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Potatoes, Peasants and Livelihoods: A Critical Exploration of Contract Farming and Agrarian Change in Maharashtra, India

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy (Human Geography)

School of Geosciences, Faculty of Science
The University of Sydney

2016
Statement of authorship
This work has not previously been submitted for a degree or diploma in any other university. To the best of my knowledge and belief, this thesis contains no material previously published or written by another person except where due reference is made in the thesis itself. All sources have been appropriately acknowledged.

Some of the material in this thesis has been published in the journal Die Erde.¹ This publication is single-authored by the author of this thesis.

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Approval from the Human Research Ethics Committee of the University of Sydney for this research was obtained on 18 March 2013, protocol number 2013/123.

Mark R. Vicol

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Abstract
The spread of contract farming in rural India in recent years has provoked a polarised and often ideological debate in the literature. The dominant, micro-economic view of contract farming positions it as a ‘win-win’ for rural development, benefitting both agribusiness and small farmers. Critical observers, on the other hand, emphasise the exploitative effects on rural households, viewing contract farming as ‘win-lose’. The critical weakness of both these approaches, however, is a failure to ground interpretations of contract farming schemes in the broader agrarian contexts in which they appear. Little is known about how different households in different contexts come to engage, or not, with contract farming, and what this might mean for future livelihood pathways in spaces where contract farming operates. This thesis punctures these debates through a critical exploration of potato contract farming, rural livelihoods and agrarian change in three villages in Satara district, Maharashtra. The primary research question for this study is: how is potato contract farming incorporated into rural spaces in India, and what does this mean for patterns of advantage and disadvantage? In addressing this question, I make three core contributions.

First, mainstream presumptions that contract farming engages with a homogenous, undifferentiated livelihood landscape need to be recast. In Satara, I find that patterns of agrarian differentiation are not characterised by ongoing dynamic processes of agriculture-led differentiation into classes of capitalist farmers and rural labour, as is imagined by a classical understanding of agrarian transition. Rather, the agrarian structure in my study sites is characterised by a diverse group of ‘middle farmers’, or petty commodity producers, who often struggle to reproduce themselves through a combination of on and off-farm activities. Second, I argue that firms use contract farming as an institutional solution to the procurement challenges associated with traditional agricultural markets in India. In Satara, the spread of potato contract farming is symptomatic of changing governance structures in modern agricultural value chains.

My third key argument is that patterns of social and economic differentiation arising from contract farming must be understood as co-produced at the intersection of these existing livelihood landscapes and the dynamics of contract schemes. In Satara, this intersection results in a complex mosaic of winners and losers amongst rural households, meaning that contract farming cannot be easily generalised as ‘all good’ or ‘all bad’. Importantly, I argue that potato contract farming is a ‘middle farmer’ activity. However, while many middle farmers accrue some benefits, these are unevenly distributed and truncated by the powerful position of the contract firm. As a result, I argue that for most households, contract farming does not represent a viable accumulation pathway. In fact, contract farming is just one activity among many in a crowded livelihood landscape where accumulation through agriculture is increasingly difficult. Finally, rather than leading to dynamic patterns of accumulation from below,
contract farming reproduces an agrarian structure of petty commodity producers who lack access to alternative livelihood opportunities. In fact, sites of accumulation and differentiation have moved off the farm, where better-off households ignore contract farming and increase their advantage through high-value non-farm activities. This suggests that agrarian change in Satara district is intimately connected to processes of livelihood diversification and agrarian questions of labour. These findings provide an important counter-note to current hegemonic understandings of contract farming as a 'win-win' solution for rural development, emphasising the importance of situating the impacts of such schemes within the livelihood landscapes in which they operate.
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<th>Full Form</th>
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<tbody>
<tr>
<td>GVC</td>
<td>Global Value Chain</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organisation</td>
</tr>
<tr>
<td>NIE</td>
<td>New Institutional Economics</td>
</tr>
<tr>
<td>SL</td>
<td>Sustainable Livelihoods</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>ADLI</td>
<td>Agricultural Development Led Industrialization</td>
</tr>
<tr>
<td>AGRA</td>
<td>Alliance for a Green Revolution in Africa</td>
</tr>
<tr>
<td>GPN</td>
<td>Global Production Network</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HYV</td>
<td>High Yielding Variety</td>
</tr>
<tr>
<td>MSP</td>
<td>Minimum Support Price</td>
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<tr>
<td>PDS</td>
<td>Public Distribution System</td>
</tr>
<tr>
<td>FCI</td>
<td>Food Corporation of India</td>
</tr>
<tr>
<td>APMC</td>
<td>Agricultural Produce Marketing Committee</td>
</tr>
<tr>
<td>UPA</td>
<td>United Progressive Alliance</td>
</tr>
<tr>
<td>BJP</td>
<td>Bharatiya Janata Party</td>
</tr>
<tr>
<td>INC</td>
<td>Indian National Congress</td>
</tr>
<tr>
<td>NCP</td>
<td>Nationalist Congress Party</td>
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<tr>
<td>OBC</td>
<td>Other Backwards Caste</td>
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<tr>
<td>ST</td>
<td>Scheduled Tribe</td>
</tr>
<tr>
<td>SC</td>
<td>Scheduled Caste</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agricultural Organisation</td>
</tr>
<tr>
<td>CPRI</td>
<td>Central Potato Research Institute</td>
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<td>Rs</td>
<td>Rupee</td>
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Chapter 1 - Introduction

Setting the scene

“Once again, the spectre of agrarian distress, which is unfortunately never far from the surface in much of India, is rearing its ugly head. Across the country, farmers, especially small cultivators, are facing severe problems with already dire outcomes. There has been a spike in farmers’ suicides in several States. Among several other signs of acute hardship are reports that once again more people are migrating from the countryside in search of work to cope with collapsing livelihoods at home” (Ghosh 2015).

“PepsiCo India established a model of partnership with farmers and currently works with over 24,000 happy farmers across nine states through the crop lifecycle by providing new varieties, technologies and sustainable farming practices. In PepsiCo, farmers truly have a friend and development partner. The association with PepsiCo India has not only raised the incomes of small and marginal farmers, but also their social standing” (PepsiCo India 2015).

This thesis pivots on the contradictions that define contemporary agrarian spaces in India. Rural India today is at a crossroads. On the one hand, policymakers and academics agree that Indian agriculture is in a state of crisis. Almost daily, newspapers carry reports such as that quoted above on the agrarian crisis gripping rural India, including well-publicised and tragic stories of farmer suicides. Indeed, while the rest of the Indian economy continues to grow at unprecedented rates, growth in the agricultural sector has remained stagnant during the last two decades of sustained neo-liberal economic reforms (Birthal et al. 2014; Lerche 2011). This is important, as India is experiencing an ‘unusual’ agrarian transition. While agriculture’s contribution to GDP has declined, the proportion of the total workforce employed in agriculture remains high compared to the historical experience of other transitioning countries (World Bank 2011). In short, while agriculture has declined in importance for the Indian economy, it still remains important for the livelihoods of the majority of rural households (World Bank 2011). At the same time, India’s urban growth, while spectacular, has not created the quantum of decent employment for rural people seeking a way out of crisis, as is witnessed by the growing slums on the fringes of Mumbai and Delhi. The agrarian crisis is not just one of farming, but reflects the broader struggles of rural households to construct and maintain sustainable livelihoods.

On the other hand, rural India is the site of significant changes in the organisation and production of agriculture, as small-scale farming households become increasingly connected to corporate forms of agriculture and farming, and new agricultural technologies become available. These changes reflect transformations occurring in global agriculture, characterised by the emergence of modern agri-food value chains. These transformations have been driven by processes of financialisation, liberalisation and corporatisation in global agriculture systems, changes to consumption patterns in an increasingly
urbanised world, and technological advances in production and distribution of agricultural commodities (Reardon et al. 2009). Liberalisation in agriculture has encouraged corporate capital investment in Indian agriculture, and new actors such as the multinational firm PepsiCo have entered agrarian spaces in India.

These contradictions have provoked a polarised debate about the best way forward for households in rural India. Critical observers view neo-liberalisation and the incursion of agri-business capital into rural spaces as at the heart of the marginalisation and exploitation of rural households. Conversely, successive Indian governments and mainstream economists have pinned rural development hopes on a new paradigm of ‘connecting small farmers to markets’ (Vorley et al. 2012; World Bank 2007).

Contract farming has come to occupy a central position in this debate as a particularly visible manifestation of the changes happening in rural India. Contract farming, a mode of vertical coordination used by agri-business firms to control agricultural production, has spread in India in recent years. As a result, households in India who previously pursued their livelihoods supplying agricultural products to loosely organised traditional markets now face a new set of challenges, opportunities and constraints in engaging with contract farming schemes and accessing modern markets. In the state of Maharashtra, recent amendments to the state’s agricultural policy to enable agri-business firms to establish direct relationships with small farmers have encouraged the spread of contract farming for potatoes. Firms, including both PepsiCo and domestic companies, are using contract farming to satisfy their demand for consistent quality chip-grade potatoes. These potatoes are used for processing into potato chips to supply India’s rapidly growing snack food sector. Contract farming therefore represents a potential new livelihood opportunity for rural households in Maharashtra. A small body of literature has evaluated the welfare impacts of contract farming participation in India from a microeconomics perspective. However, there are a lack of studies that seek to place contract farming within the broader agrarian landscapes in which they appear (Pritchard & Connell 2011). Little is known, therefore, about how different households come to engage, or not, with contract farming in India, and what this might mean for future trajectories of agrarian change in spaces where contract farming operates.

**Research problem and aims**

Contract farming in the Global South, particularly in Africa, has been a site of analytical and ideological contestation in the academic literature for several decades (Grosh 1994; Little & Watts 1994; Oya 2012). In India, where contract farming is a relatively recent phenomenon, research has thus far been dominated by mainstream micro-economic approaches. Economic studies have associated contract farming with higher incomes for participant households. This literature tends to uncritically associate positive income effects for individual farmers with contract schemes being a ‘win-win’ outcome as a whole for agri-business and rural communities (e.g. Birthal et al. 2005). Indian policy makers have
echoed this ‘win-win’ narrative by positioning contract farming as a key pillar of an agricultural modernisation and rural development agenda. Others, adopting a highly critical anti-agribusiness approach, position contract farming as a tool for capital to exploit poor peasant farmers (e.g. Sarkar 2014), thus proposing a ‘win-lose’ (win for agribusiness, lose for rural communities) narrative. The critical weakness of both these approaches, however, is a failure to ground interpretations of contract farming schemes in the broader agrarian contexts in which they appear. As Pritchard and Connell (2011) have pointed out, these tendencies lead to essentialist interpretations of contract farming as either the whole solution, or an unequivocally false direction, for the crisis facing rural India.

This thesis punctures essentialist accounts of contract farming in India through a grounded exploration of potato contract farming in three rural villages in Satara district, Maharashtra. Two villages, Pawarwadi and Randullabad, are located in Koregaon taluka² in central Satara district, while the third village, Bhushangad, is located in Khatav taluka to the east (Figure 1.1). In Pawarwadi and Randullabad, a domestic agricultural consultancy firm³ has established potato contract farming to supply their clients (potato chip processors) consistent quality chipping potato. In Bhushangad, PepsiCo, a multinational food company, controls the contract farming scheme. PepsiCo use contract farming to procure raw material for their own potato chip processing operations.

Using these villages as case studies, I argue that the incursion of contract farming produces complex mosaics of winners and losers that defy essentialist ‘win-win’ or ‘win-lose’ claims. Given the inherently differentiated nature of rural spaces in Satara district, potato contract farming has quite distinct spatial implications for rural livelihoods and patterns of rural development in each village. Importantly, given the diversity and messy reality of rural livelihood landscapes⁴ in India today, I argue that these implications are likely to manifest in different ways for different households, both participants and non-participants. This means that in Satara district, contract farming cannot be easily generalised as ‘all good’ or ‘all bad’. Rather, this thesis argues that the implications of contract farming schemes for processes of rural change will be shaped by the socio-economic, political and institutional contexts with which it

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² A taluka (also known as a tehsil) is an administrative division in Maharashtra, below the level of a district.
³ Not mentioned by name at the request of the company.
⁴ The idea of landscape is at the core of geographic inquiry. As Batterbury (2001, p. 438) writes, “A classical object of inquiry in academic geography is the dialectical relationship between the rural landscape and the human activities that help create it.” In recent years, geographers have broadened the idea of landscape beyond that of the physical environment of a place. As Batterbury (ibid) continues, landscape is now understood as “the intersection of the realms of natural environment, of production processes and social relations and of meaning.” I use the term ‘livelihood landscape’ in this thesis to represent the complex spaces within which households go about their everyday activities. This includes the myriad of livelihood, cultural, social and political processes and activities that rural households perform that give a rural place its character and meaning, the physical environment with which household interact, and the material processes of production and reproduction that structure social relations. The intersection of these processes creates distinct livelihood landscapes, which in turn mediate future livelihood possibilities for different households.
intersects (Little & Watts 1994; Singh 2002; Pritchard & Connell 2011). Therefore, contract farming cannot be understood without situating it in the agrarian spaces in which it operates. What is needed rather is an explicit engagement with \textit{place} in research into contract farming. Adopting this approach will avoid fetishising the contract scheme itself, and make an important contribution to understanding how contract farming will influence future patterns of differentiation and accumulation in agrarian spaces in India.

![Map of field sites](image)

\textit{Figure 1.1: Map of field sites. RN – Ranullabad; PW – Pawarwadi; BH – Bushangad.}
Research questions

At its heart this thesis is about understanding agrarian change. I ask questions about the nature of rural livelihood pathways and socio-economic differentiation in Satara district today. I problematise the role of agriculture in rural livelihoods and then explore the implications for agrarian change, differentiation and future livelihood pathways. This approach emphasises the messy realities of how these existing livelihood landscapes intersect with potato contract farming. The main research question for my thesis is:

- How is potato contract farming incorporated into rural spaces in India, and what does this mean for patterns of advantage and disadvantage?

A further four sub-questions guide this research:

1. What are the primary dynamics and characteristics of contemporary livelihood landscapes in Satara district?
2. What are the key value-chain processes influencing the dynamics of potato contract farming schemes in Satara district?
3. How does potato contract farming intersect with the livelihood pathways of different households in Satara district?
4. What do these intersections mean for patterns of differentiation and agrarian change?

In the process of answering these questions, insights of practical and theoretical significance are revealed. First, I find that contract farming participation is differentiated along socio-economic divides, but in unexpected ways. In each village, contract farming is a ‘middle farmer’ (or petty commodity producer) activity, whose livelihood assets and capabilities ‘fit’ with each scheme. Second, however, notwithstanding the material benefits that some participants have gained, contract farming is not a livelihood activity of significant accumulation for middle farmer households. In fact, contract farming is just one activity among many in a crowded livelihood landscape where accumulation through agriculture is increasingly difficult. Rather than providing opportunities of social mobility for households, each scheme is reproducing an agrarian structure characterised by petty commodity production, while better-off households are increasing their advantage through diversifying into higher value non-farm activities. This suggests that sites of differentiation in rural Satara are now found off the farm, invoking new agrarian questions of labour. These findings provide an important counter-note to current hegemonic understandings of contract farming as a ‘win-win’ solution for rural development, emphasising the importance of situating the impacts of such schemes within the agrarian spaces in which they operate.
Methodology

In this thesis I employ an integrative methodology. My study combines the theoretical strengths of sustainable livelihoods approaches and global value chain analysis (GVC), a project initiated by Kanji et al. (2005) with important contributions from Bolwig et al. (2010), Challies & Murray (2011), Kelly (2009; 2013), Fold (2014) and Neilson & Shonk (2014). Importantly, I situate the insights gained from this livelihoods/GVC approach within a critical agrarian political economy. Each approach carries with it particular research methods that are suited to its epistemological and ontological foundations. All three approaches emphasise the importance of qualitative research methods, and can therefore be fruitfully combined into a complementary framework. The livelihoods, GVC and agrarian political economy literature is reviewed in Chapter 2, providing justification for this combined theoretical and methodological approach. Specific methodological choices are discussed at the beginning of Chapter 4 and 5, in place of a dedicated methodology chapter. This approach allows the different methodologies employed in the study to be discussed in context with the different aims of each empirical chapter. This section outlines some key methodological considerations at a more general level.

The methodological choices of this thesis reflect the challenges of simultaneously conceptualising the systemic qualities of the global economy and development in territorial defined spaces (Dicken & Malmberg 2001; Kelly 2013). A key contribution of recent economic geography literature is that economic development is the spatial expression of uneven social relations of production in a capitalist system (Massey 1979; 1995; Yeung 2005; Yeung & Coe 2015). This is an explicitly relational perspective that conceptualises processes of globalisation and uneven development as co-produced by the relationships between actors in local ‘horizontal’ spaces and actors in extra-local ‘vertical’ economic systems, with both embedded in specific social and institutional contexts (Bathelt & Glückler 2003; Dicken 2015; Dicken & Malmberg 2001). This perspective crucially informs the key methodological aim of this thesis. I seek to integrate the ‘horizontal’ and ‘vertical’ dimensions of contract farming and rural change, hence capturing the underlying processes that produce and reproduce uneven spatial development in rural India. To do this, I adapt a conceptual framework initially developed by Dicken (2015) and Bolwig et al. (2010) in a way that aims to overcome the limitations of ‘stand-alone’ methodological approaches to contract farming which analyse vertical or horizontal issues in isolation (Figure 1.2). This framework links the broader economic (value chain) processes driving contract farming with local spaces of people, livelihoods and differentiation.

In Figure 1.2, the vertical dimension is represented by the chipping potato value chain that connects different nodes of value chain processes (inputs, production, transport, processing, retailing, consumption etc.) spread over different geographical places in the global economy. Importantly, value
chain nodes are embedded in different horizontal contexts (Dicken 2015). The horizontal dimension of interest for this thesis is represented by the local livelihood landscape of a village. This horizontal space encompasses the economic, social, environmental, political, cultural and institutional processes that influence the terrain upon which rural households pursue their everyday livelihoods. Contract farming represents the node of the value chain that intersects with the horizontal livelihoods dimension. This reflects the empirical and theoretical aims of the thesis to understand the consequences for agrarian change at the intersection of local livelihood landscapes and extra-local contract farming schemes. Such an approach is also multi-scalar in nature. Livelihoods are understood to be not just local processes, but influenced by the broader political economy in which they are pursued, including processes happening at sub-national, national and regional scales. Value chain processes are inherently multi-scalar, both in the territories they encompass, and the institutional and economic processes occurring at local, regional, national and global scales that influence their operation. Overlaid on all of this is an explicit recognition of the political dimension of rural change. The framework in Figure 1.2 incorporates the influence of broader political-economic structures that mediate the outcomes of contract farming at all scales, particularly for rural households. This requires paying attention to how particular outcomes are structured and differentiated by social difference, including class, caste, gender, cultural identity and power relations (Scoones 2009).

A parallel case study
Application of the model described in Figure 1.2 brings attention to how contract farming manifests in specific places. My thesis is therefore constructed as a parallel case study (Baxter 2010; Thomas 2011a) of potato contract farming in Satara district, covering three villages and two potato contract farming schemes. I do not present a formal comparative analysis, but rather use these parallel cases to explore and tease out the nuances of the phenomenon of the interaction of contract farming, livelihood landscapes and agrarian change in Satara district. Employing a parallel case study approach allows me to draw out useful differences and similarities that illuminate how this phenomenon may present differently in particular places, as well as differences between potato contract schemes controlled by different firms (see Creswell 2007).

Case study research is a broad methodology that “involves the study of an issue explored through one or more cases within a bounded system (i.e. a setting, a context)” (Cresswell 2007 p.73). Case study methodologies have a substantial history in human geography, where researchers are often concerned with how a phenomenon manifests in a particular place or context. Qualitative case study research in human geography is therefore typically idiographic, where depth of knowledge is sought in order

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5 Creswell (2007 p.74) terms this a collective or multiple case study.
understand a particular phenomenon in more detail. Baxter (2010 p.81) offers a useful definition of cases studies in human geography that resonates with this thesis:

“(C)ase study research involves the study of a single instance or small number of instances of a phenomenon in order to explore in-depth nuances of the phenomenon and the contextual influences on and explanations of that phenomenon.”

The case study is therefore not a method in and of itself, but rather a methodology of research design, or in other words a choice of what is to be studied (Thomas 2011a; Cresswell 2007). Case study research typically involves a range of data collection methods, including quantitative survey work, ethnographic
participant observation, interviews and document analysis (Baxter 2010; Cresswell 2007). Case studies are a common approach to researching GVC issues, as they allow the researcher to ‘find the global within the local’ (Barnes et al. 2007 p.2). The grounded and local-scale nature of livelihoods research means that livelihood studies commonly also follow a case study methodology.

Thomas (2011a) provides a useful typology for how case study research is constructed. The author makes a useful distinction between the ‘object’ and ‘subject’ of a case study. He argues (p.513) that all case studies need something to be explained (the object, or ‘the analytical or theoretical framework’) and something to offer explanation (the subject, or ‘a practical, historical unity’). The analytical framework (the object) of my case study is taken from the research questions I outlined above; namely, how is contract farming incorporated into rural spaces in India, and what does this mean for patterns of advantage and disadvantage. The subjects of my case study will therefore represent the ‘prism’ through which facts, ideas and concepts about contract farming, livelihoods and agrarian change are “refracted, viewed and studied” (Thomas 2011a p.515). In this thesis, the subjects of my case study were selected at two different scales. First, the broader scale subject of my case study is potato contract farming in Satara district. This subject was chosen as it represented a ‘key case’ (Thomas 2011a) of contract farming in India. Potato is a key crop of focus for contract farming expansion in India, and there exists a nascent literature on potato contract farming in different parts of India, providing the opportunity for this thesis to test theories generated in the existing literature. Further, the expanding potato chip processing industry in Pune, and the involvement of both domestic and international firms in Satara district, made it a particularly visible subject, offering an ‘exemplary’ case of contract farming in India. Two separate potato contract farming schemes operating in Satara district were selected for analysis to create opportunity for comparison between the value chain governance styles of a domestic firm vis-à-vis a multinational firm. Second, within Satara district I selected three villages as the finer scale subjects of my research. The criteria for selecting these villages rested on the presence of households participating in either of the potato contract farming schemes, and the knowledge of key informants about these villages that facilitated access and data collection (‘local knowledge case’ – see Thomas 2011a). One outcome of my village selection was that one village was located in a much drier agro-ecological zone, providing another valuable point of contrast between livelihoods and contract participation. The logistical constraints of a PhD thesis meant that village selection was restricted to three; one where PepsiCo operated, and two where the domestic firm operated.

The use of case study methodology inevitably raises important questions about generalisability in social science. Criticisms of the case study as a distinct methodology frequently emphasise the epistemological
need for social science inquiry to attain generalisability (Thomas 2011b). From this perspective the case study is often viewed as a weak or inferior methodology in the social sciences, or as lacking validity:

“‘You cannot generalize from a single case,’ some [of the author’s colleagues] would say, ‘and social science is about generalizing’” (Flyvbjerg 2006 p.219).

In addressing the issue of generalisability in this thesis, I make two main points. First, as Baxter (2010) and Flyvbjerg (2006) argue, concern of the lack of generalisability of the case study is likely exaggerated, particularly if case study research is designed appropriately, care is taken in the selection of cases, and “the analysis is attentive to the tension between concrete and abstract concepts” (Baxter 2010 p.93).

Further, Baxter (2010) and Flyvbjerg (2006) argue that the idea of generalizability or transferability in qualitative social science rests on different assumptions to that of generalizability in the natural sciences. The distinction is made here between statistical generalisation and analytical generalisation:

“In [statistical generalisation], generalisation is achieved through large probability samples, while in [analytical generalisation], transferability is accomplished by (1) carefully selecting cases and (2) creating useful theory that is neither too abstract nor too case specific” (Baxter 2010 p.94)

The aim, therefore, for selecting the subject(s) for my case study was not to create a representative sample of a wider population. Rather, the subjects of my research were chosen as an interesting example that could to illuminate and explicate the phenomenon of the influence of contract farming on livelihoods and agrarian change in India (see Thomas 2011a).

Second, Thomas (2011b) and Flyvbjerg (2006), among others, question whether any social science theory attains generalisability in the sense of the hypothetico-deductive model of the natural sciences. Flyvbjerg (2006), for example, argues that social science has not succeeded in producing predictive, general theory as we understand scientism in the natural sciences. Learning and knowledge creation in the social sciences is therefore dependent on context-dependent, concrete knowledge. This is the very kind of knowledge that case study methodology is adept at producing. As Thomas (2011b) argues, if we accept the argument that special generalisation is ‘an illusory goal’ in the social sciences, this frees case study inquiry from the misplaced expectations of natural science-based generalizability criterion. Instead, the aim of the case study is to therefore idiographic, to generate intensive rather than extensive knowledge (what Thomas (2011b) calls ‘exemplary knowledge’) in order to build our understanding of a phenomenon. As Baxter (2010 p.82) argues:

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6 Baxter (2010) points out that many qualitative researchers prefer the term ‘transferability’ to generalizability.
“The primary guiding philosophical assumption is that in-depth understanding about one manifestation of a phenomenon (a case) is valuable on its own without specific regard to how the phenomenon is manifest in cases that are not studied.”

These arguments also justify the selection of cases. I describe the logic of my case selection above. While contract farming in other cases in different contexts (e.g. different crop, geographic location, economic and social characteristics) may manifest in different outcomes, this does not make the knowledge produced in my case studies any more or less valid.

A brief note on qualitative research

The exploratory nature of the research questions and aims of my thesis calls for strong engagement with qualitative research methodologies. While it is not my intention to engage in an extended discussion of the epistemological foundations of qualitative research, a few brief comments on qualitative methodology are warranted. Qualitative research is concerned with elucidating knowledge about phenomena based in the meanings of those who experience such phenomena, and the social structures within which such meanings are constructed (Winchester & Rofe 2010). Qualitative methodologies therefore enable the researcher to go beyond prescriptive analysis and engage more deeply with the why and how, attempting “to make sense of, or interpret, phenomena in terms of the meanings people bring to them” (Denzin & Lincoln 2005 p.3). The research aims of this thesis require me to elicit deep and contextualised knowledge of people, places and processes in their natural settings. The qualitative methodologies I employ allow an inductive approach to be taken to uncover the dimensions of agrarian change at the intersection of the local (horizontal) and the global (vertical), where both meaning and contribution to theory are allowed to emerge from the most frequent or significant themes in the raw data (Neilson & Pritchard 2009). This can move research into agrarian change beyond the static and often de-contextualised nature of quantitative studies. The importance of qualitative methods has been highlighted in both GVC and livelihoods research (Neilson & Pritchard 2009; Scoones 1998). Qualitative methods are critical for generating deep knowledge of industries and value chain processes, and for eliciting “the nuance of circumstances for individual firms, communities and other stakeholders” (Neilson & Pritchard 2009 p.58). The grounded, narrative focused and people-centred nature of livelihoods analysis has meant that livelihood researchers have also favoured qualitative methods (Kanji et al. 2005; Scoones 1998).

While I have emphasised the value of grounded qualitative methodologies, two issues must be addressed. First, it is recognised that in practice qualitative research is rarely purely inductive (Baxter

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7 For an in-depth discussion of qualitative research methodologies in human geography and other social sciences see Hay (2010) and Silverman (2005).
Rather, research and theory generation is often a cyclical process of deductive and inductive approaches. Existing theory is used as orienting concepts to facilitate research design and suggest starting points for data collection and analysis, while subsequent theory generation and concepts are allowed to emerge from the data without the limitations or restrictions of pre-conceived ideas (Baxter 2010; Layder 1998; Silverman 2005). Layder (1998) suggests this approach represents ‘adaptive theory’. The literature reviewed in Chapter 2 outlines the orienting concepts of my study. Initial ideas formed from existing theory in the literature are explored through the study of a real world case, with the subsequent empirical insights used to inform and refine existing theory and “to generate new concepts (theory) to explain what is observed (inductively)” (Baxter 2010 p.89).

Second, the notion of subjectivity versus objectivity in qualitative research must be addressed. As Winchester and Rofe (2010) note, the difference between quantitative and qualitative research is often described as a duality of objective and ‘hard’ science (quantitative) on the one hand, and subjective and ‘soft’ science (qualitative) on the other. Positivist social science has long valued so-called ‘objective’ knowledge over knowledge perceived as subjective. This approach also rests on another powerful dichotomy: that between the researcher and subject of research. The positivist approach imagines researchers as disembodied from the contexts that they study, implying that the researchers themselves are above or exempt from the social relations that they study (Burawoy 1998). As Mansvelt and Berg (2010 p.335) argue, this extends to the use of formal third-person writing styles by positivist researchers that attempt “to erase the authorial self from their written work (and) create...distance between themselves as researcher/author and their research objects.” However, the assumption of objectivity and the ‘value-free’ position of positive social science has been increasingly challenged in recent decades, particularly with the qualitative, or cultural, ‘turn’ in human and economic geography since the 1980s (Winchester & Rofe 2010). As Riley and Harvey (2007 p.347, emphasis in original) argue:

“(S)cepticism of social science objectivity...has led to a flowering of work that utilizes a variety of techniques and methodologies that are characterised, not by their claim to be able to reveal a singular and verifiable ‘truth’, but to both problematize existing meta-narratives, as well as to sketch a world that is socially constructed and contingent, and where knowledges are situated.”

There is now an explicit recognition of the importance of reflexivity in social research. That is, choices of what to study and how are always value-laden, and the data collected is shaped by the background of the researcher and the way in which they insert themselves into the worlds that they study. Rose (1997) uses the term ‘situated knowledge’ to contest universalist models that imagine the researcher as all-seeing and all-knowing. Recognising knowledge as partial and situated leads to a different concept of
‘objectivity’ “that attempts to situate knowledge by making the knower accountable to their position” (Mansvelt & Berg 2010 p.338, emphasis in original). A reflexive approach to research therefore embraces engagement, rather than detachment, where knowledge is built through “reflexive exchange between (active) researchers and respondent-participants (not subjects)” (Neilson & Pritchard 2009 p.58; see also Burawoy 1998).

**Positionality**

Following from the observations above, this section provides some reflections on my positionality within this research. Positionality has significant implications for the production and interpretation of qualitative data, and for the conduct and effectiveness of qualitative research (Merriam et al. 2001; Rose 1997). Therefore, the position of the researcher should not be suppressed or written out of research accounts, but instead reflected on and incorporated as a necessary part of the research process. Positionality is also referred to as ‘insider/outsider’ status. Conventional accounts have often suggested that being an insider (that is, being accepted by actors because of similarities, shared histories, common ground, mutual acquaintances etc.) will lead to more access, and more valid findings. This leads to researchers often dividing positionality into an insider (‘good but impossible’) and outsider (‘bad but inevitable’) dualism (Crang 2003 p.496). Recent work however has highlighted the fluidity in perceived insider/outsider status as researchers move across research sites, with different participants making different assumptions about the identity of researchers (Crang 2003; Merriam et al. 2001).

My research was affected by my position as a white male, and as a ‘Westerner’. My position afforded me both insider and outsider status as I moved through different spaces in my research sites. Within each village I had to manage my position as an outsider. As a Westerner and non-Hindu I was perceived as a cultural outsider, and many villagers maintained a social distance from me. This social distance reduced over time with familiarity, however I had to carefully navigate interactions with participants to build trust and openness. As a ‘researcher’, I also had to attend to the inherent unequal position of power that I was placed in that may have intimidated or coerced participants. In an interview setting, this meant being open to cultural and social norms such as accepting cups of tea and offers of food, being flexible as to when and where interviews took place, and sitting myself at the same level as participants. I also had to be open to people’s curiosities about my own life and culture, and incorporate these conversations into my interactions with participants, rather than attempting to control interactions. Being an Australian was often an advantage, as I could usually find common ground with most households in a discussion of that particularly Indian obsession – cricket!

The interview site also needs careful consideration. As Elwood & Martin (2000 p.649) argue, careful reflection is needed when selecting interview locations, as the “interview site itself embodies and
constitutes multiple scales of spatial relations and meaning, which construct the power and positionality of participants in relation to the people, places and interactions discussed in the interview.” These considerations are particularly relevant to the household interviews I conducted in each village. Most of these interviews took place at the participant’s home, however I also incorporated farm visits and casual walking conversations within each village. By attending to these ‘micro-geographies’ of interviewing, I was able to create an environment that fostered open and voluntary exchanges of information and enhanced the credibility of my findings. In my key informant interviews with corporate and other stakeholders outside of the village, a different power dynamic existed. I had to carefully build trust and adapt my behaviour (including my appearance!) to gain access to key informants at their places of work.

My status as an outsider was emphasised by the fact that I did not speak the local language, Marathi. As my field sites were still uncertain prior to going to India, it was difficult for me to learn a language given that there are over 100 major languages spoken in India, with notable differences between states. Marathi is not spoken outside of Maharashtra or Goa, while Hindi is not necessarily spoken in rural areas of Maharashtra. Some village members spoke English, an official language in India, however I required a translator for most of the interviews I conducted with households. The literature identifies several epistemological challenges with working through translation in social science research, including representativeness and the role of the translator in producing information (e.g. Temple & Young 2004). Using translators can affect the reliability of the information collected, as the nuances of meaning and knowledge can be lost through translation. However, using a translator also offered some advantages. Care was taken in selecting translators who understood the aims of the project. I was able to recruit recently graduated masters students from Pune University as translators, who had various experience in rural development issues and were all from rural backgrounds. I was able to reflect on each interview with the translator, providing further insights and perspectives. Given their backgrounds, each translator was also able to establish a good rapport with interview participants. Interviews were translated ‘live’, and I recorded the translated answers verbatim as field notes. Through a process of double checking and reviewing each interview I ensured that the translated data was as representative as possible. It should be noted however that quotes presented in the subsequent chapters are translated versions of participants’ responses.  

My positionality also required me to manage expectations of the help I could offer village members. Households frequently asked me what benefits participation in my research would bring to them. All villages have been the recipients of state and NGO-run development projects, and households would

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8 Quotes used in-text have been assigned a code to protect the anonymity of the interviewee. Each household was assigned a village code and number. For example RN01 refers to a household from Randullabad village, PW01 a household from Pawarwadi, and BH01 a household from Bhushangad.
frequently request my help with agronomic advice. I managed these expectations by being honest and upfront about the potential benefits of my research. Some households were suspicious of me as being ‘from the government’, and were thus wary of providing me with information that they thought might jeopardise their entitlements, or lead to perverse outcomes for them (in the context of the corruption and favouritism that characterises local politics in India and the often negative encounters local people have with the state). For example, it is highly likely that better-off households that I interviewed under-reported their income. Further, my position as a male significantly impacted the research process. Gendered cultural norms in India mean that women are often ‘invisible’ in research conducted by male researchers. Making the voices and opinions of women visible in my research was a difficult challenge to navigate, as interviews were almost always set up for me with the male household head. Even if I arranged an interview with a female member of a household, a male was always in attendance. I navigated this by arranging a focus group with women in one village, and explicitly involving women in household interviews where possible. However, the majority of my interviews were with men.

In comparison to my initial outsider status with households, I was able to position myself as somewhat of an insider with some individuals in each village. My position as a Western researcher invested me with an inflated sense of importance in the eyes of village leaders, and this allowed me privileged access to information and spaces in the village such as temples and the Gram Panchayat office that other village members did not enjoy. My status also facilitated the recruitment of potential participants. I was often taken to meet villagers by a person of high status in the village, usually a member of the Gram Panchayat or the contract farming agent, who would emphasise the importance of my research. This raises issues related to gatekeepers. GVC and livelihoods research often requires access to closed or private settings such as villages and firms. Access to these sites, and perceptions of insider/outsider status, is often contingent on developing relationships with gatekeepers. Particularly when conducting GVC research, where company data and information is often hidden and sensitive, researchers will often need a third party ‘endorsement’ to secure the cooperation of potential participants (Neilson & Pritchard 2009). This, of course, leads to issues of alignment and loyalty, generating alternative perceptions of insider/outsider status among other potential participants. I gained access to my field sites through the endorsement of each contract farming firm. This was necessary as it would have been difficult and time-consuming to identify villages where contract farming operated without the support of the firm. Information and data on the operation of each contract scheme also depended on securing access to key informants from each firm. Although I was conscious of the inherent politics behind working through the very companies I may end up critiquing, each firm did not interfere with my independent visits to each village and the conduct of my research. The most important gatekeeper ended up being the contract farming agent in each village. The agent is a local village member who works for the contract firm and runs the day-today
operations. Each agent was my first point of contact. The agent provided introductions to other village members and lists of names of contract farmers and potential interview participants. This is, of course, a source of potential bias and I was aware that the agent might direct me to talk to participants who would not be critical of the scheme. The agents in two of the villages were also active members of political parties, a key source of division in each village. I managed these biases by establishing relationships with other gatekeepers including village leaders and lower caste households, and through the purposeful sampling approach described in Chapter 4.

**Ethics**

A study such as this inevitably raises several ethical issues involved in cross-cultural qualitative research. Ethics approval was obtained from the University of Sydney Human Research Ethics Committee. This process was useful for pre-emptively identifying my ethical responsibilities in this study. To minimise any potential harm to my case study villages, informed consent was obtained from all participants prior to interviews. Participants were given an information sheet translated into Marathi. Consent forms were also used, with verbal consent obtained in most instances (obtaining signatures can commonly provoke suspicion from households that they may be signing away more than they are aware of). Participants were also informed that they could cease participation at any time. As the interviews sometimes dealt with sensitive information such as political views or criticisms of village leaders, confidentiality of the data is important and the anonymity of participants is maintained throughout my thesis.

**Structure of the thesis**

This thesis is organised into eight subsequent chapters:

**Chapter 2** reviews the relevant literature on agriculture, contract farming and agrarian change, establishing the theoretical framework of the thesis. The chapter is split into four parts. Part one reviews the contested place of agriculture in rural development policy, and outlines the main debates in the literature about the future of small farmers in the Global South. Part two reviews conceptualisations of recent changes in the global agri-food system, including the spread of contract farming. Part three reviews the literature on contract farming, outlining three main theoretical approaches to understanding contract farming’s role in rural development: new institutional economics (NIE), global value chains (GVC) analysis, and critical agrarian political economy. Part four sets out the theoretical framework of the thesis. I argue that a framework combining the strengths of GVC and agrarian political economy offers a fruitful way forward, but only if grounded through a people-centred sustainable livelihoods lens.
**Chapter 3** sets out the context of the case study by outlining recent trends in rural development and agriculture in India. The chapter argues that the current conditions facing agriculture and rural India are an institutional legacy of the green revolution era and the liberalisation agenda pursued since the 1990s. This has led to the rapid emergence of contract farming in the past two decades. The chapter concludes by arguing that research into contract farming in India has been dominated by micro-economic approaches that fail to address the broader implications of contract farming for agrarian change.

**Chapter 4 and 5** outline the important empirical results from the case studies that form the basis of the analysis presented in the remaining chapters. **Chapter 4** analyses contemporary household livelihood pathways in each case study village. The chapter begins with a detailed description and historical account of each village, before discussing the important livelihood strategies pursued in each village. I then identify key livelihood assets and capabilities that enable or constrain households to pursue particular livelihood activities. The key argument of Chapter 4 is that livelihood pathways and possibilities are shaped by the position of households within the political economy of each village. **Chapter 5** discusses the key feature of the potato contract farming scheme that operates in each village through a value chain analysis of chipping potato in Satara district. The chapter argues that in each village, the firm has implemented contract farming as a particular mode of value chain governance to solve procurement challenges that characterise traditional potato supply chains.

**Chapter 6 and 7** analyse how the contract schemes described in chapter five ‘touch down’ on the livelihood landscape of each village described in Chapter 4. **Chapter 6** uses the lens of contract participation to understand how different households engage with contract farming in ways dependent on their livelihood position. Here, I establish the patterns of contract participation that have emerged in each village, connecting this to the intersection of the particular dynamics of potato contract farming and the livelihood dynamics of each village. **Chapter 7** adds another layer to the complex interaction between potato contract farming and local livelihoods. Here, I analyse how the distribution of benefits between participants, and between participants and non-participants, are contingent on broader livelihood processes and agrarian structures. This chapter problematizes analysing the benefits or costs of contract farming *in situ* to the micro-functioning of the contract scheme itself.

**Chapter 8** discusses what the insights of this thesis mean for understanding differentiation and agrarian change in Satara district. The chapter situates the main arguments of the thesis within the key concepts of livelihoods and agrarian change discussed in the literature review chapters. I conclude by arguing that the insights presented here are suggestive of the importance of situating contract farming within concrete understandings of the livelihood landscapes in which they appear.
Chapter 9, the concluding chapter, summarises the main research findings and outlines the key theoretical and policy implications for understanding contract farming and agrarian change in India. This chapter also identifies avenues for future research.
Chapter 2 - Literature review

Introduction

This chapter provides a critical review of the literature relevant to the research aims and questions outlined in Chapter 1. The chapter is split into four parts. Part one reviews the literature on the role of agriculture and small farmers in rural development. Part two reviews debates about recent changes in the global agri-food system, drawing on perspectives from agricultural economics, economic geography and food regime theory. Part three then reviews three alternative approaches in the literature to understanding the role of contract farming in contemporary agri-food systems and the implications for rural development: new institutional economics (NIE), global value chains (GVC) analysis, and agrarian political economy. Part four concludes the chapter by reviewing the arguments of the sustainable livelihoods (SL) literature. Here, I argue that a livelihoods lens can enrich the analytical power of a theoretical framework incorporating the insights of GVC analysis and agrarian political economy.

Part 1: Agriculture and rural development policy debates in South Asia

Despite the intensive focus on the UN’s Millennium Development Goals in recent decades, it is estimated that around 900 million people still live in extreme poverty world-wide (UN 2015). Progress certainly has been made; during the Millennium Development Goals era, official rates of global poverty have halved compared to 1990 levels. However, for the 900 million still surviving on less than US$1.25/day, this achievement is largely meaningless.

Importantly, global poverty is still a rural phenomenon. More than three-quarters of the world’s poor live in rural areas of sub-Saharan Africa, South-east Asia and South Asia. Rural poverty is particularly pervasive in South Asia, where 80% of the rural population live on less than US$2/day (IFAD 2010). Despite increasing urbanisation in the region, it is predicted that the majority of South Asia’s poor will continue to reside in rural areas for decades to come (Dorward et al. 2004; Ravallion et al. 2007).

Compounding fears for South Asia’s rural poor has been the emergence of food security as a serious social and policy issue in recent years. Between 2006 and 2008, global food prices almost doubled. By some estimates the food price crisis increased the number of food insecure people to around 1 billion globally, and placed food security at the top of the global development agenda (Lawrence et al. 2011). Food insecurity is concentrated in rural areas; over half of all undernourished people live on small farms (Nagayets 2005). Almost a quarter of the world’s chronically hungry people live in rural India alone, where food insecurity has been “particularly stubborn” (IFAD 2010 p.49).
It is not surprising that against this backdrop of rural crisis, agriculture has been re-centred in debates about development policy in recent years (Birner & Resnick 2010; De Janvry 2010; Wiggins et al. 2010). Rural livelihoods in South Asia are dynamic, and households pursue a diverse range of livelihood strategies, including increasingly outside of agriculture (Rigg 2006; Rigg et al. 2012). However, most rural households in India, for example, continue to rely on agriculture for at least part of their livelihood (National Sample Survey Organisation 2014; Venkatesh 2013). Nonetheless, the place of agriculture in development policy has a turbulent history. In the immediate post-war period, the role of agriculture in development took a back seat to that of industrial development. The dominant rural development paradigm rested on theories of dual economic development, where agriculture was conceptualised as a ‘peasant’ sector, traditional and backwards, that would passively provide resources (including labour) to the modern sectors of the economy, and eventually be displaced by large scale, capitalist agriculture (Dethier & Effenberger 2012; Ellis & Biggs 2001; Wiggins et al. 2010). For those subscribing to this paradigm there was no particular justification for supporting agricultural development per se. In the early 1960’s, however, the role of the peasant in rural development was reassessed. Schultz (1964), for example, argued that peasant farmers were in fact rational economic agents capable of allocating resources efficiently, what he termed ‘efficient but poor’. Evidence that suggested peasant agriculture could in fact be the site of dynamic growth changed the way agriculture’s role in development was viewed, particularly as urban or rural-based industrialisation did not provide “enough jobs for under-employed rural labour” (Wiggins et al. 2010 p.1341). Small scale agriculture was now considered to be a key engine of rural development and economic growth in the Global South (Ellis & Biggs 2001; Johnston & Mellor 1961). The experience of East-Asian miracle economies, where rural development was anchored to redistributive land reform and productivity increases in small scale agriculture, supported this paradigm (De Janvry 2010). This ‘classical’ understanding of development as a linear process emphasised that rapid productivity growth could be achieved through diffusion of technology to peasant farmers and correcting the myriad market failures that they faced (notably, access to rural credit). This would then create investible surpluses and a home market for industrial goods, promoting industrial growth. As agriculture became more efficient, surplus labour would be released to emerging urban and rural industries, and the contribution of industrial growth to the national economy would take over that of agriculture (Dethier & Effenberger 2012; Ellis & Biggs 2001). As De Janvry (2010 p.19) notes, “the role of agriculture in development was thus measured in its support to the acceleration of growth in the rest of the economy, principally industry, with the relative decline of agriculture a symptom of mission successfully accomplished.” Promoting growth in agriculture was the starting point of the path to development.
In South Asia, the green revolution provided the technological platform for agriculture-led development policy from the 1960’s onwards. The diffusion of high-yielding wheat, rice and maize varieties to small farmers aimed to kick-start agricultural growth, reduce famine and rural poverty, and stimulate industrial and urban growth (De Janvry 2010). These strategies met with spectacular initial success. Crop yields and agricultural productivity increased dramatically and famine and absolute poverty decreased. Governments invested heavily in the agriculture sector throughout the 1970’s and early 1980’s to build on these successes. State intervention included substantial public investment in fertiliser and pesticide subsidy programs, irrigation programs, and the establishment of parastatal organisations to facilitate farmer access to extension services and markets. This suite of policy strategies were conceptualised in the literature as agriculture-demand-led industrialisation (ADLI), and ADLI-based policies were considered far superior for promoting growth in developing countries than alternatives such as export-led industrialisation (e.g. Adelman 1984).

At the beginning of the 1980’s, however, the conditions that enabled ADLI-based strategies began to erode, and dissatisfaction with the performance of agriculture as a development strategy led to a paradigm shift (De Janvry 2010). The productivity gains from green revolution technologies plateaued, and it was clear that benefits were skewed towards already better-off farmers in a position to take advantage of supposedly ‘scale-neutral’ technologies. Heavily indebted governments abandoned interventionist agricultural policies, as the era of World Bank and IMF-led neo-liberalisation and structural adjustment took hold. Ineffective and inefficient state marketing agencies were dismantled as developing states began to prioritise trade liberalisation, privatisation and opening up urban-based economies to the world market (Bezemer & Headey 2008; Dorward et al. 2004). This ‘free market revolution’ was known as the Washington Consensus, and led to a drastic decline in agricultural sector aid from development donors and a decline in investment in agricultural research and development in general (Bezemer & Headey 2008). As a result, the agriculture sector in developing countries faced a 20 year period of neglect, as agriculture was “assigned...a secondary, or dependent status, subordinat(ed)...to industry” (McMichael 2009b p.235; see also De Janvry 2010).

The turn of the 21st century has signalled another paradigm shift as the neglect of the agricultural sector under the Washington Consensus has come under increasing criticism (Wiggins et al. 2010). Structural adjustment policies had little positive effect on the condition of rural areas and households. The persistence of rural poverty and the emergence of food insecurity as a serious policy issue have refocussed attention on the role of agriculture in rural development. The World Bank and other important development agencies now subscribe to a paradigm of ‘pro-poor’ growth, to be achieved first and foremost through agriculture. This approach is reflected in the title of the World Bank’s 2008 World
Development Report, ‘Agriculture for Development’ (World Bank 2007; see Bezemer & Headey 2008; De Janvry 2010). This document is perhaps the most important expression of this new vision, and reflects a now well-established body of literature that supports the role of agriculture in promoting pro-poor growth in developing economies (Bezemer & Headey 2008; Dorward et al. 2004; Grewal et al. 2012; Hazell et al. 2010; Valdes & Foster 2010; World Bank 2007).

In the last decade, development initiatives such as the Gates Foundation funded Alliance for a Green Revolution in Africa (AGRA) have embraced this vision of agriculture-for-development, directing resources for poverty alleviation and rural development towards agriculture. Rural development policy in the Global South increasingly emphasises using agriculture as a vehicle to integrate rural households into world markets and corporate value chains, and to assist those who can’t make this transition to exit agriculture. The ‘agriculture-for-development’ paradigm, then, is still firmly rooted in a discourse of economic development as structural transformation from rural to urban, and the World Bank “clearly expects that over time agriculture-based countries should, eventually, shift to becoming transforming countries before, eventually, becoming urbanised countries” (Akram-Lodhi 2008 p.1148). In short, farmers in the Global South are tasked with moving away from traditional agriculture to become entrepreneurs and competitors in agribusiness. In the words of the World Bank, this new vision of agriculture-for-development will be “led by private entrepreneurs in extensive value chains linking producers to consumers and including many entrepreneurial smallholders supported by their organisations...The private sector drives the organisation of value chains that bring the market to smallholders and commercial farms” (World Bank 2007 p.8; see also McMichael 2009b). The role of the state is reduced to “promot(ing) competitiveness in the agribusiness sector and support(ing) the greater inclusion of smallholders and rural workers” into global agricultural value chains, including through contract farming arrangements (World Bank 2007 p.8). Those households who cannot transition to commercially-oriented agriculture are encouraged to exit and join the labour force, further freeing up resources such as land for entrepreneurial farmers. Following the logic of this linear path to development, eventually all but the most efficient and capitalised farmers will leave agriculture as urbanisation takes hold.

This new vision of the role of agriculture in development has not been accepted universally. From a critical political economy viewpoint, the World Bank’s approach does little to reimagine agrarian relations and the role of agriculture (Akram-Lodhi 2008). Critics argue that the agriculture-for-development paradigm continues to subscribe to a neo-liberal view of development, reinforcing orthodox conceptualisations of the role of small farmers, and places within this an updated vision of agriculture’s potential contribution (Akram-Lodhi 2008; McMichael 2009b). As Akram-Lodhi argues, the
World Bank’s approach ignores the often contradictory and unequal power relations and social differentiation that characterise agrarian spaces:

“In its vision of agriculture the (World Bank) sees behind every farmer either a budding entrepreneur waiting to be unleashed by the power of the market or a worker who would be better off working for the entrepreneur than working his or her own piece of land. It is a remarkably old-fashioned view of structural transformation, in the sense that it is, in essence, a restatement of the ideas of modernization theory” (Akram-Lodhi 2008 p.1157).

Rigg (2006) offers a different interpretation of agrarian relations that emphasises rural livelihood diversification. Rigg argues that agriculture is no longer an appropriate site of investment for pro-poor development given the increasing prominence of non-farm income in rural economies. For Rigg, trajectories of change in the Global South have already ‘de-linked’ livelihoods from the land, and agriculture based rural development policies may overlook “the emerging spaces for development intervention” (2006 p.180). These debates speak to ideological differences about the normative goals of ‘rural development’. Certainly, the goal of rural development policy should not be to maintain millions of rural people in agriculture because of romantic notions of agrarianism; rather the goal should be the elimination of poverty (Valdes & Foster 2010). As Hazell et al. (2010) point out, the relative role of farm and non-farm livelihoods in rural development will depend on local contexts. Evidently though, a majority of rural households will continue to rely on some form of agriculture for their livelihoods, or as a base for livelihood diversification, in the near future at least, particularly in South Asia (Dorward et al. 2004; Hazell et al. 2010). Agriculture also embodies cultural and social values for many rural people, defining their sense of place. Rural research therefore should continue to focus on the role of agriculture in rural change. Critically, what is important is to build an understanding of how households negotiate new agricultural opportunities and threats that are emerging in rural spaces under the ‘agriculture-for-development’ paradigm, and link these with other economic opportunities as non-farm opportunities and urbanisation increase in a changing global economy. In this light, the next section reviews the place of small farmers within rural development debates.

Small is beautiful? The place of small farmers in rural development debates

The debate about the role of agriculture in development also concerns the future of small farms in a capitalist global economy (Fan & Chan Kang 2005; Mitchell et al. 2011; Valdes & Foster 2010; Wiggins et al. 2010). The key question is whether rural development policy should specifically support small farmers, or whether they impede growth in rural areas (Birner & Resnick 2010). Based on numbers, small farmers clearly still matter. The vast majority of farming households in South Asia are small
farmers (owning up to two hectares), meaning that, “agriculture is still a small-farm story” (Vorley et al. 2012 p.1; see also Hazell 2011). Nonetheless, how do small farmers fit into development narratives and what is the evidence for targeting small farmers in development policy?

Much of the debate around the appropriateness of small farmer-based development policy focuses on the existence of an ‘inverse relationship’ between farm size and yield, or in other words whether diseconomies of scale exist in agriculture. The inverse-relationship is an old and controversial debate within rural development (Akram-Lodhi 2008; Barrett et al. 2010). One of the earliest proponents of the inverse relationship was Chayanov (1986 (1925)), who used it to argue for the retention of a peasant sector in post-revolutionary Russia in the early 1900’s. A significant body of empirical evidence from the modern agricultural economics literature supports the inverse relationship hypothesis – that is, as farm size increases production per unit area decreases (Barrett 1996; Carter 1984; Fan & Chan Kang 2005; Hazell et al. 2010; Sen 1962; 1966). This evidence has been used to justify policies supporting small farmers, including diffusion of green revolution technologies and redistributive land reform (Akram-Lodhi 2008; World Bank 2007). Explanations for the inverse relationship have typically focussed on imperfections in labour and factor markets. Small farmers face different transaction costs to large farms, and can over-supply (essentially transaction cost free) family labour to achieve higher labour to land ratios (Fan & Chan Kang 2005). Where labour is plentiful compared to land and where agriculture is of low capital intensity, small farms can exhibit significant productive advantages over large farms (Hazell et al. 2010; World Bank 2007). Small farms can also take advantage of flexible, self-supervising family labour to increase their efficiency in labour-intensive agriculture such as horticulture (Wiggins et al. 2010). There is also evidence to suggest that small farmers apply inputs more intensively per hectare than larger farms (Fan & Chan Kang 2005).

Other researchers have questioned the inverse relationship hypothesis. In an analysis of Madagascan households, Barrett et al. (2010) found that input market imperfections limit the ability of larger farms to achieve economies of scale. The implication here is that solving market imperfections will weaken the observed inverse productive advantages of small farms (Wiggins et al. 2010). Likewise, Hazell et al. (2010 p.1352) argue that “as an economy develops with increased use of capital intensive technology and hired labour, the advantage shifts to larger farms.” As agriculture becomes increasingly capitalised and corporatised in developing countries, it seems likely that without policy intervention economies of scale will pose significant challenges to smallholders (World Bank 2007). This is why the World Bank argues for commercially oriented small farming, rather than small farms per se, as the focus for development efforts (Akram-Lodhi 2008). However, commercially oriented farms tend to be larger farms due to the economics of scale in off-farm transactions (World Bank 2007). This implies a process of land
consolidation as non-commercially viable smallholders exit agriculture, which opens up possibilities for processes of socio-economic differentiation in rural spaces (Bernstein 2010).

Complicating the already complex economies of small farmers are the well-documented processes of reductions and fragmentations in land holdings in most parts of the developing world (Lerche 2011). This is certainly the case for South Asia, where the number of small farms is increasing as land holdings are divided through inter-generational male inheritance patterns, accelerated by population growth (Fan & Chan Kang 2005; Pritchard et al. 2014). In India, for example, today more than 70 per cent of all landowners own less than one hectare, as compared to 39 per cent in 1960-61 (Government of India 2014; Lerche 2011). This raises two important issues. First, how small is too small? Without access to non-farm sources of income, the increasing number of households owning only one or even two hectares in places such as India seem unlikely to be able to escape poverty through agriculture alone (World Bank 2007). Without sufficient attention to developing non-farm opportunities, such marginal landholders may become entangled in poverty traps, with landholding becoming more of a burden than an asset. Second, Hazell et al. (2010 p.1352) argue that declining farm sizes in developing countries signal that economic development has not yet “tipped the scales from small to large farms.” Although landholding patterns differ depending on specific contexts, households commonly hold on to even marginal plots of land in many developing countries, resisting the classical narrative of ‘get big or get out’:

“...the declining average farm size in developing countries may not demonstrate any superior economic efficiency of small farms. It does, however, indicate that even tiny land-holdings remain a valued component of a diversified livelihood in the presence of highly imperfect land, labour, and capital markets” (Hazell et al. 2010 p.1352).

Similarly, Li (2009) argues that the agriculture-for-development agenda’s optimism in promoting ‘exit from agriculture’ for those unable to join the ranks of entrepreneurial farmers ignores the on-ground experience and realities of rural Asia. The implicit assumption of the World Bank is that those that do exit will find better jobs in the non-farm economy. As Li points out, however, rural households have a turbulent history of engagement with the non-farm economy through migratory wage labour, which is often distress-induced and frequently just transfers rural poverty to urban slums. The barriers to creating viable off-farm jobs for those exiting agriculture are formidable; as the World Bank acknowledges, huge investments in education and skills would be required. However, even with such investments, the potential for urban and rural non-farm sectors in countries like India to absorb the millions of smallholders exiting agriculture that the agriculture-for-development agenda imagines appears overestimated, especially since “the poorest people exit agriculture on the least advantageous
terms” (Li 2009 p.634). In this context, Li argues that advising even marginal landholders to exit agriculture threatens to deepen rural inequality. Rural households themselves, of course, recognise this. Many rural households hold on to marginal or uneconomical land holdings in rural places. This highlights that rural households often “reject…the terms of their inclusion in new economies, terms that increase the gap between rich and poor and make the poor more vulnerable” (Li 2009 p.634).

Peasants and the agrarian question in critical agrarian political economy

Policy debates on the future of small farms reflect a more fundamental historical question about the fate of peasants, and the implications for agrarian societies, under conditions of emerging capitalist relations of production in the countryside; what is known as the agrarian question. As Bernstein (2010, pp.22-23), writes, agrarian political economists have addressed the agrarian question by asking four fundamental questions of political economy:

- Who owns what? (the social relations of property)
- Who does what? (the social division of labour)
- Who gets what? (the social division or distribution of income)
- What do they do with it? (the social relations of consumption, reproduction and accumulation)

The agrarian question emerged as a distinct mode of enquiry in turn-of-the-20th century Europe, where Marxist political economists, from a historical perspective, sought to explain how the development of capitalist relations of production in the countryside would proceed, what barriers to capitalist development might exist, and what the political fate of peasants might be (Byres 1996). It was Marx himself who first addressed the agrarian question in his writings on enclosure and primitive accumulation in England from the 15th to the 19th century. Here, he considered how the capital-labour relationship would emerge in agriculture, given the capacity of peasants to exist as capital and labour at the same time. Marx was concerned that peasants might impede the full development of agrarian capitalism, a process that was necessary to provide the surplus capital for industrialisation and the subsequent emergence of a socialist society (Akram-Lodhi & Kay 2010a). The English path to agrarian capitalism that Marx identified is the first and definitive example of a classical capitalist resolution to the agrarian question (Akram-Lodhi & Kay 2009; Brookfield 2008; Byres 1996). For Marx, the experience of England showed that enclosure of the countryside and the emergence of capitalist relations of production would inevitably lead to the destruction of the peasantry (Akram-Lodhi & Kay 2009). Marx argued that in rural England, two distinct pre-capitalist social classes were transformed. Feudal predatory landlords were displaced by capitalist land owning and tenant classes (‘agrarian capital’), establishing new social relations of production in the countryside. Peasants, dispossessed from their lands, were transformed into a rural proletariat, providing labour for emerging capitalist farms and the
industrialising economies of English cities (Akram-Lodhi & Kay 2009; Bernstein 2006). For Marx, this was part of the historical process of the divorce of producers from their means of production, unleashing “unprecedented development of the productive forces in farming” and processes of socioeconomic differentiation that are intrinsic to the capitalist social formation (Bernstein 2006; Wood 2009). This classical resolution to the agrarian question has, in an odd quirk of history, been thoroughly embraced by neo-liberal economists and policy makers, who share orthodox Marxist views that the inevitable fate of agrarian societies is the decline of small farms as efficiency, entrepreneurship and returns to scale take over.

For Marx then, “the outcome of the introduction of capitalist relations of production into agriculture must inevitably be the emergence of agrarian capitals and agrarian wage labour” and therefore the destruction of the peasant (Akram-Lodhi & Kay 2009 p.17). However, the experience of continental Europe and North America at the end of the 19th century suggested that the classical English path may not hold in different circumstances. It appeared that the agrarian question could be resolved in a variety of ways that may lead to differing outcomes for capitalist development in the countryside and the political and social fate of peasants. Thus the problematic of the agrarian question arose in the disjuncture between Marxist theories of capital, and what was actually happening in the countryside. In this context, foundational contributions from Engels, Lenin and Kautsky in the 1890’s defined the terrain of the agrarian question at the end of the 19th century.

Writing about the experiences of France and Germany, Engels was concerned with the political implications of the agrarian question. Engels “assumed that capitalism was sweeping all before it” and that this would result in the slow but sure dissolution of the European peasant (Byres 1996 p.23). However, as Engels observed in both France and Germany, the resolution to the ‘peasant question’, as he framed it, had not yet run its full course. Engels’ concern was whether peasants would interpret their political interests as lying with the eroding pre-capitalist landed classes (their former landlords) or the working classes of urban Europe (Akram-Lodhi & Kay 2009; McMichael 2013a). Engels’ agrarian

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9 However, as Akram-Lodhi & Kay (2010) point out, a close reading of Capital indicates Marx did leave room for the possibility that capitalist social relations of production in agriculture could be established in multiple ways: “‘capital subsumes the labour process as it finds it’ (Marx 1976 p.1021, quoted in Akram-Lodhi & Kay 2010 p.182). So the modes and mechanisms by which capital subsumes labour in the establishment of the capitalist mode of production can produce “certain hybrid forms, in which although surplus labour is not extorted by direct compulsion from the producer, the producer has not yet become formally subordinate to capital” (Marx 1976, p.645, quoted in Akram-Lodhi & Kay 2010, p.182). Thus while peasants may be dispossessed as capitalism develops, capital can also subsume peasant labour through hybrid forms that consolidate the peasantry. The peasantry would outwardly appear unchanged even as capital produced a fundamental transformation in its social characteristics: there would be an ephemeral yet substantive separation of means of production and labour within the peasant farm. Indeed, this is what establishes small-scale pre-capitalist peasant farms as small-scale petty commodity producers under capitalism” (Akram-Lodhi & Kay 2010, p.182).
question, therefore, was more concerned with the political fate of peasants under a capitalist economy than the ways in which capitalism might emerge in the countryside.

Both Lenin and Kautsky sought to extend the agrarian question beyond explicitly political concerns to understand the dynamics of the emergence of capitalism in agriculture; in Kautsky’s words “whether Marx’s theory is applicable to agriculture, or not” (1988 (1899) p.12). As Byres (1996 p.23) notes, both Kautsky and Lenin were concerned with “the possibility, the pattern and the pace of (capital) accumulation in agriculture”. For Marxist political economists, accumulation in agriculture was an important source of surplus capital for emerging industrialisation as “agriculture has the potential capacity to create productive resources surplus to its reproductive requirements, and these surplus resources could be used to support the substantial resource costs of industrialisation, structural transformation, accumulation and the emergence of capital” (Akram-Lodhi & Kay 2009 p.19). In order for the structural transformation of pre-capitalist societies to capitalist societies to occur, then, obstacles to capital accumulation in agriculture would have to be overcome.

Kautsky defined the agrarian question as follows: “whether, and how, capital is seizing hold of agriculture, revolutionising it, making old forms of production and property untenable and creating the necessity for new ones” (1988 (1899) p.12). His analysis was primarily concerned with the continental European agrarian crisis that was apparent at the end of the 19th century. For Kautsky, two key processes, happening outside of agriculture, were lending agriculture and rural areas a “particular political and economic visibility” (Watts & Goodman 1997 p.8) at that time: first, the extension of forms of democratic franchise into the countryside meant that the agrarian economy was important politically; and second, the growth and increasing integration of a competitive world market in agricultural commodities (the contours of which Friedmann & McMichael (1989) would later call the first food regime) was depressing grain prices (Akram-Lodhi & Kay 2009; Watts & Goodman 1997). In response to these pressures, Kautsky argued that resolutions to the agrarian question, and the fate of peasants, could take a multiplicity of forms depending upon the specificities of national historical contexts. In fact, Kautsky argued that the unique (biological and seasonal) characteristics of agricultural production, and the capacity of peasants to self-exploit their own labour to compete and survive, meant that agrarian capital might restrict itself to agro-industrial functions, such as processing, inputs and finance, rather than production. This opened up the possibility of the persistence of peasant forms of production that might hinder the full development of agrarian capitalism in Marx’s classical sense.

Writing primarily about Prussia, Kautsky’s insights included that there was no tendency for the size distribution of farms to change over time (as would be expected if capitalist agriculture was displacing peasant agriculture), technical efficiency was not necessary to survive (but peasants might have to self-
exploit their own labour) and the primary response of Prussian peasants to late 19th century market coerciveness was altering production mixes, taking on debt or out-migrating (Akram-Lodhi & Kay 2009; Watts & Goodman 1997). In Prussia, the agrarian crisis was resolved through intensification and by the appropriation of some farming functions (agro-industry and processing) by capital, rather than the wholesale emergence of the capitalist social formation in agriculture (Watts & Goodman 1997). Kautsky was by no means pro-peasant, however his analysis suggested that the theory of peasant dissolution was subject to some countervailing tendencies, including processes of social differentiation within the peasantry as Lenin identified (Aragli 2009). As Akram-Lodhi & Kay note (2009 p.14), Kautsky had shown “that the emergence of agrarian capital did not have to solely rely on the out-and-out dispossession of peasants.” Peasants, it seemed, could persist under capitalism, although they would tend to differentiate into lower (labouring), middle peasants, and upper (emerging capitalists) classes, or exist as a ‘disguised proletariat’ with their marginalisation entrenched by their subsumption as petty-commodity producers under capitalism (McMichael 1997).

The agrarian question as originally applied by Kautsky, Lenin and others was posed at a particular world-historical conjuncture of significant social, political and economic change. This was a post-revolutionary world where the contours of the first food regime were reconfiguring agriculture on a world scale (Friedmann & McMichael 1989). In the succeeding decades of the 20th century, “as capitalism arose, peasants accommodated it, as their subordination to the wider social and economic forces transformed from that of a variety of pre-capitalist forms, including feudalism, to capitalism” (Akram-Lodhi & Kay 2009 p.4). The agrarian question and the insights of the early agrarian political economists faded into the background as mainstream modernisation theories took hold. However, during the last three decades, capitalism and the global economy has undergone a process of relentless change – known universally as globalisation – that has had profound implications for peasants, rural communities and agriculture in the Global South. In this context, the insights of the early agrarian political economists have been rediscovered, particularly since the full English translation of Kautsky’s seminal work Die Agrarfrage (The Agrarian Question) was published in 1988. This has led theorists to reassert the relevance of agrarian political economy and the agrarian question for understanding the future of agriculture and agrarian spaces in the 21st century, albeit reimagined through a contemporary lens.

McMichael (2013a) argues that the politics of contemporary agrarian questions have been inverted. Instead of a Marxist / socialist problematic relating to the political fate of peasants, contemporary agrarian questions pivot on a developmentalist problematic of globalisation: at a time of unprecedented agricultural productivity there are also unprecedented numbers of rural people in the Global South facing crises of food and livelihood insecurity and chronic poverty (Akram-Lodhi & Kay 2009). It is also
readily apparent that small-scale farming persists in much of the Global South, even as the tentacles of neo-liberal globalisation have extended to all parts of the globe. Research on the agrarian question, then, has refocussed on the fate of rural people and agriculture, including small farmers and peasants, in the Global South, under conditions of neo-liberal globalisation (Bernstein 2010; 1996; McMichael 1997).

Byres (1996) made a seminal contribution to rethinking contemporary agrarian questions. His argument is that the agrarian question is best thought of as three related questions. The first is the political question posed by Engels. The second is the production problematic posed by Kautsky and Lenin; that is how, or whether, capitalist relations of production develop in agriculture. Byres (1996; see also Lerche et al. 2013) then added a third agrarian question that focuses on the contribution of agriculture to the overall transformation of a society from an agrarian to industrial economy. In doing so, Byres reformulated the agrarian question into a problematic focussing on agrarian transition, namely:

“(T)he continued existence in the countryside, in a substantive sense, of obstacles to an unleashing of accumulation in both the countryside itself and more generally – in particular, the accumulation associated with capitalist industrialisation” (Byres 1996 p.26).

Byres’ argument is that in order for capitalist industrialisation to proceed, there must be a resolution to the agrarian question that removes the obstacles to accumulation in the countryside. This resolution will come in the form of some sort of agrarian transition that allows the development and dominance of capitalism. Importantly, Byres argued that contemporary agrarian transitions include the possibility of what he termed ‘historical puzzles’ (1996 p.15). Agrarian transitions need not follow the classical English path. Byres demonstrated this through a careful comparative study of the different paths to agrarian transition in Prussia (‘capitalism from above’) and America (‘capitalism from below’) in the 19th century, and East Asian countries in the 20th century (Bernstein 2010; Byres 1996). Byres’ key insight, perhaps, is that agrarian transitions can take place that do not necessarily include the full development of capitalism in the countryside, in terms of the dominance of capitalist social relations of production of agrarian capital and wage labour (Bernstein 1996):

“We can have a form of agrarian transition, a resolution of the agrarian question in our third sense, such that the agrarian question appears to be resolved in neither the Engels nor the Kautsky-Lenin sense. If, however, the agrarian question is so resolved, in this third sense, in such a way that capitalist industrialisation is permitted to proceed, then, as the social formation comes to be dominated by industry and by the urban bourgeoisie, there ceases to be an agrarian question with any serious implications.
Bernstein (2006; 2010) builds on Byres’ contributions to offer one reimagining of the agrarian question, arguing that the classical agrarian question was essentially one for capital to resolve. In the context of the development of a capitalist world economy during the 20th century, Bernstein argues that the agrarian question for capital was largely ‘resolved’ by the 1970’s, when predatory (pre-capitalist) landed classes ceased to exist on a world scale, the globalisation of agri-business began in earnest, and the capitalist form of production was internalised on a global scale. Therefore, capital no longer needs to foster accumulation in agriculture in order to fuel national industrial development. In this sense, the agrarian question of capital has been bypassed (Lerche 2013). For Bernstein, the relevant contemporary agrarian question is one of labour: the persistence of what Bernstein calls ‘petty commodity producers’ (peasant farmers who have internalised the generalised commodity production relation) signals the failure of the global economy to provide a living wage for the rural labouring classes, exemplified by the emergence of a ‘planet of slums’ (Bernstein 2004; 2010; Davis 2006). Bernstein goes on to argue that these developments mean that “nothing is gained, and much is obscured, by characterising social formations in the South today as peasant societies, or contemporary classes of petty commodity-producing small farmers as peasants” (2009 p.249). For Bernstein, then, the fate of peasants is really about “the fragmentation of labour under generalised commodity production” (Watts 2009 p.263).

In his formulation of the agrarian question of labour, Bernstein takes issue with what Byres (2004) terms ‘neo-classical neo-populism’. Neo-populists are characterised as those who, following from Chayanov’s seminal early 20th century contributions on the peasant mode of production, argue that peasants have an internal non-capitalist logic of production that allows them to survive and even outcompete capitalist farms. In this view, peasants are therefore an enduring feature of agrarian spaces, rather than a transitory form destined to disappear once the forces of capitalist production take hold (Bernstein 2009; Byres 2004; see for example Brookfield 2008). This argument also relies heavily on the inverse relationship thesis discussed previously. The agrarian populist view is an obvious challenge to the economic reductionism that both Marxist and neo-liberal thinkers use to cast peasants and small-farms as a historical anachronism (McMichael 2006b). It has influenced a development ideology that, at its heart, argues that poverty reduction and sustainable development are best achieved through fostering a dynamic small farming society (a utopian and reactionary return to peasant farming in Bernstein’s view), achieved through removing urban biases and implementing redistributive land reform.

A related body of work argues that responses to contemporary agrarian crises have been characterised by processes of peasant resistance and ‘re-peasantisation’ in the Global South, represented by global
peasant and food sovereignty movements such as La Via Campesina (McMichael 2013a; van der Ploeg 2010). For McMichael, the capital centric focus of the classical agrarian question is restrictive; the agrarian question should not be “reduced to a question formed within the terms of capital theory itself” (McMichael 2009c p.289). This is because contemporary agrarian and peasant resistance challenges the ontology of both neo-liberal and orthodox Marxist renderings of agrarian transition: “peasant resistance to global capital occurs within its relations of subjection (to capital), but not necessarily within the terms of those relations, in particular the ontology of capitalism and its accumulation imperatives” (McMichael 2006b p.477).

Instead, McMichael argues for an agrarian question of food, which inverts the classical focus on capital reproduction to that of social reproduction in the countryside, viewed through the lens of the current neo-liberal global corporate food regime (McMichael 2013a). An agrarian question of food leaves space for peasant agriculture as a resilient and socially embedded way of living, revaluing the role of agriculture “as the key to social and ecological reproduction writ large” (McMichael 2013a p.138). This problematizes the fetishization of accumulation and productivist agriculture that McMichael identifies in more classical accounts of the agrarian question: “as such (the food sovereignty movement) concerns questions of rights, social reproduction and sustainability, rather than the questions of teleology, class and accumulation deriving from a productivist understanding of capital and its historical movement” (McMichael 2009c p.308).

A third reimagining of the agrarian question that is important for this thesis is outlined by Watts (2009). Watts argues against Bernstein’s and McMichael’s assertion that contemporary agrarian questions in the Global South have nothing to do with capital. Rather, Watts contends that capital accumulation is repeated historically, and that neo-liberalism (‘accumulation by dispossession’ in words of David Harvey) is transforming the ways in which capital further takes hold of agriculture and fragments, reconstitutes or dispossesses peasants. For Watts, the reconfiguration of the global agri-food system is leading to the emergence of new forms of inequality in rural areas that are drawn into global circuits of agricultural production. The ways in which these ‘new capitals’ emerge and reshape rural places and small farmers is contingent, giving rise to complex forms of class and social differentiation in rural areas (Watts 2009). I return to Watts’ interpretation of the agrarian question in more detail in Chapter 8.

**Conclusion**

This section has reviewed theoretical approaches to understanding the role of agriculture and small farmers in rural development. First, I argue that the development paradigm promoted by the World Bank’s 2008 World Development Report has re-centred agriculture in policy debates about rural development in South Asia. The agriculture-for-development paradigm promotes a specific kind of
future for small farmers, one that is commercially oriented and agri-business focussed. This imagining of agrarian change tasks small farmers to either become capitalist farmers or exit agriculture, and is rooted in a classical linear understanding of rural development (Akram-Lodhi 2008). The updated vision of the role for agriculture promoted by the World Bank and others is consistent with the path to corporatisation, financialisation\textsuperscript{10} and internationalisation that the global economy, and more specifically food and agriculture, has taken in the last three decades; what Friedmann and McMichael (1989) refer to as the ‘corporate food regime’. What the agriculture-for-development agenda tends to ignore is questions about winners and losers in changing agrarian spaces. Second, I argue that debates surrounding the agriculture-for-development paradigm reflect longer standing historical approaches to understanding agrarian change rooted in Marxian-inspired critical agrarian political economy. The terrain of the agrarian question provides a useful entry point to understanding processes of contemporary agrarian change and the possible futures for small farmers and rural households, including patterns of winners and losers in agrarian spaces.

The re-centring of agriculture in development debates in the last three decades has coincided with significant ongoing transformations in global agri-food systems. The next section reviews the nature of these transformations in global agriculture, before moving on to discuss contract farming, one expression of this transformation endorsed by the agriculture-for-development agenda.

**Part 2: Recent changes in the global agri-food system**

The production, processing, transport and retailing of food on a global scale has undergone (and continues to undergo) significant transformations in recent decades. These transformations have changed how small farmers engage with agricultural production and markets (McCullough, Pingali & Stamoulis 2008b; Minten et al. 2013; Reardon et al. 2009). Globalisation of agri-food industries, and changing consumption patterns have converged with neo-liberal policy settings to “reshape the way food is produced, processed, wholesaled and retailed” (Vermeulen et al. 2008 p.19). These conditions have led to the emergence in South Asia and other areas of what are commonly called ‘modern markets’.

Traditional agricultural markets in countries such as India commonly involve complex trading chains and limited supply chain and market infrastructure (Reardon & Minten 2011). Farmers depend on relationships with a myriad of traders, brokers, commission agents and other middlemen to access markets, credit and other inputs. Traditional markets typically involve localised, informal and

\textsuperscript{10} Financialisation refers to the process through which the considerations of financial markets, financial instruments and financial motives come to exercise greater influence over the organisation and operation of the economy (Neilson & Pritchard 2009 p.14; see also Burch & Lawrence 2009).
unorganised trade, or are heavily regulated by state apparatus such as marketing boards. In India, state controlled public markets are known as *mandis*. In comparison, modern agricultural markets are characterised by organised, coordinated and often vertically integrated *value chains* (McCullough, Pingali & Stamoulis 2008a). These value chains spread across regional or national boundaries, linking previously spatially disconnected sites of production, processing, retailing and consumption, where commodities are transformed and value is added. Modern value chains are increasingly dominated and controlled by transnational and domestic agri-food businesses. At the same time, the state is progressively withdrawing from agriculture. The modern agri-food system is also characterised by a shift from largely producer driven to buyer driven value chains, as urban consumers demand differentiated and certified food (Gereffi et al. 2005). The most visible element of this transformation is the increasing dominance of food retailers (supermarkets) in agri-food systems; what has been termed the ‘supermarket revolution’ (Reardon et al. 2003; Reardon & Timmer 2014; Timmer 2009).

As Friedmann and McMichael (1989) have argued, the current prevailing relations of food production and consumption can be viewed as an outcome of broader historical trajectories of international economic relations (see also Pritchard 2009). Historically, the global political economy of food has moved through periods of stability and transition. In an influential contribution, Friedmann and McMichael (1989) termed these periods of stability ‘food regimes’, where “a hegemonic economic power underwrote a specific system of agri-food production and trade” (Pritchard 2009 p.298). Food regime theorists have identified a pre-WWI stable period, the first ‘food regime’, where British colonial and imperial hegemony established a food system centred on wheat and meat imports from the Colonies and the Americas to Europe, and exports of European manufactures and capital in the other direction (Friedmann & McMichael 1989; McMichael 2013a). After a period of chaotic transition during the World Wars, a second food regime emerged based on US hegemony and the Bretton Woods institutions, characterised by state control of agriculture and exports of huge US wheat surpluses, both through trade and food aid, creating food import dependency in newly decolonised nations. Since the late 1970s, however, US hegemony has declined, green revolution technologies have lessened developing countries reliance on food imports, and the EU and other states have emerged as key food exporters (McMichael 2013a; Pritchard 2009). At the same time, neo-liberal modes of accumulation, and structural adjustment policies, have increased the role and power of private corporations in the world economy. Financialisation in global agricultural industries has changed the nature of corporate governance and strategic decision making (Burch & Lawrence 2009). Along with the rise of consumer groups and environmental movements, these global processes have broken up the second food regime, reorganising the global agri-food system under conditions of instability and transition (McMichael & Friedmann 2007). It is argued that these conditions signal the emergence of a third ‘corporate food
regime’ (Burch & Lawrence 2009; Friedmann 2005; McMichael 2013a; Neilson 2008). It is under this regime that transnational and domestic modern value chains and markets have emerged, creating new geographies of food production in the Global South that rural households must adjust to, with new consequences for poverty, inequality and development.

What characterises modern agricultural markets? As mentioned above, the most cited aspect of transformation in agri-food systems is the expansion of supermarkets and retail-led value chains in both developed and developing countries (Boselie et al. 2003; Burch & Lawrence 2007; McCullough, Pingali & Stamoulis 2008b; Reardon et al. 2003; Reardon & Timmer 2014). Supermarkets came to dominate food retailing and value chains in the US, Europe and Australia from the 1960s onwards (Lawrence & Burch 2007). In developing countries, there has been a rapid diffusion of supermarkets across national economies in a series of ‘waves’ beginning in the early 1990s in Latin America and East Asia, then spreading through Southeast Asia and Eastern Europe, and finally a third wave through China and India (Reardon & Berdegue 2002; Reardon et al. 2003; Reardon & Timmer 2014). Supermarkets now dominate food retail in the first and second wave countries. This ‘take-off’ of modern retailing in developing countries is driven primarily by liberalisation of foreign direct investment (FDI) rules and other macro-economic changes associated with structural adjustment such as privatisation of parastatals, along with demographic changes and rising incomes in urban areas (Reardon et al. 2009). The trend in all countries is also towards increasing market concentration in food retail, consistent with the concentration and consolidation of capital in many sectors of the economy, aided and abetted by the strategic logic of financialisation (Lawrence & Burch 2007). Through innovative organisational strategies and harnessing consumer power, supermarkets have displaced food manufacturers, traditional markets, and state institutions as the dominant power in agri-food value chains, where they “are coming to determine what is produced, where, to what standards and where it is to be sold” (Lawrence & Burch 2007 p.9). This has resulted in ‘hourglass-shaped’ value chains, with many producers and consumers at the top and bottom, and a few powerful retail and agri-business firms in the middle (Vermeulen et al. 2008).

The extent and rate of retail transformation has been mediated by the institutional and policy contexts of different countries and regions—for instance the penetration of supermarkets into Indian markets has been slower due to FDI regulations and social and political resistance. Further, in South Asia cereal crop production is still predominantly organised through loosely connected supply chains and traditional markets. However, the pace of change in retail is predicted to increase, especially in third wave countries such as India and China (Reardon & Berdegue 2008). Changes in agri-food value chains are not just limited to retail either. Reardon and others have shown that in India, transformations are taking
place in the traditional wholesale sector as well as in domestic food processing, in what they term a ‘quiet revolution’ (Reardon & Minten 2011; Reardon et al. 2012).

Small farmers and rural communities are experiencing these transformations primarily through the restructuring of procurement systems that supply modern value chains. These changes mainly concern cash crops (high value fresh fruits and vegetables) where supermarkets and processing firms have developed modernised procurement systems as alternatives to sourcing raw materials in traditional spot markets. Reardon et al. (2009 p.1719) identify three main elements in procurement modernisation:

1. “A shift from no standards or public standards to use of private standards (for) quality and safety
2. A shift from spot market relations in traditional wholesale markets to use of vertical coordination mechanisms; the latter include explicit contracts or implicit contracts such as preferred supplier lists, and market inter-linkages such as linking output procurement to provision of credit or inputs
3. A shift from local procurement by each store, to centralised procurement using distribution centres, coupled with a shift to...sourcing via national, regional, and global networks.”

These procurement systems respond to demands for higher quality foods. This has been described as the ‘quality economy’, where retailers and consumers are increasingly demanding differentiated food products with tangible attributes such as food safety, quality, appearance and nutritional content, and non-tangible attributes such as labour, production and environmental standards (Mutersbaugh 2005). The advanced technology and large capital investment involved in modern agri-food logistics, processing and transport systems also calls for homogenous and continuous supply of raw materials that is difficult to achieve in spot markets. Small farmers in South Asia who want to grow cash crops, then, increasingly have to engage with modern procurement systems that place higher demands on the use of technology, inputs, irrigation, knowledge, skills and labour.

**Conclusion**

In this section, I argue that agricultural production in South Asia and elsewhere increasingly takes the form of coordinated value chains, controlled by large retail or agri-business firms. These firms seek to govern their upstream procurement relations as much as possible through private standards, certification schemes, and centralised and specialised wholesaling centres, with the goal of ensuring control of quality and supply. As Bair (2005 p.164, emphasis in original) notes, lead firms are able to dictate “not just the specification of what products are to be produced, (but) often how they are to be produced.” As a result, small farmers now face a new set of challenges, opportunities and constraints in accessing modern markets (Vermeulen et al. 2008). Often, this will require farmers to invest in new
technologies, skills and labour practices. Production sites are increasingly geographically differentiated over space, as firms select production areas that meet particular climatic, infrastructural, and/or labour criteria.

Contract farming is one such mechanism of vertical coordination that firms have employed in modern value chains (Key & Runsten 1999; Reardon et al. 2009). Contract farming schemes are expanding as an organisational form of procurement in many parts of the Global South, including India, enrolling small farmers in new relations of production. In the next section, the key literature on contract farming is reviewed.

Part 3: Contract farming as a mode of value chain coordination

Increasing numbers of small farmers in countries such as India are being enrolled in private-sector contract farming schemes, exposing them to new production relations under the agriculture-for-development paradigm (Singh 2002). Contract farming is not a new phenomenon in the Global South (e.g. Glover 1984; Little & Watts 1994). However, in the last decade, contract farming schemes have increased in visibility in new areas including India. There has been renewed interest from both an academic and policy viewpoint in the potential of contract farming to improve small farmer livelihoods and promote rural development, particularly in the context of the progressive withdrawal of state support for agriculture under policies of liberalisation (Birthal 2008; Oya 2012; Singh 2005).

Contract farming is best defined as a system of vertical coordination between grower and buyer, where the buyer, commonly a private retail or agri-business firm, can specify or control the conditions of production through contractual obligations (Little & Watts 1994). It is an intermediate form of agricultural organisation by agri-business, falling between procurement of commodities on open spot markets, and full vertical integration of production and downstream functions (Grosh 1994). The contract farming model reflects the motivation of downstream agribusiness processors and retailers to ensure control over quality and supply, and manage risk and uncertainty, in upstream (production) segments of modern agricultural value chains (Pritchard & Connell 2011; Reardon et al. 2009). Although the operation of contract farming schemes varies greatly depending on context, they have some common operational characteristics. First, contract farming in the Global South is primarily focused on high value horticultural crops such as fruits and vegetables. Second, contract farming schemes essentially involve an arrangement between farmer and firm, where the farmer agrees to grow and supply a specified crop to the firm, who in return agrees to purchase a specified quantity at a guaranteed price upon harvest. Further layers of obligation for farmers may include size and quality requirements, as well as specification of the production schedule, use of irrigation and inputs, and monitoring/inspection. The contract firm will commonly agree to provide production assistance,
including supplying inputs (fertiliser, pesticide and seeds), technical assistance, transportation logistics, assistance with credit and insurance, and even subsidies for irrigation infrastructure (Bijman 2008). Contracts range from informal and verbal agreements to officially sanctioned written contracts, and transfer differing levels of control of on-farm decisions about production from farmer to contractor. Bijman (2008) categorises the objectives of contract farming firms as coordination and motivation. Firms use contract schemes as a coordination mechanism to “ensure that products of the right quantity and quality are produced, and delivered at the right time and place” (Ibid p.7). Agri-business firms such as processors, who often require a homogenous and regular supply of high-quality material, use contracts to transfer information about production requirements that is difficult to transfer through spot markets. The use of contract schemes as opposed to company farms or plantations allows firms to avoid making large capital investments in land, or taking on production risks associated with full vertical integration (Glover 1984). Contracts also provide incentives to motivate farmers to grow the type of crop that firms demand. This also involves considerations of risk; contracts provide incentives to plant and grow high-risk crops that risk-averse farmers might not grow normally (Bijman 2008).

As Oya (2012) points out, contract farming has become a site of ideological contestation in the academic literature. This debate seemingly pivots on two polar views; those that view contract farming as “a dynamic partnership between smallholders and agribusiness benefiting both without undermining the rights of either (or) as an asymmetrical relationship prone to exploitation” (Ochieng 2010 p.137), leaving scant room for nuanced accounts. Mainstream agricultural economists and international development agencies tend to subscribe to a ‘win-win’ view of contract farming, arguing it benefits both agri-business and small farmers. This dominant view sits nicely with the agriculture-for-development paradigm discussed above, and is primarily influenced by the new institutional economics (NIE) literature on transaction costs. NIE theorists emphasise the role of contract farming as an institutional solution to market failures in the rural Global South. The NIE approach and its shortcomings are reviewed below. The chapter then moves to review more critical approaches to understanding contract farming, and in doing so I set out the theoretical framework employed in this thesis.

**Contract farming and new institutional economics**

Mainstream NIE perspectives argue that explanations for the failure of both state-led and market-led (liberalisation) economic development in countries such as India are best found in the weak or inappropriate institutional structures that fail to address the market imperfections and failures common to less-developed economies (Kherellah & Kirsten 2001). NIE retains the analytical foundation of neoclassical economics, namely the utility-maximising individual as the actor of focus, and prioritises the role of markets in rural development. However, instead of conceptualising a self-regulating market, NIE
Theorists emphasise the central role of institutions in mediating market exchange. As Kirsten et al. (2009 p.38) argue, “economic actors face a particular problem as a result of imperfect information about the behaviour of other actors in transactions...and institutions play an important role in addressing these problems.” Greenwald & Stiglitz (1986; see also Stiglitz 1989) argued that under conditions of imperfect information, market transactions are characterised by uncertainty and risk, leading to inefficient outcomes and market failures. The key insight for NIE is that imperfect information leads to considerable transaction costs for parties. The concept of transaction costs, based on the arguments of economist Ronald Coase (1937), is that “market exchange is not costless” (Kirsten et al. 2009 p.43). Transaction costs arise from the activities necessary to completing transactions, such as searching for information on price and quality, finding and monitoring labour, searching for buyers and sellers, bargaining, and making, monitoring and enforcing agreements (Bijman 2008; Kirsten et al. 2009). NIE argues that high transaction costs lead to market failures that hinder efficient market transactions and, therefore, economic development. Given this, transacting parties will choose the particular institutional structure that reduces or eliminates transaction costs and safeguards their transaction (Williamson 1979). Depending on transaction-specific factors, the most optimal institutional form for reducing transaction costs may be spot markets, contracts or vertically integrated structures. NIE is concerned with analysing these institutions and their effect on efficiency and welfare (Kirsten et al. 2009).

Uncertainty and imperfect information is inherent to agricultural markets in countries such as India for both producers and buyers. This is due in part to the uncertain nature of agricultural production, including seasonality, perishability, and biological uncertainties (Abebe et al. 2013). In this context, NIE theorists understand contract farming as a desirable institutional response that reduces transaction costs for both farmers and agri-business, leading to mutually beneficial outcomes in terms of welfare and efficiency (Abebe et al. 2013; Grosh 1994; Key & Runsten 1999). Additionally, the different occurrence of particular market failures and transaction costs in different areas is used to explain the wide variation in contract forms and practice in the Global South (Grosh 1994). NIE argues that contract farming is an attractive organisational structure for small farmers because it solves the following transaction cost problems listed in Table 2.1 that often deter them from participating in high value agricultural markets (Abebe et al. 2013; Bijman 2008; Key & Runsten 1999).

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11 The theoretical understanding of institutions employed in the NIE approach is taken from North (1990) who moved the definition of institutions beyond narrow references to formal organisations. Instead, North defines institutions as “the rules of the game in a society or, more formally, the humanly devised constraints that shape human interaction” (North 1990 p.3; see also Neilson & Pritchard 2009 pp.48-55).
Table 2.1: Transaction costs and contract farming.

<table>
<thead>
<tr>
<th>Transaction cost / market failure</th>
<th>Contract farming solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties in accessing high quality seed and other inputs such as fertiliser and pesticide that are often required to grow high value crops. Input markets are often imperfect or missing in rural areas.</td>
<td>Contracting company supplies seed and inputs to farmer.</td>
</tr>
<tr>
<td>Risk associated with growing high value cash crops in the context of uncertain markets and prices.</td>
<td>Fixed contract price reduces uncertainty.</td>
</tr>
<tr>
<td>Lack of access to formal credit. Small farmers are often excluded from formal credit markets due to high risk and transaction costs on the part of lenders.</td>
<td>Farmers can use the contract as a guarantee to access credit, or credit is supplied as part of contract package.</td>
</tr>
<tr>
<td>Costs associated with marketing and getting crops to markets in the context of poor local market infrastructure, including transport infrastructure.</td>
<td>Contracting company typically provides transport and logistical assistance. Contract provides farmer with direct access to market.</td>
</tr>
<tr>
<td>Lack of access to market information about price and demand.</td>
<td>Contract price is given up front. Purchase of contracted produce is guaranteed by company.</td>
</tr>
<tr>
<td>Lack of access to extension and crop information in the context of state withdrawal from providing these services.</td>
<td>Most contracts contain provisions for extension services. Farmers can access expertise of company agronomists.</td>
</tr>
</tbody>
</table>

Contract farming allows firms to reduce transaction costs they face in spot markets associated with transferring information to farmers about planting and input schedules, and other crop information that is necessary to grow crops with the required quality attributes. Contract farming also solves problems, while retaining the coordination advantages, associated with vertically integrated structures such as plantations. The most significant of these are costs associated with labour. Labour markets are often poorly functioning in rural areas of the Global South, and contracting arrangements allow firms to avoid labour hiring and supervision costs. Contract farmers often use family labour, which is self-supervising and essentially transaction cost-free for firms (Key & Runsten 1999). Firms can also reduce costs associated with imperfect land markets, or restrictions on land-ownership common in South Asia for example. Finally, contract farming schemes allow firms to transfer production risk to farmers.

Welfare impacts of contract farming: the NIE approach

NIE theorists have also addressed a contentious issue in terms of rural development: whether small farmers or agri-business (or both) benefit more from contract relations. NIE-based studies frequently highlight the ‘win-win’ nature of contract farming for rural development (e.g. Bellemare 2012; Eaton &
Evidently, participation in contract farming is associated with higher incomes for rural households (Pritchard & Connell 2011). For NIE theorists, the spread of contract farming in places such as India itself indicates its welfare benefits for small farmers. If farmers are conceptualised as rational, self-maximising individuals, it follows that they would only participate if contract farming led to welfare gains over alternative activities (Bellemare 2012). Empirical evidence from economic studies lends support to this ‘win-win’ scenario: participating farmers on the whole do achieve increased yields and income. However, establishing direct causal impacts of contract schemes has proved methodologically difficult (Barrett et al. 2012). Studies that report welfare gains emphasise that contract farming connects small farmers to new or more lucrative markets, gives access to technical assistance, modern inputs and credit, as well as reduces risks associated with volatile crop prices (Key & Runsten 1999). For example, in a study of peanut contract scheme in Senegal, Warning & Key (2002) found that participation significantly increased farmer income and many of the beneficiaries were small farmers. Similar evidence has been found for apples and green onion in China (Miyata et al. 2009), milk, broiler chickens and vegetables in India (Birthal et al. 2005), seed corn, seed rice and broiler chickens in Indonesia (Simmons et al. 2005), and multiple crops in Madagascar (Bellemare 2012).

Barrett et al. (2012), in a comparative study of five countries, offer a more nuanced interpretation from a microeconomics perspective. While supporting the evidence that indicates contract participation leads to increased welfare, the authors question whether these benefits are attributable to contract schemes themselves, or to other often unobservable location and selection effects. This reflects the understanding that participation in contract farming is not random, but instead depends on; i) the firm deciding to locate the contract scheme in that household’s area; and ii) the firm then offering a contract to that household (see also Bellemare 2012). Barrett et al. (2012) argue that a firm’s location decisions are influenced by soil quality and other biophysical and climatic factors, as well as physical and institutional infrastructure. In order to maximise profit, firms will locate in areas of high agricultural profitability and good infrastructure, areas that would tend to be populated by more advanced or profitable farmers. There are similar selection effects when firms offer contracts to households within geographic areas. Across the five study sites, characteristics consistently associated with contract participation included access to irrigation, membership of farmer organisations, and social connections (Ibid).

A closely related issue is whether small farmers are included in contract schemes; that is whether contract schemes exhibit bias against smallholders in participation (Bijman 2008). This question is critical to the promotion of contract farming as a rural development strategy. The evidence for bias against
smallholders is mixed, and depends on crop type and context. Singh (2002), in a survey of contract farming in the Indian Punjab, found that while participation led to higher incomes, firms preferred to contract with larger producers; the average acreage under contract to transnational companies in Singh’s study sites was well above the average farm size in the state. Key and Runsten (1999) found that in the Mexican frozen vegetable sector, firms were deterred from contracting with smaller farmers by the increased transaction costs associated with providing inputs, credit and extension, as well as contract coordination and crop collection (Ibid p.396). Others, such as Miyata et al. (2009), Birthal et al. (2005) and Warning and Key (2002) found no evidence of small farmer exclusion. Barrett et al. (2012) point out that firms inevitably face trade-offs when selecting participants. Contracting with small farmers offers firms advantages in terms of access to self-supervised family labour, allowing firms to spread production risks over greater areas, allowing more flexibility in responding to consumer preferences and the increased dependence smallholders may have on the firm, encouraging better production and contract adherence (Bijman 2008; Reardon et al. 2009).

Notwithstanding the contributions of Barrett et al. (2012), on the whole, NIE-based research tends to present an uncritical view of contract farming as an institutional solution that benefits both farmers and agribusiness firms. This narrative fits well with the agriculture-for-development paradigm:

“(S)cale economies in processing and marketing exist with fragmenting and shrinking farm size, so institutional innovations such as contract farming can reduce the transaction costs and risks of smallholders. Linking smallholders to processors and retailers can also create access to more financial capital through banks—and provide technology, extension, and buy-back arrangements, while monitoring food safety” (World Bank 2007, p.237).

The ‘bias debate’, however, suggests that small farmers maintain a problematic place in this narrative. Further, the focus of NIE on the micro-scale functioning of contracts is readily criticised for the lack of attention to power structures, and the failure to situate contract farming in specific social, political, cultural, ecological and economic contexts (Oya 2012). The result is that NIE tends to uncritically reproduce modernist understandings of development and contract farming within an orthodox economics framework based on methodological individualism. Such frameworks are concerned more with ‘aggregates and averages’ rather than any normative focus on poverty reduction or concern for the distributional consequences of contract farming (Thompson & Scoones 2009, p.386). As McMichael (2013b) suggests, NIE’s conclusion that agribusiness and farmers ‘win’ from contract arrangements is self-reinforcing and predictable: farmers enter contract relations in order to increase or stabilise incomes. This conclusion, though, sheds little light on how existing patterns of social differentiation may
mediate participation, what the impact of contract schemes might be on future household livelihood possibilities and how contract farming interacts with broader patterns of rural change. Oya’s (2012, p.6) critique is illuminating:

“(T)here is no due consideration of political drivers, nor is there any serious account of power and class as organising principles to understand contract farming’s origins, developments and outcomes for the different classes of participants, considering that farmers’ differentiation is a fact of life, often connected to the emergence of contract farming opportunities themselves.”

In short, beyond a myopic focus on transaction costs, NIE has little to say about why particular contract schemes engage with particular places, how contract farming contributes to patterns of winners and losers in agrarian spaces, or how it might interact with broader patterns of rural development and inequality.

The remaining sections of part three review two alternate approaches to contract farming in the literature – global value chains analysis and critical agrarian political economy – that can address the shortcomings of the NIE approach. Part four then proceeds to make the case for incorporating the insights of local scale sustainable livelihoods analysis. I argue that a multi-theoretical approach incorporating the insights of all three approaches provides a fruitful way forward for understanding the complex outcomes of contract farming in particular places.

**Contract farming and global value chains**

Global value chain (GVC) analysis seeks to explain the shifting geographies of agricultural production and trade, including contract farming, using the metaphor of the *value chain*. Kaplinsky (2000, p.121) defines a value chain as follows:

“(T)he full range of activities which are required to bring a product or service from conception, through the intermediary phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use.”

Conceptualising the global economy in terms of ‘chains’ that link spaces of production, processing, retail and consumption has been employed in various forms in the social science, business and economics literature by researchers seeking to understand global economic change (Kaplinsky 2000). The chain concept has proved particularly useful to economic geographers and others for coming to grips with the spatial complexity of uneven global development. For its theorists, the spread of global value chains are a major driver of globalisation itself. As Neilson and Pritchard (2009, p.29) note, “(t)he research task of
following a commodity/product through a chain explains how the connections and disconnections of geography create a world of comparability and heterogeneity; of affluence and poverty, of advantage and disadvantage.” Applying this approach to contract farming and rural development re-scales research attention to how spaces of agricultural production are linked to and influenced by spatially diverse sites of economic activity in the global economy. The GVC approach has faced criticism for its sometimes-myopic focus on chains at the expense of both macro scale political and micro scale livelihood issues (Kanji et al. 2005; McMichael 2013b; Yeung & Coe 2015). However, I will argue that this weakness is a function of research design rather than an inherent shortcoming of the approach, which, in fact, allows space for the inclusion of the structural concerns of political economy, and the people-centred focus of livelihoods research. Enriching the GVC approach with the insights of agrarian political economy and sustainable livelihood frameworks provides a theoretical and methodological approach that can tease out the complexities and nuances of the implications of contract farming for rural development and agrarian spaces.

World systems theorists were among the first to employ a chain concept (at that time termed ‘commodity chains’) in the analysis of global economic organisation. Here, the concept of a commodity chain was used as a way to interrogate the international division of labour under a capitalist world economy (Bair 2005). The contemporary GVC framework emerged from an influential contribution edited by Gereffi and Korzeniewicz (1994). In this volume, researchers applied the chain approach to “understanding the changing spatial organisation of production and consumption in the contemporary world-economy”, with an explicit focus on economic development in poorer countries (Gereffi et al. 1994, p.2). The chapters in the book applied a value chain approach to several case studies based on specific industries, including footwear, automobiles, apparel and cocaine. The most influential contribution, however, was Gereffi’s chapter (1994, p.97), where he defined three key characteristics of value chains: (1) input-output structure (i.e. the chain structure); (2) territoriality (the spatial dimension); and (3) governance structure (who controls the distribution of value in the chain and how). A fourth dimension, institutional context, was added to the framework the following year (Gereffi 1995).

The analytical concept of chain governance argues that global economic activity is driven by processes of value chain coordination that affects the spatial organisation of the modern world economy, and the allocation of resources and value amongst chain participants (Bolwig et al. 2010). Importantly, GVC theorists argue that a value chain is governed by a lead firm; a powerful actor who controls participation in the value chain, the organisation and structure of the value chain, and the distribution of value. In his original contribution, Gereffi (1994) identified value chain governance as primarily producer-driven or buyer-driven. Importantly, Gereffi observed a shift in the globalising economy from producer-driven to
buyer-driven chains, as large downstream firms (buyers) were coming to control production in far flung corners of the globe. The phenomenon of the increasing power of buyers described by Gereffi is evidenced by the increasing ability of supermarkets to shape agricultural value chains. The dichotomy of producer/buyer driven governance, however, proved too simplistic in practice to account for the myriad of governance structures that are employed by lead firms. Recognising this and building on the work of Humphrey and Schmitz (2000; 2002) and Sturgeon (2001; 2002), Gereffi et al. (2005) outlined a more sophisticated framework of value chain governance in a much cited paper. The authors identified five types of value chain governance, with the degree of explicit coordination and power asymmetry in the chain increasing as governance structures move along the above continuum from markets to hierarchy arrangements (Figure 2.1):

1. **Markets**: Spot price or repeat transaction arrangements, where the costs of switching to new partners is low for both parties;
2. **Modular value chains**: Suppliers make products to a customer’s (buyer) specifications;
3. **Relational value chains**: Complex interactions, often managed through family ties or reputation, which create mutual dependence and high levels of asset specificity;
4. **Captive value chains**: Suppliers are transactionally dependent on much larger buyers, and face significant switching costs because of market or technological constraints;
5. **Hierarchy**: Systems of vertical integration along the chain.

![Figure 2.1: GVC governance types. Source: Gereffi et al. 2005, p. 89.](image)
Importantly, Gereffi et al. (2005, p.87) argued that value chain governance is determined by three primary factors: the complexity of transactions required to produce the final product; the ability to overcome complexity through codification of these transactions; and the capabilities of actors in the supply base to meet the lead firm’s requirements. Different combinations of these determinants give rise to the different governance types described above, influencing how lead firms exert power within a value chain (Table 2.2).

Table 2.2: Key determinants of value chain governance. Source: Gereffi et al. 2005, p. 87.

<table>
<thead>
<tr>
<th>Governance type</th>
<th>Complexity of transactions</th>
<th>Ability to codify transactions</th>
<th>Capabilities in the supply-base</th>
<th>Degree of explicit coordination and power asymmetry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Modular</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Relational</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Captive</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

A second area of focus for GVC studies is the concept of upgrading (Gereffi 1999). Upgrading is defined as the “several kinds of shifts that firms (actors) or groups of firms might undertake to improve their competitive position in global value chains” (Gereffi et al. 2001, p.5). Employing the upgrading concept allows researchers to ask how farmers, producers and other economic actors in developing countries can generate the necessary competencies and skills to gain entry to and improve their position (in respect to value capture) in value chains that are often governed by powerful transnational firms (Bair 2005). GVC proponents argue that the different upgrading prospects of developing country actors is critical to understanding “how and why countries advance—or fail to advance—in the global economy” (Gereffi et al. 2005, p.79). The upgrading concept contrasts with the emphasis placed on endogenous and localised inter-firm dynamics and institutional structures in the regionalism and clusters literature of the late 1990’s (Neilson & Pritchard 2009). This reflects a debate between the relative importance of the ‘vertical’ (value chains) and ‘horizontal’ (local institutions and clustering) for regional development (Coe et al. 2004). GVC researchers have sought to reconcile these approaches by emphasising that local upgrading opportunities are dependent on how local actors are connected to downstream firms (Humphrey & Schmitz 2002). Four types of upgrading are defined, which require different skills and enabling environments in order to achieve (Barrientos et al. 2010; Humphrey & Schmitz 2002):

1. Process upgrading: Transforming the production process to make it more efficient, through reorganisation or new technology;
2. Product upgrading: Moving into more advanced product lines;
3. **Functional upgrading**: Acquiring new, higher value added tasks in the chain (or abandoning existing functions);

4. **Inter-sectoral upgrading**: moving into chains in different sectors.

One important contribution of the upgrading concept is that upstream producers can more easily achieve process or product upgrading than functional upgrading. Lead firms typically will help upstream actors with process or productivity learning, while jealously guarding the intangible aspects of production in the chain (such as marketing, brand development, patents etc.) that are the sites of most value (Bair 2005; Neilson & Pritchard 2009). Recently the upgrading concept has been criticised for focusing only on economic upgrading of chain actors. To address this, the concept has been extended to include the implications of value chains for social upgrading outside of the chain, including employment and gender outcomes (Barrientos et al. 2011).

**Theoretical approaches to contract farming in the GVC literature**

For GVC researchers, understanding agriculture and rural development starts from understanding the value chain itself (Kaplinsky & Farooki 2011). For agri-food value chains, the trend of the last 25 years has been away from market forms of governance towards captive and hierarchical governance and vertical coordination. GVC researchers have documented the expansion of coordinated modern value chains into the fresh fruit and vegetable sectors of developing economies (Bienabe et al. 2007). GVC researchers have asked questions about the prospects for small farmers participating in modern value chains, including upgrading and value capture. Of central concern has been whether modern value chains will include or exclude small farmers (Vorley et al. 2007).

From a GVC perspective, the spread of contract farming in the Global South is consistent with the trend towards captive and vertically coordinated forms of governance in modern value chains. Contract farming is an increasingly important form of value chain coordination for firms in meeting the demands of modern agri-food systems for traceability, standards and certification, while also maintaining competitive advantage (Neilson 2008; Swinnen & Maertens 2007). Accordingly, small farmers must also respond to increasingly rigorous production requirements based around quality, safety and other factors or risk being squeezed out of high value modern value chains in favour of larger or better resourced farmers (Henson et al. 2005). These exacting requirements translate to higher capital requirements, and GVC research has highlighted the increased barriers to entry that small farmers now face in connecting to modern value chains through contract farming and other market structures (Bienabe et al. 2007; Gibbon 2003).

Existing GVC studies report mixed evidence on the impact of contract farming on small farmer inclusion and value capture. Small farmers are often vulnerable, and struggle to maintain their place within
vertically coordinated value chains (Oya 2012). Pritchard and Connell (2011) show how the food safety and traceability demands of EU and North American retailers drove the implementation of an integrated chilli contract farming scheme by an Indian exporter, leading to the exclusion of ‘non-progressive’ farmers in many cases. In Indonesia, the spread of private regulation in the coffee industry in the form of certification schemes is influencing the spread of contract relations between growers and exporters, restructuring coffee value chains and impacting farmer welfare (Neilson 2008). Dolan and Humphrey (2000; 2004) show how the Kenyan export vegetable industry became increasingly integrated in response to the changing quality requirements of UK supermarkets. The vertical coordination of export vegetable value chains required by UK supermarkets influenced Kenyan exporters to establish contracts with fewer, and bigger, growers. Likewise, Fold and Larsen (2011) argue that small farmers face increasing barriers to entry in participating in horticultural value chains that end in the Global North. The technical and economic requirements of these markets often exclude small farmers. For African producers, Fold and Larsen argue product or process upgrading for small farmers in Global North-oriented value chains often requires participation in contract farming schemes where they can access the required capital, skills and technology; however often only those who can attract NGO support through farmer cooperatives are able to meet the entry requirements.

Others are more optimistic about the prospects for small farmers in modern value chains. In a study of Malagasy vegetable contract farmers, Minten et al. (2009) argue that small farmers in Madagascar have successfully participated in and benefitted from a value chain controlled by a marketing firm that sells to European supermarkets. This leads the authors to argue that modern value chains should be seen as an opportunity rather than a threat to small farmers. Likewise, small farmers in Maharashtra, India, were able to participate in a high value grape export value chain by forming cooperatives to negotiate contracts with downstream buyers (Roy & Thorat 2008). The cooperatives were organised through a marketing partner known as ‘Mahagrapes’, which allowed small farmers to upgrade through economies of scale in input procurement and knowledge dissemination. Although both studies highlighted that many small farmers (up to 10,000 in the Malagasy case) participated in and benefitted from modern value chains, in each case there were particular constraints that without supportive interventions would have excluded many from participating. In Madagascar, participants were spatially concentrated (all participants were within 120km of the lead firms processing plant), and high transaction costs of dealing with many small farmers dissuaded other firms from investing in the country. In the Indian case, while the authors found no bias against small farmer participation per se, small farmers that could not meet the costs of standards compliance and tolerate the risk of rejection by European buyers could not participate.
While offering some important insights on the changing nature of agricultural production, GVC analysis has attracted criticism, particularly for its firm and chain-centric focus, and emphasis on governance. Institutions remain somewhat of a ‘black box’ in GVC analysis, however this is more a function of how the framework has been applied (Bair 2005; Neilson & Pritchard 2009). As noted above, the institutional dimension was added to the GVC approach early on, reflecting the observation that value chains “do not exist in a vacuum but within a complex matrix of institutions and supporting industries” (Sturgeon 2001, p.11; quoted in Neilson & Pritchard 2009, p.8). Neilson & Pritchard (2009, p.8) have called for a “reassertion of the importance of institutional analysis within a fourfold GVC approach.” Such a reassertion can reinforce the geographical nature of GVC analysis: the governance dimension addresses how chain actors and processes are connected across space, while the institutional dimension addresses how chain actors are embedded in particular places.

Notwithstanding Neilson & Pritchard’s contribution, GVC studies do suffer from their tendency to focus heavily on the ‘vertical’ dimension of the global economy (i.e. the contract farming scheme itself) at the expense of the ‘horizontal’ dimension (the cultural, social, political and institutional factors of place) (Dicken 2015). From a geographical perspective, the firm and chain-centric focus of GVC studies obscures broader processes of rural development, particularly how historical and place-specific factors influence how contract farming schemes ‘touch down’ in particular places (Bair 2008). As it has been applied to understanding regional development, the GVC approach often fails to recognise the importance of the co-constitutive nature of the global economy, and the role that embedded spatial relations and contextual factors of place play in producing outcomes in economic spaces that intersect with value chains. For example, as discussed above, the upgrading concept is often applied uncritically to the economic upgrading possibilities of firms already participating in the chain, overlooking the effect of value chains on the social conditions of both participants and non-participants, and particularly non-firm actors (Barrientos et al. 2011). As Bair (2005, p.167, emphasis in original) identifies, there is a pressing need “to study more closely the factors external to chains that shape their geography and configuration, and strongly affect the extent to which different actors benefit from participation in them.”

Economic geographers using the global production network (GPN) approach have attempted to make explicit the spatial and relational nature of value chains. GPN theory seeks to move beyond the linear and vertical conceptualisation of the value chain in the GVC approach (Coe 2012; Coe et al. 2004; Dicken et al. 2001; Henderson et al. 2002; Yeung & Coe 2015). Instead GPN scholars take the view that “such processes are better conceptualised as being highly complex network structures in which there are intricate links – horizontal, diagonal, as well as vertical – forming multi-dimensional, multi-layered lattices of economic activity” (Henderson et al. 2002, p.442). The GPN approach adopts an explicit
relational approach to regional development, attempting to analyse how network processes, spread over multiple scales, produce particular patterns of economic organisation and winners and losers in the global economy (Dicken & Malmberg 2001; Yeung & Coe 2015). Two concepts are particularly important for GPN theorists: strategic coupling and embeddedness. Strategic coupling describes the mechanisms through which the needs of extra-local lead firms in production networks are matched with local assets, leading to the engagement of GPNs with particular places (Yeung 2009). The strategic coupling of GPNs with local spaces drives regional development. The concept of embeddedness is taken from Granovetter’s (1985) work on how economic action is embedded in historically-informed social relations and structures. GPN researchers have used the term to describe “the multiple social, cultural, economic, political, historical, and personal relationships that situate actors in networks, regions and social groups” (Weller 2006, p.1251; see also Hess 2004). In this way, the GPN approach is an attempt to embed global value chains in the diverse networks of socio-spatial relationships that span economic spaces (Yeung & Coe 2015).

While the GPN approach has highlighted some shortcomings of the GVC framework, it too remains open to criticism (Fold 2014). In particular, the concept of embeddedness remains ‘fuzzy’, leading to questions of ‘who’ exactly is embedded in ‘what’ (Weller 2006, p.1250; see also Coe 2012), while the strategic coupling concept has yet to be operationalized in any general sense. GPN studies of agriculture or contract farming have also been limited. Most GPN studies have focussed on complex production networks characterised by highly developed, advanced manufacturing industries, including telecommunications (Hess & Coe 2006), and technologically-intense industries in East Asia (C. Yang 2009; D. Yang et al. 2009; Yeung 2009). This has led some to suggest that the GPN approach may be more usefully applied to such complex, networked industries, while the GVC approach may be more useful for commodity based industries such as agriculture (Neilson & Pritchard 2009). As early as 2008, Bair (2008) suggested that in practice, both approaches were converging methodologically, and seemingly producing similar empirical insights. Nevertheless, the methodological firm-centric focus of both approaches, what Taylor (2007, p.534) refers to as ‘network essentialism’, constrains the ability of GVC/GPN studies to understand processes and patterns of regional development beyond that of firms participating in a chain/network, particularly in the case of agriculture and rural spaces in the Global South. Kelly (2013, p.84) articulates this as a concern for what a GVC/GPN approach might miss:

“(T)he purpose of analysis is not just to assess the ways in which firms organize production spatially, but rather to consider how places are changing. Thus when the question of development is raised, it puts the GPN approach in a somewhat difficult position. While the GPN framework is adept at explaining why certain economic
activities are in certain places...it is less oriented towards engaging with those places themselves as the locus of analysis.”

Another criticism directed at GVC/GPN approaches is the way in which particularly value chain analysis has been translated uncritically to policy settings, under the nomenclature of ‘value chain development’. Under the agriculture-for-development paradigm, modern value chains and contract farming schemes are viewed as a vehicle for incorporating small farmers into the global economy. A primary challenge for rural development is how value chains can be made ‘pro-poor’. Contract farming schemes in particular are viewed as a potential solution to the entry barriers that small farmers may face in participating in modern value chains (Gibbon 2003). From a value chain development perspective, contract schemes allow downstream firms to transfer the skills, knowledge and technology that small farmers need to meet the production requirements of modern agriculture, while enabling the coordination of a diverse supply base of smallholders. The argument is that engaging with global value chains will allow ‘traditional’ farmers in the Global South to accumulate capabilities that will allow households to progress in the global economy (Kaplinsky & Farooki 2011). For the World Bank and others, small farmer engagement can be strengthened by improving both horizontal and vertical market linkages to facilitate upgrading (Vorley et al. 2007). Connecting smallholders to markets has become the catchphrase of development agencies. The operationalization of the GVC concept has included the production of ‘how to’ manuals, encouraging firms to create space for small farmers in modern value chains as part of a paradigm of pro-poor market development and corporate social responsibility: “with the right sort of support, small-scale producers can be efficient and reliable providers of quality produce; in other words good business partners” (Vermeulen et al. 2008, p.1.11; see also UNIDO 2011). The concept of ‘value-chain development’ therefore fits well with the neo-liberal agriculture-for-development agenda (Neilson 2014).

GVC/GPN analysis is a useful framework for understanding the phenomenon of contract farming, going beyond the narrow microeconomic focus of NIE, which speaks to broader concerns of governance, institutional embeddedness and power. However, the implications of contract farming schemes for broader patterns of social differentiation and uneven development remain hidden (Kelly 2013). Chain or network approaches do not offer insights into the consequences for patterns of winners and losers outside of a narrow focus on the chain or contract scheme itself, limiting the ability of GVC/GPN analysis to come to grips with important questions about rural development and agrarian change. There is, therefore, a clear opportunity to enhance the analytical purchase of GVC/GPN analysis by incorporating the strengths of critical agrarian political economy discussed in part one. To this end, the next section
reviews the contribution of critical political economy to understanding the impacts of contract farming on agrarian spaces.

**Contract farming and the agrarian question revisited**

Agrarian political economy theorists have taken a more critical approach to understanding the role of contract farming in rural development, viewing it through the lens of broader historical questions about the prospects for peasants under conditions of capitalist agrarian transitions. This approach has paid attention to how contract farming may fit into historical patterns of social and economic change in rural areas analysed at a national or global scale. Often, this includes thinking about peasant exploitation and resistance in the context of contract farming. Contract farming, as a visible manifestation of contemporary agri-food systems, has featured prominently in recent debates about contemporary agrarian change. For agrarian political economists, contract farming is one way for capital to resolve the agrarian question of the development of capitalism in the countryside. Situating contract farming within an agrarian change narrative has allowed researchers to move beyond narrow definitions of contract farming as a technical response to market failures. These contributions have provided key insights into how small farmers are subordinated to, or accommodate, contract farming, as an indicator of broader patterns of agrarian change.

An early seminal contribution from agrarian political economy was an edited volume by Little & Watts (1994). The authors focus on the unequal power relations and conflict they see as inherent in contract farming relations, arguing that contract farming is a key institution through which capital can come to control various aspects of agricultural production, in particular rural labour, “in the search for new sources of profitability and accumulation” (p. 6). This is necessary as capital has been unable to subsume the rural production process as a whole. The authors also argued that contract farming is an ideological tool of the World Bank and other international organisations to promote structural adjustment and export diversification, with the discourse of a ‘win-win’ for both agri-business and small farmers used to promote contract schemes in the Global South. However, the contributions to the volume argue that such an approach fails to account for the political, economic, historic or socio-cultural context in which contract relations arise. By applying a critical political economy lens, Watts (chapter one) argues that rather than enhancing the independence of small farmers, the objective of contract farming schemes is to subjugate labour:

“(T)he family farm under contract survives in a quite limited sense, as a shell of its former self. Formally integrated with and subordinated to various circuits of capital, the much-vaunted independent grower functions as little more than a *propertied labourer, a hired hand on his or her own land*” (Watts 1994b, p.33, emphasis added).
For Watts, contract farming is best viewed as a ‘non-equity’ form of control over production, allowing agri-business access to the essential commodities of land and labour without investing in either, avoiding the inherent risks and problems that capital faces in directly owning the means of production in agriculture as identified by Kautsky. This relegates peasant farmers to the role of a self-employed semi-proletarian – indeed the “proletarianisation of the once independent family-famer” is a recurring theme in the agrarian political economy literature (Brookfield 2008, p.119).

However, peasant farmers, as Watts argues, are not silent spectators to their own subjugation. Small farmers have engaged in strategies of resistance and adaptation in response to contract schemes through subversion of contract rules including selling contracted produce on the open market (‘side-selling’), and diverting contract scheme inputs (credit, fertiliser etc.) to other crops or household needs. Importantly, Watts & Little also argue that the sheer diversity of contract arrangements mean a unified ‘theory of contracting’ is of little use. Rather, case studies, where contract schemes are interrogated within the place-based contexts in which they occur, are essential to uncovering the social, cultural and economic complexity inherent in contract relations.

In an extensive review of the political economy of contract farming in Africa, Oya (2012) positions contract farming as a site of ideological contestation in debates about the development of capitalism in rural areas. For Oya, discussions about contract farming cannot be separated from broader debates about the role of small farmers in development. He argues that so called neo-populist writers view contract farming as “one of the preferred institutional devices to make the smallholder path to development (and capitalism?) viable in contemporary developing countries in the context of globalisation” (2012, p.9). This politically popular view has permeated into World Bank policies that, as noted above, strive to find a place for (entrepreneurial) smallholders in corporate agriculture without challenging the corporate global agri-food system. But here lies the crux: it is apparent that in many cases contract farming schemes have only been sustainable under conditions of monopsony power, where a company is the only buyer for many small farmers with scarce alternative livelihood and income generating options (Oya 2012). There is, therefore, a contradiction between neo-liberalism’s commitment to free markets as the best path to small farmer welfare on the one hand, and contract farming as an institutional innovation that may only work for agribusinesses under conditions of less or no market competition (Oya 2012, p.9). Oya’s contribution also tackles the role of contract farming in agrarian transitions, however he criticises Watts & Little for their over-deterministic view of the inevitability of contract farming relations expanding under globalisation. Oya argues that there is no evidence of a distinct ‘contract farming path’ in agrarian transition, and instead suggests that “contract

\[12\] It should be noted that this is not their term.
farming may be contributing to processes of social differentiation and capitalist development already under way, in conjunction with several other forces, specific to time and place” (2012, p.28). This points to an important argument of the agrarian political economy literature: that the benefits of contract farming will likely accrue to those farmers with higher levels of pre-existing resources or capital, particularly those with access to off-farm income sources (Brookfield 2008; McMichael 2013b; Oya 2012; Singh 2002; Zhang 2012).

Questions remain, however, about the significance of contract farming’s contribution to processes of differentiation and ‘accumulation from below’ in rural areas, particularly in regards to: i) the role of contract farming in the emergence of a class of capitalising small farmers (the World Bank’s entrepreneurial small farmers); ii) whether contract farming represents a viable alternate path of an agrarian transition centred on small farmers rather than large-scale farming; and iii) whether contract farming will make redundant the emergence of domestic agrarian capitalists if agribusiness can use contract farming to extract surplus value from small farmers, without needing to change the structure of agrarian relations (Oya 2012).

In a review of contract farming in China, Zhang (2012) argues that understandings of the interactions between small farmers and contract farming must be placed in the context of local political economy, including access to alternative options for different social groups. While quantitative studies in China, focusing on the microeconomic effects of contract farming, have found evidence of positive income effects, Zhang argues that such findings lead to oversimplified understandings of contract farming as ‘pro-poor’. Instead, when analysed within broader patterns of agrarian change, contract farming in China loses much of its appeal for small farmers, and is better understood as an activity of last resort for households who have watched state support in agriculture erode over the past three decades.

McMichael (2013b, p.671) has argued that debt relations constitute the primary means by which small farmers are incorporated into contract farming schemes, where a farmer “enters a particular kind of value relation that has the potential to become an instrument of control, debt dependency and dispossession”. McMichael is highly critical of the value chain vision of development. Like Little & Watts (1994), he views value chains and contract farming as sites of inherent unequal power relations, which threaten the autonomy and ecology of peasant farming (see also Brookfield 2008). Debt relations are critical to the implementation and reproduction of contract farming. McMichael conceptualizes contract farming as a response by capital to crises of accumulation in agriculture:

“Value-chain agriculture, the new contract farming nomenclature, envisions the large-scale integration of smallholders into agribusiness relations in an era in which export
agriculture has become synonymous with ‘feeding the world’ ...(R)esolving the agrarian and food crisis through a project such as this represents a ‘spatio-temporal fix’ enclosing producers in value-chain technologies financed through debt dependency” (2013b, p.673).

McMichael further argues that this ‘fix’ is not even paid for by agribusiness, but rather through the debt relations established with peasant farmers, often with state support or subsidies. The mobility of global agribusinesses allows companies to expand by exhausting local resources and transferring created value elsewhere (David Harvey’s concept of accumulation by dispossession, see Harvey 2004). McMichael’s key argument is that in the process no new wealth is created for most local farmers; rather local wealth is captured and relocated. Debt chains smallholders to value relations beyond their control. Further, it has been well documented by Singh (2002) and others that contract companies often ‘shift the goalposts’ for small farmers once they have been incorporated into contract schemes by increasing quality requirements, lowering payments or increasing input costs.

Conclusion
Part three has reviewed three ‘prisms’ through which contract farming in the Global South has been analysed in the literature. Each approach – NIE, GVC analysis and agrarian political economy – views contract farming through a particular ontological and methodological lens, leading to particular interpretations of the implications of contract farming for rural development. I argue that NIE, the dominant and mainstream approach to contract farming in the literature, provides a largely uncritical analysis of the role of contract farming as a microeconomic institutional innovation that reduces transaction costs and solves market failures. Such an approach often leads to oversimplified interpretations of contract farming as a ‘win-win’ solution to agrarian crises that are not placed within the context of broader patterns of rural development and agrarian change. This interpretation fits well with the conceptualisation of agriculture and rural development promoted by the World Bank and others under the ‘agriculture-for-development’ paradigm.

On the other hand, the insights of the GVC and agrarian political economy literature provide a more critical framework through which to interrogate the implications for contract farming for small farmers and rural development. GVC analysis understands the spread of contract farming as part of broader patterns of global economic restructuring, situating contract farming as a form of governance implemented by lead firms in global value chains. In doing so, GVC analysis highlights the role of value creation and distribution, power relationships within value chains and the role of institutions in mediating the outcomes for small farmers. Agrarian political economy adds to this understanding by situating contract farming within broader scale historical patterns of agrarian change and the dynamics
of the emergence of capitalism in agrarian spaces. In doing so, agrarian political economy highlights how contract farming fits into ongoing processes of class differentiation and capital accumulation, often reproducing inequality and the exploitation of peasant or labouring classes. Combining the insights of both the GVC and agrarian political economy approaches offers a way forward for a critical appraisal of contract farming and rural development. However, both approaches are open to criticism and limitations. The GVC framework often essentialises the value chain, ignoring important processes and actors outside the chain of interest. As Coe (2012, p.3) argues, there is a need for GVC/GPN research to “incorporate a more comprehensive view of what constitutes ‘value’ beyond the firm—e.g. by incorporating households—and development beyond the purely economic sphere.” Likewise, the agrarian political economy approach typically provides overly theoretical accounts of contract farming at a macro level, rather than careful or nuanced empirical investigations of the on-ground realities of contract farming, which can lead to essentialist interpretations of contract farming as ‘all bad’.

It is reasonable, therefore, to critique the GVC and agrarian political economy literature for failing to ground accounts of contract farming in the place-specific ways in which rural people actually live their lives. This research gap serves to mask the nuances of how contract farming schemes insert themselves into rural spaces and reproduce, or not, patterns of privilege and socio economic differentiation. I argue, therefore, that contract farming must be understood within the context of place-specific local livelihoods. Incorporating a local-scale livelihoods lens into contract farming research allows researchers to ground interpretations of schemes in the actual places where they operate, disentangling the complex interactions between contract farming and rural places. There exists, therefore, an opportunity to ground a combined GVC/agrarian political economy approach with the local scale insights of sustainable livelihoods analysis. I argue that by incorporating a livelihoods ontology alongside a combined GVC/agrarian political economy approach we can begin to build multi-disciplinary theoretical frameworks that illuminate the complex and nuanced ways in which contract farming interacts with rural spaces and rural households. This sets up the empirical contribution of the thesis: a livelihoods-centred case study of contract farming and agrarian change in rural India.

Part 4: Adding a livelihoods approach

The rationale for incorporating a sustainable livelihoods approach with a combined GVC/agrarian political economy framework starts from the need to address a basic but intractable problem in regional development: “what can poor people in rural areas do to improve their lives?” (Mitchell et al. 2011, p.1). Given the potential of contract farming to reproduce patterns of unequal development, a livelihoods approach provides the analytical tools to account for how contract schemes intersect with the place-based social, cultural, political, environmental, economic and historical specificities that define the
everyday lives of local people. Livelihoods analysis achieves this by focusing on the factors that influence how farmers, workers, men, women and households construct, successfully or not, different livelihood strategies in order to live meaningful lives. In this way, livelihoods thinking challenges researchers to account for the diversity of the actual lived experiences of local actors in rural development problems:

“(L)ivelihoods approaches have challenged fundamentally single-sector approaches to solving complex rural development problems. The appeal is simple: look at the real world, and try and understand things from local perspectives. Responses that follow should articulate with such realities and not try and impose artificial categories and divides on complex realities” (Scoones 2009, p.172).

Livelihoods-based thinking has a rich history in rural research. Anthropologists and others have employed locally embedded and people first approaches, using methods of deep field engagement, though not necessarily under the title of ‘livelihoods analysis’ (Scoones 2009). A coherent and distinct livelihoods framework first emerged in a paper by Chambers and Conway (1991) from the Institute of Development Studies (IDS) at the University of Sussex. IDS scholars and others have since developed what is known as the ‘sustainable livelihoods (SL) approach’, or sustainable livelihoods analysis (SLA) (Scoones 2009). Chambers and Conway’s original definition of a livelihood remains influential (Chambers & Conway 1991; quoted in Kanji et al. 2005, p.4):

“A livelihood comprises the capabilities, assets (including both material and social resources) and activities for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.”

Livelihoods analysis became central to development debates at the end of the 1990’s, as development scholars and practitioners began to challenge the prescriptive solutions of the Washington Consensus. The UK Department for International Development (DfID) adopted an explicit people and poverty focussed livelihoods approach in its development programs in the late 1990’s, and much of the work that developed the SL framework originated in DfID and the IDS (Scoones 2009). Although the approach has largely fallen out of favour with major development agencies in recent years, livelihoods perspectives still inform a wealth of literature on development issues (Batterbury 2008; see for example Turner 2012).

The SL approach highlights the diverse aspirations of rural people, eschewing top-down or decontextualised approaches to understanding development issues in favour of examining “the
particular, micro-level contextual realities on the ground” of how people go about sustaining meaningful lives (Scoones 2009, p.173). The focus of the SL framework is thus:

“Given a particular context (of policy settings, politics, history, agroecology and socio-economic conditions), what combinations of livelihood resources (different types of ‘capital’) result in the ability to follow what combination of livelihood strategies (agricultural intensification/extensification, livelihood diversification and migration) with what outcomes? Of particular interest in this framework are the institutional processes (embedded in a matrix of formal and informal institutions and organisations) which mediate the ability to carry out such strategies and achieve (or not) such outcomes” (Scoones 1998, p.3, emphasis in original).

By focussing on how people and households appropriate and deploy different livelihood resources (defined in the SL framework as natural, financial, human, social and physical ‘capital’) in different contexts, a livelihoods approach helps understand the conditions and processes that empower or constrain people from pursuing livelihood opportunities and achieving successful outcomes (Turner 2012). In doing so, the livelihoods framework moves rural development research beyond mechanistic analysis of prices, income and consumption to highlight the agency, as well as constraints, that arise in different institutional and social contexts. Importantly, a livelihoods approach also acknowledges that people value other livelihood outcomes other than income, such as health, food security, cultural values, social status and environmental sustainability (de Haan & Zoomers 2005; Kanji et al. 2005).

Figure 2.2 outlines the sustainable livelihoods framework as it has been operationalized in rural development research. As Scoones (2009, p.177) argues, this original formulation of livelihoods research emphasised the economic dimensions of local livelihoods as mediated by social and institutional processes. In doing so, livelihoods researchers opened up lines of communication with more mainstream development economists as a first step towards broader and more grounded understandings of poverty and development. Figure 2.2 therefore presents livelihood analysis as an ‘input-output-outcome’ checklist for analysing rural livelihoods that is amenable to the quantitative methods familiar to mainstream economics (Scoones 2009). In particular, much of the subsequent mainstream livelihood research has focused heavily on the five capitals (physical capital was added to later iterations) of the livelihoods resources dimension, or what has become known as the livelihood ‘asset pentagon’. The metaphor of the asset pentagon has been applied in livelihood analysis as a way to compare the asset bases of different households and hence their capacity to pursue particular livelihood strategies. The idea is that the presence or absence of livelihood capitals in different combinations will enable or constrain the ability of people or households to achieve successful livelihood outcomes. However, the
dominance of the five capitals framework as a way to operationalize livelihoods research has been criticised as overly instrumental. This narrow focus on the livelihood ‘metrics’ of a household has compromised the deeper focus of the sustainable livelihoods framework as it was originally conceived, such as on issues of marginality, power, poverty, capabilities, institutions and context (Scoones 2009).

As earlier contributions from researchers such as Bebbington (1999) make clear, the livelihoods capitals framework was originally conceived in a much broader sense (Scoones 2009). Bebbington (1999, p.2022) argues for a locally embedded approach to poverty and development analysis based on capitals and capabilities that moves beyond a narrow material conceptualisation of livelihood assets:

“(P)eople’s assets are not merely means through which they make a living: they also give meaning to the person’s world... assets are not simply resources that people use in building livelihoods: they are assets that give them the capability to be and to act... they are also the basis of agents’ power to act and to reproduce, challenge or change the rules that govern the control, use and transformation of resources.”

Here, livelihoods are conceptualised as an outcome of households’ differentiated access to assets or resources, including the non-material, mediated through engagement with the state, market forces and civil society. Bebbington (1999, p.2022) draws on Amartya Sen’s notion of capabilities to argue that livelihood capitals are not simply used to build livelihoods in a dispassionate and instrumental sense; rather they are “vehicles for instrumental action (making a living), hermeneutic action (making living meaningful) and emancipatory action (challenging the structures under which one makes a living)”. 
Recent livelihood research has focused on the concept of livelihood pathways as a way of conceptualising the common livelihood patterns that arise amongst particular social groups (de Haan & Zoomers 2005). Such an approach aims to move the livelihoods framework beyond a neo-liberal focus on individual strategies to a more structural approach:

“(P)athways are best defined as patterns of livelihood activities which arise from a co-ordination process among actors. This co-ordination emerges from individual strategic behaviour embedded both in a historical repertoire and in social differentiation, including power relations and institutional processes, both of which pre-structure subsequent decision making” (de Haan & Zoomers 2005, p. 43).

As such, particular households pursue livelihoods, “but not necessarily under conditions of their own choosing” (de Haan & Zoomers 2005, p.43). Livelihood pathways are determined and constrained by past actions and decisions, made in the context of specific historical, institutional and socio-economic contexts (Scoones & Wolmer 2002).

Accounting for the myriad of circumstances and factors that determine the livelihood pathways of different households is a complex analytical task. Dorward et al. (2009) propose a simple schema that classifies the typically complex and detailed livelihood histories and narratives collected in the field into
a useful explanatory model. Dorward et al. argue that rural livelihood strategies can be classified into three broad categories that represent the livelihood aspirations of different households:

- ‘hanging in’ where households, often in adverse circumstances, maintain their current activities to ensure their survival without investing in assets;
- ‘stepping up’ where households expand their current activities by investing in assets to increase their production and income; and
- ‘stepping out’ where households use their current activities to “accumulate assets which...then provide a base or ‘launch pad’ for moving into different activities that have initial investment requirements leading to higher and/or more stable returns” (Dorward et al. 2009, p.243).

This typology highlights the dynamic interaction between present livelihood assets, temporal changes, and future pathways. However, each type is aspirational; as Dorward (2009, p.136) points out in a separate paper, households often fail in these strategies, and there is always the possibility that households may ‘go backwards’ or ‘drop out’. Even so, the strength of the typology is that it allows researchers to connect micro-scale livelihood processes with the macro-scale concerns of social differentiation, as the possibilities of different households to ‘hang in’, ‘step up’ or ‘step out’ (or indeed the relegation of others to falling down or ‘dropping out’) also hinge on their place within the political economy of a village:

“(This framework) raises wider sectoral, inter-sectoral, and macro-economic policy questions. Its emphasis on cross-sectoral dynamics and on livelihood diversity and diversification also encourages a multi-disciplinary view of poverty reduction...This in turn draws attention to questions about broader economic, institutional, and social change. For policy makers concerned with these broader issues, on the other hand, this conceptualisation grounds these issues in poor people’s current livelihoods and aspirations” (Dorward et al. 2009, p.243).

The potential for incorporating the insights of livelihoods research with a combined GVC/agrarian political economy framework for analysing contract farming and rural development is striking. Such a combination can overcome the lack of attention given to place in GVC/agrarian political economy accounts of contract farming, while also addressing the limitations of the livelihoods approach, namely its limited engagement with power, politics and structure (Scoones 2009). Challies and Murray (2011, p.32) capture this potential by arguing the following:

“(L)ivelihoods research needs to involve both detailed empirical investigation of livelihood strategies and social relations at the local/household level, and analysis of
overarching structural, historical and institutional elements...GVC approaches require both an appreciation of chain dynamics – governance, distribution of value, prospects for upgrading – and an understanding of the localized social and economic determinants and impacts of chain participation. In other words, there is real scope for livelihoods and GVC approaches to complement each other and for each to contribute to addressing the other’s shortcomings.”

GVC theorists have recognised the need to focus more attention on place-specific institutional factors (Neilson & Pritchard 2009), labour (Coe & Hess 2013; Kelly 2013), social upgrading (Barrientos et al. 2011), and local poverty, environmental and social differentiation concerns (Bolwig et al. 2010; Kelly 2013); all issues that lend themselves to a livelihoods approach. In an insightful contribution, Kelly (2013) uses a case study of an industrialising region in the Philippines to explore the tensions between network and place in GPN analysis. The author argues that the GPN approach tends to “subordinate place to the network” (2013, p.10), missing questions of local development such as livelihood and social differentiation outcomes that operate outside of the creation and retention of value within a production network.

Recently, a limited number of attempts have been made in the literature to explicitly bridge livelihoods and GVC research in the agricultural sector (Kanji et al. 2005; Bolwig et al. 2010; Challies & Murray 2011; Fold 2014; Neilson & Shonk 2014). However, none specifically address contract farming, nor do they attempt to incorporate the broader historical concerns of agrarian political economy. This represents a clear research gap in the literature that this thesis seeks to address. Kanji et al.’s (2005) paper is an early, instrumental attempt to combine the strengths of GVC/GPN and livelihood analysis. Their work highlights how a combined approach and methodology can uncover the depth of important issues that must be addressed in development interventions. Kanji et al. do not, however, address how livelihoods and value chains co-produce rural development outcomes outside of a narrow focus on chain participants. Challies & Murray (2011), while setting out to incorporate livelihood concerns into a value chain analysis, end up producing a standard GVC analysis of raspberry growers in Chile, only using livelihoods to describe the impacts of value-chain participation on different types of household ‘capital’. Again, the focus is firmly on chain participants only, with little insight into how the intersection of livelihoods and value chains mediate processes of inclusion or exclusion, or translate to broader patterns of social differentiation and rural development. Fold (2014) argues for the integration of livelihood and GVC analysis using the conceptual apparatus of settlement trajectories. The author argues that incorporating analysis of livelihood diversification at the settlement scale can spatially enrich GVC analysis. For Fold, the ways in which a value chain enables or constrains opportunities for livelihood
diversification are indicative of potential future settlement trajectories that will be “constitutive for regional development beyond narrow economic growth within firms” (p. 779). Fold’s contribution is useful as he seeks to explicitly link agricultural value chains and regional development outcomes through an understanding of livelihood diversification. However, his framework is only applied to two case studies of regions dominated by a single crop, and Fold acknowledges that in more diverse economies the empirical challenges of incorporating GVC and livelihoods analysis are more daunting. Bolwig et al.’s (2010) work represents perhaps the most integrated attempt so far in the literature at constructing a framework that facilitates grounded understandings of how livelihood and value chain processes co-produce rural development outcomes. Bolwig et al. develop a conceptual framework that attempts to explicitly integrate the vertical dimension of value chain dynamics with the horizontal elements of place, including poverty, gender and the environment. Importantly, the authors stress that understanding value chain outcomes for local actors must involve not only analysis of power relations within the value chain, but also those relationships of power and inequality outside of the value chain, into which local actors, including non-chain actors, are embedded.

There is significant potential for combining GVC analysis with a livelihoods perspective to produce a more nuanced and deeper understanding of the implications of contract farming for rural development in local places. This thesis will adopt the strengths of Bolwig et al.’s (2010) approach, specifically their focus on situating analysis at the intersection of the vertical and horizontal dimensions, and Dorward et al.’s (2009) useful livelihood typology as a way to connect the micro concerns of livelihoods research with the macro concerns of agrarian political economy. Importantly, agrarian political economy will remain front and centre in this study, as I seek to tease out how processes of social and economic differentiation mediate contract farming opportunities for local actors, and in turn how these opportunities influence future patterns of differentiation.

One additional issue remains under-theorised in much of the GVC and livelihoods literature: history. Most GVC studies of contract farming represent a snapshot of a value chain or contract farming scheme and its participants at a particular moment in time (Oro & Pritchard 2011). I argue that history matters for social and economic outcomes at the intersection of contract farming schemes and rural livelihoods. To address the static nature of many GVC studies, my study will adopt an evolutionary view of livelihoods and contract farming, using the insights of evolutionary economic geography (EEG) (Boschma & Frenken 2006; Coe 2011). This builds on calls from economic geographers to use evolutionary concepts to strengthen the analytical purchase of GVC/GPN studies (MacKinnon 2012; Oro & Pritchard 2011). Understanding the historical processes that drive the evolution of contract farming schemes and livelihoods in particular places will lead to a much deeper understanding of patterns of inequality and
differentiation, and provide insights into the possible future pathways of households in rural places where contract farming operates.

EEG is a hybrid approach. It is concerned with “the processes by which the economic landscape—the spatial organisation of economic production, distribution and consumption—is transformed over time” and the implications of this evolution for uneven geographical development (Boschma & Martin 2007, p.539). Importantly, EEG recognises that the paths actors follow within economic spaces will co-evolve with place specific factors such as institutions (MacKinnon 2012; Oro & Pritchard 2011). Thus, the development of a region will be a consequence of its own history, as “the current state of affairs has emerged from and has been constrained by previous states of affairs” (Boschma & Frenken 2006, p.280). This is known as path dependence, where “previous events affect the probability of future events to occur” (Boschma & Frenken 2006, p.281). While the past does not pre-determine the future (i.e. future trajectories are stochastic), EEG theorists argue that feedback loops reinforce evolutionary paths, potentially leading to ‘lock in’ in development, where behaviour and organisational forms “become self-reproducing over time” with no capacity to adjust to wider economic change (Martin 2006; quoted in MacKinnon 2012, p.233). Understanding the evolution of the vertical and horizontal dimensions of rural spaces provides deeper insights into how contract farming schemes come to intersect with particular places; how this intersection distributes benefits to people in a particular place; and what can be done to ensure the benefits of contract farming schemes and economic globalisation are distributed equally across space, avoiding the reproduction of what Fold (2009) terms ‘archipelagos of privileged spaces’ in the Global South.

**Conclusion**

This chapter has reviewed the relevant literature and key debates on the role of agriculture and small farmers in rural development policy, recent changes in the global agri-food system, and competing conceptualisations of contract farming. In doing so, I have set out the key theoretical frameworks that will be employed in the subsequent chapters of this thesis. The key arguments that I have made in this chapter can be summarised as follows:

- In part one, I argue that the role of agriculture in conceptualisations of rural development has changed significantly over the last century. Two key arguments are made. First, I contend that the role of agriculture in rural development has been ‘re-centred’ in recent decades, as part of a post-Washington Consensus paradigm led predominantly by the World Bank. However, this new paradigm of ‘agriculture-for-development’ reproduces neo-liberal and linear narratives of rural development. Second, I argue that debates about agriculture, small farmers and rural development reflect a longer-standing historical approach to understanding the future of
agrarian spaces under capitalism: what is known as the agrarian question. This approach is based in Marxian-inspired critical agrarian political economy, and provides useful tools for understanding processes of contemporary agrarian change and the implications for differentiation and inequality in rural spaces.

- In part two, I argue that global agri-food systems have undergone significant transformations in recent decades, under conditions of economic globalisation, that will have profound implications for the livelihoods of households in rural areas of the Global South. In particular, modern agri-food production increasingly takes the form of tightly integrated value chains controlled by lead firms, typically large domestic or multi-national agribusiness firms. Importantly, these changes have led to the spread of contract farming in countries such India, enrolling small farmers in new relations of production.

- In part three, I argue that contract farming has been conceptualised in the literature through three distinct prisms: NIE, GVC analysis, and agrarian political economy. NIE is the dominant approach in the literature, however it suffers from several shortcomings, including the way that NIE theorists uncritically analyse contract farming as a microeconomic institutional solution to perceived transactions costs and market failures in rural areas. A combined GVC/agrarian political economy framework provides a useful way forward for a more critical and nuanced understanding of contract farming and rural development, however such a framework needs to be grounded in understandings of the actual places where contract farming schemes operate.

- In part four, I argue that a sustainable livelihoods framework provides this grounding. Incorporating a livelihoods lens into a GVC/agrarian political economy approach can account for the place-based social, cultural, political, environmental, economic and historical factors that influence how modern contract farming schemes engage with local places and mediate processes of rural change and social differentiation.

Having set out the key theoretical foundations, the next chapter will contextualise the present study through a discussion of the major issues facing agriculture and rural places in India, including the recent spread of contract farming. This sets the scene for the empirical contribution of this thesis: a case study of a contract farming scheme in rural Maharashtra, India.
Chapter 3 - Agriculture, agrarian change and contract farming in India

Introduction

This chapter provides an overview of the issues facing agriculture and rural places in India today, providing justification for why the present study focuses on India. India’s transformation in recent decades into a ‘lower middle income’ and rapidly developing economy has been a theme of academic and popular fascination. Certainly, the changes to India’s economy have been profound. In the decade to 2010 per capita income rose by 64%, while GDP grew at 8% for much of the decade with some states achieving even higher numbers (Bajpai & Sachs 2011; Planning Commission 2013). However, this growth has been highly spatially uneven. Urban India has been the primary beneficiary of economic transformation in the last two decades, driven by political and economic reforms that have paved the way for booming IT and service industry centres. Unparalleled growth in urban India has led to the emergence of the much vaunted (but contested) concept of the Indian ‘middle class’ (see Harriss 2006; Ravallion 2010). Rural households, though, have not matched the economic exploits of their urban counterparts. Rural areas are still home to the majority of India’s poor, and small farms still dominate the rural landscape, where the majority of households still depend on agriculture for a least some of their livelihood (IFAD 2010; Planning Commission 2013). What Gandhi observed in the first half of the 20th century, that ‘India lives in its villages’, still holds true today, both literally and metaphorically. What also remains is the poverty and hunger that Gandhi rallied against; in many rural villages and on millions of small farms lives some of the world’s poorest and food insecure people.

Agrarian life in India is not static however. Agriculture and the rural economy have undergone significant transformations during the 20th and into the 21st century. As agriculture has changed, so have rural livelihoods and patterns of privilege and disadvantage within and across rural spaces. Today, rural India represents a (albeit large) microcosm of the transformations in agriculture that are happening throughout the Global South, mediated by the particularities of India’s history and political and social institutions (Neilson & Pritchard 2007). The pace of change in rural India, including the rapid spread of modern agricultural value chains and contract farming schemes, and the persisting conditions of inequality in the countryside, mean there is a pressing need to develop in-depth and nuanced understandings of the implications for rural spaces of the transformations occurring in agriculture. This study addresses this need.

Two periods of change that have had lasting influence on the economic geography of rural India today loom large in any account of agricultural change and rural development: the green revolution from the 1960’s to the 1980’s; and the period of economic liberalisation ushered in since 1991. I review each
period, focusing on the consequences for the agricultural sector and rural livelihoods. I then review arguments in the literature about the state of agrarian India today, or what has broadly been labelled India’s agrarian crisis. Finally, to contextualise the present study, the chapter concludes with an account of how contract farming has expanded in rural India in recent years, including a review of recent contract farming studies.

The Green Revolution

In the decades leading up to India’s independence in 1947, rural India was largely characterised by mass poverty, extreme inequality and agricultural crisis. The agrarian structure of much of pre-independence India was dominated by a feudal-like zamindari system of upper-caste landlords, empowered by the British colonial administration to collect taxes from tenant farmers, or ryots, who worked the land. Towards the end of World War II, agricultural production and rural livelihoods were in a vulnerable state throughout much of the country, culminating in the tragedy of the Bengal famine in 1943 (Dorin & Landy 2009). This, and the turmoil in rural India during independence and partition, led the Nehru government to put food self-sufficiency at the top of its priority list, with the bulk of the budget of the Indian Government’s first five year plan (1951-1956) directed at irrigation projects and agricultural development (Fan et al. 2008). Land reform was also instituted, with the abolition of the zamindari system and redistribution of ‘land to the tiller’, although the comprehensiveness of such reforms differed significantly between states. However, as Dorin and Landy (2009) note, although considerable progress was made in the agricultural sector in the immediate post-independence years, subsequent five year plans reduced the focus on agricultural development in favour of urban industrialisation and import-substitution policies (see also Fan et al. 2008). The livelihood crisis in the Indian countryside lingered on as farm prices were kept artificially low and agricultural exports were restricted to ensure the availability of cheap food for urban-focused industrial development (Fan et al. 2008). With farmers lacking incentives to produce more food, grain production stagnated and India began to rely on imports to feed a growing and hungry population. After courting US and Soviet food aid at the start of the 1950s, in 1956 India signed an agreement with the United States that ensured access to food aid under the PL 480 program. This set India on a path of reliance on subsidised flows of American surpluses of wheat, rice and other staples. India, then, was fully caught up in the logic of the post-war US-centred food regime, with the food security of millions of rural Indians hinging on the continuance of US food aid, based on a US-India relationship that was often fractious. By 1964, famine had re-emerged in parts of the country, and then the 1965/66 monsoons failed. Combined with rising US-India tension over the Vietnam War that threatened India’s food aid, the time was right for a new approach to agriculture in India that would become known as the green revolution (Timmer 2010).
The green revolution refers to the targeted transfer of newly developed high-yielding crop varieties (HYVs - principally wheat, rice and maize) to small farmers across the Global South during the second half of the 20th century. The principal aim of this US led program was to dramatically increase agricultural production in the Global South, and was closely connected with the geopolitics of the Cold War. A necessary suite of green revolution policies accompanied seed technology transfers, including irrigation and other rural infrastructure projects, extensive distribution of fertilisers, pesticides and other agricultural technologies, as well as extension of credit and crop knowledge to targeted developing country farmers. India was one of the first recipients of green revolution technologies. Led by then agriculture minister C. Subramaniam and agricultural scientist M.S Swaminathan, wheat HYVs, developed by Norman Borlaug and other researchers in Mexico, were progressively introduced to irrigated areas in the agricultural heartlands of Punjab and Haryana from the mid-1960’s, expanding to other states and crops throughout the 1970’s and 80’s.

From its inception, the green revolution provoked much contention over the actual impacts on poverty, a debate that continues to this day (Cleaver 1972; Farmer 1986; Jewitt & Baker 2007). The green revolution certainly significantly influenced the geographical and social landscape of agriculture and rural areas in India (Jewitt & Baker 2007). There is little doubt that the technological advances led to great increases in agricultural production, particularly in the north. From the 1960’s to the 1990’s, food grain production more than doubled across the whole of India, with the greatest gains in wheat (Dorin & Landy 2009; R. Singh 2000; Umali Deininger & Deininger 2001). Off the back of these production increases, India has become an occasional net exporter of food, achieving the holy grail of food grain self-sufficiency that early post-independence governments had desired (Alexandratos 1999; Headey & Fan 2008; R. Singh 2000).

Green revolution technologies have since diffused more widely across India, although the technology remains inaccessible for many small farmers (Baker & Jewitt 2007). It is also evident that benefits have been highly spatially differentiated, both within and between regions (Lerche 2011). As early as 1973, researchers were concerned that aggregate production gains were masking inter and intraregional economic and social disparities that the green revolution was reproducing (Chakravarti 1973). A large body of evidence now suggests that both the diffusion of green revolution technologies, and production and income gains, did concentrate in areas where particular physical and institutional infrastructure had been previously developed (Freebairn 1995; Prahladachar 1983). Evidently, larger farmers with access to capital, who were well connected to markets, and who owned land in already irrigated areas such as in Punjab and Haryana were well positioned to take advantage of the new technologies: indeed these regions and farmers were specifically targeted by policy makers who focussed their efforts in the most
productive areas (Sidhu 2002). Poorer, smaller farmers in less productive states were left behind. This reproduction of agrarian class differentiation within and between regions has filtered down generations. Descendants of successful green revolution farmers have been able to move into commercial farming operations and invest in other areas of the economy, increasing the divide between rich and poor rural residents and changing the social and economic dynamics of rural spaces. Jewitt and Baker (2007; also Baker & Jewitt 2007), however, caution that perspectives of the green revolution in India can tend towards essentialism when not based in grounded and local scale interpretations. Using data collected over a period of 35 years, the authors examine the experiences of the green revolution in three villages in north India, concluding that local perceptions were overwhelmingly positive, including a universal improvement in food security and overall improvement in living standards. Importantly, however, the authors also conclude that the majority of benefits did accrue to already better off social groups, and that the gaps between rich and poor farmers are greater than ever. Lower castes, including landless labourers, benefitted the least (Baker & Jewitt 2007; Jewitt & Baker 2007).

As well as influencing the socio-economic structure of rural India, the green revolution has had lasting institutional legacies that persist to the present day. In particular, the pervasive role of the post-independence Indian state has been a hallmark of the agricultural sector that has had important implications for contemporary political and economic structures. With the aim of incentivising the uptake of HYVs by farmers, maximising production and achieving food security for the population as a whole, the Indian government implemented interventionist policies in food prices, marketing and distribution from the mid 1960’s onwards (Chand 2005; 2012; Dorin & Landy 2009). These interventions principally involved the establishment of a minimum support price (MSP) system for food grains combined with obligatory state procurement, the establishment of regulated agricultural markets through a Model Act, and the creation of a public distribution system (PDS) to distribute food to the masses at reasonable prices (Acharya 2006; Chand 2005; 2012). In particular, the creation of a MSP system and the regulation of markets have had a significant impact on the way in which modern agriculture such as contract farming has evolved in India.

The MSP system was designed to protect farmers from price movements of new HYVs by “guaranteeing sales at a price that would cover their production costs and generate at least a small profit in the most advanced [agricultural] zones” (Dorin & Landy 2009, p.84). Originally developed for wheat and rice, the Indian government now announces a yearly fixed price for 25 major crops that represent a large proportion of the gross cultivated area in India (Dorin & Landy 2009). Most of the crop that is procured through the government-controlled public food grain market under the MSP system is stored and distributed by the Food Corporation of India (FCI). While the MSP system has had positive effects,
primarily insulating farmers from price shocks, the system has been unevenly implemented across both crops and regions (Acharya 2006; Chand 2012). This has led to a shift in cropping patterns towards commodities that are strongly supported by the MSP system, particularly wheat, rice, sugarcane and cotton, leading to production shortages in other crops such as oilseeds, pulses and coarse grains (Chand 2012). Such policies have also favoured farmers in states and regions with the infrastructure and resources to produce and procure surpluses of wheat and rice. For example, the original green revolution states of Punjab and Haryana dominate FCI procurement of wheat (Chand 2005; Gulati et al. 1996).

The second important institutional legacy of the green revolution period is the proliferation of government-regulated agricultural markets that have dominated agrarian commerce in India over the past 50 years. Regulated wholesale markets were set up or expanded by states from the 1960’s onwards as a government intervention in the trading of agricultural produce (Acharya 2006; Chand 2012; Wanmali 1980). The aim was to provide regulated facilities to ensure competitive, fair and efficient trading conditions for farmers. In the early period of the green revolution almost all Indian states passed agricultural produce marketing committee (APMC) acts, based on model legislation distributed by the central government. Today, agricultural wholesale markets in India continue to be regulated through the state-implemented APMC Act. Chand (2012, p.54) writes that the basic tenet of APMC legislation is to mandate “that the sale/purchase of agricultural commodities notified under it are to be carried out in specified market areas, yards or sub-yards. These markets are required to have the proper infrastructure for sale of farmers’ produce. Prices in them are to be determined by open auction, conducted in a transparent manner in the presence of an official of the market committee. Market charges for various [agents] are clearly defined, and no other deduction can be made from the sale proceeds of farmers.”

Regulated agriculture markets, known as mandis, number in the thousands across India. These mandis played an important role through the period of the green revolution, particularly as agricultural trade in India at the time of independence was still largely undeveloped, and farmers were at the mercy of exploitative relationships with traders and mercantilists (Chand 2012). Today, however, the relevance and effectiveness of the APMC Act is contested. It is argued that the system leads to inefficiencies, high costs, the proliferation of middlemen, and curtails growth and innovation, while providing little in the way of market services to farmers, or incentives to upgrade (Cohen 2013; Singh 2012). The Act has curtailed private sector investment in agriculture, as firms have been unable to deal directly with farmers. Cohen (2013), in a study of agricultural marketing in West Bengal, notes that the adherence of mandis to APMC Act regulations can be tenuous at best, and regulated markets are susceptible to corruption, inefficiencies and significant power imbalances. Over the last two decades, pressure has
mounted to reform APMC legislation to allow direct marketing between farmers and agribusiness firms. Many states have already amended their APMC Act to allow for direct marketing and/or private markets, and ongoing reform of the APMC legislation is considered vital for encouraging growth in the sector (Planning Commission 2008; Singh 2012). Importantly, recent reforms of the APMC Act and other areas of the agricultural sector have set the stage for the spread of contract farming. The remainder of the chapter will review the period of liberalisation in Indian agriculture from 1991 onwards and the subsequent spread of contract farming, particularly in the state of Maharashtra, which is the site of the case study used in this thesis.

Liberalisation in Indian agriculture from 1991 onwards

By the end of the 1980’s the gains from green revolution technologies were rapidly slowing in previously high growth areas, while the costs of spreading such technologies to resource-poor farmers or areas were increasing (Lerche 2011). It was also becoming clear that the explosion in pesticide and fertiliser use and exploitation of ground water resources were leading to significant ecological problems (Datta & Jong 2002; R. Singh 2000). At a policy level, there was growing disillusionment with the interventionist approach that Indian governments had pursued since independence. These policies were seemingly failing to promote the kind of growth that could eradicate the livelihood and food insecurity that still plagued much of rural India. At the same time, green revolution surplus-producing farmers in productive states, translating their new economic power into political power, began to mobilise on issues such as the perceived unequal terms of trade between countryside and city, low commodity prices and increasing indebtedness among farming classes (Jodhka 2012). Indian agriculture entered a period of restlessness, which coincided with a major debt crisis in 1990-1991 that shook the entire Indian economy (Deshpande & Indira 2007; Fan et al. 2008). This crisis came at a time of a broader shift away from state-led development in much of the Global South, encouraged by ‘Washington Consensus’ institutions such as the IMF and the World Bank. In a tense political climate in 1991, Indian legislators implemented an IMF sponsored economy-wide structural adjustment package of debt reduction accompanied by major macro-economic reforms and liberalisation policies (Ballabh & K. Reddy 2007; Dorin & Landy 2009; Nagaraj 1997). As a result, from 1991 onwards, India has moved away from its historical focus on state-driven, endogenous development towards private sector led growth and increasing integration with world markets (Dorin & Landy 2009).

Since the 1991 crisis, Indian agricultural policy has been progressively liberalised. The priorities for agriculture set out in the Indian Government’s last three five year plans, covering the period 2002-2017, provide insights into how the political and policy terrain of agriculture is changing. Significantly, in contrast to the state led, protectionist policies of past agricultural plans, recent five year plans identify
market liberalisation as a priority for encouraging diversified agricultural growth. Over the last two decades, driven by rising urban incomes and changing diets and consumption patterns, agricultural production has undergone a slow but significant shift away from grains and pulses towards an increasingly diversified and export-oriented production mix of high value fruits and vegetables (Dorin & Landy 2009; Joshi & Gulati 2007). Continuing diversification away from low value cereal crops to high value and exportable fruits and vegetables is considered crucial for rural development (Joshi & Birthal 2007; Planning Commission 2013). The central government has identified several priority areas of reform to encourage the development of a modern, diversified agricultural sector. These reforms aim to facilitate the modern value chains that can grow, transport, store, process and market these commodities. As Joshi and Gulati (2007, p.385) write “[g]iven the perishable and high value nature of these commodities, the growth in their export [and domestic consumption] has strong implications not only for producers but for financiers, processors, exporters, and the retail chain industry, too. It also has repercussions for the institutional innovations that are emerging to link plate to the plough – efforts to link changing consumer preferences and rising exports of high value agriculture to the production decision of the growers.” Three particular areas of reform aimed at modernising Indian agricultural production have implications for the spread of contract farming: reform of foreign direct investment (FDI) legislation; the ongoing reform of state APMC Acts; and the active promotion of private sector contract farming by states.

In 1997, India liberalised FDI restrictions in food wholesaling, allowing 100% foreign ownership of operations. However, for multinational food retailers, who are driving much of the modernisation in global value chains, India has long been a hostile environment for FDI. Although foreign supermarkets have operated in India for some time, this has usually been through local partners or subsidiaries. Restrictions on majority foreign ownership of multi-brand retail have limited their influence in Indian agriculture; India has been labelled as the ‘final frontier’ for global food retailing (see Neilson & Pritchard 2007). The cultural dominance of local wet markets and small family operated grocery stores have made foreign owned supermarkets politically contentious, and it is evident that any supermarket ‘revolution’ will be heavily moderated by these “spatial particularities” (Neilson & Pritchard 2007, p.238).

However, the Indian Government is certainly taking steps to loosen these restrictions, flagging FDI in food retailing as a key focus area for encouraging the development of modern value chains (Planning Commission 2013). At the end of 2012, the Congress-led UPA Government revised its position, permitting FDI up to 51% subject to various conditions and approval by individual states. Several states, including Maharashtra, have adopted the changes. As of early 2014, the new BJP led central government has given notice that it intends to revise the 2012 decision, citing protection of the jobs of family owned
retailers as its priority. Even so, the domestic food retailing sector is rapidly moving to modernise its own processes in anticipation of an increase of FDI in food retailing and the growth of the supermarket model in India, particularly to gain ‘first-to-market’ advantages over multinational supermarkets.

A second priority area for reform is agricultural marketing and, in particular, reform of the long-standing APMC Act. Since 2000, arguments against the APMC Act have reached a tipping point, with many contending that the Act is itself a major source of inefficiency in Indian agriculture, and has held the sector back from rapid modernisation (Chand 2012). For example, Archarya (2006, p.4) argues that over time APMC mandis have “emerged as some sort of government-sponsored monopoly in the supply of marketing services/facilities, with all the drawbacks and inefficiency associated with public sector monopolies.” Chand (2012, p.55) argues in a similar vein, noting that “the APMC Act, which was enacted to protect farmers’ interests and increase market efficiency and transparency, is now being used to deny them opportunities to get better prices, to prevent competition, and to guard the interests of middlemen.” Box 3.1 summarises the problems facing regulated markets in India. The central government responded to these concerns in 2003 by distributing a revised APMC Model Act to the states, signalling the gradual withdrawal of the Indian state from agricultural marketing (Singh 2012). The Model Act essentially allows for the establishment of private sector agricultural markets, including private investment in market infrastructure, warehousing, wholesaling and logistics. The Model Act also allows direct marketing (including contract farming) between private agribusiness and farmers, a domain that was hitherto completely dominated by government.

<table>
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<th>Box 3.1: Summary of problems facing regulated markets in India (source: Archarya 2006; Chand 2012).</th>
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<tr>
<td>• Proliferation of intermediaries, resulting in high cost of goods and services</td>
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<tr>
<td>• Inadequate infrastructure for storage, sorting, grading, and post-harvest management</td>
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<tr>
<td>• Private sector unwilling to invest in logistics or infrastructure under prevailing conditions</td>
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<tr>
<td>• Price-setting mechanisms are not transparent</td>
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<td>• Mandi staff are ill-equipped and untrained</td>
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<td>• Market information is not easily accessible</td>
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<td>• Essential Commodities Act impedes free movement, storage and transport of produce.</td>
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<tr>
<td>• There remains a critical lack of cold storage facilities and cold chains</td>
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<tr>
<td>• Large food loss problems due to inadequate logistic systems,</td>
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<tr>
<td>• Inefficiencies and malpractice in market management, and</td>
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<tr>
<td>• Growing power imbalances between sanctioned traders and farmers.</td>
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13 The Essential Commodities Act enables state governments to restrict the movement of certain agricultural products across state boundaries. It was designed to prevent the diversion of local supplies to other areas of scarcity or the hoarding of supplies by traders to raise prices (Ahluwalia 2002, p.78).
It is up to individual states whether to adopt the recommended revisions to the APMC Act. As of 2015, sixteen states, including significant agricultural producing states such as Maharashtra and Karnataka, have amended their APMC Act in the spirit of the Model Act, while Bihar and Kerala have abolished their APMC Act completely. Another six states, including the original green revolution states of Haryana and Punjab, have partially amended their acts. Five states, including Uttar Pradesh and West Bengal (representing almost 25% of the total population of India), have not made any amendments. The uneven adoption of the Model Act points to the strong vested interests of politically powerful trading associations and others in maintaining the current mandi system. Significant local political power and patronage is often based in control of APMCs and mandis (Chand 2012). Actual progress in developing private marketing channels and winding back the power of APMCs has been limited, even in states where the Model Act has been adopted in full. States have frequently diluted different parts of the legislation to cater to different interest groups (Chand 2012; Planning Commission 2013). In fact, as Singh (2012) notes, many of the reforms remain only on paper, and as of 2012 there had yet to be a single private primary wholesale market set up under the Model Act across the entire country.

Nonetheless, the amendments to the APMC Act, along with the easing of FDI restrictions and other reforms over the past two decades, have opened the door for increased domestic and foreign private investment in agricultural value chains in India. Multinational firms such as the American giant Walmart have since entered the cash and carry food wholesaling sector in India, while others such as PepsiCo and Unilever have invested in food processing and manufacturing. While the entrance of large multinationals creates headlines, liberalisation in agriculture has stimulated just as important changes in domestic supply chains, what Reardon and Minten (2011) have referred to as a ‘quiet revolution’. Increasing domestic private investment in agriculture has led to the displacement of traditional supply chains by modern domestic secondary wholesaling, cold storage, processing, logistics and retail sectors (Reardon & Minten 2011).

**Agrarian crisis in India today**

Despite recent reforms, liberalisation has been slow to take hold in agriculture compared to industrial sectors of the economy, and the agricultural sector today is still characterised by significant state intervention (Fan et al. 2007). The unique place of farmers in the political landscape of India and the critical role that agriculture plays in the livelihoods of millions means politicians are reluctant to make major reforms to areas such as land markets and land ceiling acts, or withdraw politically sensitive agricultural subsidies (Dorin & Landy 2009; Fan et al. 2007). However, at the same time a general sense of crisis has taken hold in rural India in the period since 1991 (Lerche 2011; D. Reddy & Mishra 2010). This crisis has led to a reengagement in the literature with debates about agrarian change and class
relations in India. The literature on agrarian class relations in India in the 1970’s and 80’s focused on what was known as the ‘modes of production debate’. This debate took on Byres’ first and second agrarian question: that is, whether capitalist relations of production had developed fully in rural India, or whether agrarian relations were better understood as ‘semi-feudal’, and what the implications of this were for the political strategies of the Indian Left (Thorner 1982; Harriss 1992). Although generalising across regional and state boundaries is fraught with difficulties in India, there is substantial evidence that the modes of production debate has been resolved in favour of capitalism; semi-feudal agrarian relations have been substantially transformed post-1991, and capitalist relations of production in agriculture now characterise the Indian countryside, incorporating the majority of, if not all, rural households (Basole & D. Basu 2011; Harriss-White 2008; Lerche et al. 2013). This accelerated transformation towards capitalist relations of production in agriculture over the last three decades has led to distinctly uneven processes of class differentiation and social and economic polarisation, a point I also return to in Chapter 4.

Taylor (2011) argues that processes of stark class differentiation under increasingly pervasive capitalist relations of production are at the heart of India’s current agrarian crisis. For Taylor, this is a crisis of social reproduction for increasingly marginalised lower social classes, rather than an overall crisis of capital accumulation in agriculture. In fact, new sectors of the Indian agricultural industry, such as processors and input suppliers, have done quite well in the new neoliberal policy environment. However, the agrarian crisis is characterised by the increasing marginalisation of small and marginal landowners and landless labourers, unable to meet their basic social reproduction needs. The increasing pressure on small farmers is manifested most starkly in the spate of farmer suicides in recent years that has gripped many states (Mishra 2010; 2006). This agrarian crisis therefore reflects the uneven nature of capitalist development in rural India, which Taylor (2011, p.493) traces to the social upheaval initiated by the green revolution:

“Beginning in the green revolution period and accentuated under neoliberalism, there has been a broad upheaval in the relations of class, gender and caste, and this is encapsulated in a process of stark social differentiation. This transformation has greatly impacted the distribution of opportunities and risks across the rural population according to the types of assets that different social groups own and the forms of control they can exercise over market conditions and other people’s labour.”

This upheaval has resulted in a crisis of household reproduction for the large classes of small farmers and landless labourers who now face new pressures including global crop price volatility, insecure or inaccessible non-farm opportunities, indebtedness, and the increasing pressures of climate change and
climate variability. Taylor (2011, p.494) goes on to argue that four key processes are contributing to these crisis conditions under neo-liberal agricultural policy settings:

1. The ongoing decline in size of landholdings, particularly the increase of marginal holdings below two hectares, and subsequent growth in the number of small farmers makes even simple reproduction impossible for many households, forcing the majority to seek livelihood strategies beyond farming.

2. A shift in cropping patterns towards cash crops and the subsequent dependence of households upon volatile world market prices, both for inputs necessary for cash crop orientated agriculture and the sale prices of the crops themselves.

3. The breakdown of former social relationships including those of patronage, resulting in the privatization of risk. This includes the retreat of the state in welfare and extension, and the undermining of common property resources.

4. Increasingly fragile ecological systems under conditions of climate change, including shifting monsoonal rainfall patterns, groundwater depletion and soil degradation.

What of Byres third agrarian question? What kind of agrarian transition is Indian experiencing? Although capitalist relations of production are firmly entrenched in much of rural India, capitalist development as a whole in India post-1991 has been characterised by a distinct lack of agrarian transition in the classical sense, further cementing the crisis in rural India (Lerche 2013). Agrarian political economists and development agencies alike have variously described India’s agrarian transition as ‘slow’ or ‘unusual’ (Lerche 2011; World Bank 2011). For example, while the proportion of the total workforce employed in agriculture has declined over the last three decades, it has done so much slower than would be anticipated under conditions of a dynamic transition, and much slower than other transitioning countries such as China (Lerche 2011; World Bank 2011). According to World Bank data, in 2014 at least 47% of the total Indian workforce was still employed in agriculture, only down from 61% in 1994. Using National Sample Survey data, Venkatesh (2013) estimates that in rural areas over 60% of male and nearly 80% of female workers’ main source of employment is in the agricultural sector. The paradox of this slow transition is that at the same time the contribution of agriculture to GDP has fallen much more rapidly compared to agricultural employment, and now stands at only 14% (Planning Commission 2013). As Mishra (2010, p.126) argues, in Maharashtra “most of the workforce continues to depend on agriculture, even as the sector’s share in state domestic product has sharply declined.” This paradox reflects the failure of widespread accumulation in agriculture, and the struggles of rural households for whom agriculture is still central to their livelihoods (Harriss-White 2008). Adding to this ‘crisis of transition’, the rapid growth in urban India has been effectively ‘jobless’ growth as far as rural
populations are concerned, meaning the urban economy has been unable to absorb the growing numbers of those for whom agricultural livelihoods is an increasingly problematic proposition (Harriss-White 2008). Employment in manufacturing, a key industry for the absorption of surplus rural labour in other transitioning countries, has declined as a share of total national employment in India over the last three decades. The rural non-farm economy is expanding, allowing some rural households to successfully diversify; however many of these jobs are informal, or casual and low paid (Pritchard et al. 2014; World Bank 2011). As a result, there are significant and growing disparities between urban and rural, and non-agricultural and agricultural, per capita income. Through the lens of agrarian transition, then, it can be argued that at this point in time agriculture has lost its importance for the overall transformation of the Indian economy (Lerche 2011; 2013). The classical political economy position is that a proper agrarian transition is yet to take place in India. An alternate position, following from Bernstein (2010), is that capitalist development of the Indian economy is progressing without a proper agrarian transition, or in other words, that the agrarian question of capital has been bypassed in India (Lerche 2011, p.105).

The evolution of contract farming in India

Whatever the nature of India’s agrarian transition, for many of the 70% of India’s population that live in rural areas, representing over 800 million people, poverty and marginalisation are a constant feature of daily life. Over 30% of rural Indians still live below the official poverty line, with millions more existing on not much more (Planning Commission 2013). Furthermore, the modernising forces of neoliberal agriculture are inevitably increasingly penetrating Indian villages, creating pressure on small farmers to change their growing decisions and modernise their practices. The most visible and perhaps contentious way that modern value chains are reaching into rural India is through the spread of contract farming. In addition to allowing for private markets and direct marketing, the new APMC Act also makes provisions for the establishment of formal contract farming schemes, previously illegal under APMC legalisation. Contract farming has been embraced by many states, including those that have only partially implemented APMC reforms. Promotion of contract farming, including through public-private partnerships, features significantly in both central and state government agricultural and rural development strategies (Planning Commission 2013; 2008). In both policy and research circles, contract farming is now viewed as a promising strategy to connect small farmers to modern value chains and boost rural incomes. A number of studies have emerged over the last ten years on contract farming in India. This section discusses the evidence about the impacts of contract farming in India. In doing so, I argue that existing research tends to interpret contract farming in India as either all good or all bad, ignoring the nuanced ways in which contract farming may integrate with village and household livelihood patterns, and hence influence patterns of rural development.
As a formalised procurement system, contract farming has a relatively short history in India. Gulati et al. (2008) trace the origin of contract farming in India to the informal contracting arrangements in the sugarcane and dairy cooperative structures that emerged in the green revolution era (1960’s to 1980’s). Cane growers and dairy farmers were provided with fixed, assured prices for delivery of cane to the sugar factory or milk to the cooperative. Formalised contract farming schemes, controlled by agri-business, did not emerge in India until the early 1990s, coinciding with the shift away from dominant grain-based diets and cropping patterns towards diversification in the agricultural sector (Singh 2002).

Changing dietary patterns and consumer demands for high value and high quality foods, as well as increasing liberalisation in the agricultural sector since 1991, have since opened up opportunities for agri-business, leading to the emergence of organised food processing and retailing sectors, and modern value chains. Contract farming has become an important procurement strategy within these value chains.

The specificities of Indian agricultural policy, particularly the Land Ceiling Act which limits the ability of private firms to own land and establish a corporate farming sector, has made contract farming an attractive alternative to full vertical integration for private agricultural capital (Singh 2005). The emergence of contract farming schemes is particularly evident in the high value horticultural sector where agri-business firms require consistently high quality, timely and cost effective supply of raw material to supply processing factories (Singh 2002; 2005). PepsiCo is credited with pioneering private contract farming in India with its entrance into the processed tomato sector in Punjab in 1989, where it established backward linkages with farmers in order to ensure tomato supply for its processing factory. PepsiCo also established an organised supply chain for potato based around contract farming in Punjab in the mid-1990s. Since PepsiCo’s early foray into contract farming, multinational and domestic firms have used the contract farming model to procure a range of agricultural commodities including tomato, potato, chilli, rice, poultry, gherkin and milk. Proponents of private agri-business involvement in the agricultural sector have promoted contract farming as not only a solution for agri-business, but also as a way of transferring technology, skills, modern inputs and credit access to small and marginal farmers and linking them to modern value chains, thereby allowing their participation in the high value crop sector and fostering inclusive growth (Gulati & Ganguly 2008).

Governments view contract farming as a strategy to both encourage investment in a fledgling modernised agricultural industry, and increase farmer incomes and address rural poverty. In 2000, contract farming was elevated as a policy priority in the central government’s first National Agricultural Policy. Contract farming has since appeared as a priority in the central government’s subsequent 10th, 11th and 12th five year plans. India’s 12th five year plan (2012-2017), released in 2013, positions contract farming as a crucial institutional innovation that can connect small farmers with technology and market access (Planning Commission 2013). Finally, as
discussed above, a priority for the agricultural sector in the 12\textsuperscript{th} five year plan is the ongoing reform of state-based APMC Acts to create an enabling legal environment for contract farming and abolish the middle-men, agents and profiteers of the traditional system who are singled out as exploitative of small farmers and a key source of inefficiency in the sector.

Given the prevailing policy and economic environment, it is no surprise that the contract farming model has been taken up enthusiastically by domestic and multinational firms during the last decade in states where it is permitted. While there is no official data on the number of farmers that are involved in contract farming in India today, the growth of contract farming as a procurement system is evidenced by both its increasing profile in agricultural policy documents and the increasing attention to contract farming in both the academic literature and popular media. Existing research on contract farming in India tends to mirror the broader ideological debates discussed in Chapter 2. The dominant approach to understanding contract farming in India employs a micro-economic and NIE based framework, and is concerned with assessing the economic gains for both participating farmers and agri-business. While noting some shortcomings of specific schemes, this literature generally positions contract farming as a win-win solution for both India’s agricultural economy and small farmers, and more generally as a solution to the ‘agrarian crisis’ facing rural India (e.g. Birthal et al. 2005; Chakraborty 2009; Ramaswami et al. 2005; Tripathi et al. 2005; V. Sharma 2007; ). A smaller body of research has focussed on the potential exploitative nature of contract farming using a political economy-based approach (e.g. Cohen 2013; Singh 2002; Sivramkrishna & Jyotishi 2008). In reviewing these arguments below, however, it is argued while these literatures have made useful contributions to understanding the phenomenon of contract farming in India, research into the broader implications of contract farming for patterns of rural development and social and economic differentiation in specific rural places has so far been limited.

Micro-economic studies of contract farming in India usually report welfare gains for participating farmers as opposed to non-participants. For example, Tripathi et al. (2005) found potato farmers in Haryana realised significant gains over non-contract growers, concluding that contract farming reduced risk for agri-business and price uncertainty for farmers. Ramaswami et al. (2005) found similar results for contract poultry growers in Andhra Pradesh, concluding that contract farming is more efficient than non-contract systems. Although the authors found that poultry processors appropriated most of this ‘efficiency surplus’, they concluded that the contract poultry growers still made substantial gains in expected income than they would have outside the contract system, due to the transfer of technology and improved managerial practices that the contract scheme offered. Likewise, Dileep et al. (2002), in a study of contract tomato growers in Haryana, found that even though non-contract growers could
realise a higher procurement price in the open market, contract growers realised higher returns due to improvements in yield.

The question of participation bias and farm size is particularly important in the Indian context given the political sensitivities surrounding small farmers, as well as the well documented trend of farm size decline. As Birthal (2008, p.8) notes, “in smallholder dominated agrarian economies [such as India], exclusion of small farmers from contract farming schemes is politically unacceptable and socially undesirable. Inclusion of small farmers in contract farming increases its political acceptability.” Evidence of bias against small farmers in contract farming in India is mixed. Birthal et al. (2005) found no bias in a study of milk, broiler chicken and vegetable contract farming schemes in Punjab, Andhra Pradesh and Delhi/Haryana respectively. However, other studies have reported evidence that suggests in many cases, to reduce transaction costs, firms prefer establishing contracts with medium and large landholders, such as in tomato contract farming in Haryana (Dileep et al. 2002), basmati rice, potato, tomato and chilli in Punjab (Kumar 2007; V. Sharma 2007; Singh 2002) and oil palm in Andhra Pradesh (Dev & Rao 2005, although the same authors report considerable participation of small farmers in a gherkin contract scheme in the same state). These studies, however, tend to view this bias as a technical problem that can be resolved through policy changes, negotiation or the formation of farmer cooperatives.

Others have taken a more critical approach to understanding contract farming in India, pointing out that while schemes may provide benefits for participants, there is a lack of understanding about the wider implications for rural places (Pritchard & Connell 2011). As Singh (2002; 2005; 2012) argues, contract farming has the potential to drastically change relations of production in agrarian spaces, perhaps leading to new forms of exploitation for small farmers. Singh (2002) also raises concerns that contract farming may have unintended consequences for non-contract farmers and the local economy, including higher food prices for rural households and rural labourers who may not share in the welfare benefits of contracting. Using a case study in Punjab, Singh suggests that contract farming has increased economic differentiation between small and large farmers, concluding that there “seems to be an inherent contradiction in the objectives of the contracting parties and those of the local economy” (2002, p.1621). Sivramkrishna & Jyotishi (2008) take a similar approach to Singh, arguing that in the absence of a strong institutional environment, contract farming will inevitably lead to exploitation of small farmers due to the inherent monopsonistic position of contracting firms. The spread of contract farming in India has usually been conceptualised as consistent with, or even a natural extension of, the shift from inefficient state-led food supply chains to efficient market-led value chains in the era of neo-liberal reforms. Cohen (2013), however, offers a different interpretation of the emergence of private markets and contract farming. In a comprehensive study of the efforts of supermarkets to reform agricultural
marketing in West Bengal, where contract farming is still technically illegal, she argues that in fact “what we are presently witnessing...[is] a transformation in the power relations that organise markets, and the legal and extra-legal rules that govern them” (2013, p.20). Cohen’s perceptive argument highlights the complex tensions between ‘traditional’ and ‘modern’ agriculture, and particularly how small farmers fit into narratives of efficiency that dominate the agricultural policy debate in India. These tensions are evident in that the efficiency gains that result from transition from traditional to modern markets are not at all clear cut. As Cohen (2013) argues, farmers engage in traditional market practices that have evolved to be efficient within particular social, cultural and economic contexts. Using evidence from West Bengal, the author goes on to argue that traditional market structures, despite their own inequalities and contradictions, can often offer a better deal for small farmers than modern, corporate market structures including contract farming. These unorganised sectors in fact pose genuine competition to organised value chains. At present, private firms find it difficult to navigate Indian markets to acquire the efficiencies and consistencies that their business models require. Reform of the APMC Act is crucial in this respect, including legalising contract farming so that firms can “circumvent the complex chain of wholesale markets and intermediaries” that characterise the traditional sector (Cohen 2013, p.58).

Conclusion

This chapter has argued that two key periods have shaped the contemporary agricultural sector of India. First, the green revolution era from the 1960s to 1980s left an institutional legacy that still permeates Indian agriculture today, including the important role of the state, and the evolution of agrarian social structures. Second, the era of liberalisation from 1991 onwards has led to an increasingly neoliberal agricultural policy environment, and has created the conditions for the emergence of modern value chains and contract farming as an important mode of agricultural production. However, post-1991 rural India has been characterised by a general sense of agrarian crisis. Through the lens of agrarian political economy, I contend that this crisis is a product of sharply uneven processes of class differentiation under conditions of increasingly pervasive capitalist relations of production. At the same time, while rural India is now characterised by the full development of capitalist relations of production, agrarian transition has been slow or non-existent, further entrenching the state of crisis.

It is in this context that contract farming has progressively spread over the last decade. I have argued, however, that existing research suffers from some significant shortcomings in understanding the complexities of contract farming in India. First, when discussing bias, most studies have been conducted in Punjab and Haryana, where average land holdings are larger than other states, and land holding patterns are tipped more in favour of larger farms. It may be the case that in other states, where land
holding patterns are dominated by smaller farm sizes, firms may be forced to include more small farmers by way of necessity, exposing small farmers to new relations of production. In any event, existing studies conceptualise bias only in terms of farm size, with no insight into how place-specific social, cultural and livelihood factors may influence inclusion and exclusion, or permitting the possibility of farmer agency in making informed decisions not to participate. Moreover, existing research into the income gains from contract participation provides little insight into how such gains are differentiated between different social groups and different farmers within the clearly heterogeneous category of contract participants.

As Pritchard & Connell (2011, p.236) point out, existing research into contract farming in India remain open to charges of essentialism in their interpretations of contract farming as predominantly a win-win solution for agribusiness and small farmers: “this literature [mainly] problematizes the benefits and costs of schemes in situ to the question of who gains advantage from individual schemes. Attracting less attention has been the broader question of how schemes are inserted within pre-existing agrarian landscapes.” This leads to a “failure to understand the diverse grounding of schemes in different place-based contexts” (Pritchard & Connell 2011, p.236). As I argued in Chapter 2, a combined livelihoods/GVC/agrarian political economy framework can provide this grounding in place, while also accounting for the dynamics of the contract scheme itself. Rather than focussing on the small welfare gains or losses that participation may bring, I argue that research must pay attention to how contract farming schemes integrate with already existing livelihood patterns, as well as broader political-economic structures. To address this gap in the Indian context, the next chapter presents the first empirical contribution of the combined theoretical and methodological framework used in this thesis; namely an analysis of the historical and contemporary livelihood landscapes of the three case study villages introduced in Chapter 1.
Chapter 4 - The evolving rural livelihoods landscape of three villages in Satara District, Maharashtra

Introduction

This chapter presents an analysis of the existing livelihood landscapes of the three case study villages in Satara district, Maharashtra. The aim of the chapter is to paint the social, economic, political and environmental canvas onto which potato contract farming is touching down. To do this, I present an analysis of the common livelihood pathways in each village available to particular social groups and households. This chapter applies the sustainable livelihoods framework discussed in Chapter 2. In particular, two ideas from the livelihoods literature frame this chapter. First, a household’s individual livelihood strategies are enabled or constrained by the bundle of assets and capabilities that its members can access, and this access is mediated by the social, environmental and institutional context within which households pursue their livelihoods (Bebbington 1999; Scoones 2009). Second, I draw on the work of de Haan & Zoomers (2005) and Scoones & Wolmer (2002) to argue that, within a rural space, the pursuit of individual livelihood strategies by households gives rise to common livelihood pathways amongst particular social groups. These common pathways are structured by power and class relations. Applying a pathway framework allows a researcher to identify common livelihood patterns amongst different social actors (de Haan & Zoomers 2005; Scoones et al. 2012). It also adds a temporality to livelihoods analysis that provides a useful bridge to the macro and structural concerns of agrarian political economy. Such an approach is therefore recursive in that it connects household agency with the structural processes of social differentiation within which livelihoods are pursued.

To conceptualise common livelihood pathways in each village, I draw specifically on Dorward et al.’s (2009) typology of ‘hanging in’, ‘stepping up’ and ‘stepping out’. This typology provides a bridge between the economic agency focus of livelihoods frameworks, and classic understandings of structural patterns of accumulation, differentiation and agrarian change (Bernstein & Oya 2014). To this end, I present a grounded interpretation of social and economic differentiation in each village, constructing a typology of livelihood groups based on economic and social characteristics. Specifically, I argue that livelihood pathways in each village are mediated by historical patterns of differentiation and inequality. Therefore this chapter makes an important contribution to the literature by incorporating the insights of agrarian political economy into livelihood analysis. Attention is given to the ways that social categories of class, gender, caste, capital and labour influence access to livelihood assets and capabilities, and hence influence the livelihood possibilities of different household groups. This addresses Scoones’ (2009, p.187) arguments that livelihood perspectives must be informed by “an explicit theoretical concern with the way class, gender and capitalist relations operate, asking up-front who gains and who loses and
why...and (an) understanding of processes of marginalisation, dispossession, accumulation and differentiation.”

The chapter begins with a discussion of livelihood methodologies and the specific research methods employed in the livelihoods component of this study. I then outline the location and history of each case study village, and describe the day-to-day agricultural and non-farm activities that households pursue. This description further elaborates the logic of my selection of these particular villages as case studies discussed in Chapter one. Following this, I present an analysis of the important livelihood assets and capabilities that enable or constrain livelihood activities in each village. The final section of the chapter pieces together the inevitably complex and messy realities of livelihoods by sketching the common livelihood pathways in each village pursued by different social groups. The aim is to outline the complexities of the livelihood landscape of each village separate from the arrival of the contract scheme. To do this, I draw on a careful analysis of the oral histories and household narratives collected in household interviews, as well as information gleaned from focus groups, key informants and my own observations.

**Methodology**

Livelihoods research is based in a ‘people first’ development perspective. The approach explores the factors that affect how people make livelihood choices, what livelihood strategies are possible, and how livelihoods change. As Dorward et al. (2009, p.242) argue, employing a livelihoods framework makes some general assumptions, namely that a) “people generally aspire both to maintain their current welfare and to advance it”, and b) “in trying to advance their welfare, people can attempt to expand their existing activities and/or move into new activities.” The insights gained from livelihood analysis have been used to inform development policy and priorities in addressing rural poverty, with an understanding that poverty “is more than just insufficient income” (Whitehead 2002, p.575). The diversity of issues that can be investigated in livelihoods research, as well as its cross-disciplinary nature, has generated a variety of methods (Challies & Murray 2011; Scoones 1998). Kanji et al. (2005) list some of the common methods and tools that are used to analyse livelihoods. These include: secondary data analysis such as country and regional statistical ‘indicators’ and poverty assessments that help to initially establish context; key informant interviews; participatory methods; and household surveys.

Reflecting its people-centred, ‘action research’ orientation, livelihood methodologies often focus on participatory approaches. Livelihood research methods frequently give agency to local people to share and analyse their own knowledge and to be participants in research about their lives, rather than recipients of expert generated knowledge (Chambers 1994). These participatory approaches are captured by the research techniques of Participatory Rural Appraisal (PRA) and its close cousin Rapid
Rural Appraisal (RRA). These techniques were developed through the 1980’s and early 1990’s, reflecting the shift in development research and practice from ‘top-down’ to ‘bottom-up’ approaches (Chambers 1994). In particular, PRA represented a move “away from extractive survey questionnaires and toward(s) new approaches and methods for participatory appraisal and analysis in which more of the activities previously appropriated by outsiders are instead carried out by local rural or urban people themselves...PRA has been called ‘an approach and method for learning about rural life and conditions from, with and by rural people’” (Chambers 1994, p.953). RRA is considered a more extractive approach, eliciting local people’s knowledge for analysis by outsiders, while PRA explicitly situates the researcher as a facilitator, who aims to empower local people to conduct their own analysis of development issues (Chambers 1994). The ‘menu’ of methods for doing RRA and PRA is diverse, and includes semi-structured interviews, participant observation, focus groups, participating in daily village life, wealth ranking, generating timelines, livelihood mapping, and transect walks. Reflecting on the criticisms of instrumentalism in applications of the five capitals approach discussed in Chapter 2, recent applications of the sustainable livelihood framework have also argued that researchers should adopt “more inclusive, actor-oriented, approaches to livelihoods that focus attention on social relations among individuals, embedded within local socioeconomic, political, and cultural systems” (Turner 2012, p.404, emphasis added). Adopting this approach is consistent with the aims of my study to produce nuanced, contextually grounded, spatially aware accounts of regional development at the intersection of value chains and livelihoods.

The remaining chapters of this thesis draw on qualitative data from 54 household interviews and 13 key informant interviews completed across the three case study villages in Satara district, Maharashtra between April and September 2013. A further four interviews were completed with key informants in the city of Pune. Each household interview was conducted as a semi-structured conversation, usually with the household head. Where possible, female members of households were interviewed, however the majority of respondents were male, reflecting embedded gender roles and the positionality of me as a male. In one village, a group interview was organised with female village members. Interview data was also enriched through the use of ethnographic methods of casual observations, encounters, village and farm walks, and casual conversations in each village. A follow up trip to each village was made in February 2014 where a focus group meeting with village members was held in each village, including an adapted wealth ranking exercise. These focus groups enabled critical triangulation of my data, where my insights and interpretations were discussed and checked for consistency.

Household and key informant interview participants were recruited using a purposive (or theoretical) sampling approach (Mason 2002; Patton 2002). Purposive sampling is a useful technique where the aim
of a research project is to collect in-depth, idiographic knowledge about a particular topic. This approach is based on ‘non-probability’ qualitative sampling methods, where participants are included for theoretical reasons (often based on the subjective judgement of the interviewer), rather than random sampling techniques common to quantitative research methods (Patton 2002). Mason (2002, p.124) expands on the meaning behind purposive sampling:

“(Purposive) sampling means selecting groups or categories to study on the basis of their relevance to your research questions, your theoretical position and analytical framework, your analytical practice, and most importantly the argument of explanation that you are developing. (Purposive) sampling is concerned with constructing a sample which is meaningful theoretically and empirically, because it builds in certain characteristics of criteria which help to develop and test your theory or your argument.”

Purposive sampling approaches therefore do not pre-determine sample size or aim for statistical representation of all types, but rather aim to select participants from which in-depth perspectives can be gathered on the research topic. Mason (2002, p.129) again points out that,

“Your answers to questions about which people to sample should therefore be driven by an interpretative logic which questions and evaluates different ways of classifying people in the light of the particular concerns of your study. Underlying all of this must be a concern to identify who it is that has, does or is the experiences, perspectives, behaviours, practices, identities, personalities, and so on, that your research questions will require you to investigate.”

The support of gatekeepers from the contract firm operating in each village was necessary to access the field sites. Permission was then sought from each village Sarpanch to conduct the research, and the Sarpanch and other key informants helped to identify and approach initial participants. Further participants were identified through a process of ‘maximum variation sampling’, where participants are selected for diversity and variation in order to capture “central themes that cut across a great deal of variation” (Patton 2002, p.235). Given the obvious divisions of landowning and caste in Indian villagers, care was taken to sample households from different caste backgrounds, as well as landless and landowning households across a range of farm sizes. In addition, a mix of contracting, formerly contracting and non-contracting households were sampled. Key informants were identified and

14 The title given to the village leader.
recruited primarily through a passive snowballing technique. The breakdown of interviews conducted in each village is detailed in Table 4.1.

Table 4.1: Interviews completed in each case study village.

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<tr>
<th>Location</th>
<th>Household interviews</th>
<th>Key informant interviews</th>
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<tbody>
<tr>
<td></td>
<td>Contract</td>
<td>Former Contract</td>
</tr>
<tr>
<td>Bhushangad</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Pawarwadi</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Randullabad</td>
<td>8</td>
<td>4</td>
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<tr>
<td>Pune</td>
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Each household interview was roughly divided into two halves. The first half engaged the respondent in a conversation about village life and livelihoods including the livelihood activities of each household, what challenges they faced in improving their well-being, patterns of wealth distribution, and significant changes or events in village or individual household histories. Prompting questions informed by existing livelihoods literature and theory were used to guide the semi-structured discussion, however space was provided to allow respondents to branch out into in-depth discussions of particular topics which they thought important or to which they had special knowledge. The aim of each interview was to collect deep, contextualised insights into village life and livelihoods. The interview schedules used are provided in Appendix A. The data gained from these discussions forms the empirical base of this chapter. The second half of the interview focused on the contract farming scheme; this data is presented in Chapter 5.

A brief note on livelihood pathway methodologies is warranted here. Mushongah & Scoones (2012) argue that most livelihoods-based research into rural change is based on a snapshot approach, conflicting with the inherently dynamic and temporal nature of livelihoods. A pathway approach seeks to capture this dynamism and change. Ideally, then, a pathway methodology would involve a longitudinal study of livelihood change over time, perhaps 20 years or more (Mushongah & Scoones 2012). However, given the constraints of a PhD thesis, a longitudinal study was not feasible in this case. Therefore, in order to understand livelihood change in each village, household interviews focused explicitly on collecting life histories of contract and non-contract farmers (Mushongah & Scoones 2012; de Haan & Zoomers 2005). Collecting these life histories allowed me to undertake an empirically informed analysis of village livelihood pathways both before and after the arrival of the contract farming scheme. Further, my interviews incorporated an evolutionary lens in order to explicitly acknowledge that history matters in determining how livelihood patterns come to appear in different places. In adopting this approach, evolutionary explanations also seek to avoid the ‘topological snapshots’ common to much GVC and
livelihoods research, rather placing historical explanation at the core of any investigation of rural places (Martin & Sunley 2006). This approach aimed to produce a rich picture of livelihood change over time.

Interviews lasted between 20 minutes to two hours, and were conducted with an interpreter present. The interpreter translated questions asked by the interviewer into Marathi, and respondents’ answers were then translated back into English in real time. This resulted in a somewhat disjointed conversation, however it also allowed the interviewer to further explore interesting topics raised by the respondent. Interview notes were transcribed into digital form, and then analysed using the qualitative software package NVivo. Qualitative coding was used both to organise the interview data and as a mode of analysis. Each transcript was coded to reveal common themes and points of difference using a combined inductive and deductive approach; existing theoretical frameworks were used to inform codes and categories, while new codes and categories were also allowed to emerge from the data itself. Two coding exercises were completed. An initial broad brush coding in late 2013 elicited the major themes and insights of the data. These insights informed the questions asked in the follow up visit to each village in February 2014. The second coding exercise then aimed for a more in-depth analysis of the data, resulting in nine categories of codes (detailed in Table 4.2) that inform the analysis in this and subsequent chapters. Data gathered at each code was further analysed through a process of memo writing and reflection.

Table 4.2: Categories of codes used in analysis.

<table>
<thead>
<tr>
<th>Code category</th>
<th>Important sub-codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important existing livelihood strategies</td>
<td>Common livelihood pathways</td>
</tr>
<tr>
<td></td>
<td>Non-farm livelihood strategies</td>
</tr>
<tr>
<td></td>
<td>Agricultural livelihood strategies</td>
</tr>
<tr>
<td></td>
<td>Diversification</td>
</tr>
<tr>
<td></td>
<td>Education of next generation</td>
</tr>
<tr>
<td></td>
<td>Migration</td>
</tr>
<tr>
<td></td>
<td>Remittances</td>
</tr>
<tr>
<td></td>
<td>Household structure</td>
</tr>
<tr>
<td>Important household livelihood resources</td>
<td>Enabling infrastructure</td>
</tr>
<tr>
<td></td>
<td>Social capital</td>
</tr>
<tr>
<td></td>
<td>Credit and access to credit</td>
</tr>
<tr>
<td></td>
<td>Important institutions</td>
</tr>
<tr>
<td></td>
<td>Land and physical capital</td>
</tr>
<tr>
<td></td>
<td>Human capital</td>
</tr>
<tr>
<td></td>
<td>Risk attitudes of households</td>
</tr>
<tr>
<td></td>
<td>Labour</td>
</tr>
<tr>
<td></td>
<td>Access to extension and crop knowledge</td>
</tr>
<tr>
<td>Factors influencing existing social differentiation</td>
<td>Landholding patterns</td>
</tr>
<tr>
<td></td>
<td>Geographical location and access to resources</td>
</tr>
<tr>
<td></td>
<td>Non-farm income</td>
</tr>
<tr>
<td></td>
<td>Caste</td>
</tr>
<tr>
<td></td>
<td>Access to water</td>
</tr>
<tr>
<td>Social networks and political power</td>
<td>Historical livelihood processes</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Agricultural production</td>
<td>Evolution of landholding patterns</td>
</tr>
<tr>
<td>Education</td>
<td>Changing perceptions of agriculture</td>
</tr>
<tr>
<td>Human capital</td>
<td>Livelihood decisions of ancestors</td>
</tr>
<tr>
<td>Common characteristics of best-off, middle, and worst off households</td>
<td>Access to non-farm income</td>
</tr>
<tr>
<td></td>
<td>Historical investment decisions</td>
</tr>
<tr>
<td></td>
<td>Health</td>
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<tr>
<th>Historical livelihood processes</th>
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<tbody>
<tr>
<td>Evolution of landholding patterns</td>
</tr>
<tr>
<td>Changing perceptions of agriculture</td>
</tr>
<tr>
<td>Livelihood decisions of ancestors</td>
</tr>
<tr>
<td>Access to non-farm income</td>
</tr>
<tr>
<td>Historical investment decisions</td>
</tr>
<tr>
<td>Health</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing livelihood barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of water access and availability</td>
</tr>
<tr>
<td>Lack of credit access</td>
</tr>
<tr>
<td>Lack of financial capital</td>
</tr>
<tr>
<td>Lack of infrastructure</td>
</tr>
<tr>
<td>Ineffective institutions</td>
</tr>
<tr>
<td>Lack of labour assets</td>
</tr>
<tr>
<td>Lack of diversification</td>
</tr>
<tr>
<td>Lack of land</td>
</tr>
<tr>
<td>Lack of access to education</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operation of the contract scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of contract agent</td>
</tr>
<tr>
<td>Governance of contract scheme</td>
</tr>
<tr>
<td>Recruitment strategies</td>
</tr>
<tr>
<td>Location decisions of contract firm</td>
</tr>
<tr>
<td>Evolution of contract scheme</td>
</tr>
<tr>
<td>Motivations of contract firm</td>
</tr>
<tr>
<td>Value distribution</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interaction of households with contract scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation to join contract scheme</td>
</tr>
<tr>
<td>Livelihood factors that influence inclusion and exclusion</td>
</tr>
<tr>
<td>Crop characteristics that influence participation</td>
</tr>
<tr>
<td>Role of agency in the scheme</td>
</tr>
<tr>
<td>Relationship between households, risk and participation</td>
</tr>
<tr>
<td>Lack of development as an entry point for contract scheme</td>
</tr>
<tr>
<td>Alternatives to contract scheme</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contours of participation in the contract scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution of benefits</td>
</tr>
<tr>
<td>Impacts on participants and non-participants</td>
</tr>
<tr>
<td>Role of credit</td>
</tr>
<tr>
<td>Role of standards</td>
</tr>
<tr>
<td>Power relationships in contract scheme</td>
</tr>
<tr>
<td>Reason for exiting contract scheme</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Influence of contract scheme on social differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stepping out</td>
</tr>
<tr>
<td>Stepping up</td>
</tr>
<tr>
<td>Hanging in</td>
</tr>
<tr>
<td>Insignificance of contract scheme for development outcomes</td>
</tr>
<tr>
<td>Best-off group don’t need to contract scheme</td>
</tr>
<tr>
<td>Contract scheme as a middle household activity</td>
</tr>
</tbody>
</table>

In addition to the semi-structured interview, a basic livelihood questionnaire was completed with each household, with the exception of Randullabad where several households could only spare enough time.
to complete a short semi-structured interview. This livelihood questionnaire (detailed in Appendix B) collected some basic quantitative livelihood data that further informed analysis of the interview data. The questionnaire also enabled triangulation of the interview data with reported livelihood data, and allowed the identification and follow up of inconsistencies. A summary of this data is provided in Table 4.3, outlining some basic livelihood statistics of the interview participant group in each village.

Table 4.3: Summary of livelihood statistics of each interview group.

<table>
<thead>
<tr>
<th></th>
<th>Bhushangad</th>
<th>Pawarwadi</th>
<th>Randullabad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landowning households</td>
<td>16</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Marginal landowners (^1)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Landless households</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Caste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maratha</td>
<td>11</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>OBC (^2)</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>SC/ST (^3)</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Average landholding (acres) (^4)</td>
<td>12</td>
<td>7.5</td>
<td>6.6</td>
</tr>
<tr>
<td>Largest landholder (acres)</td>
<td>35</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Average irrigation (acres) (^5)</td>
<td>6.4</td>
<td>6.6</td>
<td>4.2</td>
</tr>
</tbody>
</table>

\(^1\) Owning less than 1 acre.

\(^2\) Other Backward Caste

\(^3\) Scheduled Caste/Scheduled Tribes

\(^4\) Among landholding households

\(^5\) Among landholding households

Livelihood characteristics of each case study village

Location and geography

Pawarwadi and Randullabad are both located in Koregaon taluka (refer to Figure 1.1 for a map of the location of each village). Both villages are relatively well connected; Pawarwadi sits on a main road connecting it to a nearby service centre, while Randullabad is 11kms from the main Pune-Satara highway. Randullabad, however, is not as well serviced by transport as Pawarwadi, and farmers must travel for longer to access markets and services. Each village is 650m above sea level, with rainfall patterns reliant on the south-west monsoon. Satara district itself is bordered by the Western Ghats to the west, which strongly influences rainfall patterns in the district. As the southwest monsoon moves over the Western Ghats a large amount of moisture is dumped, resulting in a decreasing rainfall gradient (or rain shadow) as the monsoon moves further inland. As a result both villages receive less rainfall than the district average of 1400mm, but more than talukas to the east such as Khatav (Jagannath 2014). In Randullabad, the average annual rainfall over the past 10 years has been recorded as 750mm, with a minimum of 365mm in 2003. Pawarwadi’s topography is mostly flat, and soil quality is comparatively fertile, with two artificial lakes nearby (Figure 4.1). In Randullabad, half of the village farmland sits on the
side of a hill, where the soil is rocky and of poorer quality. A watershed development program, completed in 2008, has improved water availability and well recharge in the village.

Bhushangad is located in Khatau taluka. It is not a continuous village, but rather is the name of the Gram Panchayat that three fragmented hamlets fall within – Sarnobtomala, Shinedewadi and Bhushangad. Each hamlet is located about 1km apart at the foot of Bhushangad fort, a Shivaji-era fortification that sits atop a large rocky hill. Within each hamlet, households are geographically dispersed, with families living close to their farmland. This adds to the fragmented atmosphere of the village. The village is noticeably isolated. Access by road can be difficult particularly during the monsoon season, and public transport is limited. Bhushangad is located 630m above sea level. Khatau taluka is considered a drought prone area, with the lowest average rainfall in Satara district. On average, the area where Bhushangad is located receives around only 450mm of rain per year (Jagannath 2014), leaving Bhushangad vulnerable to ‘failed’ monsoon seasons. The topography in the village is undulating to hilly, with rocky soils of relatively poor quality. Drinking water shortages have been somewhat alleviated in recent years with the construction of a government built canal through the village. Table 4.4 summarises some key characteristics of each village.

Table 4.4: Summary characteristics of each village.

<table>
<thead>
<tr>
<th></th>
<th>Pawarwadi</th>
<th>Randullabad</th>
<th>Bhushangad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>980</td>
<td>1857</td>
<td>1101</td>
</tr>
<tr>
<td>Households</td>
<td>182</td>
<td>374</td>
<td>210</td>
</tr>
<tr>
<td>Distance to main road</td>
<td>adjacent</td>
<td>11km</td>
<td>13km</td>
</tr>
<tr>
<td>Distance to Satara city</td>
<td>35km</td>
<td>45km</td>
<td>55km</td>
</tr>
<tr>
<td>Road access to village</td>
<td>sealed</td>
<td>sealed</td>
<td>unsealed</td>
</tr>
<tr>
<td>Rainfall</td>
<td>~800mm</td>
<td>~800mm</td>
<td>~450mm</td>
</tr>
<tr>
<td>Major crops</td>
<td>Sorghum, pearl millet, sugarcane, potato, eggplant, tomato, exotic vegetables</td>
<td>Sorghum, wheat, pearl millet, groundnut, sugarcane, pomegranate, tomato</td>
<td>Wheat, sorghum, legumes, some sugarcane and potato, limited other cash crops</td>
</tr>
<tr>
<td>Irrigation source</td>
<td>Two artificial lakes</td>
<td>Watershed scheme</td>
<td>Limited. Canal is primarily for drinking water</td>
</tr>
<tr>
<td>Village school</td>
<td>Up till 7th standard (~13 years old)</td>
<td>Up till 7th standard (~13 years old)</td>
<td>Up till 4th standard (~10 years old)</td>
</tr>
</tbody>
</table>
Figure 4.1: View of Pawarwadi over artificial lake.

Village histories

Pawarwadi

Pawarwadi takes its name from the dominant clan in the village, the Pawar. Six Pawar families settled the village around the turn of the 20th century. An 1889 British map is the first recording of Pawar landholders in the area that is now the village. A state government-led land reform process in 1969 to join fragmented holdings and increase the total land holdings in the village established the modern day borders of the village, and in 1979 the village was incorporated as a separate Gram Panchayat. The total farm land today in Pawarwadi is 377ha, representing an average farm size of around 2.2ha per landowning household. Land holding patterns have been heavily influenced by patrilineal inheritance patterns, with landholdings becoming progressively smaller over generations.

Today, the Pawar clan, who belong to the politically dominant Maratha caste in Maharashtra, heavily dominates the village population. The Maratha caste refers to the Marathi speaking people, located predominantly in Maharashtra, who commonly trace their descent to Kshatriya (warrior and ruling) classes (the Rajputs) of Northern India. Marathas became dominant in Western India with the rise of the Maratha Empire in the 1600s, led by the warrior king Shivaji who is a preeminent cultural icon for present day Marathas. Since the founding of Maharashtra in 1960, Marathas have maintained their

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15 Historical information reported in this section was taken from both household and key informant interviews, unless noted otherwise. At the Gram Panchayat level, historical documents are difficult to access, or commonly are not in the public domain.
position as the politically and culturally dominant caste. In rural areas, Maratha clans like the Pawar are the dominant land owning and farming caste. The village is also home to around ten landless households of lower caste families whose ancestors migrated to Pawarwadi to pursue their traditional caste occupations. Most of these landless households are from the Lohar caste, an OBC\textsuperscript{16} category caste whose traditional occupation was blacksmithing. Another caste group, the Teli, are also present in the village, whose traditional occupation was pressing food oils. The Teli are viewed as an inferior caste group to Marathas, although they have failed to achieve OBC classification. These lower caste households remain landless and face a different set of livelihood challenges to the landowning Marathas. There are no scheduled castes or tribes (SC/ST\textsuperscript{17}) households in the village. Despite being well-located in terms of natural resources and infrastructure, Pawarwadi has suffered from a lack of attention from government and non-government development programs, perhaps due to its small population. The village is mostly comprised of semi-pucca\textsuperscript{18} houses (Figure 4.2), with a large number of kutcha\textsuperscript{19} houses still inhabited. One key informant pointed to the poor quality of the Gram Panchayat building as an indicator of Pawarwadi’s average development status. Villagers are loyal to one of two parties active in the village – the Delhi-based Indian National Congress (INC), or the Nationalist Congress Party (NCP), which is a Maharashtrian based centre left party that splintered from the INC in 1999. The current Sarpanch is a female OBC (Lohar) villager. Her election was enabled by the reservation system in Maharashtra where 30% of Sarpanch positions are reserved for women, and 30% for OBC.

\begin{footnotesize}
\begin{enumerate}
\item Other Backward Class is a classification in the Indian Constitution for caste groups that are socially and educationally disadvantaged though do not experience the same historic caste discrimination as Dalit (untouchable) castes. OBC caste groups are entitled to access programs such as reservation systems in public educational institutions.
\item The classification used for historically disadvantaged and oppressed Dalit or untouchable castes.
\item Hindi word meaning solid or permanent.
\item Hindi word meaning temporary or imperfect.
\end{enumerate}
\end{footnotesize}
Randullabad

Randullabad takes its name from Randullakhan, a 17th century Mughal general who fought alongside Shivaji’s father, Shahiji. Randullakhan was killed in battle around the Randullabad area. A small, historical mosque dedicated to Randullakhan sits in the village. The settlement itself dates back to the Shivaji (17th century) era, and was settled by members of the Jagtap clan, who also belong to the open-category Maratha caste. Today, the Jagtaps are the dominant land-owners. The total farm land in Randullabad is 516ha, representing an average farm size of about 1.4ha per landowning household. As is the case in Pawarwadi, landholdings are becoming smaller through each successive generation. Compared to Pawarwadi, Randullabad has a greater proportion of lower caste households. The village is home to around 30 SC households and a further 20 OBC households. There are 20 landless households in the village, a majority of whom are SC. Lower caste groups present in the village include Ramoshi, who were traditionally village guards or watchmen, and Sutar, whose traditional caste occupation is carpentry. A number of lower caste households have been able to become land-owners over generations through purchase or gifting.

Water access and availability has been a historical problem for Randullabad, particularly for those farms located in the west of the village. The water situation has significantly improved in recent years thanks to a major watershed project initiated and run by the Gram Panchayat, supported by a local development agency. As part of the project capacity building phase, the village came together to provide four days of initial labour, with 360 families taking part. The Gram Panchayat contributed 20% of the project costs, and measures were put in place to control grazing to limit land degradation. The village has also banned the digging of bore wells to protect ground water levels. The project is a defining event
in the village’s recent history. Water availability, including percolation into wells, has improved, particularly for those farms in the west (hilly) part of the village. Funds for women’s and lower caste development were also provided as part of the project, which were used to fund self-help groups.

Houses in Randullabad are mostly pucca and the village’s Gram Panchayat and primary school buildings are well-built structures (Figure 4.3). The Sarpanch of Randullabad is a highly educated woman from an open-caste household. Many villagers stressed that governance in this Gram Panchayat is particularly effective and the Sarpanch provides good leadership. Randullabad was used as a backdrop for scenes in the 2011 Marathi movie Deool, which is a source of great pride for villagers.

Figure 4.3: Village-scape of Randullabad.

Bhushangad

The history of Bhushangad village is closely tied with the nearby 13th century hilltop fort that shares its name. Settlements in the area of the fort date back to the Shivaji era (17th century), where various caste and clan groups were employed in traditional occupations in the service of the dynasty. These caste or clan groups now dominate particular hamlets in the village. For instance, the ancestors of people from the hamlet of Sarnobotmala were traditionally soldiers and commanders in Shivaji’s army, and were paid
with produce from surrounding farmers who farmed under sharecropping arrangements. There is also a large presence of Ramoshi households in the village who were employed as village guards in Shivaji’s time. Today, 60% of the village population are OBC, 35% Maratha and 5% SC. Bhushangad hamlet is dominated by OBC households, where most of the population is centred, while Maratha households dominate Sarnobotmala and Shinedewadi.

No precise data was available on landholding patterns in the village, however it was apparent that they differ from those in Pawarwadi and Randullabad. There are very few landless households in Bhushangad. Many OBC families were granted land in reward for their service during Shivaji’s time, while other OBC and SC households have been able to buy or acquire land. Land ownership is still distributed along caste lines. Some OBC and SC households own up to 10 acres of land, however Maratha households own more land on average, with some possessing 30 acres. Much of this land is of poor quality however, and irrigation coverage is much lower than the villages in Koregaon taluka. Due to its isolated position, drought prone climate and fragmented nature, villagers consider Bhushangad a ‘backwards’ or less developed village than others surrounding it, and particularly villages in other talukas to the west. The most significant development program in recent years has been the construction of a canal adjacent to the village. Although the canal was primarily built to improve drinking water supply, there have been flow-on effects for agriculture, particularly for those with adjacent farmland. The types of houses in Bhushangad vary from hamlet to hamlet, and by caste. In Sarnobotmala and Shinedewadi, Maratha households own pucca houses, while Bhushangad hamlet is dominated by OBC-owned semi-pucca or kutcha structures (Figure 4.4). The Sarpanch and deputy Sarpanch positions in Bhushangad are reserved for OBC candidates, and the current Sarpanch is a female from a Ramoshi household.
Day-to-day livelihood activities

This section provides an overview of livelihood activities in each village by asking a simple though fundamental question: what do people actually do to improve their livelihoods? Answers to this question differ based on local articulations of how place-based historical, environmental and social processes entwine with broader political and economic processes at various scales. However, there are also similarities in how livelihood activities have evolved across the case study villages, including the increasing significance of non-farm income, whilst at the same time the continuing importance of agriculture as the mainstay of livelihoods in each village. When discussing village livelihood activities it is useful to tackle agricultural and non-farm activities in turn, however as the subsequent sections highlight, many households engage in a dynamic mix of agriculture and non-farm activities when constructing their livelihood strategies.

Agricultural livelihoods

Pawarwadi

Pawarwadi’s good land quality, water access and transportation connections have allowed the village to develop a relatively dynamic agricultural economy. For landowning households, high-value agriculture, rather than off-farm activities, is the biggest source of wealth generation. In the 2011 census 78% of working individuals in the village listed their main occupation as agriculture, either as owner-cultivators.

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A person involved in cultivation on own or leased land for payment in money, kind or share.
(53%) or as agricultural labourers (25%). Farm labour remains an important livelihood activity, particularly for marginal landowning households who cannot reproduce themselves through crop production alone. A majority of interviewees stressed the ongoing importance of agriculture to village livelihoods, even as access to non-farm opportunities increases. Importantly, interviewees still culturally identify themselves as farmers even where a greater share of household income comes from non-farm sources, and social status is closely tied to land-holding. Furthermore, there is a sense that agriculture has reasserted itself in recent years as a dynamic and viable livelihood activity, particularly with the increasing spread of advanced irrigation and improving connectivity to markets:

“Farming has become more profitable over time. In the past, sugarcane, tomato, potato and other vegetables were not produced, but irrigation has allowed farmers to diversify into these crops and earn more profits” (PW01).

Cropping patterns have changed significantly in the last 30 years. Traditionally, Pawarwadi was known for its bajra (pearl millet) production. Other coarse grains, beans and groundnut were also important traditional crops. From around 1984 farmers began to replace traditional crops with cash crops as irrigation became more widespread. The increase in area under sugarcane, encouraged by the fixed prices offered by nearby sugar factories, has had the biggest positive impact on landowning households. Out of the ten landowning households interviewed, nine grow sugarcane as their primary cash crop. Farmers, who generally enjoy good market access, have also taken up other vegetable cash crops such as tomato, onion, ginger, potato and eggplant, which they sell to APMC mandis as far away as Mumbai or Kolhapur, depending on market conditions. A select number of farmers are also growing high-value exotic vegetables (including rocket, iceberg lettuce, broccoli, leak and various herbs) for hotels in Mumbai. All landowning households still grow coarse grains or wheat, as well as vegetables for self-consumption. From the farmer’s perspective, cropping patterns are primarily influenced by water availability (including ground water and rainfall) and market prices, as well as household decisions around whether to pursue cash crops or stick to more familiar traditional cropping patterns.

Households also commonly engage in milk production to supplement their household incomes and for self-consumption. Many households, including marginal landowners, will keep at least one buffalo. Milk is an important source of protein for household diets, and depending on production households will sell excess milk on a daily basis to local dairy cooperatives that operate in the village. Dairy was a significant source of cash for one interviewed household, who owned seven buffalo. Purchasing or accessing fodder, or accessing grazing land, can be a challenge, particularly in drought years.
**Randullabad**

Similar to Pawarwadi, all landowning households in Randullabad participate in agriculture. Randullabad’s agricultural economy is relatively dynamic, although historically poorer water access and land quality, particularly to the west, has constrained cropping patterns. Until the completion of the watershed project in 2008, many households were limited to growing mostly traditional crops such as coarse grains (bajra and jowar\(^{21}\)), wheat and perhaps ground nut or peas if water was available. Those with land in the east of the village have been able to pursue more diversified cropping patterns, although declining or irregular rainfall and relatively poor transport connections and market access compared to Pawarwadi have influenced households to diversify into non-farm activities. Even so, the majority of interviewed households named agriculture as their main livelihood activity. For some, this is more a cultural identity than economic reality, as non-farm income has overtaken agriculture for many households, though it is clear that agriculture remains the most important livelihood activity at the village scale. In the 2011 census 65% of workers listed their main occupation as agriculture (62% owner-cultivators and 3% agricultural labourers):

> “Most people say that farming is not losing its importance in the village” (RN10).

Traditional cropping patterns in Randullabad were similar to other villages in the area, based around coarse grains and wheat. The village also has a long history of table potato production. Notwithstanding the water problems faced by farmers, cash crops, most importantly sugarcane, have spread in the village over the last 30 years as irrigation coverage has increased. Further, the watershed project has led to a reinvigoration of agriculture in the village, and cropping patterns have diversified significantly in the last five or so years. It has allowed the area under sugarcane, peas, soybean and other cash crops to increase, improved yields, and enabled many farmers to sow a summer crop for the first time. The watershed project also provided funds for the development of irrigation-fed horticulture, including the establishment of pomegranate and custard apple plots.

Randullabad is not as well connected to agricultural markets as Pawarwadi, and accessing transport can be challenging for less well-off households. Those that can access transport will frequently sell their crops in the Pune APMC, 80km away, where farmers can achieve higher prices than Satara. Small amounts of produce are also commonly sold in the market facilities in nearby Wai.

Milk production plays a more significant livelihood role in Randullabad than Pawarwadi. Five milk cooperatives operate in the village, and milk production is an important side-activity to farming for most landowning households. The contribution of dairy to a household’s livelihood ranges from selling one

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\(^{21}\) Sorghum.
litre per day from one buffalo, to those households that own six or seven buffalo or cows and earn a significant yearly income selling 20 litres or more per day.

**Bhushangad**

Agriculture plays a significantly more central role in household livelihoods in Bhushangad. In the 2011 census 92% of individual workers listed agriculture as their main activity (65% owner-cultivator and 27% agricultural labourers). However, the village’s agricultural economy is noticeably less dynamic than Randullabad or Pawarwadi, and livelihoods are more precarious. Landholdings in the village typically include sizeable areas of poor quality or uncultivable land. As a result, many households have attempted to diversify into non-farm activities, some with more success than others. Nonetheless, agriculture remains the dominant livelihood activity in the village for a large majority of households:

“Most households in the village are dependent on farming, there are not many with jobs outside of farming” (BH17).

Cropping patterns in Bhushangad have been severely limited by the drought-prone climate of the area, poor land quality and lack of irrigation infrastructure. Until around six years ago, when the newly constructed canal began operation, farm land in the village was entirely rain-fed. Thus, whereas farmers in Randullabad and Pawarwadi were able to move into cash crops in the 1980s, Bhushangad farmers continued to pursue traditional cropping patterns based on coarse grains, wheat, pulses and legumes, supplementing their livelihoods through temporary migration and non-farm activities. Until the canal was built, agriculture was in decline in Bhushangad, and many households were forced into ‘distress diversification’. The construction of the canal, however, has led to a revival of sorts for agriculture in the village:

“10 years ago I was in Mumbai working as a painter. Since the canal was built I came back to the village to farm. Many people have returned from off-farm jobs to do farming again since the canal has been built” (BH03).

Households have had more confidence to invest in irrigation in the past six years, allowing some diversification of cropping patterns into cash crops such as pomegranate, potato, capsicum, and sugarcane. Potato and sugarcane now dominate as the most important cash crops. However, agricultural opportunities are still limited compared to the other case study villages, and there is a lack of high-value horticulture. Many households still have limited access to irrigation, restricting the coverage of high-value crops.

The isolated position of the village and its poor road infrastructure present market access challenges for households. Most households do not have access to the lucrative city markets of Pune or Mumbai.
Instead, farmers utilise APMC markets and sub-markets in surrounding towns such as Karad (40km) or Pusesawali (13km), where transport costs are low. Some farmers send crops such as onions to the city of Kolhapur (110km) where they can command a better price.

Similar to the other two case study villages, dairy plays an important supplementary livelihood role in the village. Several landowning SC and OBC households pursue milk production as their main livelihood activity, grazing their herd on land that is usually of marginal quality and unsuited to growing crops for the market.

**Non-farm livelihoods**

_Pawarwadi_  
Although agriculture dominates household income sources in Pawarwadi, many landowning households also engage in non-farm activities to supplement their agricultural incomes. Non-farm livelihood activities in Pawarwadi are focussed on low-skilled, temporary and cash generating opportunities, much of which is invested back into agriculture. For landless households, non-farm income has obvious importance, and landless households pursue a diversified mix of low-value non-farm activities.

For landowning households, non-farm activities have been dominated historically by temporary migration to large cities such as Mumbai, Pune and Nashik for house painting. Oral histories from interviewees trace engagement in house painting for several generations since at least 1972 and the activity has become an integral part of the livelihood strategies of many households. It was not entirely clear how painting came to dominate non-farm livelihoods in the village. It is apparent that around 40 years ago some village men established themselves as supervisors for house painting in Nashik, and successive generations have drawn their labour from Pawarwadi, passing on skills and maintaining the village’s link with this industry. According to key informants, up to 80% of households have at least one member engaged in seasonal painting work, with up to 200 male villagers temporarily migrating each year to work as painters. Painting represents an important source of income that supplements uncertain agricultural incomes, and provides a vital source of cash that can be used to invest in household assets, education and agricultural activities. Painters earn around Rs 400/day, higher than the Rs 200 or 250/day earned by agricultural labouring.

Besides painting, a small number of households have sons or daughters who have secured employment in service industries in Pune or Mumbai, or who have enlisted in the Indian army. Some of these migrated household members are able to send remittances, which are used to invest in agricultural or household improvements. In one case, a landowning household has two highly educated sons, one of whom works as a pharmacist. The son sends significant remittances back to the village, and these
remittances are now the main source of income for the household, although the household head continues to engage in agriculture. Nonetheless, the role of remittances appears less significant compared to the other two case study villages.

Randullabad

Non-farm activities play a more prominent role in Randullabad as a primary household livelihood activity than the other two villages. In the 2011 census 31% of individual workers said that their main income activity was outside of agriculture:

“If a household depends wholly on farming then this won’t be enough to provide them with a good economic condition. Just farming is not enough anymore. You need at least one family member to migrate.” (RN GROUP)

Similar to Pawarwadi, a number of farming households have household members who engage in low skilled non-farm labour such as construction and painting, typically as temporary migrants to Pune, Mumbai and other cities. This income is typically either invested back into agriculture for land improvements, upgraded irrigation, tractors and advanced inputs, or invested in higher education for household members. Educated household members are then able to find higher value service or professional positions in urban areas, sometimes as permanent migrants, sending back remittances to the village.

Non-farm activities in the village are diverse. Villagers have found work as security guards, mechanics, drug store employees, government employees, bank clerks, teachers, retail employees, lawyers and Ayurvedic doctors. Satara, Pune and Mumbai are the main destinations for migrant workers seeking employment in services or skilled industries. Non-farm activities are, of course, particularly important for marginal land-owners or landless households who cannot meet their livelihood needs through agriculture. These households typically eke out a livelihood through locally-based activities such as security guard work at a nearby wind farm, opening a small village store or driving a transport car. Some primarily lower-caste households engage in agricultural labour, although this is steadily declining, as social status is negatively associated with agricultural labouring in the village.

Bhushangad

Non-farm livelihoods are increasing in importance to households in Bhushangad, and accessing high-value non-farm opportunities has a significantly bigger impact on a household’s fortunes than agriculture. However, few households in the village currently consider non-farm pursuits as their primary livelihood activity: only 8% of individuals in the 2011 census listed a non-farm activity as their main occupation. Even so, remittances and non-farm ‘side activities’ play a large role in the fortunes and
socio-economic status of households. Given the historically poor and stagnant state of agriculture in the village, many households have a long history of non-farm livelihood activities, often forced into distress diversification or migration decisions. Household members, typically males, have engaged in low skilled labour requiring temporary migration such as house painting and truck driving. This has changed since the construction of the canal, as many temporary and some permanent migrants have returned to full-time farming. Some households have been able to invest the income earned from non-farm activities in irrigation and other agricultural assets.

Remittances play an important role for some households. Investing in the education of children who are then able to secure non-farm employment and send home remittances is a key livelihood strategy for households, and is pursued by both large and marginal landowners. A couple of households have been able to use family and social connections to secure lucrative jobs for their sons in gold and silver shops, and remittances are now their main source of household income. Remittances are also important for OBC and smaller landowners. One OBC household had two sons working as truck drivers who were sending home significant remittances, much of which was invested back into agriculture.

Livelihood assets and capabilities
This section combines insights from all three villages in order to tease out both similarities and differences in the factors that enable or constrain the livelihood activities discussed above. The discussion is informed by the five capitals approach associated with livelihoods analysis, however I build on this by conceiving of assets as “not simply resources that people use in building livelihoods: they are assets that give them the capability to be and to act” (Bebbington 1999, p.2022). Importantly, this section argues that access to important assets and capabilities in each village is conditioned by patterns of social and economic differentiation in each village. In addition, as the following discussion reveals, many of the livelihood factors discussed here are interdependent, and overlap in ways that also mediate a household’s livelihood outcomes. Access to certain assets and capabilities is enabled or constrained by access to other important livelihood assets. This is summarised in Table 4.5.
### Table 4.5: Summary of important livelihood assets and capabilities.

<table>
<thead>
<tr>
<th>Livelihood asset</th>
<th>Role as livelihood asset and capability</th>
<th>Political economy of livelihood asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling infrastructure</td>
<td>Important physical assets such as roads, water and electricity infrastructure enable livelihood diversification choices, particularly crop diversification. Lack of infrastructure constrains market access and development of local non-farm economy.</td>
<td>Infrastructure assets are differentiated between villages by local and regional party politics, political favouritism and caste politics.</td>
</tr>
<tr>
<td>Water availability and access</td>
<td>Access to water enables agricultural-based livelihoods and determines cropping possibilities. Irrigation enables crop diversification into cash crops and increased production and accumulation of agricultural credit. Lack of water access constrains livelihood choices, including non-farm activities.</td>
<td>Access to irrigation assets depend on access to financial and social assets, and are therefore conditioned by class and caste politics.</td>
</tr>
<tr>
<td>Land</td>
<td>Land ownership enables access to agricultural livelihood opportunities (as a physical asset), but also acts as an important social, human and financial asset to enable access to non-farm opportunities and important social functions such as status, political access and identity.</td>
<td>Ownership of land is highly differentiated along caste and class divides. Lower caste and poorer households tend to be landless or marginal landowners. Land title is typically in male’s name.</td>
</tr>
<tr>
<td>Social networks and political access</td>
<td>Access to social networks enables physical asset and knowledge sharing for agricultural livelihoods, as well as adaptive and coping capabilities. Social networks enable non-farm opportunities through linkages to urban areas. Access to political processes influences other important livelihood assets.</td>
<td>Social networks are based on caste and land owning status. Open caste households are better connected. Political access is differentiated primarily by caste and gender. Lower caste households and women are often excluded from political processes.</td>
</tr>
<tr>
<td>Financial capital</td>
<td>Access to financial capital including credit enables households to invest in new or upgraded livelihood activities.</td>
<td>Credit access is differentiated by class, caste and gender. Lower caste or landless households are often excluded from formal credit institutions.</td>
</tr>
<tr>
<td>Formal institutions</td>
<td>Access to institutions is an important form of social capital. Access to government extension improves agricultural livelihood capabilities, while self-help groups are critical to lower caste household capabilities.</td>
<td>Access to formal institutions is dominated by open caste households. Self-help groups are differentiated between villages by political processes at local and regional scales.</td>
</tr>
<tr>
<td>Human capital</td>
<td>Education is a critical asset that gives households capabilities to access improved livelihood opportunities. Attitude to risk and innovation influences livelihood choices.</td>
<td>Access to higher education is differentiated by caste, class and gender. Lower caste and female villagers are excluded from many higher education opportunities.</td>
</tr>
</tbody>
</table>

### Enabling infrastructure

Public infrastructure such as roads, canals and electricity play a vital enabling role for household livelihoods in each village. State or NGO led infrastructure programs such as canal building, road improvements, watershed programs and electricity were described by households as the most significant milestones in improving livelihood conditions in each village. Infrastructure enables choice, which in turn enables households to diversify their livelihood activities in meaningful ways. This is
particularly so for agricultural-based livelihoods. The starkest examples from the interviews were the watershed project in Randullabad and the construction of a canal in Bhushangad, which has allowed landowning households to actively diversify their cropping patterns in recent years:

“The watershed program is the special thing about the village, and has had a great impact on households’ livelihoods. Apart from that, people’s livelihood options are the same as they have been” (RN20).

In contrast, lack of enabling infrastructure has significant flow on effects. Poor road infrastructure has limited market access for farmers in Bhushangad, and also constrained the development of non-farm side-businesses such as village stores. In all three villages, farmers commonly complained about the lack of storage infrastructure (sheds, cold storage etc.) for crops. This constrains their ability to both participate in markets for perishable fruit and vegetable crops, and to store produce to smooth income across seasons. A lack of storage facilities also means farmers must be price-takers, with no ability to wait for better prices or target more lucrative markets.

Differences between each village in extent and quality of infrastructure have a significant influence on livelihood possibilities. Interviewees attributed much of these differences to politics. At a regional scale, corruption and nepotism, common characteristics of state politics in India, influence the infrastructure development of particular talukas. District and state governments have historically neglected Khatav taluka, and most households in Bhushangad thought that the village misses out on development funds and programs. This constrains the livelihood possibilities of all households in Bhushangad:

“The roads in Bhushangad are neglected by local and state politicians. Corruption has stifled development in Bhushangad. The whole taluka of Khatav has poor roads compared to the rest of Satara district” (BH17).

Along with its spatiality, the temporal and historical dimension of infrastructure development has influenced the evolution of village-scale livelihood patterns. A canal was built near Pawarwadi in the 1980s, meaning households here, while also limited by other factors, had the capability to diversify into cash crops much earlier than Bhushangad, contributing to the more dynamic nature of agricultural livelihoods in Pawarwadi.

**Water availability and access**

Water is a critical natural asset for enabling agricultural livelihoods in each village. The ability of a household to engage successfully in agricultural activities is influenced by water availability and access. Water availability is determined by rainfall and climate patterns, which are increasingly unpredictable, and is also closely connected to physical infrastructure such as canals, artificial lakes and watershed
structures. Water availability, then, is influenced by processes happening at multiple scales, such as global scale climate change and regional scale political processes, which are mostly out of the control of local households.

At a local scale, water access strongly conditions a household’s livelihood possibilities. Understanding water access as a livelihood asset involves thinking about water as more than just natural capital, but rather as being closely connected with other important assets and capabilities such as financial capital, credit access, social status, caste and social networks. One example is access to wells. Interviewees commonly expressed the idea that as a land-owner ‘you need wells to do well.’ Access to wells, however, is determined by spatial factors (location of land relative to watershed and groundwater, soil type and topography) and social factors (the ability to afford to build a well or access a neighbour’s well). As a Pawarwadi household member explained:

“Not all farmers have enough wells on their land, so some have to rent in water. This affects their economic condition and opportunities. The people with enough wells are those farmers whose savings have allowed them to invest in wells” (PW01).

Likewise, installing or upgrading irrigation systems is a major livelihood priority for landowning households in all villages, however the ability to do so is constrained by access to wells, financial capital, credit and government subsidies. For households, the ability to install and access irrigation, then, is influenced by class and caste processes at the village level. At the regional level irrigation schemes are unevenly distributed, influenced both by political processes and natural environments (rainfall, topography etc.). These processes have resulted in better irrigation infrastructure in Koregaon taluka than in Khatav.

Households lacking irrigation are constrained to traditional and low-value crops, conditioning access to other livelihood opportunities and, in the absence of other livelihood activities, cementing their marginal class status. Accessing irrigation is often a first step towards accumulation in agriculture. Irrigation enables access to cash crop opportunities that can make a significant impact to a household’s income, as well as their capability to diversify and improve their social standing.

**Land**

Issues of land ownership and access cut across all other livelihood assets and capabilities. Although non-farm livelihood activities are increasingly important, land remains a critical asset in each case study village. Access to land allows households to meaningfully participate in the agricultural economy. Access to land also allows households to grow food for self-consumption. In Bhushangad, where livelihoods are heavily dominated by agriculture, the importance of land as a livelihood asset is paramount:
“All hamlets are dominated by farming as the major livelihood activity. The less well-off houses in the village are those with no land or small marginal holdings” (BH01).

The central role of land relegates landless households to lower socio-economic positions, constraining their capabilities to engage in poverty reducing livelihood strategies. Landlessness impacts access to other important livelihood assets and capabilities such as education and access to credit. Landlessness in each village is intimately connected to the social category of caste, further reinforcing the marginality of these households. Lower caste households were historically excluded from owning land. These processes of exclusion still influence the socio-economic status of lower caste households. Landless households must struggle to meet their reproductive needs through other means; however their lack of land also constrains their access to non-farm opportunities:

“Because of their lack of land saving and investing is very difficult. They have to buy everything like food so this eats up their income. They have no land to fall back on” (PW13).

The role of land as a livelihood asset, then, goes beyond its value as a physical or natural asset. Apart from enabling agricultural production, owning land also contributes to social capital (a source of political power and social status, and as a safety net in hard times), human capital (as a source of identity and purpose) and financial capital (as a launch pad into the non-farm economy, as collateral to borrow credit against, a site of capital investment and as a base from which to expand a household’s livelihood activities). Access to land allows households to diversify into non-farm activities, and to access other important livelihood assets such as education:

“Because of my land, I was able to access enough capital and credit to help my sons to set up their businesses” (BH11).

Households that lack adequate access to land are often forced to diversify (sometimes in distress) in reactive ways into whatever non-farm opportunities are available, which are often low-skilled and low value and don’t contribute to any great shift in their livelihood trajectory:

“If people have a small landholding then it is necessary to do other activities such as painting. The differences between rich and poor exist in spite of the alternative activities available – land is a huge limiting factor” (PW02).

While land remains a critical livelihood resource, accumulating land is increasingly difficult for all types of households. In the respondent group, over the last ten year only one household has significantly increased their landholding, accumulating eight acres over that time period. 90% of households in the
respondent group recorded no change in landholding, suggesting a less than dynamic agrarian structure, a point I return to later.

**Social networks and political access**

In all three case study villages, interviewees identified social relationships and networks (what might be broadly categorised as ‘social capital’) as important to their livelihood success. Social networks are important for livelihoods in a number of ways. Although there are no formal cooperatives in any of the villages, informal cooperation between farmers typically involves labour sharing, water/well sharing, asset sharing (tractors, bore pumps, bullocks etc.) and knowledge sharing. In interviews, farmers told of how they often engaged with broader inter-village networks and rural-urban knowledge flows to gain access to the latest crop, market and input information.

Social networks also enable access to non-farm opportunities. A number of households, particularly well-connected Maratha families, have used their family and social networks to secure their children employment in non-farm occupations in Maharashtra and other states. These predominantly rural-urban linkages allow households to accumulate capital through remittances while maintaining their rural identity, and migrated household members often bring back new knowledge and skills.

Access to social networks is strongly determined by historical caste or clan divides, suggesting that what is known as bonding social capital in the literature is particularly strong in each village. This was particularly evident in Bhushangad, where social cohesion is strong between open caste Maratha households:

“**Sarnobatmala [hamlet] in particular is very good with unity. They are all from the same caste and they all help each other**” (BH03).

However, bridging social capital is weak in each village. Caste-based groupism typically combines with historic patterns of privilege, power and marginalisation to exclude other (lower caste) households from social and knowledge networks:

“**There are agriculture officers that visit the village, but these officers will give information to some farmers with the expectation that they will share with other farmers. Often, however, these farmers keep the information to themselves**” (BH10).

Political access at multiple scales has a significant influence on household livelihood possibilities. Access to political power, including the capability to influence decisions, is closely linked to access to other

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22 Bonding social capital refers to social networks between homogenous groups (e.g. caste, gender, socio-economic status), while bridging social capital refers to social networks formed across social groups (see Putnam 2000).
important livelihood assets and capabilities, particularly physical and financial assets. Political favouritism at the village level, whether along political party or caste lines, can constrain certain households, particularly lower caste households, from accessing government programs and benefits. Maratha households are better positioned to influence how the Gram Panchayat distributes government development funds, while party and caste politics influence the ability of a household to access welfare benefits controlled by the Gram Panchayat. The following quotes illustrate the ongoing and pervading influence of social networks and politics as a livelihood asset and constraint:

“I have been the victim of some caste politics in the past. We qualify for the BPL card but have not been given a card. There are some Marathas who earn even more than us who do have a BPL card. We haven’t received any assistance for installing irrigation and pipelines because we were truthful about our circumstances and finances” (RN28).

“The Gram Panchayat has caused a BPL card mishap. The Gram Panchayat is holding our card but not passing it on to us. We don’t know why this would be, but we think it is internal politics. We can’t tell or see what is happening inside the Gram Panchayat” (PW13).

**Financial capital**

Interviewees identified access to financial assets, including credit and savings, as giving them the capability to make investment choices, access new livelihood opportunities and endure or withstand livelihood crises. Access to financial capital is particularly important for agricultural based livelihoods. The seasonality of agricultural income means that households often face temporary capital shortages that can curtail planting new crops or the application of inputs. A lack of financial stability also dissuades households from making investments in higher-value or riskier livelihood activities, as priority must be given to daily household reproduction. For landless households, access to financial capital can be problematic, as households are often forced to pursue temporary and uncertain livelihood activities with no fixed income. It is unsurprising that almost all households across the three villages identified a lack of financial capital or savings as a major barrier to improving their livelihoods:

“The major problems in the village include households’ lack of financial stability. Not many people have any money to invest in improving their livelihoods” (RN05).

“One of the major challenges with farming is the lack of capital to make investments. I often don’t get my money on time to make further investments in farming” (BH09).

Given the cash flow and income problems that are pervasive across many households in all villages,

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23 A Below Poverty Line card gives households access to certain entitlements and welfare benefits, most notably subsidized food from the Public Distribution System (PDS).
access to credit is an important source of financial capital for households. Whether via formal credit institutions or informal money lending, credit access fuels livelihood expansion, enabling farmers to move into cash crops, and households to educate their children or pay for marriages:

“I rely on credit to pursue new activities and make investments, and for this I must approach the village credit society or the bank” (PW03).

At the same time, credit can be double-edged sword for households. Engaging with credit relations also exposes households to indebtedness, particularly given the inherent uncertainty and unpredictability of agricultural livelihoods that are dependent on bio-physical and climatic cycles. Many households are not willing or able to take on these risks:

“I can’t access labour and I don’t have enough water, so I don’t want to take on credit as I won’t be able to repay any loan. I can’t take the risk” (BH14).

Credit access is also differentiated along caste and class lines. Landless households in each village are excluded from the credit cooperative society, while access to social networks (knowing the right people), often along caste lines, enables credit access. Lower caste and poorer households do not meet the requirements of banks, and are often forced to rely on informal money lenders, often at higher interest rates. This places households into positions of exploitation, however, even so, this form of credit access can be critically important to livelihood maintenance. At a village level, the location of formal credit facilities is important. For example, Bhushangad’s isolated location means physically accessing formal credit institutions is difficult for many households. Moreover, in all three villages, those that can easily access institutional credit are typically households that already own more land, or have adequate existing financial resources, enhancing their advantage and access to more stable or rewarding livelihood strategies.

“In any village getting credit approval is difficult. Not many people get favourable action or results. Those that have good relations with influential people can get credit more easily” (RN11).

Finally, consistent with the increasing diversity of livelihood strategies discussed above, non-farm income is a critical source of financial capital, external to the production and re-investment cycle of agricultural livelihoods. Access to non-farm activities is also a livelihood goal in itself, as non-farm activities now offer more lucrative and rapid pathways to improving livelihoods than agriculture.

**Formal institutions**

Households depend on access to various sources of institutional support to enable them to improve their livelihoods, or maintain their current livelihood position. The role of local, state and national
government is important here, particularly in the context of an increasingly liberalised agricultural and rural policy environment. Two examples of the influence of government institutions stand out in the three case study villages. First, in a positive sense, central government action on affirmative action policies (known in India generically as ‘reservation policies’) have given lower caste villagers and women the capability to access positions of political influence and education opportunities. Second, however, the gradual withdrawal of the state government from agricultural spaces has constrained access to extension and capacity building services for landowning households. There is a large demand for information about new crops, technologies and farming practices from farmers who are desperate to improve their agricultural livelihoods, however this demand is no longer being met by governments, creating a vacuum that is often filled unevenly by private agribusiness firms:

“There is a lack of extension services from the government available. Only private companies are providing guidance. I haven’t come into contact with any agricultural officers, or been given any publications to help me with my farming” (RN15).

Access to self-help groups (SHG) is a significant livelihood asset that builds the capabilities of households to pursue improved livelihood strategies. SHGs are an important institution for women from lower caste and landless households. Membership of a SHG enables access to other important livelihood assets such as financial capital, social networks, personal empowerment and skills building that landless households and women might otherwise be unable to access. The effectiveness and dynamism of SHGs in each village varies, dependent on historically informed institutional and cultural environments. In Bhushangad, the fragmented nature of the village and its isolation has limited the development of effective SHGs. In Randullabad, in contrast, a history of effective and engaged Gram Panchayats and the success of the watershed project have provided space for SHG development:

“From the watershed program, 5% of the development funds were given to women’s development. There are 19 women’s self-help groups in the village. One member from each group came together to form a peak group for the development of women in the village. From a fund of Rs 300,000, the group bought ploughers, harvesters and grass cutters to make women’s work easier. The SHG’s also rent these machines out to farmers” (RN09).

Human capital

Household livelihoods in each village rely on a set of intangible assets that are best represented by the notion of human capital. The term human capital has been employed in a variety of different contexts. Here, the term is used to capture a range of intangible human qualities and capabilities such as “the skills, knowledge, ability to labour and good health and physical capability important for the successful pursuit of different livelihood strategies” (Scoones 1998, p.8).
Education levels of household members have a significant influence on livelihood opportunities. Education enables livelihood choices, including opening up non-farm possibilities. Access to higher education can make significant improvements to a household’s well-being:

“Our eldest son got a job within one month of graduating, and things have rapidly improved since then” (PW09).

A household with highly educated children has the capability to access lucrative non-farm opportunities, and benefit from remittances. Access to education, however, is highly differentiated by class and caste status. Each village has a primary school, however these are poorly resourced, struggle to attract high quality teachers, and offer limited opportunities for older children. In Bhushangad, for example, schooling is only available to 4th standard (10 years old). This means households must send their children outside of the village for further education, a significant barrier for worse-off and particularly lower caste households:

“The education opportunities available to households determine their livelihood success and financial situation. If you can get your kids educated and they can find jobs in the city then this will make a big difference. Those who already have a good financial situation and good nutrition can access these education opportunities more readily” (RN08).

Apart from education, the ability to be innovative is an important livelihood asset and capability. Households in each village commented that all landowning households face the same physical and natural constraints; differences in success then depend on the human capabilities of individuals:

“Farmers have all been endowed with the same resources from nature, so success depends on how much effort you put in” (BH07).

This is closely related to a household’s perception of and attitude to risk. The ability or willingness to take risks can influence a household’s livelihood choices. Attitude towards risk followed similar patterns in each village, differentiated by access to other assets such as land and financial capital. Larger landowners tended to be more willing to invest in new activities or take on credit, while marginal landowners or landless households, or those with previous experience of loss or indebtedness, tended to be risk-averse:

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24 These barriers have been officially removed through the reservation system for designated OBC and SC castes; however in reality historic patterns of discrimination still persist.
“I’m willing to take more risks than other farmers, because I think the demand is high for new products, and so are the prices. I’m better off than a lot of other households, so I can take the risk of investing in new crops. I also have more land on which to try new crops” (BH07).

“Other than sugarcane there are no other cash crops that I can invest in because I can’t risk making a loss” (BH16).

History Matters

The livelihood assets and capabilities discussed above do not simply exist as static resources that households draw down to pursue their livelihood activities. Rather, a household’s access to key livelihood assets evolves over time. In short, history matters. Historicising this analysis means understanding how households’ access to livelihood assets has co-evolved with the wider trajectory of place-based historical processes. This is important as these evolutionary livelihood factors influence contemporary patterns of asset distribution and access, and therefore patterns of socio-economic differentiation. The contemporary livelihood assets and capabilities that households can access in each case study village are informed by the evolution of place-based institutions, as well as social, economic and ecological processes at various scales, akin to the concept of ‘path dependence’ used in evolutionary economic geography (see Coe 2011; Martin & Sunley 2006). Here, the concept of path dependence suggests that a household’s livelihood assets and capabilities “evolve as a consequence of (its) own history” (Martin & Sunley 2006, p.399). Table 4.6 outlines the key ‘evolutionary livelihood factors’ that emerged from the household interviews in each village.
Table 4.6: Evolutionary factors impacting livelihoods.

<table>
<thead>
<tr>
<th>Evolutionary livelihood factor</th>
<th>Impact on livelihood asset or capability</th>
<th>Example of influence on livelihood patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caste status</td>
<td>Historical influence on all livelihood assets. Lower castes often landless or marginal landowners, poor financial, physical and social capital, constrained access to political power, credit institutions etc.</td>
<td>Lower caste household historical lack of livelihood assets mean current generations are often constrained to marginal livelihood activities (e.g. non-skilled labouring).</td>
</tr>
<tr>
<td>Land inheritance patterns</td>
<td>Access to land and family labour assets.</td>
<td>Male inheritance patterns lead to declining farm sizes and fragmentation of land holdings. Women are excluded from owning land.</td>
</tr>
<tr>
<td>Past investment decisions</td>
<td>Access to physical and financial assets.</td>
<td>Historic capability or decision to invest in irrigation infrastructure conditions agricultural opportunities (e.g. cash crops).</td>
</tr>
<tr>
<td>History of credit relations and indebtedness</td>
<td>Financial capital and attitude to risk.</td>
<td>Households who have experienced indebtedness in the past are less likely to take on risks of new livelihood opportunities.</td>
</tr>
<tr>
<td>History of non-farm income</td>
<td>Financial capital and social capital.</td>
<td>Household history of significant non-farm income enables current generation to invest inheritance in further high-value non-farm and agricultural opportunities.</td>
</tr>
<tr>
<td>Geographic location of land</td>
<td>Physical and natural assets.</td>
<td>Evolution of land ownership patterns and location of farm land can highly constrain agricultural opportunities due to spatial variation in soil quality, watershed topography and land quality.</td>
</tr>
</tbody>
</table>

As an example of the influence of these evolutionary factors, Box 4.1 presents two vignettes describing the effect of caste and land inheritance patterns on the evolution of household livelihood assets and capabilities.
Caste

It is not the aim of this thesis to provide an in-depth discussion of the issue of caste in rural India, however a brief note is warranted. Although the importance of caste-based discrimination is weakening over time in rural India, the livelihoods of lower caste households are still significantly influenced by the legacy of past discrimination. In particular, the historical association of caste with occupation, or social roles, has had an enduring impact on access to land, a key livelihood asset and source of status in rural villages. Although many Maratha clans trace their origins as Kshatriya, they now identify as the traditional landowning and farming caste. Marathas are the politically dominant caste in Maharashtra, and have historically dominated rural land ownership. Lower castes have been historically excluded from land ownership and are associated with servant occupations that further undermine their marginal social status. For example, the OBC categorised Ramoshi caste in Randullabad and Bhushangad traditionally acted as guards or nightwatchmen of the village. In Pawarwadi, OBC households belong to the Lohar caste whose traditional occupation was blacksmithing. Scheduled castes, known historically as Dalits or untouchables, are even lower on the social order, and were often forced to live in a separate area of the village. Untouchability and caste discrimination are illegal in India today, however the legacy of caste was still noticeably pervasive in each village.

PW5 is the head of an OBC Lohar household. His wife was recently elected as Sarpanch through the reservation system, however the household’s livelihood assets and capabilities have been significantly influenced by their caste status. PW5’s ancestors settled in the village around 100 years ago to work as blacksmiths. The caste system significantly constrained his father’s livelihood options. As his father owned no land, he was forced to work as a blacksmith, a very low paying occupation. As a child, PW5’s education opportunities were limited. Their household is still landless, and PW5 makes a precarious living through odd jobs such as motorcycle maintenance and welding.

Land inheritance patterns and non-farm income

As discussed in Chapter 2, average farm sizes are declining in India thanks to inter-generational male inheritance patterns. This has two important impacts. First, the next generation of male farmers are forced to pursue agricultural livelihoods with a small land asset base. This is exacerbated in households with multiple male children. Second, women household members are excluded from land ownership.

BH05 farms on five acres of land, which he considers inadequate to achieve a sustainable livelihood. BH05’s grandfather had five sons, meaning that BH05’s father inherited 16 acres of land. BH05 has two brothers, and therefore inherited five acres of land. His low land asset base has meant he has struggled to sustain his family through farming alone. When he was younger, BH05 took a job in Mumbai as a house painter, however the pay was not enough to maintain his family’s livelihood. Unlike larger farmers, he has been unable to invest in outside businesses. His lack of land encouraged BH05 to ensure his two sons received a good education, relying on his farming income to fund this. BH05’s livelihood has improved significantly since his eldest son graduated as an engineer and found work in Pune.

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25 Warrior or governing class according to the Hindu system of Varna (social orders).
Livelihood pathways in Satara district: hanging in, stepping up and stepping out

The previous sections provide an in-depth discussion of the diverse nature of contemporary household livelihood activities in each case study village. Livelihood activities are enabled or constrained by access to important livelihood assets and capabilities, which is in turn influenced by important structural factors of political economy. To conclude this chapter, this section pieces these complex livelihood realities back together through an analysis of the common livelihood pathways that different livelihood groups follow in each village. To achieve this, I use Bernstein’s four basic questions of agrarian political economy (Bernstein 2010; Scoones 2009):

- Who owns what?
- Who does what?
- Who gets what?
- What do they do with it?

This moves the analysis beyond a simple functional understanding of the variations in household livelihood assets and capabilities to incorporate appreciation of how important structural factors in rural spaces constrain or enable the livelihood activities of different households. Critically, the different livelihood pathways available to different households reflect broader patterns of accumulation and differentiation, or what Bernstein (2010) calls the ‘class dynamics of agrarian change’. To proceed with this analysis, I first outline a categorisation of ‘livelihood groups’ based in grounded interpretations of social and economic differences, reflecting the contemporary agrarian structure (class differentiation) of each village. These livelihood groups are then linked to common livelihood pathways. To capture the uneven distribution of livelihood possibilities, Dorward et al.’s (2009) livelihood typology is employed as an organising framework. As discussed in Chapter 2, this typology categorises household livelihood aspirations into three broad pathways of ‘hanging in’, ‘stepping up’ or ‘stepping out’. As Bernstein & Oya (2014, p.17) suggest, this schema reformulates ‘classic’ understandings of class differentiation of poor (landless labourers), middle class (petty commodity producers) and rich (capitalist farmers) rural households: those that can only maintain or protect their social reproduction (hanging in); those that are able to accumulate and expand within agriculture (stepping up); and those that can accumulate into different and higher value livelihoods (stepping out). Given this, I argue that this typology provides a useful bridge between the micro and macro focus of livelihoods and agrarian political economy frameworks. This political economy-informed understanding of livelihoods paints a rich picture of the livelihood landscape of each village. It is onto this livelihood landscape - the place-based nuances of
everyday livelihoods and existing and ongoing patterns of differentiation – that contract farming touches down.

Livelihood groups: patterns of socio-economic differentiation in each village

Information gathered from household interviews and observations suggest that socio-economic stratification in each village is primarily defined at the local scale by three key linked livelihood factors; land ownership and farm size, education and non-farm income, and caste status. These factors structure access to other important livelihood assets to influence patterns of winners and losers in response to new livelihood opportunities in each village.

The dominant mode of access to land in all three villages is direct ownership. Leasing or other customary land access was not a significant factor in any village. Interview respondents talked about stratification primarily in terms of landholding, and consistently categorised better-off household as being those that owned more land:

“The amount of land a household owns determines their fortune” (BH02).

“The amount of land that someone owns, or if they own land at all, determines a household’s fortunes” (RN01).

There are several examples from the case study villages that also refer to the importance of farm size. This suggests that gross landholding is not always the determining factor of socio-economic status. Rather it is what a household can do with that land. A household who owns less land but through the deployment of other livelihood assets is able to use that land in more efficient and productive ways can achieve an economically larger farm than other larger landowners. Farm size is, however, closely related to landholding size in each village. In each village, respondents categorised the best-off households as owning at least seven acres, suggesting a threshold of landholding size, below which a household cannot bridge the gap to larger landholders by increasing the economic size of their farm.

Land ownership and farm size structures access to livelihood pathways, and therefore socio-economic stratification, through two primary processes; agricultural-based accumulation, where those with more land or economically larger farms can produce more surplus crops for sale, and therefore accumulate capital; and as a base from which to expand into the non-farm economy, where large landowners use their land to access credit, education and other assets required to pursue accumulation in non-farm activities. Despite agriculture’s continuing importance, it is this latter role of land ownership that is becoming the most important site of difference between rich and poor households. In a somewhat paradoxical way, large landowners are using their land assets to step out of agriculture and launch themselves into lucrative non-farm activities, with some households then reinvesting non-farm capital
and increasing their advantage in agricultural activities. However, rich households are not accumulating land and becoming capitalist farmers in the classical sense. The static nature of rural land markets in Satara district has created a distinct pattern of agrarian change that is discussed further in Chapter 8. Given the multifaceted social, economic and cultural roles of landowning, households across all social classes are motivated to hold onto their land. Rich households with significant non-farm capital to invest therefore find it difficult to accumulate land. Poorer farming households are unwilling to sell land, except in situations of extreme distress. Land remains an important safety net and site of social status and identity, even for small and marginal landowners who now have to reproduce themselves predominantly through selling their labour. Equally, landless households face significant struggles in becoming landowners:

“There has always been a shortage of land in the village. No one sells their land. It is very difficult for a landless household to find a seller, even if they could afford to buy land” (PW11).

This all speaks to the growing importance of non-farm income. While livelihoods are culturally dominated by agriculture, they are increasingly economically dominated by non-farm income. As significant accumulation in agriculture is difficult for most households, with the exception of some larger landowners in Pawarwadi, migration and remittances have become important factors influencing socio-economic stratification. Put simply, to accumulate capital, households now need to diversify into non-farm activities. Access to non-farm income, however, is differentiated by the socio-economic position of a household, predominantly through access to education. Better-off households can more easily access education for their children, who can then go on to secure well-paid jobs in urban areas, or start non-farm businesses of their own, reproducing patterns of inequality in the village. These processes are also occurring in the context of decreasing land holdings due to inheritance patterns, meaning agricultural livelihood pathways are becoming more marginal for subsequent generations. These economic realities are superimposed upon shifting attitudes in which young people view agriculture as a less desirable livelihood activity. Non-farm income is still important for poorer or less educated households, however this is typically in the form of low-skilled, temporary and low-paying activities that do not allow a household to change their socio-economic position or livelihood pathway in any meaningful way. Diversification into non-farm activities can be an active strategy for worse-off households; however they tend to not be able to enter the non-farm economy on the same playing field as larger landowners (Li 2009):

“Rich farmers can send their children to the city to work and to get a good education. This is a major difference between rich and poor farmers. Remittances can then be used to invest in farming, increasing rich households’ advantage” (RN04).
Finally, the impact of historical and ongoing caste marginalisation on access to livelihood pathways in each village is stark. Caste-based discrimination is now outlawed in the Indian constitution, and affirmative action programs have improved the material well-being of many lower caste households. However, the historical legacy of caste-base discrimination has influenced how lower and open caste household livelihood assets and capabilities have evolved differently over time, significantly determining present livelihood pathway possibilities. Lower caste (OBC and SC) households were historically landless, had fewer opportunities to accumulate capital, and were excluded from political participation and education. These historical processes mean lower caste households in each village have been constrained to marginal livelihood pathways, which in turn limits the livelihood opportunities available (without ‘path breaking’ interventions) to current generations.

With these key factors in mind, an adapted ‘success ranking’ exercise (Scoones et al. 2011; Scoones et al. 2012) was conducted with focus groups of key informants in each village (Appendix C). This exercise aimed to construct locally relevant categories of households that reflect the characteristics of the main social groups in each village. Participants were asked to come up with categories that described the livelihood fortunes of different households in their village, including common characteristics of each group. These insights were combined with information from the household interviews as well as my own observations to construct grounded categories of social and economic differentiation in each village. The resulting categories of ‘livelihood groups’ for each village are presented in Tables 4.7, 4.8 and 4.9. Each household in the interview sample was then assigned to a livelihood group based on the characteristics that emerged from the focus groups.
Table 4.7: Livelihood groups in Bhushangad.

<table>
<thead>
<tr>
<th></th>
<th>‘Lower group’</th>
<th>‘Middle farmers’</th>
<th>‘Best off’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land holding</td>
<td>1-3 acres, low quality</td>
<td>3-10 acres</td>
<td>Largest land owners</td>
</tr>
<tr>
<td>Caste</td>
<td>OBC and other lower caste.</td>
<td>70% Maratha, 30% OBC.</td>
<td>Maratha only.</td>
</tr>
<tr>
<td>Education access</td>
<td>Historically marginalised from higher education due to caste status, but improving thanks to affirmative action programs.</td>
<td>Mixed. Education of children an important strategy for some households. Remittances important source of capital.</td>
<td>At least one child in tertiary education. Significant remittances.</td>
</tr>
<tr>
<td>Dominant income source</td>
<td>Labouring.</td>
<td>Agriculture, with some significant but low-value non-farm activities and agricultural labouring.</td>
<td>Non-farm income.</td>
</tr>
<tr>
<td>Employ farm labour</td>
<td>No.</td>
<td>Seasonal labour commonly employed for harvesting/sowing activities. Family labour important.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Estimated percentage of village households</td>
<td>20%</td>
<td>Majority.</td>
<td>5%</td>
</tr>
<tr>
<td>Number in sample</td>
<td>4</td>
<td>9</td>
<td>3</td>
</tr>
</tbody>
</table>
### Table 4.8: Livelihood groups in Pawarwadi.

<table>
<thead>
<tr>
<th></th>
<th>‘Lower group’</th>
<th>‘Middle farmers’</th>
<th>‘Best off’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land holding</strong></td>
<td>Landless or 1-2 acres.</td>
<td>5-10 acres.</td>
<td>Own minimum of 7 acres.</td>
</tr>
<tr>
<td><strong>Caste</strong></td>
<td>OBC and SC, plus a small number of Maratha.</td>
<td>Maratha.</td>
<td>Maratha.</td>
</tr>
<tr>
<td><strong>Education access</strong></td>
<td>Poor. Most households can’t afford higher education for their children.</td>
<td>Most households attempting to access higher education for their children with varying success.</td>
<td>Have at least one highly educated household member. Able to access higher education for offspring.</td>
</tr>
<tr>
<td><strong>Dominant income source</strong></td>
<td>Agricultural labouring, selling cereal crops.</td>
<td>Agriculture, but increasingly non-farm activities.</td>
<td>High-value agriculture and remittances.</td>
</tr>
<tr>
<td><strong>Employ farm labour</strong></td>
<td>No.</td>
<td>Some, typically seasonal labour. Rely on family labour also.</td>
<td>Yes, extensive.</td>
</tr>
<tr>
<td><strong>Estimated percentage of village households</strong></td>
<td>35-40%</td>
<td>50%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Number in sample</strong></td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 4.9: Livelihood groups in Randullabad.

<table>
<thead>
<tr>
<th></th>
<th>‘Lower group’</th>
<th>‘Middle farmers’</th>
<th>‘Best off’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land holding</td>
<td>Landless or 1-2 acres.</td>
<td>3-10 acres.</td>
<td>10-20 acres.</td>
</tr>
<tr>
<td>Caste</td>
<td>OBC and SC.</td>
<td>Maratha.</td>
<td>Maratha</td>
</tr>
<tr>
<td>Education access</td>
<td>Typically less well educated. Limited ability to access higher education for children.</td>
<td>Mixed. Educating university is a key strategy for some, others can’t afford this.</td>
<td>Typically at least one highly skilled and educated household member has migrated.</td>
</tr>
<tr>
<td>Dominant income source</td>
<td>Agriculture labouring, plus limited non-skilled non-farm labouring</td>
<td>Agriculture. Low-skilled non-farm activities increasingly important</td>
<td>Remittances, which are often invested into agriculture.</td>
</tr>
<tr>
<td>Employ farm labour</td>
<td>No.</td>
<td>Some households, labour sharing is also common. Family labour important.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Estimated percentage of village households</td>
<td>25%</td>
<td>50%</td>
<td>10-15%</td>
</tr>
<tr>
<td>Number in sample</td>
<td>4</td>
<td>14</td>
<td>5</td>
</tr>
</tbody>
</table>

How do these livelihood-based categorisations relate to existing understandings of agrarian class differentiation in India? As discussed in Chapter 3, what Bernstein (2010) calls generalised commodity production now characterises rural Maharashtra. That is, capitalist relations of production have been fully internalised in rural areas. This then creates a tendency towards rural class differentiation, which in the classical sense involves the emergence of an agrarian capitalist class and a rural proletariat. As identified by Kautsky (1988 (1899)) and Lenin (2009 (1899)), however, while the tendency is towards class differentiation, this may occur in a multitude of ways that include the persistence of forms of peasant production. Lenin argued that peasants would tend to differentiate into three distinct classes (see Bernstein 2010, p.104):

- ‘Rich peasants’, or what Bernstein calls emerging capitalist farmers, are those able to accumulate assets (particularly land) and engage in expanded reproduction to reproduce themselves as capital.
- ‘Middle peasants’, or medium farmers, are those able to reproduce themselves as capital and labour at the same scale, engaging in simple reproduction; and
- ‘Poor peasants’, or poor farmers, are those unable to reproduce themselves as capital, and therefore must struggle to reproduce themselves as labour, either through subsistence farming
on their own small parcels of land, or labouring for other farmers (and perhaps in the process becoming landless).

Understandings of agrarian class relations in India are complicated by the significant differences between states, and even between regions, in terms of agricultural productivity, history of land holding patterns and employment distribution (Lerche 2011). A recent study by Ramachandran et al. (2010), summarised by Lerche (2011), uses the results of a socio-economic survey to construct and describe agrarian class categories in three villages in Andhra Pradesh. The authors identify four main classes: landlords, big capitalist farmers, the peasantry, and manual workers. The numerically small landlord and big capitalist farmer classes are the dominant local ruling classes, the only difference being landlords historically belonged to a pre-capitalist landlord class. Both classes are the major landowners, and do not participate in manual operations on the land; their land is either worked by tenants or labour. At the lower end of the class divide are manual workers, most of who are landless, who work as either agricultural labourers for capitalist farmers or rich peasants, or as non-agricultural labourers. In the middle is the peasantry: those that combine ownership of the means of production (land) with participation in the labour process (Lerche 2011). The authors divide the peasantry into four separate peasant classes: rich, upper middle, lower middle and poor. This division is based on their ownership of the means of production and the ratio (measured in labour days) between hiring out/family labour and hiring in labour.26

In my study, there is certainly a visible class of landless labourers in each village in Satara district, all from lower castes, who are compelled to reproduce themselves as labour. This corresponds to the category of ‘lower group’ identified in each focus group. The ‘lower group’ in each village also includes what Lenin and Ramachandran et al. would call poor peasants: marginal landowners with low incomes who struggle to reproduce themselves through agriculture and must also sell their labour. Interestingly, however, most landless or marginal landowning households do not labour for richer farmers in the village. In fact, in each village there was an apparent contradiction in the complaints of lower group households that they could not find work, and the struggles of richer farmers to find enough labour to work their fields. The explanation for this appears to lie with the use of seasonal migrant labour from poorer states such as Bihar, who are more amenable to control and can be paid less than local workers, and the growing disenchantment of younger generations from the lower group with agricultural labouring. Instead, landless households in each village pursue fragmented and insecure non-farm livelihoods, constrained by their marginal caste status and without the security of land on which to grow their own food. These households are typically entangled in exploitative relations with politically

26 Rich peasants who hire in labour would be expected to have a labour ratio with a very low coefficient, while poor peasant who must hire out or exploit their family labour would have a coefficient greater than one.
dominant Maratha caste households, particularly through the Gram Panchayat where landless lower caste households are frequently denied access to social welfare entitlements such as PDS cards.

At the other end of the spectrum of the class divide in the three current case study villages, there is little evidence of a remnant landlord class, given the particular histories of each village discussed above. A small class of what might be called big capitalist farmers/rich peasants belonging to the best-off group are evident in each village, and are the major landowners. The best-off households all come from the Maratha caste and from large landholding families, and are all well connected socially and politically, frequently relying on networks of patronage to increase their advantage. However, even the best-off households are subject to the pressures of declining farm sizes and variable weather patterns, constraining their ability to expand through agriculture. Most therefore now maintain their class status by accumulating through the non-farm economy rather than agriculture. Much of this accumulation is facilitated by their privileged access to higher education for their children, and their ability to use their caste and political networks to find lucrative jobs in cities. In each village, most of the households in the best-off category were either currently or previously involved in village politics, with several male household heads having served as Sarpanch. Land still plays an important role in the lives of best-off households. Even households who have substantially moved into non-farm activities still retain their landholdings and hope to accumulate land, although as noted elsewhere accumulating land is difficult for all social classes in each village. Most best-off farmers employ significant amounts of labour on their land to maintain their agricultural operations, and many still retain some involvement in day-to-day operations. Agricultural livelihoods are of significant importance to best-off households in Pawarwadi, whose class status is more clearly defined in terms of capitalist agriculture, with investments in high value horticulture such as tomatoes produced in hothouses. While best-off households dominate economic and political life in each village, their numerical smallness reflects arguments made by several researchers that in most states (including Maharashtra, but with the exception of the high-productivity green revolution states of Punjab and Haryana) there has not been the emergence of a dynamic or large class of capitalist farmers from the peasantry, nor widespread proletarianisation (Harriss 2013; Harriss-White 2008; Lerche 2011). Certainly, in all three case study villages, there is a lack of ‘accumulation from below’ that would be characteristic of a more dynamic agrarian structure (c.f. Scoones et al. 2012).

This leaves, then, a large class of middle farmers in each village, encapsulating a diverse range of households and livelihood activities. Their common characteristic, however, is that they all “combine the class places of capital and labour” in various configurations (Bernstein 2010, p.103, emphasis added). The agrarian class structure of each village is therefore numerically dominated by a diverse class of petty
commodity producers, struggling to reproduce themselves as both capital and labour under capitalist relations of production. This is supported by arguments first made by Harriss in the early 1990’s:

“The view which I take, is that the agrarian economy is largely characterized by differentiated 'peasant' petty commodity production, dominated by a small number of surplus appropriating rich peasants, with even the middle peasantry mainly pushed below the level of autonomous reproduction, and a large class of landless labourers” (Harriss 1992, p.209; see also Harriss-White 2012; Basole & D. Basu 2011).

Petty commodity producers are subject to the pressures of both reproducing the means of production (capital) and reproducing the producer (labour), making them a “contradictory unity of class places” (Bernstein 2010, p.103). In each case study village, middle farmer households are in many ways caught between pursuing accumulation through agriculture (land is their major asset) and the need to reproduce themselves as labour. In the context of the neo-liberalisation of Indian agriculture, middle farmers in each village now face huge pressures in trying to maintain their agricultural livelihoods, including volatile crop prices, indebtedness, rising costs of inputs, increasing competition for labour and ecological and climatic pressures (Harriss 2013). Middle farmer households, therefore, commonly described themselves as farmers, however in different seasons received most of their income from non-farm activities such as painting.

Middle farmer households in each village are also subject to differentiation, reflected in the varying distribution of livelihood assets and capabilities of petty commodity producers (Bernstein 2010). They commonly hire in at least some labour (and many do in my study). Middle farmer households must compete with each other for labour, for access to moneylenders or other sources of credit, for access to water resources, and for access to new crop opportunities and technologies. The success of middle farmer households often rests on their access to political networks. Richer middle farmers are typically involved in village politics and can use this status to capture state benefits such as irrigation subsidies at the expense of other households, or to gain approval to build a new well next to a water source. As Bernstein (Bernstein 2010, p.105) argues, then, “even [middle] family farmers establish their commodity enterprise at the expense of their neighbours.” These processes of differentiation disturb the romantic image of the egalitarian ‘family farmer’ or yeoman that is central to the narratives of modern peasant movements (Bernstein 2010), a point that I will return to in Chapter 8.

Livelihood pathways

I argue above that households in each village may be categorised into different livelihood groups that reflect patterns of class differentiation in each village. Importantly, the livelihood group (or class place) of a household significantly shapes the aspirations and ability of households to pursue livelihoods
pathways that result in different outcomes in terms of differentiation and upwards and downwards social mobility. The livelihood experiences of different households are inevitably complex and context specific. For the purpose of analysis, there is, then, a need to classify these complex processes “in a way that makes sense of emerging patterns of differentiation and class formation” (Scoones et al. 2012, p.514). Following Scoones et al.’s (Ibid) work in connecting different social classes to different livelihood pathways in Zimbabwe, I use Dorward et al.’s (2009) livelihood typology of ‘hanging in, stepping up or stepping out’ to link the different livelihood groups identified above to particular livelihood pathways. As discussed in Chapter 2, it should be noted that these pathways represent aspirations, and as such there is always the possibility a household may falter due to unexpected shocks, poor decisions or various forms of exploitation, and may in fact go backwards or be forced to drop out of their livelihood strategies.

Table 4.10 identifies nine common livelihood strategies pursued by different livelihood groups across all three villages that are broadly categorised as either hanging in, stepping up or stepping out. The third column in the table outlines the number of households from the sample group in each village that were assigned to each category. This typology is based on detailed analysis of household interview transcripts, as well as information gleaned from the focus groups and observations. Even so, it is necessarily a simplification of a very diverse and complex livelihood landscape. Some households certainly defy easy classification, blurring the boundaries between social class and livelihood pathway. Nevertheless, this typology provides a representation of the complex patterns of differentiation based on the livelihood pathways available to different social classes that is used as the basis for further analysis in later chapters.
Table 4.10: Livelihood pathways in each village (adapted from Scoones et al. 2012).

<table>
<thead>
<tr>
<th>Livelihood pathway</th>
<th>Livelihood group / strategy</th>
<th>Village</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BH</td>
<td>RN</td>
<td>PW</td>
</tr>
<tr>
<td>Hanging in</td>
<td>Lower group / landless labourer</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Lower group / marginal landowner</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Middle farmer / struggling farmer</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Middle farmer / straddling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stepping up</td>
<td>Middle farmer / cash crops</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Best-off / capitalist farmer</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Stepping out</td>
<td>Lower group / education</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Middle farmer / diversifier</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Best-off / non-farm accumulator</td>
<td>3</td>
<td>4</td>
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</tbody>
</table>

BH = Bhushangad, RN = Randullabad, PW = Pawarwadi
The caste and class barriers that households from the lower group face in accessing livelihood assets and capabilities mostly confines them to hanging in pathways, reinforcing their marginal status. Lack of land (or lack of cultivable land) looms large in the livelihood aspirations of these households. Without access to education, there are few clear pathways for landless and marginal landowning households to get ahead. The hanging in strategies of the lower group are classified as landless labouring or marginal landowning. Landless labouring households are those that pursue precarious livelihood strategies at the fringes of the social structure of the village. Both households in this category are located in Pawarwadi, and both suffer the historical legacy of extreme caste discrimination and are extremely vulnerable to any shocks. For example the household head of PW14 was forced to give up his agricultural labouring job to care for his wife. With no land to grow food on, and no sons to earn an income for the household, PW14 relies on small remittances from his daughters who are married and live in other villages. Compounding the household’s marginal position is the lack of political access. The household has still not received the PDS ration card they are entitled too, and blamed this on political processes inside the Gram Panchayat that they are not privy to. Marginal landowners complicate the picture of land as an asset. Several of these households own land, up to six acres, however this land is of very poor quality and unsuitable for growing crops. These households lack the assets to produce any agricultural surplus, and must rely on often insecure and fragmented non-farm labouring to survive. A small number of households from the lower group in Randullabad and Pawarwadi have positioned themselves to try to leverage access to education through government affirmative action programs to improve their livelihood pathway. These households were classified as stepping out, given that they had secured higher education for at least one of their children (typically male) who had left the village, and were beginning to accumulate some capital or savings through remittances. These households are still very vulnerable to livelihood shocks.

The best-off households use their class position to significantly expand their agricultural activities (step up) and/or to move into high value non-farm activities (step out). The livelihood strategies of the best-off households reflect the complex interactions between land and livelihoods, and the increasing centrality of non-farm capital in processes of differentiation in rural India. Five best-off households were classified as stepping up, or as accumulating significantly in agriculture. These households represent the best approximation of capitalist farmers in each village. Four of these households are located in Pawarwadi, where fertile land and good water and irrigation infrastructure has allowed capitalist agriculture to develop more extensively than the other two villages. All of these households are from historically large landowning families that managed to secure productive land close to water sources. Importantly, however, these households have only emerged as capitalist farmers (employing substantial amounts of labour and marketing their entire agricultural surplus) in the past one or two generations, and these processes were facilitated both by large land assets and non-farm capital. For example, PW2’s
father owned a substantial amount of land, however struggled to maintain the household’s livelihood. Thirty years ago, the household took the decision to diversify and started a flourmill in the village. This was a success and allowed the household to accumulate more land, and to invest in drip irrigation. PW2 inherited this land, and has since accumulated significant capital in agriculture, planting large amounts of sugarcane, ginger and other high value crops on his irrigated and highly productive land. While the historical specificities of Pawarwadi made accumulation through agriculture possible for PW2, the majority of best-off households in Randullabad and Bhushangad accumulate primarily through non-farm activities. Seven best-off households, four from Randullabad and three from Bhushangad, were classified as stepping out, and provide an example of the circular relationship between land and non-farm income. The important point is that all of these households are large landowners. Historically, these households have been able to use their land assets to accumulate capital through agricultural production, not necessarily as capitalist farmers but beyond that of other smaller landowners. The current generation has then used this land base as a ‘launch pad’ into the non-farm economy, primarily through accessing higher education or business opportunities for their sons. The best example of this is BH11. The household head inherited a substantial amount of land, and by out-producing other households was able to accumulate more land to increase his landholding to 30 acres. BH11 did not see a future in agriculture for his sons, however, and used the capital he had accumulated in agriculture, as well as extensive social and familial networks, to set them up with gold shops in Andhra Pradesh. His eldest son was very successful and now owns a silver utensil factory. BH11 now receives at least 1,500,000 rupees in remittances each year (a huge sum of money even compared to other best-off households). He invests some of this in agriculture, and now employs substantial labour to grow sugarcane and pomegranate on his land.

What of the numerically dominant petty commodity producers in each village? Middle farmer households were categorised as pursuing livelihood strategies across all three pathway types. The majority of middle farmer households (13 in total) in the sample group are, however, pursuing livelihood pathways best classified as hanging in. The strategies of these hanging in middle farmers were categorised into struggling farmers and straddling farmers. Struggling farmers represent the worst-off households of the middle farmer group. These households are medium landowners who aspire to accumulate through agriculture, but struggle to produce an agricultural surplus due to their lack of access to farm assets such as irrigation and inputs, or are constrained by indebtedness. Additionally, these households have failed to diversify into non-farm activities in any meaningful way. For example RN5’s lack of financial capital means they struggle to maintain their agricultural livelihoods in the face of irregular rainfall patterns. The household cannot afford to employ labour, and so must dedicate their labour to their farm activities. This constrains their ability to pursue other non-farm activities. Straddling
middle farmers also struggle to accumulate through agriculture for many of the same reasons, however they have managed to diversify into mostly low-value non-farm activities such as house painting. These activities do not enable expanded accumulation, but rather allow straddling households to reproduce themselves more securely than struggling middle farmers.

A group of ten middle farmers were classified as stepping out. These households lacked sufficient assets to accumulate in agriculture, however they had been successful in diversifying into significant non-farm activities, such as teaching, service professions or military service. These households rely on remittances, and invest in agriculture to attempt to improve their production and livelihood security, but are vulnerable to shocks and indebtedness. Finally, a group of seven middle farmer households were classified as stepping up, attempting to accumulate through agriculture. These households tend to own more land than other middle farmers, usually as a result of inheritance patterns, and have better access to important agricultural assets and capabilities such as inputs, machinery and crop knowledge. They also tend to be more politically connected. However, their accumulation aspirations are often thwarted by their lack of further assets, particularly water, constraining their social mobility. All of these households’ livelihoods are supplemented by non-farm activities such as house painting. These households represent potential emerging capitalist farmers, although they face significant hurdles.

It is evident then that livelihood pathways are complex and dynamic. Livelihood diversification is the norm, and those households relying solely on agriculture tend to be constrained to hanging in pathways. The livelihood pathways available to different social groups tend to reinforce class differentiation and patterns of inequality. This reflects the argument made by Harriss (2013, p.358) that declining land sizes, lack of new land for accumulation, and fragmented non-farm opportunities mean “the differentiation and polarization of peasant classes has nearly frozen.” By this, Harriss does not mean that differentiation amongst rural households is not extensive or stark: the large differences between livelihood groups are clearly evident in this chapter. Rather, Harriss’ argument reflects the extreme lack of social mobility or dynamic processes of accumulation in rural areas, or a stagnation of the peasant classes. This is evident in the clear lack of dynamic processes of accumulation from below by the middle farmer group in the three current case study villages, contrasting to findings in other contexts such as Zimbabwe (Scoones et al. 2012). The majority of middle farmer households in the present study are constrained to hanging in, a point I return to in Chapter 8.

**Conclusion**

This chapter has presented a place-based analysis of the contemporary livelihood landscape of each case study village. The chapter began by discussing each village’s unique history and physical geography, providing important context from which to interpret present day livelihood activities. It is evident that in
each village agricultural-based livelihood activities still dominate, however non-farm activities are increasing in significance. I argued that the distribution of these livelihood activities amongst different households is influenced by access to different livelihood assets and capabilities. Importantly, this is mediated by social and economic status, as well influenced by a household’s livelihood evolution. The livelihood possibilities of different households are therefore closely linked to historical patterns of class and caste differentiation in each village. Using insights from household interviews and focus groups, I presented a grounded interpretation of class differentiation in each village by categorisation households as belonging to different ‘livelihood groups’; best-off households, middle farmer households and a lower group. I then linked these livelihood groups to different livelihood pathways, categorised as hanging in, stepping up and stepping out. This typology of pathways represents a complex reality of highly differentiated and diversified livelihood strategies that tend to reinforce patterns of differentiation and inequality. Importantly, I argued that each village’s livelihood landscape is characterised by a lack of social mobility and dynamic processes of accumulation from below in the middle farmer group, constraining the livelihood aspirations of many households.

This chapter has ‘set the scene’ for the analysis of later chapters. The in-depth and placed-based understanding of livelihoods presented in this chapter is the canvas onto which potato contract farming is ‘touching down’. The implications for rural households of the interaction between this complex, place-based livelihood landscape and potato contract farming are the focus of the remainder of this thesis. To this end, the next chapter presents a value chain analysis of the evolution and structure of the potato contract farming scheme that operates in each case study village.
Chapter 5 - Potato contract farming in Satara District, Maharashtra

Introduction

This chapter turns to the second ‘scene setting’ task of the thesis; understanding the important characteristics of potato contract farming in Satara district. This second issue provides an essential baseline for this thesis. To achieve this, I apply a global value chain framework. Two separate potato contract farming schemes operate in the case study villages. The multinational food company PepsiCo controls contract farming in Bhushangad, while in Randullabad and Pawarwadi, a Pune-based domestic agribusiness company does. Both schemes are set up to supply the potato needed for processing into packaged potato chips. Therefore, this chapter situates each contract farming scheme within the potato chip value chain that it feeds. I argue that potato contract farming in the three case study villages can be understood as a mode of agricultural production that agribusiness firms have employed to coordinate the upstream segment of a modern value chain. In this case the upstream segment refers to sowing, harvesting and transport. The chapter ‘maps out’ this modern value chain, and the traditional value chain that it displaces, before focussing in on the contract scheme itself. Contract farming is, of course, just one system of agricultural production that firms may employ to produce the raw materials they require to feed modern agri-food value chains. It is important, then, to situate potato contract farming in Satara district in the local institutional and agricultural context in which it has emerged, including the challenges of traditional potato value chains that motivated firms to move to a contract farming model.

The chapter begins with a brief discussion of the history of potato production in India, and the traditional value chain structure that has dominated potato production in Satara district since Indian independence. I then discuss the emergence of potato contract farming in Satara district, and finally provide an in-depth discussion of the operation of the contract scheme in each village, including the critical role of local contract agents.

Methodology

The messy reality that often confronts value chains researchers in the field calls for flexible and varied methodological tools. Given this, there is a lack of a standard GVC methodology (Kanji et al. 2005; Mitchell et al. 2011; Neilson & Pritchard 2009). Nonetheless, the common concern of GVC researchers is to use the metaphor of the value chain to trace a product through its various nodes of production in order to answer questions about why certain nodes are located where they are, why certain actors participate and others are excluded, how value and power is distributed among chain actors, and how smaller chain actors such as farmers can improve their position (Mitchell et al. 2011). Therefore the initial analytical tool is value chain mapping, where a chain or network is schematically represented to
establish the major actors, their relationships, input-output structures, and territoriality. Such mapping typically makes use of ‘grey literature’ (e.g. trade journals and industry/government reports) and statistical sources to ‘piece together’ the chain (Kanji et al. 2005; Neilson & Pritchard 2009), as well as initial focus groups with small producers (Vermeulen et al. 2008). These preliminary ‘value chain mapping’ tactics are typically then followed with the collection of primary data through questionnaires, surveys and/or interviews with a broad range of key informants (Neilson & Pritchard 2009; see for example Challies & Murray 2011; Neilson 2008). GVC field work may involve collecting quantitative information such as agricultural production data, income data and profit records, and qualitative information on chain actors’ experiences and knowledge of the processes and dynamics that influence chain functioning. Qualitative methods predominate in GVC research, where the focus has been on empirically rich, industry-based case studies (Bair 2008; Coe 2012).

This chapter follows this approach. First, potato value chains are mapped. This was premised on research that used grey literatures to piece together a range of different, and sometimes opposing, perspectives about these chains. Rough schematics from this analysis were then taken into the field, where primary data from semi-structured interviews with village households and key informants, as well as my own observations, were used to build an in-depth and situated understanding of the complex dynamics of the contract scheme and value chain. Interviews with key informants were crucial to this task. Interviewing a diversity of key informants allowed individual narratives of the value chain to be cross-referenced, achieving a satisfactory level of triangulation. Four Pune-based key informants were also interviewed. Table 5.1 details the roles of the key informants that were interviewed.

The second task of this chapter is a detailed description of the contract scheme itself. Technical information about the operation of the scheme was collected from key informants. Interviews with both contracting and non-contracting households were then used to illuminate the complexities of the operation of contract farming in each village. The interview schedules used in both settings are provided in Appendix A.
Table 5.1: Description of key informants.

<table>
<thead>
<tr>
<th>Location</th>
<th>Details of key informants</th>
</tr>
</thead>
</table>
| Bhushangad  | • Contract agent  
              • Administrative head of Gram Panchayat  
              • State government agricultural assistant (extension officer) responsible for Bhushangad |
| Pawarwadi   | • Contract agent  
              • Administrative head of Gram Panchayat  
              • State government agricultural assistant (extension officer) responsible for Pawarwadi |
| Randullabad | • Contract agent  
              • Bank of Maharashtra representative  
              • Local BAIF (Indian rural development NGO) representative  
              • Watershed project representative  
              • Informal women’s group  
              • Informal farmer’s group  
              • Group of prominent farmers |
| Pune        | • CEO of domestic contract firm  
              • Vice-president of procurement (south and west region), PepsiCo  
              • Local potato chip processing company (client of domestic contract firm)  
              • BAIF project manager (head office) |

**Potato production in India**

Potato (*alu* in Hindi, *batata* in Marathi) was first introduced to India in the 17th century by Portuguese traders along the west coast and British traders and missionaries in West Bengal. The establishment of potato as a reliable food crop in India was initially problematic. European varieties struggled in the hot and dry climate of the Indian plains, only gaining a foothold in the higher altitudes of Punjab and West Bengal, where potato became an important staple crop (Smith 2011). Post-independence, the Nehru government established the Central Potato Research Institute (CPRI) in 1949, tasked with developing potato varieties suited to India’s climates. As a result of this research effort, potato production dramatically increased. Potato is now ubiquitous in Indian diets. Consumption of potato has grown rapidly in recent decades, and is now the leading vegetable crop in terms of production in India (Reardon et al. 2012). According to the FAO, India is now the world’s second largest potato producer after China. From 1970 to 2008, the crop area under potato increased by 150%, while the output value of potato doubled (Kannan & Sundaram 2011). This trend is continuing, and potato is now a significant cash crop across many states. The distribution of potato production in India is primarily determined by climate. Excessively hot climates have limited the spread of the crop in southern India, with production concentrated along the Indo-Gangetic Plain in the north of the country. According to the Indian government’s National Horticultural Board, the states of Uttar Pradesh (31%), West Bengal (25%) and
Bihar (14%) account for more than 70% of total potato production. In these areas potato is grown as Rabi (winter) crop, harvested from February to April.

**Traditional potato value chains in Satara district**

Historically, potato was a minor crop in Maharashtra. In 2013, potato production in Maharashtra represented less than 1% national production. However, there is a strong history of localised potato production in the state. Satara and Pune districts have historically dominated potato production, and in Satara table potato is an important cash crop. The traditional value chain for table potato varieties in Satara district is represented in Figure 5.1. This value chain is built around the APMC system discussed in Chapter 3. Farmers marketing potato through this value chain do not sell directly to retailers or consumers, except through informal local wet markets in surrounding villages and towns. Farmers growing potato source seed, inputs and credit (if required) through their own contacts, relying on social networks. After harvest, a local trader or aggregator will commonly collect the potato crop from farmers, often acting as a grader and arranging transport to the appropriate mandi. The potato then passes through a series of middlemen, including APMC commission agents, traders and wholesalers before reaching consumers. Given the lack of cold storage infrastructure in Satara, farmers are often forced to sell the potato crop soon after harvest, limiting their ability to take advantage of price movements or hedge against price volatility (Reardon et al. 2012).

Small farmers across India market their table potato crop and earn a livelihood through similar traditional value chains. However, the complex and often opaque structure of these traditional chains has been claimed to harbour inefficiencies that act to the detriment of both farmers and consumers, and impede rural development (Pachouri 2012). In particular, traditional value chains are criticised from neo-liberal perspectives for high transaction and marketing costs. Several links in the traditional value chain detailed in Figure 5.1 tend to be singled out for criticism. First, farmers operating in this traditional value chain are said to face problems with high transaction costs or missing markets for inputs and credit (Birthal 2008; Birthal et al. 2005; Ramaswami et al. 2005). Farmers usually depend on relationships with APMC commission agents to access inputs and credit, making them subject to potentially exploitative relationships (Pachouri 2012). Second, traditional value chains are criticised for failing to facilitate the transfer of crop knowledge and extension required to grow new crops to small farmers, particularly in the context of continuing state withdrawal from agriculture (Birthal et al. 2007). Third, farmers are said to face various marketing constraints that discourage innovation. This includes the proliferation of ‘middlemen’ that farmers must sell their crops through, a lack of access to distant markets, difficulty accessing price information, vulnerability to price volatility, and lack of post-harvest infrastructure (Birthal et al. 2007).
Figure 5.1: Traditional table potato value chain. Source: author’s own work.

Traditional value chains are also criticised for not meeting the changing demands of modern urban consumers. For potato, much of this growth in demand has been for processed and ready-to-eat snacks and potato chips. This reflects broader shifts in diet and consumption patterns driven by rising incomes and urbanisation (Gaiha & Thapa 2007; Misra et al. 2011). At a national level, demand for processed salted snacks like potato chips is increasing at up to 20% per year (PepsiCo manager pers. comm.). To meet this demand, agribusiness firms require particular varieties of potatoes with specific quality attributes that make them suitable for chipping. In complex traditional value chains, potato chip processors cannot establish direct links to farmers, and therefore are unable to communicate their required quality demands. Further, risk-averse small farmers are unwilling to plant new varieties that have thin or risky markets. The vagaries of the APMC system make it difficult for potato chip processors to obtain reliable, timely and adequate supplies of raw material in traditional value chains, discouraging investment in the sector. For those subscribing to the ‘agriculture-for-development’ paradigm, these high transaction costs stifle the expansion of a modern food-processing sector, with adverse flow-on
effects for farmers and rural economies in general (Reardon et al. 2012). As a key informant from PepsiCo put it:

“There are many problems that small farmers are facing in India. They have small and often fragmented land holdings, they have poor access or no access to credit, they only have access to poor quality seed and input, they have little or no capacity to invest in farming, and they have poor market access, which is usually controlled by various middlemen. This results in a vicious cycle that also leads to production of poor quality crops, and this is bad for processors” (CO05).

As discussed in Chapter 3 the central government responded to these criticisms by introducing its Model APMC Act in 2003. Maharashtra amended its Act in 2005 to comply with the Model Act. As a result, new value chains for potato chip production in the state have been able to emerge. Of most interest to agribusiness firms and potato chip processors are the new provisions for the establishment of contract farming schemes, allowing firms to bypass regulated markets and procure raw material direct from farmers. I now assess these as they operate in Satara district.

Value chain governance and potato contract farming in Satara district

Two different agribusiness firms are involved in potato contract farming in the case study villages in Satara district. In Bhushangad, PepsiCo (manufacturers Frito Lay branded potato chips) controls the contract scheme. PepsiCo was one of the first multinationals to enter Indian agriculture, and is recognised as pioneering contract farming in India. In Randullabad and Pawarwadi, the contract scheme is run by a Pune-based domestic agribusiness firm established by a former PepsiCo manager. The firm is not a potato processor, but rather a consultant that procures and supplies both chipping potatoes and processing equipment to small and medium potato chip processors. Each firm uses contract farming as a mode of value chain governance, allowing firms to vertically coordinate the upstream functions of the value chain without establishing large scale, vertically integrated corporate farming operations. Each firm uses contract farming to solve the problems faced in procuring consistent quality chipping potato in traditional value chains:

“PepsiCo needed to overcome the problem of there being no developed markets for these new varieties of chipping potato for small farmers. This was limiting the uptake of the crop. PepsiCo wanted farmers to adopt new inputs and new agronomic practices to produce the quality potatoes that they needed for their chips. They also wanted to encourage more investment in growing chipping potato. This is all focussed on the need to produce a reliable quantity of high quality chipping potato to feed PepsiCo’s processing facilities. Therefore contract farming was introduced to Satara district as a solution for these issues” (CO01).
Potato chip processors require potatoes with low reducing sugar levels (<0.2%), high dry matter content (>20%), and standardised shape and size. Potatoes with high sugar content produce a dark or brown coloured chip and poor taste, due to the ‘Maillard reaction’ between sugars and amino acids during the frying process (Pandey et al. 2009). Low dry matter content results in lower product recovery for processors, increasing processing time and the use of cooking oils, increasing costs, and producing an inferior tasting potato chip. Table potato varieties tend to have higher sugar content and variable dry matter, and are not graded for these characteristics in APMC markets. Firms, then, face high transaction costs procuring suitable potatoes in the open market and lack any method of quality control. Through establishing direct links with farmers, contract farming allows firms to make several interventions at critical points in the upstream segment of the value chain in order to control the production of potato for required quality and quantity of raw material (Figure 5.2).

Both of the contracting firms in this study supply farmers with new chipping potato varieties that have been bred for low sugar content and other attributes that are suited to processing, using the fixed price of the contract to encourage uptake of the crop. Through the contract scheme, the firms are also able to govern the growing process through the use of growing schedules, company agronomists and supply of tailored input kits, all geared towards ensuring the production of potatoes suitable for processing. Standard setting and grading systems are used to incentivise farmers to follow growing schedules, with the contract stating that undersized, damaged or high sugar content potatoes will be rejected. Firms also intervene in transport systems, ensuring that potatoes are transported off farm as soon as possible after harvest to reduce rotting and other exposure related damage.

Beyond these crop specific motivations, contract farming is an important governance strategy for firms. Corporate farming, involving ownership or leasehold of large scale agricultural land, remains essentially unlawful in most states due to restrictions on land ownership and foreign investment. State-based land ceiling acts, part of important post-independence land reform initiatives designed to redistribute land to the poorest rural populations, limit the amount of land that can be owned by a single entity. In Maharashtra, the Agricultural Lands (Ceiling on Holdings) Act (1961) restricts possession of agricultural land (through sale or lease) to 18 acres for irrigated land capable of yielding two or more crops in a year, 27 acres for irrigated land capable of yielding only one crop, and 54 acres for dry land. Although recent reforms have been made in Maharashtra to allow agri-business firms to own or lease large tracts of ex-government land (particularly what is classified as ‘wasteland’), direct investment in crop production by firms is not feasible without further reforms to land ceiling acts and rural land markets (Singh 2006). Corporate farming is also extremely politically sensitive, given the strong sentiment around ‘land to the tiller’ rural land reform movements, and fears of corporate takeovers of small farms are tangible.
election issues. These factors make contract farming attractive. It allows firms to control land without owning (or leasing) it, subverting highly restrictive laws.

**Key Interventions**

- **Seed**
  - Contract requires farmers to use specially bred chipping potato seed, usually sourced by firms from Punjab.

- **Planting**
  - Farmers supplied with tailored fertiliser and pesticide kit. Local agent monitors input application and ensures compliance with growing schedule. Firm agronomists make regular visits to sample and monitor crop quality.

- **Growing**
  - Local agent samples crop for sugar levels, size and other quality attributes. Unsuitable potatoes are rejected. Transport is arranged by the firm or local agent to minimise rotting or exposure.

- **Harvest**

Figure 5.2: Key interventions in potato production made by contract firms. Adapted from Pritchard & Connell 2011.

**Input-output dimensions of potato chip production in Satara district**

The modern value chain controlled by each firm in Satara district is detailed in Figure 5.3. As is evident from comparison with Figure 5.1, potato passes through far fewer hands than in traditional value chains. Potatoes procured through modern value chains from the three case study villages are generally processed in the city of Pune, 150kms east of Mumbai, where PepsiCo has established a processing plant, and where the domestic firm supplies chipping potato to other small to medium processors. PepsiCo also uses potatoes from Satara to supply two other processing plants in Punjab and Kolkata on an ad hoc basis. The domestic firm will also transport chipping potato from Satara district to clients in other states such as Karnataka and Punjab depending on seasonal supply and demand. Potatoes processed in Pune by PepsiCo are distributed to supermarkets and other retailers through the west and south of India. Potatoes from the domestic firm’s contract scheme in Satara district are processed by smaller branded and unbranded processors for sale mostly within Maharashtra.
Figure 5.3: Contract farming anchored value chain. Source: author.

Figure 5.4 explores the contract scheme ‘box’ of both the PepsiCo and domestic firm controlled value chain. Both schemes operate similarly. The solid arrows represent the movement of potato, while the dashed arrows represent movement of inputs. The contract scheme is where the chipping potato value chain ‘touches down’ in each case study village. This is where the modern potato value chain intersects with the livelihoods of rural households, and where the production of raw material by small farmers to supply the value chain occurs. Unravelling the dimensions and dynamics of each contract scheme is the focus of the remainder of the chapter.
Territoriality: location decisions of contract firms

As both value chains only supply potato chips to domestic markets, their territoriality is contained within India. However, what explains their territoriality within the country? Although Mumbai and Maharashtra in general are important consumer markets for potato chips, the most suitable environments for growing potato are located in north India, as already discussed. Why, then, have PepsiCo and the domestic firm established potato contract farming in Satara district? Key informants from each firm gave two primary reasons. Firstly, to take advantage of processing plant capacity in and around Pune. The city has become a hub for supplying the Maharashtra market. This has motivated firms to source raw material in proximate districts, including Satara. Secondly, on account of strategic and seasonal supply issues. Almost all of India’s chipping potato crop has historically been grown as a Rabi crop in the north of India. This seasonal bias results in a glut of supply nationally between January and April/May. The storage shelf life of the chipping potato crop means that material harvested in the north can be stored until September at the latest (although adequate cold storage facilities are also in short supply). As a result, PepsiCo and other processors were finding it difficult to source quality raw material between September and December. The climatic and soil profile of Satara district, in particular the moderate amount of monsoon rainfall, makes it possible to grow potato as a Kharif (monsoon) crop, which is harvested from September onwards. Therefore, although farmers in Maharashtra do not have extensive
experience in growing potato, PepsiCo and other firms identified Satara district as a strategic source of chipping potato:

“Satara district was selected as an area to contract in because of the proximity to the processing factory in Pune. Also, 95% of the potato crop in India is grown in the Rabi season. Potato needs a temperate and steady temperature for good quality production. Pune and Satara districts have suitable climates and soil conditions for growing potato in the Kharif season. PepsiCo was searching for an area to grow a Kharif potato crop to ensure year round supply of potato without having to rely on storage. They started around Bangalore, but there was too much rot in this location” (CO05).

Within Satara district, local soil profiles and microclimatic conditions have influenced which villages have been targeted as sites for potato contract farming. Soil type is particularly important for chipping potato. Soil fertility in Satara district is generally high, however the potato crop also requires a well-draining soil profile that disperses water quickly. Soil that holds too much water will lead to rotting, which can be a significant issue for potato crops particularly in the monsoon season. This means that even within villages, certain land may be unsuitable for growing chipping potato. The rainfall pattern within Satara has also influenced the location decisions of contract firms. The area under potato contract farming in the district increases inversely with the rainfall gradient (from west to east). PepsiCo originally targeted Koregaon taluka in central Satara district (where Pawarwadi and Randullabad are located) where the domestic firm now operates. However, from 2007, PepsiCo, citing problems with farmer indebtedness, fungus and crop failure in Koregaon, gradually moved its contract operations further east into Khatav (where Bhushangad is located) and Maan talukas, where rainfall is less that Koregaon:

“PepsiCo chose Khatav because it is a low-rainfall area. The fact that Khatav is a drought prone area is a blessing in disguise for attracting the contract scheme” (BH20).

Due to its climate and soil profiles, Koregaon taluka has historically been the leading grower of potato in Satara district, and this is why PepsiCo initially established their scheme in the taluka. Representatives of the domestic firm also emphasised their preference for locating in villages that have previous potato growing experience. In this respect, PepsiCo’s move to Khatav taluka, and particularly the area around Bhushangad, where potato growing is less ingrained in the local agricultural economy, is noteworthy. The implications of this move will be explored in later chapters.

The identification and recruitment of a suitable local agent also significantly influences location decisions. The local agent is responsible for grower recruitment, and therefore exercises a significant degree of control over which villages are selected. The personal and political connections of the agent,
and the proximity of a village to the agent’s home village, influence which villages the agent chooses to target for recruitment:

“The PepsiCo agent bought the scheme to the village. He is from another nearby village, and knew this village well” (BH07).

**Contract scheme operation**

**The place of the agent**

Both firms operate the contract scheme through a local agent. The agent is important, because it is through him (he is inevitably male) that contract farming is ‘embedded’ in its local context. Each firm employs this ‘agent model’ to reduce the transaction and coordination costs of dealing directly with hundreds of small farmers. Local agents also give the contract scheme local legitimacy, and each firm can leverage the local contacts, reputation and knowledge of the agent:

“(The domestic firm) designed the system that uses local agents. This is designed to maximise relationships of trust... The local knowledge and relationships of the agent is critical to the scheme’s success” (CO01).

While the domestic firm established their scheme using the agent model, PepsiCo initially established a ‘direct contact’ model of contracting, where PepsiCo employees were the first point of contact for contract farmers. As the number of farmers under contract grew, dealing directly with farmers proved to be problematic in terms of effectively providing extension and other services. PepsiCo then introduced the agent model to address these difficulties. The effectiveness of the agent is critical to the ability of both firms to operate its contract scheme successfully:

“(We) must make sure that we align with the right person in an area or village. We look for local people who already have some commercial and business know-how, and someone who has participated in commercial agriculture and is educated, preferably in agriculture” (CO01).

“What makes a good agent? Someone who serves farmers on time, follows the policies of the company, and builds trust with the company. Agents need to be well-educated and experienced farmers, especially experienced at growing potatoes. They need to be leaders and be capable of giving guidance to farmers as they need it” (PW16).

In the PepsiCo scheme, the agent is a business management and economics graduate from a small village and service centre on a main road in Khatav taluka, about 8kms from Bhushangad. The agent had previously lived and worked in Mumbai, and owns and runs an agricultural supply chain management
firm. His firm had some business dealings with PepsiCo, and he was recruited after a chance meeting with a PepsiCo manager in 2006. The agent trialled the chipping potato crop in his home village with a few other farmers on 10 acres. A limited amount of table potato had been grown previously in the village. The success of the trial led the person to becoming PepsiCo’s contract agent for the area, recruiting enough farmers to plant 160 acres of contract potato in 2007. The agent had no prior farming experience (apart from having grown up in a small farming household) before being recruited. Through his company’s office in his village, he has now expanded the scheme to around 500 acres in four villages, including 40 farmers under contract in Bhushangad.

The domestic firm recruited the agent responsible for Pawarwadi in a similar fashion. This agent, whose home village is Pawarwadi, holds a Bachelor of Science degree in agriculture and has extensive farming experience including potato production. He also holds an elected position as a representative in the Gram Panchayat of the village, and is a prominent member of the local Indian National Congress party. Prior to becoming a contract agent, he worked for a large agribusiness firm developing post-harvest and storage technologies for potato and other crops. Through his work with this firm, he met the director of the domestic firm in 2011, who offered him the opportunity to participate in the contract scheme and then to sign on as the agent for the area around Pawarwadi. The agent is now responsible for around 25 contract farmers with 40 acres under chipping potato.

The domestic firm’s agent in Randullabad is a lawyer by training and lives between Satara city and his family’s house and land in Randullabad. He is well connected politically, and holds the position of deputy Sarpanch for Randullabad. He previously worked as an agent for PepsiCo when PepsiCo’s scheme operated in Koregaon taluka. The agent’s family were experienced table potato growers, and in 2006 PepsiCo approached him to participate in the contract farming scheme. When PepsiCo’s operations broke down in Koregaon taluka, the domestic firm recruited him. He is now responsible for around 100 acres of chipping potato, with 35 farmers in Randullabad and 15 farmers in surrounding villages under contract.

**The contract instrument**

The instrument that governs the scheme is a written contract between the farmer, who agrees to grow the chipping potato using a specific growing schedule and inputs, and the contracting firm, which agrees to pay the farmer a guaranteed price upon harvest and to supply seed, extension and inputs. Several other parties are involved in the fulfilment of this contract, including input companies that agree to supply the required inputs, usually at below market price, and most importantly a local bank, which agrees to extend credit to contracted farmers to enable them to purchase the seed and inputs, and meet their planting and harvesting costs. The contract specifies the purchase price, as well as the price
farmers must pay for seed and inputs, and details the loan facility and payment process. The required quality standards for harvested chipping potato are also detailed in the contract, with the provision that the firm may choose to decline to purchase material that does not meet these standards. For the domestic firm, the quality standards that apply are minimum 18% dry matter, reducing sugar levels of less than 0.2% (less than 0.1% is considered high quality), a minimum diameter of 40mm, and less than 3% of the harvested material should be green potato.

The duration of a contract is one growing season. Each firm announces the contract price at the beginning of each growing season (May/June), based on a combination of current market prices and production costs. Over the last three seasons, the contract price has been between Rs 11-12/kg. This compares to table potato market rates that can be as low as Rs 3/kg. According to PepsiCo and the domestic firm, the fixed price offered at the beginning of the season will be on average around 10% less than the current national market price for chipping potato varieties. However market prices usually decrease by the time of harvest (September/October/November), making the contract price attractive. Firms must also be prepared to increase their contract price if the market price for chipping potato has increased at the time of harvest. This was the case at the end of the 2014 growing season. Heavy monsoonal rains resulted in crop failure and poor production in Karnataka and parts of Maharashtra, forcing prices up. PepsiCo and the domestic firm responded by increasing their contract price to around Rs 25/kg.

The legal status of each contract is murky at best, particularly in the context of India’s convoluted and complex legal system and endemic marginalisation of rural people from legal institutions. Contract farming as a concept is legalised and supported by the state in Maharashtra, however, the contracts themselves are not supported by any specific legal framework, or monitored or endorsed by any central body in any meaningful way. One key informant claimed that PepsiCo’s contract scheme is the only ‘official’ contract scheme in Maharashtra, as contracts are written on official government stamped paper. The domestic firm’s contracts are simply signed under the company’s letterhead. There is uncertainty as to how enforceable contracts are by either party, and mechanisms to address contract disputes are lacking. Firms are unwilling to legally pursue farmers who break their contract due to political sensitivities:

“It is difficult to get into legal issues with farmers as they are politically pampered” (CO05).

At the same time, farmers have no legal protection or recourse to compensation if the firm reneges on the contract conditions. Trust and reputation, particularly in the case of the firm, therefore play a critical role in the enforcement of contracts. Informal enforcement of contracts is the norm, where the
potential for “loss of reputation and future access to the market for any party that defaults on a contract” incentivises both farmers and firms to honour the terms of the contract (MacLeod 2007, p.595). The legal grey area that exists around contracts in India is demonstrated by the domestic firm’s operations in Uttar Pradesh. The state has not amended its APMC act, and contract farming is officially illegal there, however the firm has introduced what they termed contact farming. NGOs were used to gain trust in the targeted areas, and all agreements between the firm and farmer are verbal.

**Side selling**

PepsiCo and the domestic firm’s contracts differ in relation to selling options upon harvest. PepsiCo’s contract requires farmers to exclusively sell all of their potato harvest to the firm at the agreed price. The domestic firm originally had the same requirement, however found that this condition became a key site of conflict. It now allows farmers to sell the chipping potato to any buyer. This is seemingly a unique way of operating a contract scheme: firms usually use the contract model to not only get the right variety of seeds in the ground, but also to exercise certainty of supply. Not requiring farmers to sell the contracted material to the firm appears to contradict the very reason for using contracts. The domestic firm’s contracts, however, are an interesting adaptation to local contexts. Farmers in Satara district are not just contract farmers; they are engaged in the production of multiple crops and many are connected into multiple markets with established relationships with traders and wholesalers. If at harvest time a farmer can find a higher price in an alternate market, they will often shirk (essentially unenforceable) contractual obligations and sell contracted produce to the highest bidder. This is known as ‘side selling’ and is a significant risk for firms engaging in contract farming (Barrett et al. 2012). The PepsiCo agent for Bhushangad estimated that about 10% of farmers would side sell some of their crop if the market price were higher at harvest. Given their rigid contracts, PepsiCo, therefore, must be ready to deal with implications of open market price movements and side selling:

> “There can be issues with side selling. If the market price is more than 1 or 2 rupees higher, then some farmers will say they had low production, and side sell to the market. This also happens in reverse – if the contract price is high (market price drops) then PepsiCo can be flooded with more supply than expected... To succeed, contract farming companies need to be big players to absorb the irregularities of contracting. It is important for the company to always honour their side of the contract with farmers” (CO05).

The domestic firm rationalised their strategy by referring to their relationship with farmers as based on more of a minimum support price model than a traditional contract. The contract guarantees a fixed (or

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27 Although the underdeveloped market for chipping potato varieties makes finding an alternate buyer challenging for most farmers.
minimum) price and access to inputs and high quality seeds for farmers. This encourages the uptake of the contract crop. The domestic firm then relies on the quality and timeliness of their services, as well as the agent’s reputation and relationships, to make selling harvested potato back to the agent/firm the obvious choice for farmers. The relatively thin markets, and high transactions costs involved in accessing alternative markets, for the varieties of chipping potato used in the scheme also incentivises farmers to sell back to the firm. This context brings into focus the crucial role of the agent. If, for example, the agent fails to arrange timely transport for a farmer after harvest, the farmer will likely sell to any alternative market. This model works for the domestic firm because of its role as a consultant, rather than a processor. The firm’s main source of profit is not the sale of chipping potato, but rather the additional services they provide to small processors including processing equipment, transport logistics, training and other consultancy and business services. Unlike PepsiCo, the domestic firm does not have a commercial imperative to supply its own processing plants. Rather, its focus is on getting these new processing varieties of potato in the ground, creating a viable market for chipping potatoes that will encourage the growth of the processing industry.

**Responsibilities of the agent**

The key activities performed in the operation of each contract scheme are detailed in Table 5.2. The domestic firm’s approach to contract farming is highly distanced. Key informants from the firm stressed that it engages semi-autonomous ‘franchisees’ rather than agents to manage the scheme. Each franchisee is provided with business administration, communication and HR training, along with technical training in potato agronomy. The franchisee’s own company becomes the local face of the contract scheme. This was evident in the villages, where farmers were more likely to identify the scheme with the franchisee. Some contract farmers had little knowledge of who the contract firm actually is:

“In farmers don’t really differentiate between contracting companies. They don’t know the details or the differences in seeds, operations, policies etc. There isn’t much known about the firm in the village or their operations. Farmers just know there is an agent who can give them chipping seed, guidance and a contract” (RN16).

PepsiCo also provides technical training to the agent, however PepsiCo agents are directly engaged as local service providers. PepsiCo’s own employees and extension officers closely coordinate the contract scheme alongside the agent.
From the interviews conducted with the agent from each village, I identified several challenges that agents must overcome in running the scheme to ensure contracts are fulfilled and the maximum amount of production is achieved. These include:

- **Recruitment** (Figure 5.5) – farmers will not sign on to the contract scheme if they are not convinced there are benefits above non-contracted crops.

- **Credit** – the success of the scheme depends on securing credit for contracted farmers and this is often challenging.

- **Side selling** – farmers may sell to alternate markets if the rate is better or if the agent fails to provide timely and effective service.

- **Transportation** – coordinating timely transportation is important to reduce loss from rotting and exposure.

- **Pests and disease** – the correct pesticides must be supplied to protect from insects and disease.

- **Relationships** - The reputation and background of company representatives and agents is important. Relatives and friend’s opinion of the scheme will influence farmers. Face to face meetings with firm representatives are important; farmers value relationships of trust.

- **Seed** – maintaining supply of good quality seed is crucial.

- **Contract rate** – company must honour contract or store potatoes for farmers.

- **Labour** – while this is not the agent’s responsibility per se, arrangement of enough labour is a significant challenge for many farmers.

- **Payment** – farmers expect timely payment upon harvest.
### Table 5.2: Key activities in the operation of the contract scheme.

<table>
<thead>
<tr>
<th>Month</th>
<th>Activity</th>
<th>Domestic firm</th>
<th>Role of agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>April/May</td>
<td>Recruitment of farmers and arrangement of contracts</td>
<td>Firm gives each agent a target (measured in acres under chipping potato) to work towards each season. The agent is then responsible for all marketing and recruitment activities in his area. Agent is responsible for selecting farmers to offer contracts to. Firm sets the terms of the contract.</td>
<td>Agent is responsible for marketing and identifying suitable farmers to offer contracts to. PepsiCo sets the terms of the contract.</td>
</tr>
<tr>
<td>May</td>
<td>Arrangement of credit for farmer</td>
<td>Agent assists farmers to arrange approval for a crop loan with a local bank or cooperative</td>
<td>Agent coordinates the credit approval process and mediates between farmer and bank.</td>
</tr>
<tr>
<td>June/July</td>
<td>Delivery and sowing of seed</td>
<td>Agent purchases seed from firm and sells on to contracted farmers. Agent will also sell seed to non-contracted growers.</td>
<td>PepsiCo delivers seed to agent, who distributes seed to contracted farmers. Payment for seed is made direct from farmers loan account to PepsiCo</td>
</tr>
<tr>
<td>June/July</td>
<td>Delivery of input kit</td>
<td>Agent purchases inputs from firm. Farmers purchase input kit and additional fertiliser/pesticide from agent at below market cost price.</td>
<td>Dupont supplies input kit under arrangement with PepsiCo. Payment is made direct from farmers loan account to Dupont. Agent distributes input kits from a central point. Farmers purchase extra fertilisers from agent.</td>
</tr>
<tr>
<td>June - October</td>
<td>Growing schedule and extension</td>
<td>Agent undertakes majority of extension work. Agent distributes growing schedule and input application charts to farmers. Firm representatives visit village periodically to monitor crop and provide more specialised advice.</td>
<td>Agent arranges farmer meetings with Dupont to distribute fertiliser and pesticide information and application schedule. Each farmer is supplied with an input chart. Agent is first port of call for crop advice, while a regional PepsiCo representative coordinates more specialised services. PepsiCo agronomists visit each farmer 2-3 times per season to monitor crop.</td>
</tr>
<tr>
<td>September - November</td>
<td>Harvest</td>
<td>Agent determines harvesting schedule for each farmer. Upon harvest, agent samples and tests each farmer's crop for quality attributes. Deductions and sorting of undersized or poor quality potatoes takes place on-farm. Potatoes are weighed on-farm (50kg bags). Agent will also procure chipping potato from non-contracted growers. Firm arranges transport and monitors harvest.</td>
<td>Agent determines harvesting schedule. Agent samples each farmer’s crop for quality defects (Figure 5.6). Potatoes are weighed on farm and at destination. Undersized potatoes are sorted on-farm and at factory gate. Agent coordinates local transport, PepsiCo arranges long-haul transport. PepsiCo representative works closely with agent to monitor harvest.</td>
</tr>
<tr>
<td>Post-harvest</td>
<td>Payment</td>
<td>All payments run through the agent. Firm transfers payment for total amount procured from area to agent. Farmers are then paid individually by the agent less any deductions and commissions.</td>
<td>PepsiCo manages payment system. No money moves through agent. PepsiCo calculates final payment and transfers to farmer’s bank account. The farmer’s loan is settled and remaining profit is transferred to farmer’s savings account.</td>
</tr>
</tbody>
</table>
Figure 5.5: Recruitment poster used by contract agent.

Figure 5.6: Potato grading chart used by agent.

**Credit and payment system**

The provision of credit to contracted farmers is a critical feature of the scheme. The inputs, seed and labour required to grow chipping potato are capital intensive for small farmers. It takes around Rs
35,000/acre to cultivate and fertilise chipping potato. Without credit this cost would be prohibitive for many small farmers. For most participating farmers, the capital used to finance their participation comes largely from credit:

“The credit aspect of the contract scheme is very important. If it wasn’t done on a credit basis then nobody would be able to do it” (BH01).

Credit, then, is the lubricant that enables capital-poor small farmers to participate. By specifying a fixed price and guaranteed market, the contract provides a mechanism for banks to justify credit extension to small farmers who normally would not be approved for formal loans. In the PepsiCo scheme, the firm has established a formal agreement at the national level with the State Bank of India to provide credit to contract farmers. Once a contract is signed, the agent assists each farmer to secure a loan, using the contract certificate as a sort of guarantor. Each PepsiCo-contracted farmer in Bhushangad is extended up to Rs 30,000 in credit. Farmers use their own savings, or loans from credit cooperatives or informal lenders, to make up any shortfall. Payment for inputs and seed is debited from the farmer’s credit account. After harvest, PepsiCo transfers payment to the farmer’s credit account, and the outstanding loan is settled. Interest on the loan is 7% for PepsiCo scheme. The remaining profit is then transferred to the farmer’s savings account.

Credit has become harder to access in recent seasons. Drought conditions over the last five or so years has made the bank more risk averse in lending to small farmers. The bank now requires that contract farmers present a certificate of ‘no objection’ that confirms they have no other outstanding loans in order to qualify for credit.

The domestic firm operated a similar credit and payment system. The firm had an agreement with the Bank of Maharashtra to provide credit to farmers, and used the same credit and savings account system as PepsiCo. Agents had a prominent role in facilitating the credit arrangement. The level of involvement of the bank in each village depended on the relationships and reputation of each agent, meaning credit availability often differed from village to village. Without the backing of a large firm such as PepsiCo, the bank required each agent to act as a guarantor. In Randullabad, the agent had to provide an Rs 50,000 surety to the bank at the beginning of the 2013 season that was returned after all farmers had successfully repaid their loans. This placed the onus on the agent to ensure that each farmer produces enough potatoes to repay their loan:

“A local branch in another village had a 50% default rate from contractors because the agent didn’t provide the right attention and guidance, and because of the drought. Around 150 farmers defaulted” (RN19).
However, as of the start of the 2015 potato season, after I had completed the bulk of my fieldwork, this credit system has broken down due to problems with repayments and default. The Bank of Maharashtra has now pulled out of this arrangement in all of the domestic firm’s villages, citing that too many farmers had failed to meet their repayment obligations over the last few seasons. In 2013, the bank started to tighten its approval requirements after the default rate reached 30% in Pawarwadi, due to drought. At this time, credit was extended only to farmers who had cleared their debt from the previous season, and who had no other outstanding loans. At the end of the 2014 season, the bank withdrew completely from the scheme, and it is now up to farmers to individually source credit. In Randullabad, eligible farmers will now have to access credit for the scheme through the village credit cooperative. The payment system in both villages now runs through the agent. The agent will use his own capital to purchase inputs and seed from the firm at the beginning of the season. Farmers will then purchase required inputs and seed directly from the agent. In Pawarwadi, the agent will individually provide inputs to farmers he has established relationships with on credit, to be paid back at harvest. After harvest, the firm will transfer payment for the total amount of potato procured from the agent’s area (less deductions for rejected potatoes) to his account. The agent will then issue each farmer with a cheque for payment.

Both firms also arrange crop insurance for farmers. AIC, a national agricultural insurance company, provides cover for crop damage caused by drought, flooding, storms and wild animals. Cover is not provided for disease, fungus or insect attacks. The insurance policy covers the loan each farmer takes out. If a successful insurance claim is made, the payout will depend on the percentage of the potato crop that is assessed as damaged. Farmers are still expected to sell any undamaged crop to the firm at harvest. Small farmers in India often have difficulty securing crop insurance at an affordable premium. Insurance firms are unwilling to negotiate the significant transactions costs and risks of dealing individually with small farmers (Punjabi 2008). The contract scheme allows insurance companies to reduce transaction costs by dealing with the firm or agent, instead of multiple individual farmers.

Agents are payed on a commission basis by each firm. Each firm provides a seed commission for the amount of seed distributed to contracted farmers (incentivising the agent to get more seed material in the ground) and a production commission for the total amount of potato supplied to the firm at harvest. This base commission for production is between Rs 0.3-0.5/kg. This is designed to incentivise agents to achieve as much production from their contracted farmers as possible:

“The base commission provides a profit if production is four times the amount of seed provided. Anything above this production rate is a bonus” (BH20).
Bonus commissions are also paid to the agent for delivering a high quality harvest\textsuperscript{28}, and agents also receive commission from input sales. PepsiCo’s agent in Bhushangad also extracts profit from the scheme through the sale of extra fertiliser to farmers, who are obliged to purchase extra inputs if the agent or PepsiCo agronomists determine that soil nutrients are lacking during the growing season.

**Labour**

Labour is a central issue in the scheme. The contract scheme itself can be viewed as one strategy that firms use to avoid the costs and problems associated with recruitment, retention and supervision of farm labour. This overcomes the problem that farm labour is often unreliable, transient and difficult to supervise. These transaction costs represent a significant risk to firms engaged in corporate farming or direct employment. In contract farming schemes, however, it is the farmer’s responsibility to manage his/her labour requirements. In the three villages, almost all interviewed contract farmers considered finding enough seasonal farm labour for their contract crop a significant challenge:

“Labour costs about Rs 250/day. If it is raining the labourer will usually not turn up. There is a significant problem with getting enough labour for farmers in the village” (BH01).

The government-employed agricultural officer responsible for Pawarwadi expanded on the problems farmers face with labour:

“Labour shortages are also a big problem. Many farmers have to source labour from outside of their village. Seasonal or migrant labourers can be fickle and unreliable. Because of cash flow problems and the nature of the crop cycle, farmers also struggle to pay labourers on time, and many have to give deferred payments. The social status of agricultural labouring is also changing, and more prestige is given to jobs outside of agriculture these days. This makes it more attractive for wage labourers to seek off-farm jobs, which generate more status and respect, and may have better conditions” (PW17).

Through the use of contracts, firms avoid the problems associated with rural labour relations by not only transferring labour costs and risks to the farmer, but also through accessing the cheap or unpaid family labour of the contracting household itself (Oya 2012; Singh 2002). Contract farmers that cannot find or afford enough labour to manage the potato crop will often fall back on exploiting their own labour and that of their household, allowing contract firms to keep contract prices low.

**Risk**

One of the important functions of the contract is the allocation of risk between farmer and contract firm. Several types of risk are involved in the operation of the scheme, and distributed according to the

\textsuperscript{28} This encourages the agent to perform good extension work.
terms of the contract. First is price risk. The fixed price set by the firm allows farmers to invest with more confidence than they otherwise can in volatile open markets. This encourages production in much the same way that the Indian government’s minimum support price policy does. Second is production risk. By not investing directly in any land or crop assets, the firm avoids risks associated with potato production (Oya 2012). The farmer must bear the income loss that results from disease, adverse weather and pests, as well as labour or other social issues. Third is geographical risk. The firm is able to mitigate its exposure to supply risks through its spatial mobility: that is its ability to contract with a multitude of farmers over diverse geographies, ensuring problems in supply from farmers in one area can be buffered by supply from other areas. These issues of risk distribution have a significant influence on the outcomes of contract participation and non-participation for household livelihoods, and will be explored further in later chapters.

Conclusion

This chapter completes the second important ‘scene setting’ task of the thesis by outlining the structure and operational dynamics of potato contract farming in Satara district. Understanding the defining features of potato contract farming in the district is an essential precursor to the analysis of the interaction between local livelihood patterns and contract farming. Much of this chapter, then, is necessarily descriptive: it answers some fundamental questions about the potato contract farming scheme that operates in each case study village, namely why potato contract farming has emerged in each village, and traces the operational, economic and agronomic contours that define each scheme.

The potato contract farming scheme that operates in each case study village in this chapter anchor modern potato chip value chains that have emerged as a solution to the perceived inefficiencies of traditional value chains in Indian agriculture. This modern value chain is focused on one objective: to transform potato into potato chips that meet the demands of urban Indian consumers. The contract scheme plays a vital role in embedding this value chain within local sites of production. Contract farming enables firms to control the procurement of chipping potato that the value chain requires. The firm uses the contract to incentivise farmers to sow and harvest chipping potato with specific quality characteristics; in return farmers receive a guaranteed price for the produce, plus access to inputs, extension and credit. At the heart of each scheme is the local contract agent, whose skill and experience is critical to the functioning of the scheme in each village. Importantly, the contract farming scheme is where the value chain ‘touches down’ in each case study village, intersecting with the existing livelihood landscapes and patterns of social differentiation discussed in Chapter 4. It is to the consequences of this intersection for future patterns of differentiation and accumulation in agrarian spaces that this thesis now turns.
Chapter 6 - Inclusion and exclusion: patterns of participation in potato contract farming

Introduction

This chapter brings together the insights of Chapter 4 and 5 in order to understand how potato contract farming ‘touches down’ in each case study village. The key question here is what determines patterns of contract participation; that is, what are the common characteristics of households that take part in contract farming for chipping potato and which livelihood groups are they from, and what households do not take part in contract farming. In other words, this chapter asks questions about the patterns of inclusion and exclusion that are a result of the way each village’s livelihood landscape intersects with the dynamics of the contract scheme. The scale of focus is the household. The chapter aims to establish the place-dependent way in which different households, embedded in particular socio-spatial structures, engage with the contract scheme.

As discussed in Chapter 2 and 3, a long running concern for researchers and policy makers both in India and more broadly is whether or not contract farming schemes exhibit bias against small farmer participation (Barrett et al. 2012; Bijman 2008; Glover 1984; Singh 2002). This reflects broader concerns about the status and future viability of small farmers within modernising global value chains (Neilson & Pritchard 2009). This is certainly an important debate. Indeed, contract farming’s legitimacy as a rural development and poverty reduction project in India seemingly hinges on its ability to include small and marginal farmers. The mixed evidence of bias against small farmers in the literature emphasises the importance of assessing contract schemes in their social, economic and political contexts. Insights from the NIE literature suggest that the potential benefits arising from economies of scale lead firms to establish contracts with larger farmers (Bijman 2008; Dorward 2001), however there may be other motivations or contextual factors that induce firms to establish contracts with small farmers (Barrett et al. 2012).

However, in setting up a dichotomy between ‘small’ and ‘large’ farmers, the existing literature exhibits a significant shortcoming in the tendency to lump all small farmers into one “undifferentiated mass of poor agricultural producers” (Oya 2012, p.9), ignoring the inherent heterogeneity and differentiation within rural communities that conditions access to different livelihood opportunities including contract farming. With this in mind, I take a different approach to understanding how potato contract farming ‘touches down’ in each village. I emphasise the place-dependent nature of small farmer engagement with contract farming schemes. Indeed, I argue that the institutional setting of Satara district makes questions of small farmer bias somewhat irrelevant. Both contract firms do engage and contract with
small farmers, if only because land fragmentation and the structural settings of agriculture in Satara district give them little other choice. This speaks to the diversity of contexts that contract farming operates within in the Global South. The role and status of small farmers in a contract scheme will be context dependent:

“(T)he heterogeneity of contract production – a diversity embracing crops, actors, production relations, and institutional links – strongly suggests that any effort to outline a general “theory” of contracting would be foolhardy and ultimately unproductive” (Little & Watts 1994, p.5).

For this thesis, then, more important than questions of general patterns of bias are the local scale livelihood processes, including class relations, which mediate the interaction of different households with contract farming. In this way, I seek to transcend debates about whether contract farming is ‘good’ or ‘bad’ for small farmers. Instead I focus on how context shapes households’ participation in contract farming. Most importantly, I argue that participation is equally determined by the evolution of (differentiated) household livelihood assets and capabilities, and the locally expressed dynamics of the contract scheme. The chapter proceeds with a brief discussion of the motivations of households in each case study village to engage with contract farming. The discussion then moves to understanding how household participation and exclusion is mediated by the interaction between the livelihood landscape of each village and the dynamics of the contract scheme.

**Motivations to contract farm**

Why would households in the case study villages be motivated to engage in contract farming? The NIE literature uses a rational actor perspective to suggest that farmers will only engage in contract farming if their (subjectively) expected welfare gains from participating are higher than from not participating (Barrett et al. 2012). In this respect, participation in contract farming is not a goal in itself; it is the expected gains in income or other types of welfare that motivates farmers to participate (Bijman 2008). Existing studies suggest farmers engage in and benefit from contract farming for two primary reasons: a) reductions in production and marketing risk; and b) to access inputs, extension and credit (Bijman 2008). These motivations were evident in each case study village and are discussed below.

**Fixed price**

Households in each village are motivated to contract farm first and foremost by the potential income gains that chipping potato offers. Most importantly, it is the fixed price offered by the contracting firm that attracts households to the scheme. This is not surprising. For households, the fixed price promises a guaranteed income that can provide livelihood benefits above other crop options:
“The fixed price has been very important for farmers. Contracting has improved farmers’ purchasing power and cash flow. Participating has allowed people to save” (BH01).

The fixed price is important as it reduces uncertainty. Price risk is one of the key uncertainties that households face, given the lag between investing in planting a crop and realising payment for that crop (Ellis 1993). Small farmers also typically lack access to timely and accurate market information. This makes investing in capital intensive, but possibly highly rewarding, cash crops an uncertain investment for many households:

“The price fluctuations involved with other cash crops makes growing them like the lottery. Rates and prices will change year by year, and this makes other cash crops a risky investment” (PW12).

In the traditional potato value chain, households face significant price uncertainties that discourage them from making investments in new crops or intensifying production of current crops. The fixed price offered for chipping potato reduces some of this inherent uncertainty. This provides households with the confidence to make livelihood investment decisions at the beginning of the planting season:

“We took the decision to participate because of the fixed rate offered. This negates the uncertainty of the APMC price. The company will increase the contract price if the APMC price increases at time of harvest” (PW02).

The fixed price is particularly attractive for middle farmer and worse-off households, who typically lack market connections, flexibility and access to information, and are risk averse in their investment and livelihood decisions. As one respondent expressed, the certainty of a fixed price is often more important than the actual price itself:

“The fixed rate will motivate me to continue contracting. Even if the rate decreases, I would continue contracting because there are not any better crop options” (RN06).

Of course, a fixed price is only of benefit if a household successfully grows enough potato with the quality requirements that the firm demands to recoup their investment. This makes the type of crop an important consideration when evaluating the benefits of the fixed price for households. As discussed in Chapter 5, the contract transfers all production risks to farmers. This is important, as the chipping potato crop is vulnerable to climate and pest impacts, and is significantly more perishable than table potato or other cash crops. Therefore, contract farmers have in effect reduced price and market risk at the expense of exposing themselves to significant production risks. I expand on this point later in the thesis.
Access to credit, information and inputs

Consistent with the existing NIE literature on contract farming, households in each village participate in the potato contract scheme to address other market failures that commonly impact agricultural livelihoods in rural India, namely access to credit, information and agricultural inputs. In this sense, for many households contracting is the most obvious first step into capitalised agriculture. Contract participation enables farmers to bypass reliance on government extension services, which were uniformly criticised as overstretched and of limited quality. Small farmers in particular lack access to information on advanced agricultural technologies or new crop options, often relying on word of mouth or the assistance of progressive farmers in the village. Households, then, can benefit from the technical advice and extension provided by contract firm extension officers and local agents:

“The advice and assistance provided by the agent is attractive. There is very poor government extension in the area” (BH04).

Households in each village also value the access to the specialised fertilisers and pesticides that the contract firms provide. Farmers have limited options for accessing modern fertilisers and pesticides needed to grow cash crops or increase yields (Key & Runsten 1999). The contract scheme resolves these input market failures by supplying high quality fertiliser and pesticide as part of the contract agreement. As well as using the input kit to improve potato yield, households will commonly allocate some of this fertiliser to other crops.

Credit access was reported by interviewees as an important motivation to contract farm. As discussed in Chapter 4, this was a significant livelihood barrier in each village. Most households lack the financial capital to invest in higher return activities that can make a significant impact on their livelihood situation. However, many households also face significant challenges in accessing formal credit markets, instead having to rely on sometimes-exploitative relationships with informal moneylenders. Under-capitalised households without easy access to credit can use the credit facility offered by contract firms to access the potentially high-value livelihood opportunity that chipping potato offers that would otherwise be out of reach:

“Participating in the contract scheme insulates farmers from the normal risks associated with fluctuating markets. Banks are more willing to lend to farmers who they normally wouldn’t give credit to” (CO05).

Importantly, credit access goes hand in hand with the risk of indebtedness, given the production risks inherent to chipping potato. The ways in which the contract scheme exposes households to relationships of credit, debt and risk, influenced by the particular crop characteristics of chipping potato, is an
important dynamic that mediates both participation and the outcomes of the scheme for different households. This will be discussed in more detail in Chapter 7.

Patterns of participation and exclusion in Pawarwadi and Randullabad

The preceding section identifies how households in each village are motivated to participate in potato contract farming for various agriculture-related reasons. What, then, determines which households come to participate and which households are excluded from the scheme? Contract farming studies (especially those from within the field of economics) frequently ignore local scale livelihood factors when assessing participation, instead modelling contract participation as a rational-actor decision making process influenced by transaction costs. This ignores the role of livelihood assets and capabilities in household decision-making. I address this shortcoming here by building on the livelihood analysis presented in Chapter 4. In doing so, I argue that the uneven distribution of locally relevant livelihood factors influences the possibilities for different households to engage with the contract scheme. Specifically, contract participation and exclusion is influenced through the interaction of contract farming dynamics with the existing livelihood landscapes of each village. The analysis presented here focuses on the villages in Koregaon taluka (Pawarwadi and Randullabad) and the contract scheme run there by the domestic firm. Patterns of participation have evolved somewhat differently in Bhushangad village under the PepsiCo scheme. These differences will be teased out in the next section.

To analyse the important livelihood factors influencing participation I adapt the work of Barrett et al. (2012). Their framework provides a useful organising schema to think through these issues. The authors suggest four stages that influence participation in contract farming: a) the firm’s choice of procurement location, b) the firm’s selection of households to offer contracts, c) a household’s acceptance or rejection of the contract offer, and d) firm and household decisions to honour the contract. The factors influencing the location decisions of the domestic firm (stage a) were discussed in Chapter 5, and include the proximity of processing factories, the agro-ecological and climate characteristics of Koregaon taluka and the identification of a suitable local agent. This section addresses the local scale processes in stages b, c and d that mediate patterns of participation within villages.

Firm selection of households to offer contracts

During fieldwork, participating farmers and key informants in Pawarwadi and Randullabad said that any farmer who desires to participate in contract farming could do so. These respondents rejected any notion of discrimination in who was offered contracts. In practice, however, there are both formal and informal requirements related to livelihood assets and capabilities that influence which households are offered contracts. The domestic firm has two formal requirements for selecting participants. First, households must have at least one acre of land available to plant chipping potato. This is the minimum
amount of land for which banks will approve a crop loan. One acre may seem nominal, however this excludes most marginal landowning households, and also landowners who are unwilling to commit one acre of land to the contract crop, such as those who prioritise subsistence production. It is also important to note that there is no place for landless households in the contract farming scheme, given that leasing of land is evidently non-existent as an institution in these two villages.

The firm’s requirement that participants must have at least one acre reveals an interesting tension between scale and production risk. Each agent has an incentive to identify farmers who will sow chipping potato on more land; this maximises production while reducing the agent’s transaction costs. The firm, however, is also motivated to reduce risk by spreading production over multiple geographical sites, both within and between villages. In the present study, the domestic firm has adopted a similar risk reduction strategy, meaning that larger landholders do not necessarily dominate contract participation.

The second formal requirement for participation is access to irrigation, as unirrigated farmland increases production risk and exposes farmers to crop failure or poor yield. Irrigation not only ensures water supply to the crop if the monsoon fails, but also allows fertiliser to be applied evenly and efficiently. Banks are also more likely to approve credit for farmers with irrigation. The type of irrigation is also important. Agents prefer to contract with households who have installed drip or sprinkler irrigation, which requires more capital to establish than flood irrigation systems.

As highlighted in Chapter 4, access to irrigation is unevenly distributed in each village, influenced primarily by access to financial and natural livelihood assets, and other socio-spatial factors such as the location of a household’s land relative to canals, groundwater stores, or the infrastructure of the watershed project in Randullabad. The requirement of the domestic firm that contract farmers must have irrigation therefore interacts with these place-based livelihood factors to exclude households without existing irrigation assets or the capability to invest in irrigation:

“The requirement that you must have irrigation to contract is a problem for some farmers as they can’t afford this” (RN04).

Apart from the formal land and irrigation requirements, there are informal livelihood factors that influence which households are offered contracts. Most importantly, although the contract scheme operates on credit, potential contract farmers must be able to ‘afford’ to participate. Agents will rarely offer contracts to households lacking financial capital. Access to adequate financial capital is important as the loan rarely covers the input kit and other production costs such as labour. Some households invest up to Rs 10’000 of their own capital in the contract scheme each season. This means that
receiving a contract offer is mediated by a household’s possession of financial assets, including the capability to access capital through social or family networks.

Of course, a household’s financial assets, among other factors, also influence their ability to qualify for credit. Without credit approval, most households will not be able to participate in the scheme. While participation in the contract scheme does facilitate credit access for households who otherwise would be excluded from formal credit institutions, approval is not guaranteed for all households. As discussed in Chapter 5, this excludes households who are already in debt, including those experiencing debt as a result of loss from a previous chipping potato season:

“The obstacles to starting to contract are the farmer’s financial capability – they must be able to qualify for loans” (PW03).

In Chapter 4, I mentioned that the credit tie-in collapsed in the domestic firm’s scheme in 2014. Given this, the differential ability of households to independently access credit is certain to further constrain participation for particular households in Pawarwadi and Randullabad in the future.

Contract offers are also influenced by a household’s ability to access labour, either in the form of paid labour, family labour or through labour sharing arrangements with neighbours or relatives. Chipping potato is a labour intensive crop during sowing and harvest. Agents will not approach households without adequate labour resources.

“Some farmers don’t have... support from their family for labour to be able to participate. I know several farmers that would like to participate in the contract farming, but haven’t been able to for those reasons” (RN04).

Distribution of labour assets in both villages is dependent on a household’s financial, social and human capabilities. As discussed in Chapter 5, accessing paid agricultural labour is increasingly problematic for households without adequate financial resources. Given this, farmers will commonly assist their neighbours or relatives with contract potato sowing and harvesting in reciprocal labour-sharing arrangements, meaning access to social networks influences patterns of participation. A household’s own family labour assets also mediate participation in the scheme. Households without children or other family members to contribute labour are less likely to contract farm.

Access to social capital, particularly the membership of households to social networks, also influences the distribution of contract offers. The role of the agent is critical here. The agent has power to control access to the scheme. Although not evident in any systematic way, fieldwork observations suggest that the agent tends to provide households in his political or social network with contract offers before
recruiting other households. This was particularly evident in Pawarwadi and Randullabad where both agents are active in local village politics.

**Household acceptance or rejection of contract offer**

As Barrett et al. (2012) point out, a firm’s decision to offer a contract and a household’s decision to accept or reject that offer will often be influenced by the same factors. This means that households that profess a reluctance to engage with the contract scheme may not have been offered a contract anyhow. This was evident in each case study village. For example, households will not engage with the scheme if they determine that they do not have an adequate level of capital or access to the appropriate labour resources to be able to participate or succeed in the scheme:

“Because of my poor financial position, I have not considered participating in the contract scheme. No agent or farmer approached me about the scheme” (RN17).

Once a household is offered the opportunity to join the scheme, other more intangible factors influence participation, of which the most important is a household’s attitude to risk and uncertainty. To adequately interrogate the relationship between risk and participation in the present study, it is necessary to review existing approaches to understanding the decision-making behaviour of smallholder households.

It is well established that small-scale farmers in the Global South operate under conditions of pervasive uncertainty. This includes enhanced production, market, price, political and livelihood uncertainties. However, a key question is how to conceptualise decision-making by small farmers given these contexts. Is it the case that small farmers should be understood as operating within the bounds of rational actor models (albeit under high degrees of risk and uncertainty), or does the pervasiveness of risk and uncertainty suggest they should be conceptualised in other terms?

These arguments relate to the concept of a distinct ‘peasant economics’: that is whether peasant producers follow neo-classical economic decision-making models and act as rational, profit-maximising individuals, or whether they follow a different, non-capitalist economic logic. The idea of a distinct peasant economics was popularised by the work of early 20th century Russian agrarian economist Alexander Chayanov. Rather than seek to maximise production or profits, Chayanov argued that peasant households seek to balance their basic consumption needs with the irksome labour tasks needed to meet these needs. This is known as the consumption-labour balance principle. Chayanov assumed that all peasant labour is family labour, and he constructed a model of peasant households as focusing on

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29 For a useful summary of the main theoretical positions on the peasant as an economic agent, see Ellis (1993).
non-economic well-being (Chayanov 1986 (1925)). Chayanov’s arguments were expanded on by anthropologists such as James C Scott (1976), who argued peasants have a unique ‘moral economy’ that guides their decision-making and economic and social behaviour. A key debate in this literature has focused on whether peasants are inherently risk-averse in the way they allocate resources to new opportunities. Those in favour of the risk-averse proposition have expressed this in economic terms as ‘safety-first’. The safety-first rule proposes that peasants make decisions about resource allocation that are based on minimising risk: that is they “make [allocative] decisions in order to minimize their chances of falling below some subsistence minimum” (Henrich & McElreath 2002, p.173; see also Moscardi & De Janvry 1977).

Neo-classical economists and political economists, on the other hand, subscribe to a rational-actor view of peasant decision-making. Authors such as Popkin (1979) have argued that peasant responses to new economic opportunities can be modelled as rational actor decision-making problems, where peasant society is built on self-interested utility maximising individuals. As discussed in Chapter 2, other microeconomic research has challenged the assumption that peasants are risk-averse, arguing that peasant producers are ‘efficient but poor’ (Schultz 1964) and allocate resources in a way that maximises economic benefits like any other rational actor or farm business (Abler & Sukhatme 2006). This approach argues that peasants are responsive to new economic opportunities (i.e. they can exhibit risk-prone behaviour), but are constrained from pursuing profit-maximising strategies by missing markets for technological inputs and other market failures.

Microeconomic models of peasant decision-making emphasise economic agency. Such approaches “presuppose that people have the full power of agency to make logical choices and construct economic strategies” (Start & Johnson 2004, p.26). They also assume that households possess the equal capability (they start from an equal position) to make rational choices. Employing a livelihoods approach, however, challenges this notion of economically-calculative rational choice. It emphasises that a household’s livelihood decisions are based not just on profit-maximisation, but are motivated by other non-material aspects of well-being (Start & Johnson 2004).

Earlier studies into peasant economic behaviour and risk emphasised the duality between agency and structure. Moscardi and de Janvry (1977) found that the following factors were important indicators of whether a household would adopt risk-averse behaviour to using new inputs to improve corn yield in Mexico:

- Age of head of household (older farmers are more risk-averse)
- Education (less-well educated households are more risk-averse)
• Land (smaller land owners are more risk-averse)
• Household size (smaller households are more risk-averse)
• Off-farm income (household without off-farm income are more risk-averse)

Such research suggests that a household’s willingness to take on the risks of new economic opportunities is dependent on their access to different livelihood assets and capabilities, and therefore their position within the political economy (Guillet 1981). In this way, risk tolerance (the capability to bear risk), can be thought of as a livelihood asset in itself, influenced by access to other livelihood assets and capabilities.

In Randullabad and Pawarwadi, the degree of risk-aversion among different households mediates participation in the contract scheme. As discussed above, while households use the contract to reduce their exposure to marketing and price risks, it simultaneously exposes participants to heightened production risks. Uncertainty stems from farmers’ lack of knowledge about the agronomic characteristics of the chipping potato crop, including seed quality, susceptibility to pests and disease or appropriate growing techniques. In turn, given that the scheme runs on credit, these production risks expose households to the uncertainty of indebtedness. While perceptions of risk are partly psychological (described as ‘pure risk-aversion’ by Knight (2003)), if a household’s livelihood position causes them to subjectively judge that the risk and uncertainty of potential indebtedness outweighs the potential benefits of the scheme, they will not participate. In both villages, respondents who are risk-averse towards participation tend to have some combination of limited access to financial capital, poor water access and limited or no access to off-farm income, or have experienced periods of indebtedness in the past, or have experienced a loss from the contract scheme in previous seasons. The fear of indebtedness is an important driver of risk-aversion among poorer households in each village. As the safety-first principle suggests, under-capitalised risk-averse households are wary of outcomes that would place them into debt, as this threatens their ability to maintain minimum livelihood requirements:

“Only those farmers who are financially stable and can afford to take the risk of a loss are signing up to the contract scheme” (RN24).

“There are very few participants from the least wealthy households. These households don’t want to take risks” (RN group).

Further, some marginal landowners and lower caste households are still very much focused on subsistence reproduction. Such households lack financial capital and physical assets, and are typically weakly connected with the market economy. The risk attached to the potato contract scheme does not fit with these households’ livelihood priorities:
“I’ve heard about the contract farming scheme, but I am focussed on agriculture for self-consumption so I haven’t participated. Chipping potato can’t be used in daily consumption so I decided not to grow it” (RN12).

Perceptions of risk also mediate the participation decisions of middle farmer households and those with superior access to livelihood assets and capabilities. Perhaps counter-intuitively, risk-averse attitudes can promote participation amongst households considered to be middle farmers. Such households are open to new economic opportunities, however they are often averse to price risk in open cash crop markets. The contract scheme, then, is viewed as a less risky investment in the cash crop economy as the fixed-price reduces market risk:

“You have to take a lot of care with the contract crop because it rots quickly. If it is not cut within 70 days of planting you will lose up to 50% of the crop. But it is worth the risk because of the potential rewards. If the crop failed then I would fall back on the painting work” (PW07).

Conversely, those with superior access to livelihood assets and capabilities are willing to take greater risks in their livelihood decisions (and have access to the livelihood assets and capabilities to take on such risks). These households will often decline contract offers, preferring to independently grow chipping potato or invest in alternate livelihood options that are high risk but also offer higher potential returns:

“The market rate does fluctuate, but not that much. It is better to take the risk of fluctuation to possibly achieve a higher price than the contract price. For instance last year the market rate jumped to Rs 26/kg, but the company was only willing to buy at Rs 20/kg” (PW06).

While a household’s perception of risk is certainly influenced by access to livelihood resources, this is not to reject outright the notion of households as profit-maximisers. In fact, households do exercise a considerable degree of agency in their decisions to participate in the contract scheme. Barrett et al. (2012) emphasise this by noting that empirical studies consistently find positive returns to contract participants, and this suggests smallholders do “accurately perceive and...act on contract offers” (p. 725). Evidence from both villages suggests some households can be conceptualised as profit-maximisers, treating the contract scheme as any other livelihood investment and weighing up the costs and benefits of participation among other livelihood options. All these households, however, were either well-off middle farmers, or from the best-off group:

“Farmers are rational beings. They can make their own decisions of what crops and schemes are profitable. White peas and beans are a better investment than potatoes, which will earn me two or three times more profit. I’m moving away from growing potato” (RN16).
“To decide to participate again I would have to feel certain that I would make a profit. I would be looking for at least two times my investment in return. My participation is also influenced by the weather. If it is not a good climate for chipping potatoes then farmers will make a loss on the crop compared to table potatoes” (RN08).

Households will also employ tactics to position themselves in ways that facilitate their ability to make more informed decisions about participation. Several households reported holding out on accepting a contract offer so they could witness the experience of other farmers in the scheme before accepting or rejecting a contract offer in the next season:

“I was initially apprehensive to start contracting, but I saw that other farmers were profiting from this. My son convinced me to join the scheme, as he thought that we should experiment with the crop to see if it would give benefits” (PW03).

In Pawarwadi and Randullabad, some farmers have also experimented with the chipping potato seed on their own before deciding to participate:

“I started contracting last year after observing other farmers previously. I bought some seed from the company but didn’t sign onto a contract at first. I experimented with the seed for a season and then decided to contract” (PW06).

Economistic contract farming studies tend to give significant emphasis to the role of agency and the assumption that all households are rational-actors making profit-maximising, informed decisions. However, such emphasis can be misleading. Households are not always well informed and this impairs rationality in decision-making. A number of households in each village have certainly suffered costly losses from participation. The fact that households will accept contract offers that result in adverse outcomes suggests that power relations, misinformation and other structural constraints also influence participation decisions (Barrett et al. 2012). The role of the agent is again crucial here. The agent controls access to the scheme, but also has an incentive to sign up enough households to meet procurement targets and increase his commission payments. Likewise, while the contract firm maintains minimum quality requirements to ensure production standards are met, they are motivated to get as much potato in the ground as possible. Each agent therefore sets out to convince farmers to participate, using group meetings, demonstrations and posters to advertise and convince farmers that the scheme will benefit them. It is inevitable that some households will decide to participate against their own best interests, particularly given that poor farmers are often illiterate or poorly educated. The agents in Pawarwadi and Randullabad are both village members in positions of power who influence the decisions of other farmers. While households can freely enter and exit the scheme, those who are convinced to
participate because of the agent’s influence or due to misinformation or misunderstanding often exit after a season of “costly experimentation” (Barrett et al. 2012, p.719) that may have significant impacts on their future livelihood pathways.

Firm and household decisions to honour the contract, continue participation or exit contract farming

Contract farming in India and other developing countries has significant contract risk (the risk of contract non-compliance) for both firms and households, due to weak institutional settings, agro-ecological volatility and livelihood vulnerabilities (Singh 2002). As a result “both smallholders and firms commonly fail to fulfill the terms of agreed contracts” (Barrett et al. 2012, p.726). This can occur due to deliberate misconduct on the part of either party, or external shocks. Future participation of a household may be affected by a firm deciding not to re-offer a contract, or to move to a different area altogether, or by a household deciding not to accept a future contract offer. Not surprisingly, there was evidence of a high rate of turnover in the domestic firm’s scheme, particularly given the highly variable rainfall conditions experienced in Koregaon taluka in the past five years. Not all households experience participation in the same way however. Evidence from each village suggests that the experience of a particular household in each scheme, and therefore their decision to continue contracting or not, is influenced by livelihood assets and capabilities, and hence their place within the local political economy.

Participating households in each village tend to decide to discontinue contracting if they experience a significant crop loss due to external shocks, and as a result experience an economic loss or become indebted. The particular crop characteristics of chipping potato are important here. Interviewees frequently described the chipping potato crop as a ‘risky’ crop, vulnerable to variable agro-climatic conditions, pests and disease:

“The crop is risky. Disease can strike it quickly. Some farmers have planted seed but because of natural conditions, disease and pests have not got any production out of it” (PW06).

In each village, crop losses, due in particular to drought, have led to a significant number of households discontinuing participation:

“I suffered a loss on the contract crop in 2010 due to drought, so I decided not to continue with the crop” (RN15).

While households may exit the scheme as a result of a poor season, agents may also not re-offer contracts to underperforming households. From the firm’s point of view, there is a balance between retaining farmers to ensure the supply needs of processing factories are met, and shedding underperforming farmers. Farmers who are in debt as a result of a poor season will not be re-offered a
contract, nor will farmers who grossly underperform or engage in frequent side-selling. Agents do, however, tend to be generous in their re-offer of contracts. This is due to the position of the firm in the value chain and its core business. Agents are incentivised to recruit as many farmers as possible as the firm aims to expand the market for chipping potato in order to create a bigger market for its consultancy services.

Contract acceptance decisions by households in future seasons are also affected by the actions of the agent and firm. While there was no evidence of serious contract breaches on the part of the firm in either village, more subtle actions have influenced participation patterns. A common theme from respondents is that the firm has tightened the terms of the contract over recent seasons, increasing costs and burdens on farmers. This included increased quality standards, modifications to the contract price, and increases to the cost of mandatory inputs. Participants commonly complained that costs, particularly inputs, have increased over time without any corresponding increase in the fixed price offered by the firm. Increasing costs have influenced several households to exit the scheme, either forced out by the cost of investment required or choosing to exit as the scheme became less profitable than other activities:

“The costs of the seed, fertiliser and transport have increased” (RN14).

How do livelihood factors influence future contract offer or acceptance decisions? Participating households with constrained access to livelihood assets and capabilities are more vulnerable to the impacts of adverse events, and hence are more likely to decide to exit the scheme if they experience an economic loss. Additionally, these households are therefore more likely to not receive contract renewal offers if the firm is shedding participants in the next season. Alternatively, households with superior access to livelihood assets and capabilities tend to make decisions to continue or exit contract farming for different reasons. These households are more resilient against adverse events, and able to cope better with crop loss or increasing costs. However, such households typically have access to a range of livelihood opportunities and treat contract farming as they would any other investment, exiting the scheme if it does not provide a profitable return. Thus:

“These days it takes the same amount of investment to grow potato than a cash crop like grapefruit, but the potato crop doesn’t give as much profit” (RN16).

This leaves a group of households in the middle who possess ‘average’ access to livelihood assets and capabilities. While still vulnerable to livelihood loss, these households have access to enough livelihood assets and capabilities to successfully grow the contract crop, and to exhibit some resilience against adverse events such as crop loss. At the same time, such households lack the capability to pursue a
diversity of high value livelihood activities. Given their lack of alternative options, these households are less likely to decide to exit the scheme even after experiencing a poor season. It is evident from each village that households in this category will persevere with the contract scheme even if it provides marginal benefits, or a loss in some years, primarily because of the fixed price and access to inputs that the scheme provides, in the context of a myriad of other livelihood uncertainties.

**Contract farming as a middle farmer activity**

The three stages of contract participation decision-making discussed above reveal a common pattern of participation emerging within Pawarwadi and Randullabad. Patterns of contract participation and exclusion have been co-produced in each village by the interaction of the dynamics of the contract scheme, the existing livelihood landscape and the place of each household within the political economy of the village. Specifically, returning to the livelihood groups in each village described in Chapter 4, it is evident that the processes described above mean that participation has coalesced around a group of *middle farmer* households.

The lower group of households in each village are typically not offered a contract by the agent and their lack of livelihood assets and capabilities mean they are unable to participate even if they were to desire. These households are risk-averse and often only engage in subsistence agriculture. In fact most households in this group reported either no knowledge of the contract scheme, or not having been approached by the agent with any information on it. The few households from this group who have participated commonly exit the scheme after experiencing debt or economic loss after a poor season.

Households in the best-off group tend to approach participation with indifference. They may dedicate land to the contract crop from time to time, however will quickly exit if the scheme does not provide a good return on investment. Such households also have access to a diversity of other livelihood options, and are willing to takes risks on potentially more lucrative livelihood opportunities. They often prefer to independently access other high-value agricultural and off-farm opportunities using their own assets and connections, maintaining independence from contractual relations.

Therefore, the operation of the scheme in each village depends upon the participation of a group of middle farmer households. Such households fit the profile that the contracting firm is looking for: they have the right mix of livelihood assets and capabilities to be productive potato growers, while at the same time they lack the ability to independently pursue other high-value agricultural activities, thus rendering them dependent on the scheme. These households are open to new opportunities and are willing to accept contract offers. Their lack of access to other modern or high-value livelihood activities means they are likely to stick with the contract scheme even if it provides only marginal benefits in any one season, provided they are not excluded due to indebtedness.
Livelihood patterns and contract participation in Bhushangad

The previous section outlines a common pattern of contract participation in the two villages located in Koregaon taluka. In Bhushangad, however, patterns of contract participation have emerged in a somewhat different way. Contract farming is still dominated by a group of middle farmer households, largely reflecting the processes described above. However, there are two key differences: participation is more widespread, and a greater diversity of participants is involved, including several lower caste OBC households. To account for these differences, this section applies an evolutionary perspective, arguing that patterns of participation have emerged in each village as a result of the evolution of both the livelihood landscape in each village and the contract scheme that operates there. Specifically, this section adopts two key concepts from evolutionary economic geography (EEG) and the global production network (GPN) approach: path-dependency and embeddedness.

First, EEG theorists emphasise that regional economic change, and therefore patterns of spatially uneven development, should be understood through an evolutionary lens (MacKinnon et al. 2009; Martin & Sunley 2006). In particular, EEG argues that economic geographies evolve in path-dependent ways:

“Theories of path dependence suggest that current phenomena cannot be adequately understood without knowledge of how they have been shaped by past events”
(Mwangi 2006, p.158).

While EEG theorists have principally been concerned with evolutionary processes at the scale of regional economies, the concept of path-dependence can be fruitfully applied to local scale rural livelihood patterns as well. The key point is that livelihood landscapes, and a household’s socio-economic place within them, evolve through the non-linear effects of past events and decisions, and from different starting positions. Further, the dynamics of a particular value chain or contract scheme can also be understood from an evolutionary perspective, influenced by its own history, and also its interaction with the livelihood spaces in which it touches down. Patterns of participation in contract farming are therefore a result of the co-evolution of the contract scheme and the livelihood landscape.

Second, researchers such as MacKinnon (2012) and Oro & Pritchard (2011) have sought to incorporate concepts from EEG, specifically path-dependency, within a GVC/GPN approach. Importantly, GPN researchers have emphasised the relational nature of global value chains, arguing that value chain outcomes are not just a result of the governance structures used by lead firms within vertically aligned chains. Instead, GPN theorists emphasise the embeddedness of all actors within a chain. This acknowledges that different actors, including lead firms and households, are positioned (embedded)
within wider institutional and socio-spatial structures that mediate the ways in which they interact with other actors within a GVC/GPN (MacKinnon 2012). Applying this to the present study, households and the contract scheme in each village are embedded in spatially diverse institutional and socio-political contexts that mediate the evolution of the livelihood landscape and the dynamics of the contract scheme, leading to particular place-based patterns of contract participation.

How do these evolutionary processes influence contract participation in Bhushangad? First, at the village scale, the evolution of household livelihood assets and capabilities has been constrained by a less dynamic local development context. Specifically, the fragmentation of the village into several hamlets has historically constrained the effectiveness of the Gram Panchayat, while the agro-climatic conditions of the area and the isolated and hilly location of the village has hampered the development of a dynamic rural economy. Bhushangad’s geography has also constrained links to regional or urban centres and lucrative off-farm opportunities. Livelihoods in Bhushangad are dominated by agriculture, but given these constraints there is a lack of dynamism and innovation compared to the villages in Koregaon taluka. This has encouraged more households to accept the contract offer given the obvious lack of alternative livelihood options:

“Bhushangad farmers pretty much had no other high value cash crop option before the contract farming came to the village. There were no alternatives. Poor roads and infrastructure, and the distance to good markets were hampering farmers’ fortunes” (BH18).

“There are not any other alternatives to the contracting scheme to try in terms of high value, modern agriculture” (BH02).

Caste and land relations have also evolved differently in Bhushangad. The village has a markedly different caste structure to Pawarwadi and Randullabad, where open Maratha caste households are heavily dominant. Instead, because of settlement patterns around the fort since the 17th century, a greater plurality of castes now live in Bhushangad, including a large population of OBC households. While Maratha castes in Bhushangad are economically dominant, the place-based evolution of landholding patterns means that there are very few landless households in the village and almost all OBC households own some land. This has meant that whereas in Pawarwadi and Randullabad there are no participants from lower castes, in Bhushangad OBC households are not excluded from contract farming. Although dependent on access to other livelihood assets such as irrigation and financial capital, several OBC households have been able to participate in the scheme.

The PepsiCo contract scheme has also evolved in different ways to the domestic firm’s, influencing participation at a regional scale. PepsiCo, a giant transnational corporation, has largely set the rules of
the game for potato contract farming in India. PepsiCo’s corporate culture, embedded in American corporate governance and shareholder value, have influenced how its contract farming schemes interact with locally embedded actors. In particular, PepsiCo’s size and power has allowed it to maintain significant spatial mobility, in effect playing off farmers from different locations against one another. The spatial mobility of the firm gives it power to dictate increasingly unfavourable (for farmers) contract terms. Rural households are rooted in place. PepsiCo, however, maintains geographical flexibility as a key risk reduction strategy. This means PepsiCo can impact contract participation at a regional scale through shifting the geographical area in which it operates. This was evident in the firm’s relocation from Koregaon taluka to Khatav taluka. Prior to 2007, PepsiCo operated its contract scheme in Koregaon taluka, however the scheme eventually collapsed. Contracted farmers experienced significant crop losses, which PepsiCo attributed to problems with fungus and input application. Given the high loan default rate among farmers, the scheme’s partner bank eventually lost confidence. In a process that draws parallels with David Harvey’s (2001) concept of a ‘spatial fix’, PepsiCo abandoned the area, leaving behind indebted farmers. The firm then re-established the scheme in Khatav taluka where the less dynamic local economy meant it could extract more favourable terms from farmers.

PepsiCo’s spatial fix has allowed households in Bhushangad access to the opportunity to contract. At the same time, the firm is able to take advantage of the local development context to capture the participation of small farmers and fulfil its supply needs. At present, production from the scheme in Khatav has exceeded the firm’s requirements, and the agent is no longer recruiting new households. The lack of alternatives available in Bhushangad evidently motivates households to stay with the scheme even if it isn’t providing them with path-changing benefits. Households may just break even or make a loss but decide to participate again next year because of a lack of other options.

**Participation and household scale livelihood evolution**

The evolutionary perspective applied in the section above can be expanded to all three villages to further illustrate the ways in which different households engage with potato contract farming. Patterns of contract participation and exclusion in each village are not just a matter of individual household decision-making; they are strongly mediated by historical patterns of livelihood assets and capabilities. These have evolved in different ways over time, shaped by the political economic context in which households pursue different livelihood pathways. This is not to say that a household is fated to follow a particular livelihood pathway, but rather their future livelihood possibilities are contingent on past events and decisions, and structured by the political economy of place in such a way that some pathways are more likely than others (Martin & Sunley 2006). This view also suggests that some households are more likely to come to participate in the contract scheme than others. Revisiting Table
4.6 from Chapter 4, Table 6.1 outlines how important evolutionary livelihood factors influence how different households will come to engage with potato contract farming in different ways.

Table 6.1: Evolutionary livelihood factors influencing contract scheme participation.

<table>
<thead>
<tr>
<th>Evolutionary livelihood factor</th>
<th>Impact on livelihood asset or capability</th>
<th>Example of impact on contract participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caste status.</td>
<td>Historical influence on all livelihood assets. Lower castes often landless or marginal landowners, poor financial, physical and social capital, constrained access to political power, credit institutions etc.</td>
<td>Lower caste systemic lack of livelihood assets and capabilities exclude them from participation. Lower caste households often more risk averse.</td>
</tr>
<tr>
<td>Land inheritance patterns</td>
<td>Access to land and family labour assets.</td>
<td>Male inheritance patterns constrain participation for next generation through declining farms sizes and fragmentation of land holdings. Lack of family labour leads to non-participation.</td>
</tr>
<tr>
<td>Past investment decisions.</td>
<td>Access to physical and financial assets.</td>
<td>Historic capability or decision to invest in irrigation infrastructure enables participation.</td>
</tr>
<tr>
<td>History of credit relations and indebtedness.</td>
<td>Financial capital and attitude to risk.</td>
<td>Households who have experienced indebtedness in the past are less likely to take on risks of participating.</td>
</tr>
<tr>
<td>History of off-farm income.</td>
<td>Financial capital and social capital.</td>
<td>Household history of off-farm livelihood activities enables participation through capability to invest and openness to innovation. Households with history of access to high-value off-farm income less likely to participate.</td>
</tr>
<tr>
<td>Geographic location of land.</td>
<td>Physical and natural capital.</td>
<td>Evolution of land ownership patterns and location of farm land can highly constrain contract participation due to spatial variation in soil quality, watershed topography and land quality.</td>
</tr>
</tbody>
</table>

Table 6.1 emphasises that at the household scale, historic discrimination, decisions, adaptations and chance events have determined the nature of interaction with contract farming of different households. The influence of the evolutionary factors is best illustrated through household narratives. Box 6.1 presents a series of vignettes outlining the ways in which the evolution of a household’s livelihood assets and capabilities has influenced their interaction with the contract scheme in each village. Three vignettes are provided: one of a participant household, one of a former participant, and one of a non-
participant. These narratives do not represent a generalizable pattern, but rather represent the diverse and highly individualised way in which households’ encounter contract farming.

### Box 6.1: Vignettes of livelihood evolution and contract participation

**Contract participant**
PW3 is the head of a five-person ‘middle farmer’ Maratha household. PW3’s ancestors were not large landowners, and he and his brother jointly inherited 1½ acres from their father. Their land is also very rocky and of poor quality compared to other landowners, and they require lots of fertiliser to get good yield out of their land. PW3’s father participated in low value non-farm work such as labouring and construction. Given their small landholding, PW3 participates in low-value painting work in Mumbai for eight months of the year. Using this income he has been able to educate his sons. His eldest son now works for a car company, while another son has joined the army. Both sons send remittances home. In the last two years, PW3 has been able to install irrigation on his land. PW3 started contracting two years ago. There is no painting work during the Kharif season, so he decided to try contracting. He is a member of the same political party as the agent, and the agent allowed him to initially participate using only 0.75 acres of land. Although apprehensive initially about the contract scheme, he was convinced to join after witnessing other farmers making a profit from the scheme.

**Former participant**
RN14 is head of a three-person ‘best-off’ VJ/NT (tribal) household. The household’s current main source of income is from non-farm activities. Their traditional caste occupation was making wooden utensils, and this was his grandfather’s main livelihood activity. His grandfather was landless. RN14’s father recognised that their traditional caste occupations were not giving them good opportunities in life, and migrated to Mumbai in search of work. He secured a job as a porter in Mumbai, and was able to save enough money to purchase 1½ acres of land. As their economic situation improved, so did their status in society, and caste became less of a problem. His father was also able to afford to educate RN14, who completed his Bachelor of Arts. RN14 found a job as a health assistant in the state government and has been able to increase their landholding to seven acres. RN14 participated in the contract farming scheme for six years. He was happy in the scheme for four years, and he made a good profit. In the last two years, however, costs increased and his profit became marginal. He decided to exit the scheme as the benefits he was earning were not better that what he could earn from other crop options.

**Non participant**
BH9 is head of a six-person ‘middle farmer’ OBC household. BH9’s two sons have secured jobs as painters in the last two years, and send home remittances. These remittances are the household’s main source of income and have significantly improved their livelihood situation. BH9 also participates in farming and milk production. BH9’s grandfather owned 54 acres. BH9 inherited eight acres from his father. The household’s farming activities, and participation in the contract scheme, have been held back by their lack of access to natural resources. Half of the land he inherited is located on the bottom slopes of a hill, and gravel and stone have accumulated in the soil over time, decreasing the fertility of the soil. At the time the contract scheme came to the village, BH9 had no irrigation on his land, and therefore could not participate. The household has been able to install a well in the last two years thanks to their sons’ painting jobs, however as BH9’s sons’ now live out of the village he does not have the family labour required to grow the chipping potato, and cannot afford to pay labour.
Conclusion

In this chapter I have analysed how each potato contract farming scheme ‘touches down’ in the case study villages through the lens of participation. In contrast to economistic frameworks, which focus on transaction costs and seeking to establish general patterns of bias against small farmers in contract farming schemes, I argue that patterns of participation are influenced by a household’s position within the livelihood-informed agrarian structure of each village.

I contend that, firstly, households are motivated to participate in potato contract farming for a number of reasons, including income assurance and access to fertilisers, crop knowledge and credit. Importantly, however, households do not experience participation in the same way. Through an analysis using Barrett et al.’s (2012) four stages of contract participation decision making, I showed how the interaction between the dynamics of the contract scheme and the locally evolved livelihood landscape have influenced patterns of participation in Pawarwadi and Randullabad. Specifically, I have argued that participation in each of these villages has coalesced around a group of middle farmer households, whose livelihood assets and capabilities ‘match’ with the requirements and dynamics of the contract farming schemes. The chapter then further emphasised the variation in participation patterns between villages by arguing that participation patterns in Bhushangad are somewhat different to the other two villages because of the ways in which the livelihood landscape has evolved. These processes have further reinforced the identity of the contract scheme in Pawarwadi and Randullabad as a middle farmer activity, while in Bhushangad different evolutionary processes have allowed for a greater plurality of participation there. An obvious question, then, is what happens to participants in the contract scheme? The next chapter proceeds to answer this question through an analysis of the second important dimension of small farmer engagement with contract farming; that is how does contract farming influence household livelihoods, and how are the benefits of contract farming distributed between different households.
Chapter 7 - Situating the benefits of contract farming in a crowded livelihood landscape

Introduction

In Chapter 6 I argued that a distinct pattern of contract participation has emerged in each village, based around a group of middle farmer households. This chapter adds another layer to the complex interaction between potato contract farming and local livelihood landscapes through an analysis of the distribution of benefits amongst both participants and non-participants. The scale of focus is again the household. I interrogate the influence of potato contract farming on household accumulation in each village. In particular I ask: what benefits can households accrue from the contract scheme in each village? Are these benefits significant to overall village livelihoods? In doing so I problematize the way in which mainstream economistic contract farming studies assess the benefits of contract farming *in situ* to the micro-functioning of schemes, failing to contextualise benefits and costs within agrarian spaces.

As discussed in Chapter 2, most economist studies of contract farming find that contract farming households mostly “enjoy higher levels of [economic] welfare” (Barrett et al. 2012, p.727). However, several recent studies point to the failure of mainstream economics to establish statistically valid causality between observed welfare impacts and contract farming participation. Methodological issues make it difficult to ascribe observed welfare gains to contract participation rather than other unobservable placement and selection effects (Barrett et al. 2012; Wang et al. 2014). Therefore, while it is generally accepted by economists that contract participation leads to improved welfare outcomes, “the degree to which participating smallholders benefit remains somewhat uncertain” (Barrett et al. 2012, p.716). Further, economic studies reveal little about how “various benefits and costs (financial, social and environmental) are allocated among interested parties” (Pritchard & Connell 2011, p.238).

Lacking in the literature is an understanding of the different outcomes for different classes of participants and non-participants within rural communities (Oya 2012). To address this shortcoming, I argue that the distribution of benefits between different participants and non-participants should be understood as a result of the interaction between existing livelihood patterns and contract scheme dynamics. Further, I argue that a comprehensive understanding of the benefits and costs of contract farming must address how contract farming impacts those *outside* the scheme, including non-contracting households, landless households and rural labour, something that is often missing from contract farming debates.

The chapter begins by outlining the ways in which households may benefit from contract farming in each village. My aim is not to quantify the benefits received by each household, as is the focus of the
mainstream economics literature. Rather, I focus on how different households’ themselves perceive the benefits of contract farming. There is evidence from all three villages that participants have realised income benefits from contract farming. In general, these insights support the existing literature that associates participation in contract farming with household welfare gains. I argue, however, that these gains are not evenly distributed between participants. Rather, even within the middle farmer group, a household’s differing access to important livelihood assets and capabilities determines what benefits they can capture. Further, non-participants generally fail to capture any benefits. Finally, I argue that the uneven distribution of benefits between participants is reflected in the general indifference expressed towards the overall impact of potato contract farming in each village. Although contract farming may provide some benefits for individual households, the dynamics of each contract scheme limit the benefits that households can accrue.

**How do households benefit from contract farming?**

The mainstream contract farming literature usually attributes the benefits of contracting for small farmers to improved market access. The argument is that small farmers can use contract schemes to bypass traditional value chains and sell higher value crops into specialised and higher return markets (Bijman 2008; Glover 1984; Wang et al. 2014). This dynamic is certainly evident in each case study village. Fifteen participants and former participants from the sample group across all three villages indicated that they have realised income gains from potato contract farming, while for the year 2013, nine respondents (20% of the sample group) listed contract potato as their household’s most important source of cash income. In several cases, these cash benefits have enabled households to purchase livelihood assets such as motorcycles, housing improvement and education. These households described contract farming as more profitable than traditional farming, and as a result their cash position had improved:

“**Participating in the contract farming scheme has bought new opportunities. It will help me to pursue different things, and also repay loans and pay for my children’s education**” (PW01).

And:

“**My potato production since starting to contract has increased. Because of the contract farming I have more cash available than earlier. Contract farming has replaced staple crops as the cash source**” (BH04).

The existing literature suggests that contract farming can also benefit small farmers via better access to credit, inputs and technical assistance, and that this may be just as important as any cash benefits (Bijman 2008; Wang et al. 2014). In GVC terminology, this represents opportunities for small farmers to pursue product and process upgrading strategies within the potato chip value chain: the contract
scheme gives households in each village the opportunity to improve their crop production and yield, and ‘upgrade’ into growing a higher-value crop. This can improve not only their potato production, but also their farming overall. Again, this was certainly evident in the villages. For example, one household reported yield gains for the next crop planted after the contract potato season, and attributed this to the increased use of fertiliser as required by the contract scheme. Some households such as BH05 have also applied the modern fertilisers that they can access through their participation in the contract scheme to improve the yield of other crops: 30

“Before the arrival of the contract scheme, I only used compost fertiliser. Now I use modern fertilisers, which have become available because of the contract scheme. Because of this, my production and benefit has increased for all my crops, and this is the same for many farmers” (BH05).

Interviewees also identified improved credit access as a benefit of participation. For some of these households, contract farming represents their first experience with capitalised agricultural production. This was particularly evident in Bhushangad, where there was a sense that many participants felt excluded from cash crops and modern agricultural markets until the arrival of the contract scheme:

“Before contracting came to the village, the situation was not good for many households. Contracting has bought many side benefits to the village. It has connected farmers with the modern market in a way they haven’t been connected before” (BH01).

Distribution of benefits between participants

The benefits discussed above are consistent with mainstream economic contract farming studies. However, such studies typically reveal little about how benefits are distributed amongst participants. Profiting from the scheme depends on farmers achieving good production. It follows then that those households that can produce more chipping potato are likely to accrue more benefits from the scheme. Given that “differentiation is a fact of life, often connected to the emergence of contract farming opportunities themselves” (Oya 2012, p.6), even within a middle farmer group of participants some households are likely to be able to produce more potato than others. This then warrants some further questions about the benefits of contract farming in each village: How are benefits distributed between different participants? Do all participating households in the middle farmer group receive similar benefits, or do some gain more than others?

30 In contrast, other studies have pointed to concerns about the environmental impacts of dramatic increases in chemical fertilizer use in contract farming schemes and other forms of corporate agriculture in the Global South, including on soil health (e.g. Singh 2002).
Employing a livelihoods lens, I argue that participating households with better access to key livelihood assets and capabilities are able to produce more potato and extract gains from potato contract farming above and beyond that of other households. In particular, human capital, water assets, land assets, financial capital, labour assets and social capital were found to be important determinants of which households accrue the most benefits. These factors are expanded on below.

**Human capital**

When asked what determines who gets the most out of contract farming, the most common response from interviewees was a set of factors best thought of as human capital. Most households stated that those who work the hardest benefit the most:

“The lack of attention and hard work by some farmers is the main difference between getting more or less profit than others” (RN05).

A common perception was that given that all participants get the same price, and receive the same rainfall, the difference in gains from the scheme depends on how much effort an individual farmer puts into their potato crop. This was the view of each agent, who would often attribute the underproduction or failure of some contract farmers to laziness or lack of entrepreneurship or work ethic. While it is no doubt true that successfully growing chipping potato takes effort and hard work, these qualities are better viewed not as innate or in-built, but rather a function of a household’s livelihood situation and hence their place within the agrarian structure. A number of important factors determine a household’s ability to produce a good yield of quality chipping potato, including education, health, family structure and access to physical assets such as tractors. This includes literacy, given that farmers are provided with written instructions on input application. Crop knowledge and experience were also identified by interviewees as important factors that determined a farmer’s success. Mistakes or crop losses were often attributed to inexperience:

“There sometimes can be a loss to people who contract because mistakes are made in caring for crop. Those with less experience and not willing to work hard will have this problem” (PW02).

**Water assets**

The next significant livelihood factor influencing the distribution of benefits in each village is access to water assets. As discussed in Chapter 4, water assets are unevenly distributed in each village, and this contributes to the difference in gains that different households can accrue from the contract scheme. Households with reliable access to water, through having more wells, drip irrigation or land located within watersheds or in proximity to canals, are able to produce better yields and potato of better
quality. The type of irrigation is particularly important. Households with drip irrigation generally produce a better crop as it allows farmers to regulate both water and fertiliser application:

“One farmer in particular achieved extra yield this season. This is because he planted the potato on fields with drip irrigation. The quality is also better with drip irrigation. Fertiliser can be applied through the drip irrigation” (PW16).

Differences in water assets have been exacerbated by the drought conditions that have struck both Koregaon and Khatav taluka in recent years. Households with superior water access were able to maintain production, while those participants with poor water assets were heavily impacted.

Land assets and financial capital
The common perception among informants was that participants with more land gain more from contract farming. First, those with more land can afford to dedicate more acres to the contract crop, and therefore produce more potato. Second, land quality is not evenly distributed in each village. Households that have been able to secure land in areas of better soil quality, either through inheritance or purchase, have a production advantage over participants with land in rocky or hilly areas of each village. Households that have been able to undertake land improvements through the allocation of financial resources also have a production advantage. Third, as discussed in Chapter 4, land is an important determinant of wealth and access to other livelihood assets in each village. Participants who own more land are typically better off than those with less land, even within the middle farmer group. In short, large landowners will typically have more financial capital to invest in contract potato production:

“Those with more land can usually invest more in fertiliser and production, so they usually get more profit” (RN11).

Large landowners who have been able to use their land assets to accumulate through agriculture or non-farm activities can typically afford better irrigation, extra inputs such as organic fertiliser, and can afford to employ more labour. These assets allow larger landowners to not only produce more contract potatoes, but to also produce potatoes of better quality, reducing their rejection rates.

Labour assets
Closely related to land assets and financial capital, those participants that can afford to employ extra labour to work on the chipping potato crop are likely to gain more from the scheme. Aspects of chipping potato production are labour intensive, particularly sowing, spraying and harvesting. Chipping potato also requires close attention during the growing season, particularly accurate and regular fertiliser application, weeding and pest management. Households that can employ extra labour to help with
these tasks, or households who have access to additional family labour (children, relatives etc.), can better manage crop loss and improve overall yield and quality, leading to better returns:

“(PW02) has benefitted a lot from the scheme, as he could employ a lot of manpower, and get more production out of his crop” (PW01).

The influence of evolutionary livelihood factors on benefit distribution

In the above section, I argue that participants in each village do not benefit equally from the contract scheme. Rather, benefits are distributed according to patterns of access to livelihood assets and capabilities. Chapter 4 demonstrated that the differentiation of households is a function of historical processes that have led to the uneven distribution of livelihood assets and capabilities. As I argued in the previous chapter, understanding the evolution of different households’ livelihoods is important for accounting for why particular households are in a position to accrue more benefits than others. In short, a household’s possession of the important livelihood assets that influence the ability to accrue benefits from the scheme is a function of that household’s livelihood history. The important historical factors influencing a household’s ability to accrue benefits from the scheme are outlined in Table 7.1. These factors were found to be important across all three case study villages. I expand on each factor below, before presenting a selection of vignettes in Box 7.1 that demonstrate how a household’s livelihood evolution has influenced its ability to accrue benefits from potato contract farming.

Table 7.1: Evolutionary livelihood factors influencing distribution of benefits from the contract scheme in each village.

<table>
<thead>
<tr>
<th>Evolutionary livelihood factor</th>
<th>Impact on livelihood asset or capability</th>
<th>Example of impact on distribution of benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past investment choices.</td>
<td>Access to water assets, financial capital and human capital.</td>
<td>Historical capability or decision to invest in irrigation infrastructure enables participants to accrue more benefits. Investment in education increases human capital.</td>
</tr>
<tr>
<td>History of off-farm income.</td>
<td>Human capital, water assets, land assets, financial capital, labour assets.</td>
<td>Households with a history of off-farm livelihood activities tend to have better access to key livelihood assets that allow them to extract more benefits from contract farming.</td>
</tr>
<tr>
<td>Geographical location of land</td>
<td>Water and land assets.</td>
<td>Evolution of land ownership patterns and location of farm land can influence accrual of benefits for participants due to spatial variation in soil quality, watershed topography and land quality.</td>
</tr>
</tbody>
</table>
Accruing benefits – PW2
PW2 has participated in the contract scheme since 2010, growing chipping potato on two acres. PW2’s father established a flour mill in the village 30 years ago as a way to diversify the household’s livelihood activities away from solely agriculture. The mill has been successful, and profits have been invested into agriculture. PW2 inherited 15 acres from his father. He considers his land to be above average quality and more productive than other farms in the village. Over the last ten years, the household has progressively invested in drip irrigation, which now covers all 15 acres. The household employs substantial numbers of seasonal paid labour to work their land. Chipping potato is not the household’s main livelihood strategy, but rather forms part of a diversified livelihood strategy focused on cash crop production. While the contract scheme is not their most important livelihood activity, the household is able to accrue significant benefits from the potato contract scheme. These benefits are invested in expanding their main livelihood activities – sugarcane and ginger production.

Limited impact – PW7
PW7 owns 3.5 acres, which he shares with his brother’s household. Agriculture is the household’s main livelihood activity, however because of their lack of land PW7 supplements their agricultural income by seasonally migrating to Mumbai to paint houses. Although he has a bachelor level education, he has been unable to secure a permanent job outside of agriculture. PW7’s cropping pattern has changed regularly in the last five or so years, dictated by the availability of water. He has managed to invest in 2.5 acres of drip irrigation, allowing him to grow sugarcane in the past, however recent drought conditions has meant he has fallen back on low value coarse grain as his major crop. PW7 joined the contract scheme in 2011, planting the potato crop on 1 acre. PW7 thinks that the potato crop requires a lot of attention and takes away his time from other activities. The household can’t afford to employ more paid labour. He also thinks the crop is fragile and if he didn’t take care he could easily lose 50% of his crop. While the contract crop has provided the household with some income gains, it has not really had a significant impact on the household’s livelihood situation.

Accumulating, but not because of contract potato – RN1
RN1 is a large landowner in Randullabad, with 20 acres in his name. The household is run as a joint household. RN1 has three brothers living in Mumbai who all contribute remittances to the household. RN1 considered his father to be a successful farmer. His father was Sarpanch for a time, and could afford to educate RN1 and his brothers. Their land has three wells on it, and over 10 acres in covered by drip irrigation. His land is located in a fortunate position, as the watershed project in Randullabad has increased the amount of water in his wells, giving him confidence to invest in cash crops. Using his resources, RN1 has invested in tomato, capsicum, pomegranate and white pea production, along with coarse grain crops. RN1 has been involved with potato contracting for eight years, previously with PepsiCo and for the last three years with the domestic firm. The contract potato crop can be his most important crop in the Kharif season; however this depends on the weather conditions from year to year. In recent drought years, RN1 has had enough water resources to maintain chipping potato production. While contract farming has certainly benefitted the household, RN1 thinks it is not having a huge economic impact. Other activities are more important.
Benefits for non-participants

What about the benefits for non-participant households? The focus for assessments of contract farming schemes is commonly the contract participant. However, as pointed out by Singh (Singh 2002; 2005; 2011) contract farming studies need to take into account non-participant households. To this end, researchers from agrarian political economy perspectives have highlighted potential negative impacts of contract farming on non-participants, including higher prices for food or farm inputs, over-exploitation of natural resources, impacts on local food security and increasing gender inequalities within households (Bijman 2008; Little & Watts 1994; Porter & Phillips-Howard 1997).

I interrogate the outcomes of contract farming for non-participants through the lens of rural labour. I argue that labour is a key site of potential interaction between contract farming and non-participant households in each village, particularly landless and marginal landowning households. Although many middle farmer households in each case study village still rely on family labour, hiring in of at least some wage labour is common across most landowning households. Given the labour requirements of the chipping potato crop, the contract scheme is a potential source of wage labour for marginal landowning and landless households. The potential benefits of contract farming for rural labour fits into the narrative of rural development promoted by agencies such as the World Bank, which argues that successful farmers who accumulate through contract farming will provide labour opportunities for less successful farmers. Despite this rhetoric, the actual implications of contract farming for labouring households have received scant attention in mainstream studies of contract farming (Little 1994; Porter & Phillips-Howard 1997). Contract farming may generate demand for agricultural labour; however this may not necessarily translate to better wages or conditions. For instance, in a study of a tenant farming scheme in Kenya, Little (1994) found that the scheme provided few benefits for non-tenant labourers, while Singh (2003, p.2) argues that in India, “workers employed by contract producers tend to experience poor terms and conditions, especially women workers.”

In contrast to the enthusiasm for labour benefits promoted by the World Bank and others, I found that non-participants, in particular landless households, generally reported that the contract scheme was having a minor impact on their livelihoods in terms of employment opportunities. One lower caste household commented that while the contract scheme may provide some extra opportunities for labouring work, daily wage rates were not increasing and this limited the impact of the scheme.

“Due to the contract scheme, we have received some work. However, the numbers of days’ work available is not increasing that much and we have little power to bargain for better wages” (RN23).
One landless household was positive about the potential livelihood opportunities that contract farming may offer them in the future:

“Contract farming potatoes has created new economic opportunities for farmers. Farmers can offer labourers more work and more money due to potato crop. If the contract farming becomes more popular, there will be more labour opportunities for myself and my son” (PW15).

However, the same respondent then went on to describe how contract farming was not really part of their household’s livelihood strategy, preferring instead to pursue non-farm labouring opportunities:

“I would give preference to painting work even if potato work was available because there is more money in painting. I can earn at least rs400/day painting, and can take a rest when I need to. The painting jobs are mostly in summer and winter. My wife is able to go into the fields and labour if she needs. So I keep myself free for painting opportunities despite the stress and risk” (PW15).

PW15’s comments demonstrate the truncation of any benefits from the contract scheme for many landless or marginal landowning households. They also shed more light on the apparent contradiction discussed in Chapter 4 between the views of landowners and landless labourers in all three villages on the question of agricultural labour availability. On the one hand, a number of participating households in each village expressed frustration with their inability to access enough labour to grow a successful contract potato crop, particularly given the labour intense nature of sowing, input application and harvesting:

“Potato farming is labour intensive. This is another barrier to profiting or participating. There is a shortage of labour availability, and many farmers can’t afford to employ labour” (BH01).

On the other hand, landless households commonly responded that the contract scheme does not provide them with significant extra labouring opportunities. Several factors seem to explain this. First, the chipping potato crop, while labour intensive, is a short duration crop (around 80 days). Therefore the scheme only provides short-term seasonal labour. Labour requirements are focused around the peak times of sowing and harvest, but this may amount to only 10 days out of the growing season. Second, many participants lack the capacity to afford extra labour, and prefer to exploit their own or family labour, or participate in reciprocal labour sharing arrangements with neighbouring farmers. Third, potato labouring is arduous and unattractive work for those seeking wage labour opportunities, particularly younger generations, and does not pay well compared to more attractive off-farm opportunities:
“My son’s potato work involves transporting bags of potato from the field to trucks. This got him about 15 days’ work. The men apply fertiliser, cut seeds and they used to do the harvest. Now they carry the produce bags. Women do the planting. He is paid Rs 4 for transporting one bag. He managed to transport 400 bags in 15 days. This equalled getting paid Rs 110/day. This isn’t reliable or continuous work because the contract crop is a short rotation crop” (RN23).

Are the benefits of contract farming significant to household livelihoods?
So far, this chapter has established that participants in each village do receive some livelihood benefits from contract farming. The benefits for non-participants, on the other hand, are evidently minor at best. Importantly, though, I argue that the benefits for participants are unevenly distributed. Within the middle farmer group of participating households, it is generally those that are already in a better-off position that can accrue the most benefits. However, how significant are these benefits to participants’ livelihoods? Is contract farming a significant livelihood activity within each village, or is it no more important than other livelihood strategies in the context of ongoing rural livelihood diversification (Ellis 1998)? The question of the livelihood significance of contract farming is not often addressed in the existing contract farming literature (Oya 2012). Economic studies tend to focus on the benefits of contract farming without placing those benefits in the context of household livelihood patterns. This is problematic, as contracting households in each village typically pursue a diversity of agricultural and non-agricultural livelihood strategies in the context of their position within the agrarian structure. Importantly, contract farming households in each village are not just contract farmers, nor do all contract farming households interact with the scheme in the same way. I address these questions by outlining household attitudes to the overall impacts of contract farming that were revealed in interviews in each village. Here, I make two main arguments. First, contract farming is not that significant to overall household livelihoods in each village, although there is greater enthusiasm for the benefits of contract farming in Bhushangad; and second, the livelihood impacts of contract farming in each village are mediated by the power relationships embedded within each contract scheme.

While some participants in each village have received significant benefits from potato contract farming, and most participants have benefitted in some way, the dominant narrative across each village was what is best termed as indifference to the impacts of the contract scheme. This is reflected in the common view in each village that households that participate in potato contract farming are not necessarily doing better than those who don’t participate:

“The benefits earned by contract farmers are not significantly above the benefits that can be earned from other options available to farmers” (RN14).
This is not to deny the benefits that contract farming can provide households. For instance, fifteen contract farmers in across all villages reported production increases and improvements in income compared to traditional staple crops. For example:

“My potato production since starting to contract has increased. Because of the contract farming I also have more cash available than earlier. Contract farming has replaced traditional crops as the cash source” (BH04).

The scheme offers other benefits such as input access and exposure to modern farming practices that encourages middle farmer households to participate. At a household scale, contract farming may be attractive to middle farmer households who lack livelihood assets and capabilities to diversify into higher value activities. These insights suggest that the benefits of contract farming are context dependent and contingent on local livelihood patterns, emphasised in particular by the evidently greater enthusiasm for the benefits of contract farming in Bhushangad (Box 7.2), where participation rates are also higher. This finding is consistent with existing literature that argues that contract farming may offer relatively more significant benefits to households in areas with poorly developed markets or constrained livelihood opportunities. As Wang et al. (2014, p.6) note (rather crudely) in a review of the empirical literature on contract farming, “it is possible that [contract farming] is [more] effective at improving farmers’ income in more primitive rural areas.” For households in Bhushangad, contract farming represents one of few opportunities for households to engage with modern agricultural markets, particularly for historically worse-off landowning OBC households, compared to the two villages in Koregaon taluka where livelihoods are more diversified and many households are already engaged in other cash crop markets or high value off-farm activities. Even so, while potato contract farming may provide some significant individual livelihood benefits in Bhushangad, its overall impact remains uncertain:

“There is no doubt that contract farming is good because of the fixed price. However, I wouldn’t say the village is ahead of others because of contract farming” (BH03).
Improving livelihood assets but limited livelihood opportunities – BH01
BH01 is head of a middle-farming household that owns six acres. Agriculture is now the household’s primary livelihood activity, however in the past it was not possible for BH01 to earn a decent living from agriculture due to lack of water availability. Before the canal was constructed in Bhushangad five years ago, BH01’s land was entirely rain-fed, and as Khatav taluka is drought prone, agriculture was difficult. Their house and land has also only been connected to electricity since 2003. Because of this, BH01 migrated to Mumbai 15 years ago and found work as a house painter. Since the construction of the canal, agriculture has become more fruitful in the village, and BH01 was able to return to farming. He used his savings from painting to invest in tube well irrigation that covers all six acres, and has been able to plant sugarcane in some seasons. However, BH01 finds it difficult to access information about other cash crops, and says that government extension services are sorely missing in the village. For this reason, he joined the contract farming scheme four years ago. Contract farming has been very important for BH01’s household as it has provided them with knowledge and training about another crop and offered the household an alternative livelihood option. BH01 commented that he is ‘very happy’ with the contract scheme.

Opportunity to upgrade for OBC households – BH13
BH13 is head of an OBC household that has inherited 5.5 acres of land. The household’s fortunes have improved in recent years, thanks in part to the contract scheme. In the past, the household’s livelihood depended largely on wage labouring on other farms. Two years ago, BH13 signed up to the contract farming scheme. PepsiCo assisted him with subsidies to install irrigation on three acres. BH13 is very happy with the inputs and knowledge that the scheme provides. Before, the household couldn’t really afford to plant any cash crops; coarse grains and other subsistence crops dominated their cropping pattern. The contract scheme has changed that, and BH13 estimated that his household’s income has doubled over the last two years. The household has used this income to further their children’s education. One son also recently secured work in a gold shop in Bangalore, and soon he will send home remittances. BH13 expects that he will continue to participate in the contract scheme and hopes their livelihoods will continue to improve because of it.

What mediates the evidently ambiguous impacts of potato contract farming on household livelihoods? Box 7.3 and 7.4 below highlight the reasons interviewees gave for their indifference towards the overall impacts of the scheme in each village. Box 7.3 narrates insights from participants or former participants who generally acknowledged they had received some benefits from the scheme but that it hadn’t made a significant impact on theirs or other’s livelihoods. Box 7.4 narrates the views of non-participants who have not observed any significant livelihood impacts of contract farming in their village.
Box 7.3: Reasons for indifference towards contract farming (participants and former participants). Source: collated from interview data across all three villages.

- Contract farming has only improved our livelihoods a little bit.
- There aren’t any alternatives, so we may as well try this.
- The costs of participating are going up but the fixed price isn’t.
- Prices for other crops have gone up, but some farmers are locked into growing potato.
- I value the certainty of the fixed price, but my whole success can’t be attributed to contract farming. There are other more important factors at play.
- It’s too labour intensive (both in terms of the labour resources required and the attention each participant must give to the crop).
- It’s bought a bit of cash flow to my house, but people have lost a lot of money in the scheme, particularly due to drought in the last few years.
- The benefits and impact is decreasing over time.
- The agents give bad service – they are just another middleman.
- There’s the risk of going into debt.
- It’s expensive and capital intensive, and now there is this no objection certificate rule making it harder to get credit.
- It reduces my flexibility and innovation. I just tried it because everyone else was, but now I’m going to grow cash crops on my own. The contracting is only good for those who don’t have good levels of capital or credit access.
- The contract firm has too much power; we need more options to sell to.
- You have to borrow too much and risk that the monsoon won’t fail to put you into debt. The problem is you always have to achieve enough production to repay the loan, otherwise there is no benefit.
- It’s hard to sell rejected potatoes.
- The crop is too fragile and risky.

Box 7.4: Reasons for indifference towards contract farming (non-participants). Source: collated from interview data across all three villages.

- Those that didn’t sign contract were better off this year due to the drought.
- You need too much capital to get into contracting.
- There are no benefits for landless or non-participants.
- It’s not worth stopping other activities to try this.
- The crop rots too quickly.
- There is too much risk in terms of weather and debt.
- It only benefits those with the right assets.
- You have to take a loan to participate.
- It is too labour intensive.
- The rejection of potatoes is a big problem.
- Other crops and activities have more influence on people’s fortunes.
- The chipping potato is not good for self-consumption.
- There are no real benefits for labourers.
It is evident from these grounded insights that the limited overall livelihood impact of potato contract farming in each village is heavily mediated by several important dynamics inherent to the operation of each contract scheme. In particular, power relations, quality standards, crop characteristics and credit/debt relations limit the benefits for the bulk of participants, while consolidating the power of the contracting firm. These dynamics are expanded upon below.

**Power relationships**

Mainstream economic studies often fail to consider the impacts of power relations inherent to contract arrangements. In contrast, power is central to agrarian political economy accounts of contract farming (Little & Watts 1994; Oya 2012; Singh 2002). Much of the focus in both the agrarian political economy and mainstream economics literature has been on the *monopsony* power of firms in contract farming schemes. A monopsony arises when there are many sellers of a commodity, but only a single buyer. Contract farming schemes often produce monopsonistic situations, where the firm is a single buyer contracting with many sellers (small farmers) (Sivramkrishna & Jyotishi 2008). In fact, NIE approaches suggest that, in general, contract farming schemes are most stable when firms enjoy monopsony power over farmers who have little marketing or income generation alternatives (Baumann 2000; Grosh 1994; Prowse 2012; Zhang 2012). Monopsony power allows firms to enforce the terms of the contract and control side-selling (Grosh 1994; Key & Runsten 1999; Oya 2012).

Different literatures have interpreted the impact of monopsony power on contract farming outcomes in different ways (from a mainstream economics perspective see: Minten et al. (2009); Prowse (2012); from agrarian political economy perspectives see: Oya (2012); Singh (2002); Zhang (2012)). Typical of the agrarian political economy perspective is the observation by White (1997, p.105) that contract farming institutionalises monopsony relations between firm and farmer, and allows the firm to “accumulate on the basis of value added generated by small producers, but not captured by them due to price manipulation.” For agrarian political economists then, monopsony power diminishes the potential positive impacts of contract farming for small farmers. The unequal power relations between firm and farmer are said to result in the exploitation of small farmers by contract firms, where farmers become little more than hired labour working on their own land (Oya 2012; Watts 1994b). As Oya (2012) points out, the desirability of monopsony power on the part of the firm also reveals a tension in the promotion of contract farming as a rural development model by development agencies such as the World Bank. On the one hand, engagement with free markets is promoted as the best vehicle for rural poverty alleviation. However, as an ‘institutional innovation’, contract farming appears to work best for firms in situations of little or no market competition.
Insights from my study support a more nuanced view of power relations. Their effects in each village depended on two key dynamics. First, each firm gains monopsony power through the lack of alternative markets for chipping potato. As Sivaramkrishna & Jyotishi (2008) note, if there are existing spot markets for the contract crop, farmers will be able to break the monopsony of the contract firm through side-selling and therefore have greater bargaining power over contract prices. The chipping potato varieties grown in my villages, however, lack a well-developed spot market; indeed this is a significant motivation for each firm to implement a contract farming model. While there are some traders who buy and sell chipping potato varieties in the APMC, these markets are limited and generally difficult to access for most small farmers. Some chipping potato material is also sold in local wet markets, however chipping potato is generally considered unsuitable as a subsistence or food crop in each village. Both firms are therefore able to exercise a degree of monopsony power over contract participants, pushing down the contract price and mediating the impact on household livelihoods:

“The company does not match the market price because it knows the chipping crop is not as valued for food and will also rot quickly, therefore farmers have no other choice but to sell to the company” (PW06).

Given the lack of alternative markets for the chipping potato crop, contract farmers have little bargaining power over price. They must either take the firm’s contract price or not participate:

“Farmers have little negotiating power to determine the terms of the contract and their participation. Even if the market price is higher, the contracted farmers will still get the fixed price or not much more” (BH16).

The monopsony power of each contract firm is enhanced by its spatial mobility. While farmers are fixed in space – their land, livelihoods and households are relatively immobile – each firm maintains a spatial mobility that allows it to seek out spatial fixes to resolve any crises, including unruly or agitating small farmers:

“Farmers lack any power to influence the prices they are given because the company has a lot of location options of where they can procure potato or recruit farmers. If the farmers agitate for higher prices the company will just go elsewhere” (RN06).

Second, however, each firm’s monopsony power is mediated somewhat by the local livelihood landscape, because the bargaining power of farmers in part depends on the availability of alternative livelihood sources (Oya 2012). Livelihood alternatives, whether other cash crops or non-farm opportunities, reduce the monopsony power of firms as farmers are not fully dependent on contract farming (De Schutter 2011a; Key & Runsten 1999; Oya 2012). These arguments are particularly relevant in the Indian context where contract farming operates in the context of typically diverse cropping
patterns and agricultural livelihoods (Sivamkrishna & Jyotishi 2008). The agricultural economy of Maharashtra is diverse, characterised by a mix of cash crops and cereal crops, rather than dominated by any single crop. Rural households in Satara district are also increasingly diversifying into non-farm activities, as demonstrated in Chapter 4. Although each firm holds a clear balance of power in contract bargaining, livelihood diversity places checks on firm monopsony power. In Pawarwadi and Randullabad, where agricultural livelihoods are more diversified, the domestic firm has lesser monopsony power. Agents in these villages must actively recruit farmers, convincing them of the benefits of participating over other crop options, or target households with less diverse livelihood activities. The fact that, after agitation from farmers, the domestic firm dropped their requirement that participants must sell all potato produce back to the firm demonstrates the increased bargaining power of farmers here, even in the context of thin spot markets for chipping potato. A different power dynamic exists in Bhushangad, where PepsiCo has captured a greater proportion of households. As discussed in Chapter 4, Bhushangad’s agricultural economy is less dynamic than the villages in Koregaon taluka, increasing the power of PepsiCo:

“PepsiCo will go into areas where potato isn’t grown. Their rationale is that they will be able to set up contracts with lower prices. They have a competitive imperative to keep contract prices low. In these areas without other cash crop options, farmers will also be more dependent on the contract scheme” (CO01).

In Bhushangad, the lack of alternative livelihood options increases PepsiCo’s monopsony power, evidenced in an ability to modify the terms of the contract in the firm’s favour over time (discussed in more detail below). Households in Bhushangad are aware of this unequal power relationship:

“There should be a competitor to PepsiCo in the village so that farmers have more options and PepsiCo don’t have the power just to do what they want. This would mean that the farmers would not just have to accept what PepsiCo says and wants as the final word. Still, there isn’t a real sense of exploitation of farmers by PepsiCo” (BH13).

What impact do these nuanced power relations have on the ability of participants to benefit from each scheme? Most importantly, the power of each firm allows it to drive down prices, limiting the benefits for participants. PepsiCo, for example, will offer a contract price that is generally around Rs 2 less than the current market price, knowing that most farmers will find it difficult to access traders who will buy chipping potato at a higher price. The weak position of farmers in the value chain limits the amount of value that farmers can capture. While households lack the power to improve their position, one key
informant suggested that the sustainability of the contract scheme depends on these unequal power relations:

“All over India the trend is that farmers are not getting justified prices. Processing companies and other companies are just too powerful. However, if the potato price that farmers got went up dramatically, this current contract farming system would collapse” (PW16).

At the same time, however, it would be difficult to claim that each scheme is exploitative. Many households have the capacity to access viable alternatives that can act as a safety net or exit strategy against the power of the contract firm, mediating the impact of monopsony power. Particularly in Pawarwadi and Randullabad, contract farming is just one among many livelihood options for households. The crux, however, is that not all households have equal access to diverse livelihood opportunities, and those with less opportunities (the middle farmers) are more likely to sign up to the contract scheme. For these households, the unequal power relations discussed here clearly limit their ability to accrue significant benefits from the scheme.

Quality standards, ‘agribusiness normalisation’ and diminishing returns to farmers
The unequal power relationship between firm and farmer, and the inherent risks involved in chipping potato production, means that the benefits to participants in each village have commonly declined over time:

“I contract farmed potatoes for six years. The first four years were very profitable. In the last two years the investment costs increased and my profit became low so I stopped contracting.” (RN14).

Declining contract terms for smallholders over time have been documented elsewhere (Bijman 2008). In India, this phenomenon of diminishing returns to contract farmers has been termed ‘agribusiness normalisation’ (Kusterer 1982; Poulton et al. 2010; Singh 2002). This refers to situations where contracting firms initially offer generous and flexible contract terms and other incentives, and then, over time, once the firm recruits a critical mass of growers and is assured of a procurement base, tightens the terms of the contract and returns to ‘normal’ business operations “more determined by marketing requirements and profitability criteria” (Kusterer 1982, p.18). According to Singh (2002, p.1632) “agribusiness normalization processes mean lower produce prices and higher input costs for the farmers which leads to discontent among them.” Likewise, Sharma (2014) reported that contracting firms involved in potato production in Punjab reduced their extension services to contracted farmers over time.

In the present study, a process of agribusiness normalisation was particularly evident in Bhushangad. As discussed in Chapter 5, contract firms mandate minimum size and quality standards to ensure the
procured material meets the requirements of potato chip processing factories. The firm then reserves the right to reject any potato that does not meet these standards. Initially, PepsiCo did not enforce any quality standards in Bhushangad. For the first two or three years of the scheme, the firm accepted all potato material from contracted farmers. PepsiCo used this flexible approach to establish a foothold in the area and incentivise households to take up contracts. However, the firm has progressively tightened minimum size and quality standards in recent years, increasing rejection rates for many participants:

“In the first two years the contract scheme was better as PepsiCo did not reject any potatoes. But now they have started to reject undersized and poor quality potatoes” (BH04).

From PepsiCo’s point of view, progressively tightening the conditions of the contract follows a particular economic logic. The firm’s aim is to establish a procurement base of chipping potato that can meet the demands of its processing factory. To do this, the firm initially needs to recruit as many farmers as possible. In Khatav taluka, PepsiCo encouraged wide uptake of the contract crop by offering attractive contract conditions to farmers, eventually leading to a situation of over-supply. Once the procurement base had been established, the firm introduced stricter enforcement of quality standards to manage the transaction costs of dealing with unsuitable potato material. The firm can also use enforcement of standards to manage procurement levels to avoid over-supply of potato material.

The domestic firm also enforces strict quality standards in Randullabad and Pawarwadi. The process for determining how much potato will be rejected is opaque and prone to potential abuse, illustrative of unequal power relationships. The rejection rate of a farmer’s harvest is primarily determined by the agent, who samples each participant’s crop for sugar content, oversees the sorting of undersized potatoes, and makes judgements on the proportion of a farmer’s harvest that is damaged. The crop is sorted and weighed on farm, but is also subject to additional sorting and weighing at the processing factory. Rejected potato is left on the field, returned to the farmer, or purchased at a significantly lower price. This process is characterised by information asymmetries that favour the firm. Indeed, farmers are often surprised at the amount of produce being rejected, but have little recourse to challenge the firm’s decisions:

“Last year I produced 28 tonnes of potato. I filled the transport truck that PepsiCo provided with good quality potato, there weren’t any green potatoes. The potato was sent to Kolkata, and when I got the receipt for payment, PepsiCo said there was green potato in my harvest worth Rs 55,000. For this green potato, they would only give me Rs 1.75/kg. This meant that I lost around Rs 60,000” (BH03).

Rejection of undersized or poor quality potatoes places a serious burden on small farmers in all three villages. The domestic firm claims that on average about 5-15% of potato collected from a village is
rejected, and Bhushangad farmers reported similar rejection rates. However, rejection rates can vary significantly from season to season; respondents in Randullabad reported that some farmers suffered rejection rates of up to 50% of their harvest in drought or heavy monsoon seasons due to poor production or rotting. Households are left to find alternative markets for the rejected potato. Given that spot markets for chipping potato varieties are thin, rejected produce is often sold for throwaway rates of Rs 2/kg or less. Given the fragile nature of the crop and lack of storage facilities, farmers struggle to find an alternate buyer for the rejected potato before it rots:

“We had problems getting rid of the rejected potatoes and had to sell them for Rs 2/kg. Chipping potato is not as durable as table potato and it rots easily, so if farmers can’t get it straight to market they will make a loss” (BH15).

There is, of course, a political economy to the rejection of potato. Participants with better irrigation infrastructure, access to additional inputs or farmers who have accumulated more farming knowledge are likely to face fewer problems with rejected produce. Further, those farmers with more extensive social networks, well established links to APMC traders and access to transport will be in a better position to deal with rejected produce and maintain their profits from the scheme. For the majority of participants, however, rejection of potato significantly impacts on their accrual of benefits even if they are able to find alternative buyers. High rejection rates not only threaten the profits households can make from the scheme, but also impact the ability of participants to repay the contract loan:

“I ended up selling my entire crop to the APMC, because I was afraid of making a loss and being in debt. If I had sold my crop to the company I would have made a loss due to the sorting and rejecting of small potatoes. I felt I had no option but to side sell. I paid the company back Rs 45,000 on my loan from my profits, but had to default on the remaining Rs 10,000 of the loan” (RN16).

Agribusiness normalisation in each scheme means that contract farmers have faced a ‘cost-price’ squeeze that diminishes their ability to accumulate from the scheme:

“Fertiliser and labour costs have dramatically increased since the contract scheme started” (BH07).

This is an important point. While the provision of hitherto hard to access inputs may initially assist small farmers to “overcome stagnation in smallholder production” (Carney 1988, p.334), participants are encouraged by the agent and firm to apply extra fertiliser to maximise production and yield. Given the high reliance on chemical inputs in each scheme, there is the potential over time that contract farmers become locked into a ‘fertiliser treadmill’ (Clark & York 2008; Horlings & Marsden 2011). Contract farmers in each village are already dependent on applying more and more fertiliser to maintain potato production and maximise profit, with crop failure and indebtedness a constant threat. Farmers have also
come to depend on the firm and agent for inputs and the credit used to purchase them. In Bhushangad, for instance, the agent’s office is stacked high with bags of fertiliser, and the solution for most agronomic problems in the scheme appears to be to apply more fertiliser or pesticide. In this way, supplying inputs also becomes a key site of surplus extraction from the scheme by firms and agents. The central role of chemical inputs in the scheme also has implications for soil health and environmental outcomes for participants and neighbouring farmers, in the context of an Indian agricultural industry increasingly reliant on fossil fuel based fertilisers and government fertiliser subsidies (Longo & York 2008; Pritchard et al. 2014).

**Crop characteristics**

The physical characteristics of chipping potato limit the benefits of contract farming for participants in each village. Chipping potato is a particularly fragile and temperamental crop compared to table potato and other traditionally grown crops. Yield quantity and quality are sensitive to both over and under-supply of water and the crop itself is highly perishable and vulnerable to disease and pests. For participants, these crop characteristics make chipping potato a risky crop to grow. Although they receive an assured price for their chipping potato, production is never guaranteed. Contract participants are vulnerable to external forces that can result in crop failure and underproduction, particularly as the contract transfers production risks onto farmers (Oya 2012; Singh 2002):

“It needs intensive care and lots of inputs, but because it is also a vulnerable and temperamental crop profit is never guaranteed” (PW12).

The chipping potato crop is particularly vulnerable to variable climatic conditions. Importantly, much of this climate related risk is a function of trying to grow a commercial potato crop in the Kharif season. Chipping potato is very sensitive to changes in water availability. Too much rain leads to rot and spread of fungal diseases, while too little rain leads to poor growth. In northern India, where chipping potato is grown as a Rabi crop and entirely irrigation-fed, production tends to be more reliable. Farmers growing in the Kharif season are at the mercy of the monsoon. Optimal production depends on having enough rain to recharge wells, while not flooding the crop. The agent from the PepsiCo scheme acknowledged the inherently risky nature of growing chipping potato in the Kharif season:

“Planting the crop in the Kharif season is inherently risky, however prices are higher. There are big climate risks in this season. In the Rabi season the quality is more dependable as the crop is controlled by irrigation” (BH20).

While some farmers can successfully manage these risks, growing chipping potato in the Kharif season can be a gamble, and exposes farmers to some endemic crop and climate risks. For firms, a key function
of the contract arrangement is to transfer these climate risks to farmers. Each firm manages \textit{procurement} risks by maintaining spatial mobility and spreading its production sites over multiple geographical areas; for example the domestic firm also operates potato contract farming schemes in the Kharif season in Karnataka, while too much rainfall in other areas of Satara district was part of the reason PepsiCo establish contracting operations in Khattav taluka. Individual farmers, fixed in space to their physical land assets, are left at the mercy of endemic crop and climate risks.

These climate-related risks have had a significant impact on the benefits households can accrue from the scheme in each village. In recent years unreliable monsoon seasons have led to drought conditions, impacting production and the returns households can realise:

“\textit{Three years ago when the contract crop first arrived here there was good profit for farmers, but only a few farmers participated as not many had information or were informed about the scheme. Since more farmers have found out about the scheme, there have been some bad rainfall years, so the profit from the contracting has not been as much. If the rain returns to good levels, then farmers will profit more}” (PW11).

“\textit{Last year, those that did not participate did better because of the big losses in the potato crop due to the drought}” (BH10).

The perishable nature of the crop reinforces the power dynamics within the scheme. Participants must depend on the agent to arrange timely transportation, or risk loss from rotting. Most farmers lack the facilities to store potato, which limits their ability to hedge for higher prices later in the season. The crop characteristics of chipping potato controls side selling and effectively disciplines farmers to honour the contract, increasing the monopsony power of the company.

\textbf{Credit and debt}

Perhaps the most important dynamic of the contract scheme that mediates the livelihood benefits of participants is the credit and debt. As Gerber (2014, p.729) argues, rural credit/debt relations in the Global South are complex: credit/debt is “at times a survival requirement, a source of formidable potential or the cause of great burden.” The ambivalent position of credit in rural livelihoods is certainly evident in India. On the one hand, demand for credit is growing in rural India, and connecting poor rural households with formal credit markets is considered a rural development priority (Acharya 2006; P. Basu & Srivastava 2005; Guérin et al. 2011; Shah et al. 2007). As Acharya (2006, p.1) notes, development institutions such as the World Bank and Asian Development Bank consider credit access “a prerequisite for improving rural livelihoods and accelerating rural development.” The important livelihood role of credit is evident in each case study village. As demonstrated in Chapter 4, most households consider
credit access crucial to livelihood expansion and success. For households in the lower livelihood group, lack of access to credit is a significant barrier to stepping up or stepping out. As noted in Chapter 5, access to formal credit is a primary motivation for households to participate in the contract scheme.

The flip side of increasing access to credit has been a growing crisis of rural indebtedness (Mishra 2010; Mohanty 2005; Taylor 2011). Agrarian political economists have argued that rather than simply providing a source of finance to asset-poor farmers, the expansion of rural credit/debt relations in rural India frequently reflects existing power relations and ongoing processes of rural differentiation (Taylor 2011). In a study of micro-financing in Andhra Pradesh, Taylor (2011, p.485) argues that “while some segments of agrarian society were able to use access to finance to support consumption or diversify livelihoods, others have become caught in escalating debt traps.” In the context of the spread of modern value chains and contract farming, credit/debt relations have become a key way in which surplus value is appropriated away from contract farming communities by both banks and contracting firms (McMichael 2013b). For McMichael and others, debt is the key vehicle through which agri-business firms capitalise peasant households and foster market discipline in small farmers through new social relations of production based on debt (Gerber 2014; Oya 2012). This critical view argues that agri-business capital uses contract farming schemes to access subsidized credit in order to finance capital accumulation through debt relations with small farmers:

“[Contract farming] represents both source and outlet for capital as credit, and a complex through which agribusiness and retailing can, respectively, source agro-industrial products and generate value through the debt relation” (McMichael 2013b, p.674).

How do credit/debt relations influence outcomes for contract farming households in the present study? The insights from each case study village support a middle ground between the two positions outlined above. The operation of each contract scheme pivots on relationships of credit and debt, and these relationships are important to understanding how different households benefit from contract farming. Credit enables participation for many households, allowing them to access the livelihood benefits that contract farming can provide. Some households, particularly in Bhushangad, consider credit access itself as a significant benefit:

“The scheme has also bought [formal] credit access to the village, something that wasn’t available to a lot of farmers before” (BH08).
However, the credit relations also expose contract participants to a combination of debt and production risks that can significantly disrupt their livelihood pathways, diminish the positive livelihood impacts of contract farming, and in the worst case lead to debt spirals:

“I haven’t come across any contract farmers that I think are successful. Some farmers had to repay the contract loan on their own and they suffered big losses” (RN13).

“Before I planted the contract crop I spoke to around 15 farmers who said that they had to pay from their own pockets to repay the contract loan. Farmers have also had problems with rejected potatoes rotting after sending their produce to the company. This results in a loss for farmers and they have no recourse for compensation” (RN22).

Prior to joining the contract scheme, many middle farmer households in each village had limited engagement with formal credit markets (banks). Informal credit (through private moneylenders) is common in the village, and a farmer’s credit cooperative also operates. Although usurious moneylending is still a significant issue, local credit institutions have evolved in place-dependent ways; for example farmers may negotiate to repay debts in kind with crops, or roll over cooperative loans into the next season. Formal credit institutions are not so generous in their repayment terms however. Contract farmers, therefore, must enter a new kind of ‘value relation’ that disciplines farmers to adopt a productivist (capitalist) mindset in order to avoid indebtedness (McMichael 2013b). Once a household takes the contract loan, it enters a new set of social relations of production and faces new pressures on farming as a livelihood activity. Households must prioritise production and profit, rather than other livelihood goals in order to repay their loan:

“If you don’t achieve enough production to repay the loan, then you don’t get any benefit” (BH15).

The credit tie-in also exposes households to uneven power relations with financial institutions. Here, the company still receives its potato, the bank its profit, but because of the credit/debt relation the household receives nothing for their labour and land:

“In the last year I contracted, no profit was deposited into my bank. The bank told me that I had no profit and that I had only earned enough to settle the loan” (RN15).

These pressures have come to bear on participants in each scheme in uneven ways. The combination of production risk and credit relations particularly affects those households with poorer access to livelihood assets and capabilities. Given the temperamental nature of chipping potato and the drought prone climate, crop loss is a constant threat to contract farmers, exposing hitherto under-capitalised farmers
to indebtedness and potential loss of autonomy over their land (for example having to grow more cash crops instead of subsistence crops to repay debts, or having to sell land to repay debts):

“Getting a loan is not a problem, however repaying it can be” (PW07).

As discussed above, drought conditions in recent years have led to crop losses for contract farmers. Seven households from my cohort have experienced what they described as significant crop losses on the contract crop in the last five years. Four households without adequate financial reserves or alternative income sources have been saddled with significant debts from these losses, limiting their future livelihood options. In one case, RN16 was forced to side sell his entire contract crop to the open market (where there is not a well-developed market for chipping potato varieties), as drought conditions meant his crop was undersized and would have been rejected by the firm. He was able to pay back Rs 45,000 but had to default on the remaining Rs 10,000 of his loan (about AU$200). Debt such as this from the contract scheme precludes further participation. Households must meet their loan repayments before they can participate in the contract scheme again. If a household is still in debt from last season then they cannot get another loan for the upcoming potato season.

**Conclusion**

This chapter makes three important contributions to understanding the complex and contingent interaction of contract farming and household livelihoods in each case study village. First, it is evident that participants in each village are gaining livelihood benefits from contract farming. These benefits should not be dismissed, and have allowed some households to invest in livelihood assets and improve their material well-being. For non-participants, though, potato contract farming offers minimal livelihood benefits in the form of labour opportunities, given the short rotation of the potato crop and preference of farmers to exploit their own family labour or rely on informal labour-sharing arrangements. Second, although participants in each village do benefit from contract farming, I have argued that contract farmers do not benefit in equal ways: the gains from contract farming are clearly unevenly distributed within the group of middle farmer participants. The important point is that participating households with better access to important livelihood assets and capabilities – typically larger landowners with more extensive irrigation assets and more financial capital – are able to accrue more benefits from the scheme. Third, however, I argue that despite these varying individual benefits, the overall impact of contract farming on household livelihoods is dampened by the way in which the dynamics of each scheme interact with existing livelihood patterns. This is reflected in the indifference most interview respondents expressed towards contract farming. This pattern is slightly different in Bhushangad where less dynamic and less diverse livelihood patterns have resulted in increased enthusiasm for the impacts of the contract scheme there. Most importantly, however, even in
Bhushangad, the dynamics of the contract scheme, including power relations, quality standards, crop characteristics and credit/debt relations, constrain the benefits that participants can accrue.

The key insight of the evidence presented in this and earlier chapters is that potato contract farming in each village is not providing the quantum of livelihood gains for households that the dominant policy narrative suggests. It provides some benefits to households, however because of the way in which livelihoods and the dynamics of the contract scheme intersect in each village, accruing significant benefits from the scheme for most households is difficult. Given the ambiguous importance of contract farming in each village – benefits for individual households can vary greatly even from season to season - participation in each scheme is evidently fluid. Households come and go from the scheme, whether by choice or squeezed out due to debt. A small number of households, typically those with additional livelihood resources, can manage increasing costs and power relations, accruing useful benefits and maintaining their place within the scheme. Other households have exited the scheme on their own terms, and may choose to contract again if the terms improve, or they judge the climate conditions to be favourable. For other less well-off households, however, the dynamics discussed in this chapter has left them in debt, significantly impacting their present and future livelihood possibilities. In all these processes, the power of each firm is maintained. Turnover of participants in the scheme does not affect each firm’s ability to procure potato material given the spatial mobility that each firm maintains, procuring potato from many different geographical areas.

While the benefits of contract farming for most households are constrained, Chapter 6 demonstrated that households still participate in the scheme, whether for a lack of better alternatives, as part of livelihood diversification strategies, or because of a desire to improve and upgrade their agricultural skills and access to inputs. Contract farming therefore is still significant to the livelihood pathways of individual households and patterns of differentiation in each village because of the way in which it captures middle farmer households, particularly in the context of the power and credit/debt relations identified above. The next and penultimate chapter links these insights to the livelihood pathways discussed in Chapter 4 in order to understand what contract farming means for accumulation, differentiation and future livelihood pathways for different livelihood groups, connecting these insights to a broader project in the literature to understand future patterns of agrarian change in rural India.
Chapter 8 - Contract farming, livelihood pathways and agrarian change in Satara district

Introduction

In this chapter, I connect the empirical insights from the case study to broader understandings of contract farming, differentiation and agrarian change. This requires re-engaging with the literature reviewed in Chapter 2. The research question posed at the beginning of this thesis asked ‘how is potato contract farming incorporated into rural spaces in India, and what does this mean for patterns of advantage and disadvantage?’ The previous chapters have shown how in each village the potato contract farming scheme is incorporated by households into their livelihood pursuits in contingent and place-dependent ways. This chapter takes on the second part of the research question. It analyses what this place-based incorporation means for understanding future livelihood pathways and agrarian change in Satara district. I first elaborate on two key arguments that I have made in previous chapters; that potato contract farming in each case study is a middle farmer activity, and that the benefits of contract farming are unevenly distributed between middle farmer participants. I then use Dorward et al.’s (2009) livelihood pathways framework to make a critical third key argument; that potato contract farming is not a viable pathway to accumulation for small farmers in any of the three case study villages. The final section of the chapter builds on these insights to argue that contract farming in Satara district is reproducing an agrarian structure characterised by petty commodity producers, unable to accumulate through farming, while sites of accumulation and differentiation have largely shifted outside of agriculture into the non-farm economy.

Potato contract farming as a middle farmer activity

Two key arguments have emerged from the empirical insights of the previous chapters. The first is that potato contract farming is a middle farmer activity in each case study village. This is worth elaborating further upon. As argued in Chapter 2 and 3, much of the debate in the mainstream literature, both in India and more broadly, pivots on the existence or not of a bias against small farmers in contract farming. Reflecting on the ‘bias debate’, the insights of this thesis call for a more flexible approach than this binary suggests. The mainstream economics literature frequently contrasts an undifferentiated mass of ‘smallholders’, who presumably make up the bulk of the population, with ‘large-scale producers’, usually distinguished somewhat arbitrarily by average landholding size (e.g. Bijman 2008; Key & Runsten 1999). Similarly, the welfare impacts of contract farming are almost exclusively analysed as a comparison between the incomes of contract farmers vs. non-contract farmers. This ignores the inherent heterogeneity and differentiation between small farming households and contract participants, who differ in their use of hired labour, their farming assets, their degree of commercialisation, their
engagement with the non-farm economy, their gender composition etc., and who are also enmeshed in power relations of varying degree with their neighbouring households (Oya 2012; White 1997). Miyata et al.’s (2009) work demonstrates the difficulties in maintaining a small and large farm dichotomy. They argue that a contract farming scheme in China does not exhibit bias against small farmers; however, they also concede that even large farms in their study site are relatively small. A more critical question, then, would have been to interrogate the uneven distribution of participation and benefits within this small farming community. The inadequacy of a binary of small vs. large farms in debates about contract participation is made plain in the case study villages of my study, where an appreciation of evolutionary livelihood patterns reveals a numerically dominant and diverse group of middle farmer households. Theoretically, these could all be considered small farmers, but they differ greatly in the ways in which they engage with contract farming. A more meaningful and grounded approach to analysing participation in contract farming than average farm size is accounting for the interaction of different locally relevant livelihoods groups with contract farming. Household interaction with contract farming therefore will reflect ‘already existing’ and context-specific processes of socio-economic differentiation (Oya 2012; Smalley 2013).

In this vein, a number of studies of contract farming from a critical perspective have linked these activities with emerging groups of ‘progressive’ middle and upper farmers in rural areas. It is argued that these households are able to capture the lion’s share of benefits and increase their advantage over others (Baumann 2000; Korovkin 1992; Little & Watts 1994; Pritchard & Connell 2011; Singh 2002). This dynamic may accelerate differentiation in contracting communities by facilitating the emergence of a capitalist class of small farmers from already wealthy households (Korovkin 1992). Many of these studies question the rural development outcomes of contract farming given that the intended beneficiaries of development policy, smaller farmers and poorer households, tend to be excluded from contracts. Little (1994), in a study of a contract farming scheme attached to an irrigation project in Kenya, found that the scheme was dominated by the upper strata of rural households. 70 per cent of contract growers came from the richest 20 per cent of local households, with the remaining 30 per cent from middle-income households. Likewise, Freguin-Gresh et al. (2012), in a study of contract farming in fresh fruit and vegetables in South Africa, found that contracting mostly involved already well-off households. In a review of contract farming in Africa, Smalley (2013, p.52) concludes that contract farming appears “to present opportunities for local elite capture”, which is also supported by Baumann (2000). In the Indian context, similar patterns have been reported. Pritchard & Connell (2011, p.248) found that a chilli contract farming scheme in South India selected participants from “so-called progressive farming elements” who leveraged their class position to extract advantages from the scheme over other

31 However, the authors still persist with this dichotomy.
households. Even researchers from a mainstream economics tradition, although frequently subscribing to a ‘win-win’ interpretation of contract farming, have also noted that contract farmers tend to be already wealthier households who have access to superior livelihood assets (Bellemare 2012).

The dynamic interaction between potato contract farming and household livelihoods observed in the present study, however, suggests that contract farming in Satara district is following a different pattern. The different findings in Satara district reinforce the diverse and place-specific nature of contract farming and the importance of accounting for local livelihood contexts. Within the group of participating middle farmers in each village there is considerable diversity. Participating households certainly do not represent a unified group of emerging capitalist farmers, nor are they all drawn from the wealthiest households in each village. Middle farmers in Satara district are more likely to rely on agriculture as a main livelihood activity, and will therefore dedicate themselves to potato production. Many middle farmer households do hire in labour, however family labour is important and typically used for the contract scheme. Although contract participants are not trapped in the scheme in any formal sense, participation rates are maintained by the inability of many middle farmer households to pursue other ‘upgraded’ livelihood alternatives. Importantly, as will be discussed below, the elite or progressive households in the best-off group are not focused on accumulation in agriculture, but rather on more lucrative non-farm activities and investments. Therefore there is no clear sense of elite capture of the contract scheme in each village. Rather, participation consists of a plurality of middle farmer households who engage with the contract scheme according to their differing access to livelihood assets and capabilities.

Focus groups held in each village with key informants confirmed the middle farmer nature of the schemes. Each focus group considered that potato contract farming has attracted middle farmer households because of the way in which the scheme intersects with livelihood patterns common to this group of households. Middle farmer households are not abjectly poor. They typically own a reasonable amount of land, they can access livelihood assets such as irrigation and they typically have extensive farming experience. Firms target these households because of the nature of contract potato production; they have enough land, irrigation and farming capabilities to successfully grow chipping potato. However they also lack access to further livelihood assets and capabilities such as institutional credit, financial capital and modern inputs that would allow them to independently pursue ‘modern’ agriculture:

“They (middle farmers) face challenges around a lack of capital availability to invest in inputs and technology. They need to rely on credit and going into debt. They use a lot of self-labour and family labour, and concentrate most of their livelihood efforts on farming, so there are no distractions for them in their farming” (BH group meeting).
The second key argument I make is that the benefits from contract farming are unevenly distributed between participants, further emphasising the heterogeneity of the middle farmer group. Chapter 7 demonstrated that participating households in each case study village do obtain some meaningful benefits from contract farming from season to season. As discussed in previous chapters, this is consistent with a large body of micro-economic research that suggests that contracting households can obtain welfare (income) benefits from contract farming compared to non-contract growers. Less attention, however, has been paid to the distribution of these benefits between different contracting households. I argue that participants accrue benefits depending on their access to livelihood assets and capabilities and their position within the agrarian structure. Relatively few existing studies have addressed this point. Smalley (2013) argues that benefits accrued by participants in contract farming schemes are often highly skewed, and that these often widen over time, reflecting pre-existing differentiation. In his Kenyan case study, Little (1994) noted that over time income distribution between contract growers became ‘bipolar’. The author attributed these differences primarily to plot size. These patterns will be place-specific, influenced by evolving livelihood patterns and class structures. Chapter 7 demonstrated that households benefitting more from potato contract farming in Satara district tend to have greater access to key livelihood assets and capabilities, including irrigation and non-farm income.

**Contract farming, accumulation and livelihood pathways in Satara district**

What is the significance of these place-specific patterns of participation and distribution of benefits for future patterns of rural development in each village? As Oya (2012) notes, there is scarce evidence of how significant contract farming will be for future livelihood trajectories, and how contract farming may shape future patterns of differentiation and agrarian change in the Global South. These questions are particularly relevant for the Indian context, where contract farming is both a relatively new phenomenon and a focus of rural development policy. Will significant numbers of agrarian capitalists emerge from the ranks of contract farmers, deepening rural class differentiation and driving capitalist development in the countryside (Korovkin 1992)? Will contract farming in Satara district lead to the emergence of a dynamic agrarian capitalism in the classical sense of Marx and Lenin, driven by an emerging accumulating class of middle farmers who eventually become capitalist farmers (‘accumulation from below’) and the proletarianisation of less successful peasants? Or will contract farming and other globalised corporate-driven models of agriculture, through their ability to appropriate or subsume the production process, lead to exploitation of an underclass of ‘disguised proletarians’, cultivating company crops on their own land (Little & Watts 1994; McMichael 2013b)? Does contract farming represent a viable ‘smallholder path to development’ such as that espoused by the World Bank? Or does the way in which contract farming intersects with each case study village support new understandings of the agrarian question in rural India, based on new contradictions between
international circuits of capital and local classes of labour (Bernstein 2009; 2010)? Are there more important sources of differentiation in each village? This section will begin to unravel these complex questions by returning to the livelihood pathways framework discussed in Chapter 4. By fleshing out how potato contract farming influences the livelihood pathways of different livelihood groups, we can begin to build a picture of the relationship between contract farming, accumulation, differentiation and agrarian change in each village.

The place to start is with the middle farmer group of households who dominate contract participation. Figure 8.1 combines the detailed livelihood analysis of Chapter 4 with the insights of Chapter 6 and 7 to illustrate how contract farming intersects with middle farmer livelihood pathways of participants and former participants across all three villages.32 Beginning at the top of Figure 8.1, ten middle farmer households categorised as ‘stepping out’ in Chapter 4 have participated in the scheme. Nine of these households have continued to step out after participating in contract farming, however eight of these consider contract farming as insignificant to their overall livelihood pathway. These households have invested in contract farming as profit opportunists, using their livelihood assets and capabilities to accrue some material benefits. However, their livelihood pathways are focused on attempting to accumulate in non-farm activities, some more successfully than others. Three of these households are no longer participating, having decided that the investment is no longer worth it, while another household continues to participate only because of the household’s close relationship with the agent, even though its livelihood strategies are increasingly urban-based. Only one household in this group considered contract farming as significant to their livelihood strategies, having invested income from the scheme in his sons’ education. The tenth household in this group has been put into debt thanks to the contract scheme. This households’ pathway was therefore categorised as ‘going backwards’.

32 Households were categorised as either stepping out, stepping up, hanging in, or going backwards as a result of the contract scheme through careful analysis of the livelihood narratives collected in interviews, as well as data from the basic livelihood surveys which asked households to record major changes in income and livelihood activities over a period of ten years. So, for example, households who had been put into debt by the contract scheme and reported a decline in income were classified as ‘going backwards’, while households who had used contract income to invest in education or non-farm activities were classified as ‘stepping out’, as well as households who continued to step out, but for whom contract income was insignificant. Figure 8.1 does not attempt to assign causality to the contract scheme: clearly, other livelihood activities, decisions, and external events have also impacted a household’s livelihood pathway over this time period. Rather, Figure 8.1 seeks to represent the significance of contract farming to a household’s livelihood pathway.
Figure 8.1: Interaction of middle farmer livelihood pathways and contract farming.
Source: author’s own work.

1 S = significant, I = insignificant
Seven households categorised as ‘stepping up’ have participated in the scheme. These households represent potential emerging capitalist farmers, possessing enough farm assets and capabilities to focus on accumulating primarily through agriculture. One household considers contract farming to be insignificant to their livelihoods. This household is a large landholder, and other cash crops such as sugarcane provide a better income than chipping potato. Five households consider contract farming as significant to their accumulation strategies. They have used profits from chipping potato to reinvest in expanded production. These households have used their superior endowment of livelihood assets and capabilities, including access to non-farm capital, to accrue more benefits from contract farming than other participants. However, none of these households are accumulating solely through agriculture or contract farming; each household is engaged in the non-farm economy in order to supplement their agricultural income. Two of these households are located in Bhushangad, where contract farming takes on more significance for those attempting to accumulate through agriculture, given the lack of other opportunities there. Contract farming has disrupted the livelihood pathway of the seventh household in this group, who was put into debt after a bad season. This household’s experience with contract farming has resulted in them ‘going backwards’, although the household possesses enough assets to avoid dropping out onto a lower livelihood pathway.

This leaves a group of twelve middle farmer households that were categorised as ‘hanging in’ before joining the contract scheme. For the majority of this group, contract farming has not been a successful accumulation strategy. Six households have continued to be constrained to hanging in pathways despite their participation in contract farming. While these households have enough land and irrigation to participate, they lack the ability to accrue meaningful benefits from the scheme because of their lack of further farm and other livelihood assets. All of these households are vulnerable to external shocks such as crop failure and struggle to negotiate the quality standards and power relations of contract farming. Two of these households are no longer participating in the scheme, while the others persist with participation mainly due to a lack of other opportunities. A further two households (both from Bhushangad) have experienced ‘going backwards’ thanks to the contract scheme. Both of these households were put into debt by the scheme. On the other hand, contract farming has helped four households categorised as hanging in to shift to a more dynamic livelihood pathway. Three households have used the contract scheme to move into stepping up strategies. Their livelihoods have improved markedly in recent years relative to struggling to achieve simple reproduction in the past. The inputs and credit access that the contract scheme facilitates has allowed these households to participate in highly capitalised agriculture for the first time, and they are now attempting to ‘step up’. Two of these are OBC households from Bhushangad, and have managed to use contract farming to improve their agricultural livelihoods, using the scheme to access modern fertiliser for the first time. One of these households was
able to build a well with the income from contract farming, enabling further accumulation through agriculture. Both households now have agricultural livelihoods on par with some open caste middle farmers considered to be stepping up. One household from Pawarwadi has used income from the contract farming scheme to advance its stepping out strategies. This household has used contract income to invest in higher education for their sons, who have now secured non-farm employment in the service sector and contribute remittances back to the household.

Figure 8.1 underlines a third key argument of this chapter; potato contract farming is not a significant source of capital accumulation in each village, even for those households accruing more benefits than others. Contract farming provides important material benefits from season to season, and may allow some households to make livelihood gains. However, for the majority of middle farmer participants, the power dynamics of each scheme – quality standards, the characteristics of the chipping potato crop, and the credit-debt and power relations between firm and farmers – suppress the contribution that contract farming can make to stepping up and accumulating capital within agriculture (De Schutter 2011b; Oya 2012). It is unlikely that, as it currently operates, potato contract farming on its own will lead to the emergence of a class of small-scale capitalist farmers through dynamic processes of differentiation and ‘accumulation from below’ (Bernstein 2010; Cousins 2013; c.f. Korovkin 1992). At best, contract farming in each village reinforces the livelihood pathways of a small number of already better-off middle farmer households who were already stepping up or out, and who incorporate contract farming opportunistically into their accumulation strategies (White 1997). Contract farming has also enabled two lower caste households in Bhushangad to significantly improve their livelihoods. At worst, however, contract farming sends middle farmer households backwards through processes of indebtedness bought on by creeping quality standards, unequal power relations between firm and farmer, and crop failures. For the remaining middle farmer participants, contract farming simply reproduces their livelihood trajectory of hanging in. These households receive some benefits from contract farming, but this does not represent a path-shifting opportunity.

These insights highlight the importance of situating contract farming within broader livelihood contexts. Two arguments are relevant here. First, in terms of broader debates about the future of smallholder farmers under contemporary capitalism, contract farming has “constituted a fertile field for several battles of ideas” that may inflate its actual significance as a production system in the Global South (Oya 2012, p.27). The institution of contract farming has been the focus of substantial inquiry from mainstream economists and critical agrarian studies scholars, while also attracting the attention of development agencies and governments. However, there is a lack of systematic evidence of the actual extent and significance of contract farming as a dominant production system in the Global South (Oya
Oya argues that in the African context, the focus on contract farming from an ideological viewpoint outweighs its actual impact in the context of African agriculture and livelihoods. He points to evidence that suggests contract farming is declining as a production method in some African countries, while even in Kenya, the epicentre of smallholder contract farming in Africa and the subject of multiple contract farming studies, large-scale estate production dominates production in most crops, with contract farming having a significant presence in a few specialised horticulture crops. Similarly, in India there is a lack of empirical evidence of the actual extent of contract farming. It is very difficult to assess the significance of contract farming as a production system given the lack of data about the number of contract schemes and participants, or the volume and value of crops produced under contract. Even so, contract farming has captured the imagination of economists, governments and development institutions as a solution to India’s agrarian crisis, while also provoking outcry from critical scholars and activists who view it as a pervasive tool of agri-business capital to exploit Indian farmers. This is not to argue that contract farming is not an important phenomenon in Indian agriculture. Agri-business firms are certainly introducing contract farming in a number of crops and contexts, and contract farming seems likely to spread in India given the restrictions on corporate, or ‘captive’, farming (Chakraborty 2009; Singh 2002). Indian development agencies and politicians evidently view contract farming as a non-equity mode of capitalist agriculture, as “an acceptable compromise between the requirements of agricultural modernisation and capitalist development and the political clout of smallholder farmers” (Oya 2012, p.10). The implications of contract farming for livelihoods and agrarian formations must therefore be taken seriously. However, without systematic data, it is difficult to place claims about contract farming in the context of broader patterns of regional and national agricultural development and trends. It may be the case that contract farming remains a minor feature of the agricultural and rural livelihood landscape at a national scale in India.

Second, while the broad-scale significance of contract farming remains uncertain, most case studies of contract farming in India fail to position it in the context of local rural livelihood patterns, and therefore do not provide a full account of the implications of contract farming for agrarian change. This perpetuates an idealised vision of small farmers as only small farmers, or contract farmers as only contract farmers, and leads to assessments of contract farming that simplifies the livelihood strategies of households as a choice between contract or non-contract cultivation. Such an approach clearly ignores the inherent diversity of livelihoods in rural India and the Global South more broadly, including the increasing importance of non-farm livelihoods, a point that will be expanded on below (Rigg 2006). In the present study, the importance of contextualising interpretations of contract farming within local livelihood patterns is evident in the way that potato contract farming is positioned within broader village-scale livelihood patterns. As Figure 8.2 emphasises, when assessed within the totality of a
crowded and diverse rural livelihood landscape, potato contract farming in Satara district appears as just one among many livelihood activities pursued by different livelihood groups, and not particularly significant at a village-scale.

Figure 8.2 shows that contract farming is irrelevant to the livelihood pathways of households in the lower group, for whom the benefits from the scheme are minimal. Most are excluded from participation given their lack of key livelihood assets and capabilities. Chapter 7 reported little evidence of substantial labour benefits for non-participants in the lower group. This is an important point, as labour is often placed at the centre of the potential poverty reduction benefits of contract or out-grower schemes and corporate investment in agriculture more generally (Little 1994; Li 2011; World Bank 2011). Although chipping potato production can be labour intensive at certain points of the production cycle compared to traditional crops, the short duration of the crop limits the long-term labour benefits for local landless households compared to other labour-intensive contract crops such as tomato (Singh 2002). Moreover, middle farmer participants often cannot afford to take on more labour anyhow, preferring to redeploy their own family labour towards potato production, or rely on cheaper itinerant labour from other regions and states. In any event, the drudgery involved in agricultural labouring and stagnant wage rates encourage landless or marginal landowning households to seek labouring opportunities elsewhere in the non-farm economy.

Evidently then, for households in the lower group the contract scheme has little impact on their livelihood pathways, offering no opportunity to step up or step out, but rather reinforcing their position of social and economic disadvantage. The best-off group of households tends to largely ignore the contract scheme. A small number of households in this group have opportunistically dedicated land to the contract crop from time to time, often using contract farming as a location for investment of capital accumulated in the non-farm economy. However, contract farming tends to not provide a lucrative return on investment compared to other cash crops or non-farm opportunities. In general, best-off households investing in agriculture prefer to independently access high-value cash crop opportunities using their own assets and connections. Some have even ignored the contract scheme to grow chipping potato independently, preferring to maintain freedom from contractual relations that may reduce their ability to innovate. Above all, however, best-off households are primarily focused on the non-farm economy, and as a result contract farming has little impact or relevance for their livelihood pathways.
Figure 8.2: Contract farming’s place with a crowded livelihood landscape. Source: author’s own work.
The livelihood insignificance of potato contract farming in this case study is evident in the contract participation rates in each village. In fact, in Pawarwadi and Randullabad, the proportion of households participating in the contract scheme is only 9% and 13% respectively. As discussed in Chapter 7, a less diverse livelihood landscape in Bhushangad has led to higher rates of participation, although this still represents only 20% of households. This is a key point. Participation rates at the village level are rarely documented in the existing literature. There is a tendency to fetishize the contract scheme without assessing its livelihood significance within the context that it operates. While participation rates in contract farming in potato or other commodities may be higher in different livelihood contexts, in this case it is clear that contract farming does not dominate livelihood strategies at a village scale. This reflects the way that different households can engage with the scheme depending on their particular livelihood circumstance, situated within the broader structures of the livelihood landscapes of the three villages. It also reinforces the need for a case study approach to tease out these place-based particularities. The minor role of contract farming in village-scale livelihood trajectories was emphasised by a number of key informants and individual households. The following statement from a key informant in Randullabad is typical of this dominant view:

“It cannot be claimed that the potato contract farming has helped this village in a visible way. There are many other crops and factors that are just as or more important in the village to improving the situation of households” (RN09).

Perhaps most revealing is the way that the CEO of the domestic firm implicitly acknowledged the limited impact of potato contract farming in Pawarwadi and Randullabad, while being careful to promote the non-economic benefits of the firm’s contract scheme:

“At the end of the day, potato is a small crop in terms of area planted, and a small part of rural livelihoods. However, I do think that the villages where contracting is operating are becoming more informed, more knowledgeable and more connected to modern agriculture” (CO01).

**Contract farming and rural development: ‘win-win’ or ‘win-lose’ for rural households in Satara district?**

In light of the patterns identified above, how might we locate potato contract farming in Satara district within broader theories of agrarian change? As Oya (2012, p.9) argues, debates about the role of contract farming in rural development “cannot be dissociated from the debate on the role of smallholders in development.” Taking this a step further, these debates also pivot on the role of agriculture in rural development. This section interrogates the relevance of two common approaches in
the literature for contract farming in Satara district that tend to essentialise contract farming as either ‘win-win’ or ‘win-lose’ for agribusiness and rural households.

Deconstructing the ‘win-win’ approach to contract farming

The micro-economic literature that promotes the positive impacts of contract farming generally subscribes to a ‘pro-agriculture’ view that prioritises finding a role for small scale farming in the development of rural capitalism and hence rural development (Birner & Resnick 2010; Chakraborty 2009; Wiggins et al. 2010; World Bank 2007). This view, which has dominated the policy thinking of the World Bank and other major institutions in recent decades, holds that agriculture-focused development is particularly effective in alleviating rural poverty, and the best way to achieve this is to encourage a dynamic, productive and profitable small scale (capitalist) agriculture sector in the Global South. Arguments in favour of a smallholder dominated agricultural sector frequently rest on the assertion of an ‘inverse relationship’ in agriculture whereby small farms can outperform larger farms (in terms of productive efficiency) (Wiggins et al. 2010). As discussed in Chapter 2, one explanation for this diseconomy of scale in agriculture is the differing labour regimes purported to be used by small and large farms. The argument is that whereas large farms primarily use paid labour and therefore incur supervision and transaction costs, small farms primarily use household labour, which is flexible, self-supervising and self-motivated. Small farms can therefore apply more labour per unit of land (through processes of ‘self-exploitation’), and achieve greater yields. Small farms are also said to be more adept at exploiting local conditions through multi-cropping and various cropping/livestock combinations, leading to higher returns per hectare (Ellis 1993). This inverse relationship is central to Chayanovian explanations for the persistence of peasant farming within a broader capitalist economy (Brookfield 2008; Kay 2009). As Wiggins et al. (2010) and the World Bank (2007) note, however, in the context of modernising supply chains and high-value horticulture, the scale advantage of small farms may no longer hold as production comes to depend more on external inputs, rather than labour inputs, and modern agribusiness demands more exacting quality standards for which smallholders do not enjoy any scale advantages.33 The challenge for incorporating smallholders is therefore to develop policies to address the market failures and transaction costs said to face smallholders to ‘level the playing field’ and unlock the potential of smallholders as emerging capitalist producers (Birner & Resnick 2010). For those subscribing to this approach, the agrarian question is therefore one of capital and is to be answered through a smallholder path to development, but one that is neo-classical in nature, rather than neo-populist (Kay 2009; Akram-Lodhi 2008). The World Bank and others promote a commercially oriented

33 Akram-Lodhi (2008) argues that the World Bank appears to ‘disavow’ the inverse relationship in its flagship 2008 World Development Report, but that it seems conflicted between a pro-smallholder discourse, and a neo-classical pro-agribusiness model of agrarian transition in the Global South of ‘get big or get out’ (see also Oya 2009).
entrepreneurial vision of smallholder farming, involving emerging capitalist farmers engaging with competitive free markets, and supporting less efficient or non-entrepreneurial rural households to exit agriculture. As Li (2009) argues, this narrative places faith in a linear model of agrarian transition such as occurred in Europe, and particularly Britain, and North America in the eighteenth and nineteenth centuries. Such a narrative of linear transition is based in the ontology of modernisation theory and ideas of a path-dependent transition from agrarian to industrialised and urbanised economies (Akram-Lodhi 2009). This necessarily involves the accumulation of livelihood resources by successful farmers, including the transfer of “land to the most productive users and to facilitate participation in the rural non-farm sector and migration out of agriculture” (World Bank 2007, p.9).\(^\text{34}\)

Contract farming fits nicely into this narrative as an institutional solution, and is a policy feature of the World Bank’s 2008 World Development Report. Evidence of efficiency and economic welfare gains from contract farmers has led to the promotion of contract farming in India and elsewhere as a “preferred institutional device to make the smallholder path to development viable in contemporary developing countries in the context of globalisation” (Oya 2012, p.9). However, the widespread lack of accumulation by potato contract farmers reported in the present study challenges the overly optimistic view of contract farming that is promoted by agricultural economists and development agencies. This chapter argues that by focusing on the micro-functioning of the institution of contract farming (based in theoretical assumptions about rational economic actors, economic bargaining and transaction costs), rather than its place within broader agrarian spaces, mainstream approaches ignore the place-based livelihood manifestations of contract farming. As a result, the dominant debate around contract farming is reduced to concerns about ‘corporate social responsibility’ or getting the institutions right to avoid problems, rather any serious consideration of the significance of contract farming for rural differentiation and agrarian transformation. As Oya (2009, p.598) argues, while there are examples of contract farming success stories for small farmers, the ‘win-win’ approach tends “to neglect, silence, or misrepresent power struggles and unequal and conflictual relations, which are pervasive among farmers, between farmers and their labourers, between farmers and traders, and among so many participants in global value chains, and clearly intrinsic to the structure of relations of production and surplus extraction in contemporary capitalism.”

The insights of this study suggest that a micro-economic framework that may find potato contract farmers enjoy welfare gains that are in excess of non-contract farmers would reveal little about how different households can or do incorporate contract farming into their livelihood pathways, nor how the power of the contract firms minimise the relative significance of contract farming as a source of

\(^{34}\) The World Bank also maintains a place for market-based land reform in situations of underutilized larges estates, albeit with concerns about the competitiveness of land reform beneficiaries (p. 9).
accumulation. The livelihood pathways approach employed in this thesis provides a much more nuanced and grounded interpretation of the role of contract farming in rural livelihoods that emphasises spatial and temporal diversity, and grounds contract farming in the messy realities of everyday politics and livelihoods, including existing patterns of social and economic differentiation. This approach reveals that in Satara district, while potato contract farming provides some important material livelihood benefits, it does not represent a ‘win-win’ solution for households. These insights call into question the ‘excessive optimism’ placed in linking rural households (typically understood as being small farming households) to markets through the adoption of global value chains as a development strategy (Neilson & Shonk 2014).

In Satara district, a livelihoods-based approach suggests that the primary beneficiary of contract farming in each village will inevitably be the firm. This is as much the result of processes associated with corporate capture of value within modern value chains as the way in which contract farming insinuates itself into local livelihood landscapes. As Singh (2002, p.1636) argues, given the way in which contract farming links smallholders to uneven processes of value creation within value chains, “firms are the only beneficiaries of surplus generation through value addition which they do not share with farmers” (see also White 1997). In the present study, a back-of-the-envelope calculation by the CEO of the domestic firm of the value captured by contract farmers in Koregaon taluka estimated that for every 18g packet of chips sold for Rs 5, a contract grower receives only Rs 0.43 (or 8.6%). Further, within global value chain development nomenclature, contract farming sits uneasily with the concept of upgrading. The UN Special Rapporteur on the right to food, Olivier De Schutter (2011b, p.15), while committing to a market-led path to agricultural development, argues:

“Contract farming rarely encourages farmers to climb up the value chain and move into the packaging, processing or marketing of their produce. The purpose of contract farming is to organize a division of labour between the seller and the buyer in which the seller is confined to the production of raw commodities. In addition, all the strategic decisions — about what to grow and how to grow and about which markets to target — are with the buyer. The producer is merely the executor. Finally, in contract farming, the interests of the two parties differ: while both have an obvious interest in the success of the arrangement, the terms of the contract will be more or less favourable to each, at the expense of the other.”

De Schutter’s arguments apply to potato contract farming in Satara. While contract farming may enable some households to increase potato yield or access the higher value chipping potato crop (‘process’ and ‘product’ upgrading), access to higher value ‘downstream’ activities are tightly controlled by the firm, as these represent the key sites of value creation and capture for firms in the chipping potato value chain.
Research by Cohen (2013) into agricultural markets in West Bengal also situates contract farming within corporate strategies for value chain development and accumulation, rather than as a tool of smallholder development. In a nuanced deconstruction of contract farming’s place within historical market structures, Cohen (p. 58) argues that “contract farming is about producing new configurations of market power, standardisation, and control as much as it is about producing greater efficiencies for farmers and consumers.” The author finds that rural agricultural livelihoods in West Bengal have evolved in somewhat of a symbiotic way with local traditional market structures; that large firms have the most to gain from contract farming through the way it allows them to circumvent traditional markets structures; and that small farming households prefer to market their crops through traditional market structures which provide a better fit for their livelihood strategies than becoming ‘captured’ by corporate agriculture through contracts.35

The downstream firm bias of potato contract farming in Satara district is also evident in the place of the agent in each scheme. In effect, each agent acts as the gatekeeper of the scheme, and through unequal power relations created by the political and social position of the agent and his privileged role in the scheme, is able to extract surplus through controlling key sites of value creation such as fertiliser, pesticide and seed sales. The agent is one of the few actors apart from firms who are accumulating in a significant way from potato contract farming. While the firm uses the agent model to give local legitimacy to its operations and to reduce its transaction costs, several participants in each village viewed the agent as just another middleman, with farmers prone to the same exploitation and information asymmetries as APMC marketing structures (Cohen 2013). The class position of agents is therefore interesting. In Bhushangad, the agent is urban-based and runs a consultancy business under which he runs his agent operations. This agent has never farmed as a livelihood strategy, and is instead part of an urban middle-class reinvesting in agriculture not as a livelihood but as a profession. In Randullabad, the agent comes from a background in farming, however his livelihood pathway is based on his profession as a lawyer. This agent straddles between maintaining his family and home in Satara city, while running the contract scheme, participating in village politics and maintaining his father’s land in the village as an emerging ‘armchair’ capitalist farmer (White 1997). The agent in Pawarwadi is more embedded in the village, perhaps representing more closely a process of ‘accumulation from below’ in agriculture. He treats agriculture as a profession, having achieved a bachelor of agricultural science, and is an emerging entrepreneur, involved in capitalised production of high-value herbs and vegetable crops sold to upmarket hotels in Mumbai. These agents perhaps represent a glimpse of future capitalist agriculture in India; highly educated entrepreneurs investing in agriculture as a profession. However,

35 Cohen notes that traditional market structures carry their own inefficiencies, exploitations and inequalities, but perhaps for farmers it is a case of ‘better the devil you know’.
whether contract agents represent an emerging class of ‘agripreneurs’ or ‘agro-dealers’ (Odame & Muange 2011) that can spur capitalist development in Indian agriculture is a subject for further research.

**Food sovereignty and the ‘win-lose’ approach**

Potato contract farming clearly does not fit a rural development narrative of ‘win-win’ in Satara district. Is it then better understood as a tool for the appropriation and exploitation of peasant households by corporate and agri-business capital? This is the view of the opposite end of the ‘pro-agriculture’ spectrum that takes a fundamentally different view of small scale agriculture and development in the Global South. Based in a Chayanovian agrarian political economy, this viewpoint is theoretically underpinned by critical understandings of the corporate food regime (Friedmann & McMichael 1989; McMichael 2013a) and intellectually expressed by the notion of food sovereignty and the new peasant movements, what Bernstein (2014, p.1032) phrases as “a comprehensive attack on corporate industrialised agriculture for its devastations, both environmental and social” (see also Akram-Lodhi 2015; McMichael 2009a; McMichael 2013a; Patel 2009). For academics such as McMichael, the main contradiction in agrarian relations today is not between capital and labour in the sense of Marx’s historical theory of capital, but rather between the financial logic of multinational agribusiness corporations, and the resistance of a global peasantry (Lerche et al. 2013). This contradiction, or struggle, is specific to the world-historical moment of the corporate food regime, which pivots on “financialisation, neoliberalism, and the creation of a global food regime that fosters a commodity and accumulation ‘fetish’ in agriculture” (Akram-Lodhi & Kay 2010b, p.268). The corporate food regime leads to the ‘semi-proletarianisation’, immiseration and displacement of millions of peasant producers in the Global South who cannot compete in the global circulation of cheap food. Rather than being the solution to any global agrarian crisis, connecting peasant producers to the corporate industrial food complex via neo-liberal markets only exacerbates rural poverty. Modern value chains represent the hegemonic and homogenising tendencies of the corporate food regime that are “undermining third world agricultures” (McMichael 2009c, p.293). By focusing on food production as a social and cultural good, food sovereignty argues that the prospects for peasants should not be assessed solely through the lens of capital accumulation, but rather “the political spaces that constitute its oppositions” and possibilities of “an alternative, agrarian-centred narrative” to capitalist and corporate agriculture (McMichael 2006a, p.412). This is what McMichael refers to as a reassertion of ‘the peasant way’ and it finds its most vocal expression through the politics of *La Via Campesina* and like-minded civil society organisations. These peasant movements were born out of the failure of modern agriculture to provide a place for an increasingly marginalised rural population, manifested in the growing movement of rural peoples to urban slums and the resulting decimation of agrarian communities and local ecologies by corporate agriculture. The agrarian question, then, is one of capital, but more specifically one of food and one of
land; who produces food and for what purpose, and who owns rural land and for what purpose (Akram-Lodhi & Kay 2009; McMichael 2009c). For the food sovereignty movement, this question is to be resolved through a process of ‘re-peasantisation’ argued to be already happening in both developed and developing countries, focused on “revalorizing rural cultural-ecology as a global good” (McMichael 2006b, p.472; see van der Ploeg 2010). Re-peasantisation is conceptualised as follows:

“Farmers eliminate commercial inputs (fertilisers, seeds, pesticides) as a debt-reduction strategy and bid for autonomy from market-driven relationships that subordinate farming to standardised (and increasingly expensive) inputs and outputs. De-commodification of farming allows enlargement of the farmer’s ‘ecological capital’ by which s/he restores and renews biological farming...Self-organisation provides an alternative paradigm to the agribusiness complex...Fundamental to re-peasantisation is the ‘return to nature’” (McMichael 2013b, p.686).

In this way, the food sovereignty movement can be understood as a ‘neo-populist’ attempt to re-value peasant agriculture and food production, and the role and fate of rural peoples in development, away from a productivist ontology and towards new agrarian relations that reverse the discourse of de-peasantisation that is inherent to neo-classical understandings of rural development and agrarian transformations (McMichael 2009c). Such an agenda so far lacks a coherent practical approach and remains a political project. A recent contribution by Akram-Lodhi (2015) suggests locally relevant forms of redistributive agrarian land reform, restrictions on land markets to curtail market imperatives in agriculture and force productive farmers into other paths of accumulation, and the widespread adoption of agro-ecological farming, among other measures, would constitute praxis for food sovereignty.

Given the above, it is unsurprising that the food sovereignty movement and other ‘pro-peasant’ scholars are strongly critical of contract farming, interpreting it as ‘win-lose’ (win for agribusiness, loss for peasants) (Oya 2012). For La Via Campesina and academics sympathetic to the food sovereignty approach, contract farming is viewed through the lens of corporate control and exploitation of peasant farmers by agribusiness capital, frequently aided and abetted by the neoliberal state (Huggins 2014; McMichael 2013b; Sarkar 2014). Sarkar (2014), writing about attempts to implement contract farming in West Bengal, argues that formerly developmentalist states are abandoning longer term questions of social development by enabling private sector contract farming in the context of neoliberalism. Under a contract farming model, Sarkar argues, public interventions in rural development in the interest of social development are abandoned for policies that favour capitalist interventions in rural markets based on investor interests:
“(A)t the rhetorical level, contract farming promises to offer better farm gate prices to the farmers, but in reality, it is devised to earn better rate of return for the investors” (Sarkar 2014, p.248).

Sarkar’s analysis emphasises subordination and displacement of small farmers by contract farming, arguing that contract farming leads to a loss of autonomy of farmers over decisions around land and livelihoods. Likewise, Huggins (2014) argues that in Rwanda, government estimates of the benefits of contract farming to small farmers have been overstated, and the promotion of contract farming schemes displaces important food crops for export-oriented fruit and flower crops, threatening local food security. In a similar vein, McMichael (2013b) criticises contract farming as part of a broader critique of ‘value-chain agriculture’ and the ongoing privatisation and corporatisation of peasant agriculture. McMichael’s view is that only wealthier farmers with more resources can ‘survive’ contract farming. This leads to processes of land concentration and differentiation (in a negative sense) within the peasantry with adverse outcomes for those left behind, while capitalising ‘successful’ contract farmers are nevertheless chained to value relations that they cannot control. McMichael (2013b, p.681) argues that this leads to a ‘bifurcated’ agricultural landscape of a capitalised export sector “alongside a marginalised and semi-proletarianised peasant sector—with the former expanding at the expense of the latter”.

Two decades earlier, Michael Watts (1994b) arrived at a similar conception of contract farming, but from a different theoretical viewpoint than food sovereignty. Watts asserted the continuing importance of the agrarian question as posed by Karl Kautsky, but argued that reconfigurations in the global food system make agrarian change contingent on the balance of class forces within the peasantry (Watts 1994b; 1996; 2009). Watts’ agrarian question is one of capital, but one that emphasises the contradictory and multiple ways in which modern agro-capital may transform rural communities. In this vein, for Watts (1994a, p.249) contract farming is best understood as a form of ‘flexible accumulation’; a strategy for agribusiness to subordinate peasant forms of agricultural production without having to invest directly in land or labour. Contract farming therefore appropriates value away from direct producers and rural communities. This is particularly important given the difficulties for capital in taming the biological rhythms of agriculture and the risks involved in direct production. Contract farming allows capital to transfer production risks to peasant farmers, while appropriating surplus at other points in the value chain more amenable to capital saturation. The way that contract farming reshapes rural labour relations is particularly important. Contracting allows firms to capture the self-exploitation of family labour inherent to the peasant production process (Watts 1994b; Clapp 1994). Contract farming therefore turns independent peasant farmers into a class of ‘semi-proletarians’ labouring on their own
land. Peasant farms survive, but only “as a shell of their former self” (Watts 1994b, p.33). Watts and other contributors therefore echo the observations of both Chayanov and Kautsky at the turn of the 20th century of how capitalism was penetrating agriculture in new ways, and that peasants may persist under the subordination of capital (White 1997):

“Beneath the contract’s representation of an equal partnership, contract farming is a form of disguised proletarianisation: it secures the farmer’s land and labour, while leaving him with formal title to both. The control exercised by the company is indirect but effective; the farm’s control is legal but illusory” (Clapp 1994, p.81, emphasis added).

For researchers such as McMichael and Watts, contract farming therefore represents the subsumption of peasant agriculture by agribusiness capital:

“(Contract farming) subjects peasants to ‘real subsumption’ relations, as agro-inputs replace former farming practices, and capital appropriates the labour of now nominal (essentially proletarianised) farmers” (McMichael 2013b, p.674).

This process of subsumption explains the persistence and reproduction of small farmers under conditions of deepening capitalist relations in agriculture, although in an immiserated and undesirable ‘semi-proletariat’ form. This leads Akram-Lodhi (2009, p.615) to argue that “in South Asia, the effect of expanded contract farming would be to further entrench subordination in the South Asian countryside.” Contract farming therefore only deepens the agrarian crisis, whose resolution is to be pursued through the politics of peasant resistance that informs the food sovereignty movement.

The insights of this thesis are broadly sympathetic to the arguments of Watts (1994b) and others who conceptualise contract farming as primarily a mode of capitalist penetration of agriculture by corporate agribusiness. Potato contract farming in Satara district solves the accumulation problems of each contract firm, and each scheme evidently serves the accumulation goals of agribusiness capital over that of rural households. Chapter 7 highlights the inherently unequal power relations that structure the distribution of value within each scheme. It is evident that each firm uses the contract scheme to avoid the risks involved in direct production, transferring this onto households via the contract instrument. The firm, banks and the agent are then able to appropriate surplus at other points in the value chain, including fertiliser sales, enforcement of quality standards and interest repayments. Chapter 7 also highlighted the role that debt plays in disciplining contract participants in each village and suppressing their livelihood gains, reflecting the arguments of McMichael (2013b) that debt relations mark a key point of surplus extraction for firms in agricultural value chains.
However, the insights from each case study village also question the ‘excessive pessimism’ of the food sovereignty approach, suggesting that while such an approach highlights important global scale processes, it also ignores the diversity of livelihood interactions with contract farming, and the different ways in which contract farming intersects with livelihood pathways. Similar to the ‘win-win’ approach discussed above, by ideologically interpreting contract farming as wholly corporate exploitation of peasants in the context of the corporate food regime (to be resisted by peasants), this approach also lends itself to essentialist and ungrounded interpretations of contract farming as ‘win-lose’. Ironically perhaps, the main shortcoming of the food sovereignty approach to contract farming is similar to that of the neo-classical ‘win-win’ approach: by asserting the superiority of the ‘peasant way’, the food sovereignty literature conceptualises a homogenous and generally undifferentiated peasantry opposed to a capital ‘other’ (Bernstein 2014). Here, a globalised peasantry are portrayed as either passive victims or active opponents of globalisation, with no room for diversity or agency (Bernstein 2014). The diversified livelihood landscapes of each case study village described in Chapter 4 suggest this is an oversimplification. As White (White 1997, p.104) argues, the ‘subordination thesis’ of the food sovereignty approach needs to be “combined with awareness of the tendencies to differentiation and wage labour within contract-farming communities.” Just as a livelihoods pathway approach tempers ‘win-win’ claims in Satara district by revealing that contract farming is not a significant source of accumulation, it is also inadequate to conceive of contract farming as pitting a monolithic corporate agriculture against a hapless peasantry. To begin with, as outlined above, there is little sense of a unified social category of peasants in each village. Instead, each village is characterised by a diversity of households with differing access to livelihood assets and capabilities, and different livelihood aspirations, all “combining the class places of both capital and labour” in various combinations (Bernstein 2010, p.103). Second, the power of each firm over contract participants is not complete (Baglioni 2015). Participation is fluid; households move in and out of the scheme, exercising at least some agency in the decision to participate. 36 Households can opt out of contract farming season to season, or subvert the power of the firm through side-selling if it is more profitable. The chipping potato crop is a short rotation crop and does not dominate land use; households maintain a diverse cropping pattern. Third, contract farming is not the dominant mode of production in each village, and is relatively insignificant in terms of overall village livelihood patterns. Fourth, households have been able to use contract farming to advance their livelihood position, including lower caste households in Bhushangad who have used contract farming to make significant livelihood gains relative to their previous position. Finally, potato contract farming in Satara district also challenges Watts’ notion of the ‘disguised proletarianisation’ of peasant farmers. Addressing Watts’ arguments, there is little evidence of wholesale processes of proletarianisation

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36 Mediated, of course, by their socio-economic position within the livelihood landscape.
amongst participants as a result of contract farming, particularly given that contract farming households maintain typically diversified livelihood portfolios and contracting forms only part of their livelihood strategies. Equally there is no evidence of dispossession of unsuccessful contract farmers’ land, or accumulation of land by successful contract farmers, as a result of participation, although this is always a possibility given the debt relations discussed in Chapter 7. As a result, contract farming in Satara district reflects a “complex reality” that does not gel well with the totalising discourse of the food sovereignty approach, nor a discourse of contract farmers as propertied proletarians cultivating company crops on their own land (Baglioni 2015, p.37).

Situating contract farming and agrarian change in Satara district

It is evident that potato contract farming in Satara district does not neatly fit into essentialist narratives of ‘win-win’ or ‘win-lose’ for rural households and rural development. Such approaches do not attend to the specificities of rural livelihoods and patterns of actually existing accumulation and differentiation in rural places. Instead, this chapter argues that contract farming must be understood within a grounded, political economy informed livelihoods framework. The insights revealed by this approach suggest that in Satara district the interaction of potato contract farming and household livelihoods is best understood as an expression of the ongoing fragmentation and differentiation of ‘classes of labour’ within rural India in spaces that are characterised by generalised commodity production and increasingly diversified household livelihoods: what Henry Bernstein calls the agrarian question of labour (Bernstein 2004; 2009).

Agrarian question of capital bypassed?

Bernstein’s (2009, pp.248-249; 2010) argument is that the dynamics of contemporary globalised capitalism make new understandings of agrarian change necessary. This argument reflects contemporary agrarian spaces in Satara district and India more broadly. Two processes are important here. First, it is no longer useful to conceptualise rural production as peasant production. In Satara district, the complex and messy reality of household livelihoods blurs the analytical clarity and usefulness of definitions such as ‘peasant’ and ‘smallholder’ that inform linear understandings of agrarian change:

Bernstein argues that with the end of the colonial era, rural societies in the Global South were characterised by generalised commodity production: that is, rural villages in India today are permeated by capitalist social relations of production and reproduction that are ‘internalised’ in their rural economies, even in what would be called subsistence production. This includes the location of rural economies in India within the international division of labour and global circuits of capital and commodities. In short, pre-capitalist agrarian production relations have been substantially transformed in India, and semi-feudalism or ‘landlordism’ no longer characterises the Indian countryside (Harriss 2013; Lerche 2013). However, rather than a process of dynamic differentiation of emerging capitalist farmers and proletarianised labour, potato contract farming in Satara district is engaging with an agrarian structure dominated by petty commodity production. As I argued in Chapter 4, the majority of households in each cases study village are best understood as what Bernstein calls a heterogeneous and contradictory class of petty commodity producers who “combine the class ‘places’ of both capital and labour” in various configurations, and whose fortunes are increasingly shaped by processes and activities outside of the farm (Bernstein 2010, p.103; Harriss 1992; Harriss-White 2012).

Second, the linkages between agrarian capital and domestic industrial capital so critical to understandings of a classical agrarian transition have been severed in India (Lerche 2013). That is, in the era of contemporary globalisation, domestic industrial development in India no longer depends on capital accumulation in agriculture by agrarian classes, or the transfer of surpluses from the agricultural sector. Instead, industrial development is now chained to relations between Indian states and international finance, multinational companies and global value chains, most clearly articulated in India’s booming IT and service economy. These new linkages have enabled industrial and urban economic development to proceed at sometimes-spectacular rates in recent decades, while simultaneously growth in agriculture has been much weaker. This leads Lerche et al. (2013, p.344) to argue that “Indian capital does not need a booming capitalist agrarian sector to enable growth in the rest of the economy.” At the same time, contemporary Indian agriculture is increasingly characterised by its uneven articulation and integration within modern, neo-liberal global and domestic value chains. Agribusiness has resolved agrarian questions of capital accumulation in agriculture through new sourcing strategies and forms of organisation of corporate agriculture, including contract farming. As a result of these two processes, I argue that Lerche (2013) is correct in largely agreeing with Bernstein’s argument that the classical agrarian question of capital has been bypassed in rural India. While capitalism in agriculture may be deepening through appropriation by capital of sites of value creation upstream and downstream of direct production, this “does not significantly benefit economic development of society at large”, leaving behind a mass of rural households attempting to reproduce themselves and improve their livelihoods through petty commodity production (Lerche 2013, p.400).
Petty commodity producers and pervasive livelihood diversification

A closely related dynamic is that non-farm income is now ubiquitous within rural India. Potato contract farming in Satara district operates in a rural context characterised by increasingly diversified, fragmented and ‘multi-local’ livelihoods (Andersson Djurfeldt 2014). This renders understandings of contract farming that primarily understand rural livelihoods as agricultural livelihoods inadequate. As Rigg (2006; see also Rigg et al. 2012) argues, rural livelihoods across the Global South, and therefore the production and reproduction of inequality, are increasingly ‘de-linked’ from agriculture (Barrett et al. 2001; Bernstein 2010; Bryceson 1996; 1999; Ellis 1998; Haggblade et al. 2010). In India, livelihood diversification is emblematic of the complex and messy reality of rural livelihoods and economies (Pritchard et al. 2014). The determinants of livelihood diversification are also complex. Ellis (1998) argues that rural livelihood diversification is determined by a number of processes including seasonality in agricultural activities, differentiated labour markets which make ‘switching’ between farm and non-farm activities more or less viable for different households, risk spreading strategies, coping behaviours (‘distress diversification’), and investment strategies. For some households, the increasing role of non-farm activities in their livelihood strategies is emblematic of the growing insecurity and volatility of smallholder livelihoods in the context of uneven inclusion in the global economy (Andersson Djurfeldt 2014). For other households, the non-farm economy represents investment and accumulation opportunities, tied to increasing access to education and changing cultural values around the desirability of agriculture as an occupation (Bezu et al. 2012). In India, diversified livelihood strategies are not novel, however the role of the non-farm economy for rural households has increased substantially over the past two decades (Pritchard et al. 2014). At an all-India scale, it is estimated that the non-farm economy accounts for at least half of the average rural household’s income, and recent National Sample Survey data shows that the vast majority of jobs created in rural areas from 2004-2009 were outside of agriculture (Himanshu et al. 2013).

In Satara district, Chapter 4 reveals diverse household livelihoods increasingly engaged in activities outside of agriculture, dependent on the particular institutional and resource settings of each village. Across my interview cohort, 75% of households are engaged in off-farm activities, with almost 50% of households listing off-farm income as most important. The diverse group of middle farming households (petty commodity producers) in each village may aspire to ‘stepping up’ through agriculture, but are increasingly reliant and focused on non-farm activities. Many grow cash crops and produce surpluses for sale in markets from season to season, reinvesting profits in attempting to expand their agriculture. However, it is evident in each village that a majority of middle-farming households struggle to reproduce themselves or accumulate solely through agriculture on shrinking landholdings vulnerable to external shocks. Many middle farming households therefore ‘muddle through’, attempting to mobilise resources
to step up or out but constantly frustrated in their attempts, or are constrained to predominantly hanging in strategies, lacking access to key livelihood assets and capabilities such as inputs, irrigation, capital and land that would enable investment in expanded agricultural production. These households are therefore constructing livelihood strategies that increasingly involve ‘straddling’ across farm and unskilled non-farm activities, using non-farm income to “help reproduce farm production” (Bernstein 2010, p.107; see also Baglioni 2015). This includes twenty one households engaged in temporary migration to Mumbai and Pune for wage employment in painting and construction, a widespread phenomenon in each village. A smaller group of middle farmer households are able to successfully combine agricultural production for markets with higher value non-farm employment, side businesses and remittances to accumulate by ‘stepping out’, increasingly diversifying their livelihoods into non-farm activities while also stepping up in their agricultural activities through investing non-farm capital back into expanded agricultural production. For the worst-off households, non-farm livelihoods have long been a necessity, given the inability of landless or marginal landowners to reproduce themselves through farming.

One outcome of these processes is that few households in rural India today reproduce themselves solely through agriculture (Bernstein & Oya 2014). This is evident in each case study village: there are very few, if any, examples from each village of households accumulating (stepping up) solely through agriculture. This is consistent with other findings on agrarian structures in India, for example in a study in Gujarat, Bremen (2007) found that there was little evidence of the widespread emergence of successful capitalist farming through processes of accumulation from below (Lerche 2011). A key factor influencing the lack of accumulation and class differentiation in agriculture in Satara district is land fragmentation and declining farm sizes. The miniaturisation of landholdings over recent decades due to paternal inheritance patterns, population growth and land ceiling legislation in India has been well documented (Lerche 2011; Manjunatha et al. 2013; D. Reddy & Mishra 2010). According to the latest agricultural census, the number of operational holdings in India continues to increase, while the average operational holding size has decreased to 1.15 hectares at the national scale. In Maharashtra the average operational holding is 1.44 hectares or 3.5 acres (Government of India 2014). This shift has been accompanied by a concentration of landholdings within the marginal (below one hectare) category and a decline in the numbers of medium and large landholdings. This trend is consistent with the landholding patterns in each case study village reported in Chapter 4. Although patterns of landholding differ by state, miniaturisation of landholdings across India is making agriculture unviable as a sole livelihood strategy. In Satara district, a landholding of two hectares is too small to sustain a household’s livelihood, let alone enable accumulation, making diversification a livelihood necessity as argued by researchers in other contexts (Harriss-White 2008; D. Reddy & Mishra 2010). At the same time, however, even though
agriculture on its own can no longer provide a viable livelihood for most households in each of the case study villages, there is little evidence of an active land market in each village. Even marginal landowning households are holding onto their land. As a result, there is little evidence of land accumulation by more successful farmers as would be expected in classical transitions to capitalist agriculture as less successful households exit agriculture. Household interviews revealed that rural households in Satara district seek to hold onto even tiny plots of land for a variety of reasons. First, even though agriculture is declining in importance to rural livelihoods, it still contributes a significant proportion of income for many households. 51% of respondents in the interview group named agriculture as their most important source of income. Even households who have substantially moved into the non-farm economy still invest in farming, and agriculture is often the main livelihood activity of non-migrant household members. Second, agriculture remains culturally important to household identities. Social status in each village is still closely associated with owning land and being a successful farmer, even if livelihoods are largely shifting off-farm. Third, growing food for self-consumption forms an important food security strategy for land owning households:

“Construction work does give a reliable daily wage, but farming is important because you can also grow your own food to eat” (RN03)

Fourth, households hold onto their land as a back-up or ‘safety net’ against the uncertainties of the non-farm economy, including the often precarious, casual and temporary nature of unskilled non-farm work such as house painting. Several households also commented on the importance of keeping their land so that their migrated sons could one day return to the village and take over their family’s land. For example:

“My sons do help out on the farm when they return to the village. They will return permanently to farming one day, as the painting job is not permanent, and there are no guarantees of employment” (BH09)

There is, therefore, an interesting dialectic between (lack of) land markets and livelihood diversification. While households hold onto their land as a backstop against the uncertainties of non-farm livelihoods, it is the increasingly availability of diverse sources of income that allows small and marginal landowners to avoid distress land sales. At the same time, the cultural and social status of land means that wealthy households who now accumulate off-farm do not sell their land, preferring to straddle across rural-urban divides. As discussed in Chapter four, this has led to a stabilisation of land ownership patterns across all livelihood groups (Harriss 1992). These insights reveal some important observations about the role of land and its continuing importance as a livelihood asset in Satara district even under conditions of pervasive diversification. Land ownership conditions access to livelihood opportunities, and therefore
patterns of differentiation, through two primary processes: agricultural-based accumulation, where those with more or better quality land accumulate beyond simple reproduction; and as a base from which to expand into the non-farm economy, where large landowners use their land to access credit, education and other assets required to pursue non-farm activities. It is this latter role of land ownership that is becoming the most important point of differentiation between rich and poor households in each case study village. Large landowners are using their land assets as a ‘launch pad’ to step out of farming and into lucrative non-farm activities:

“I own 30 acres of land. Because of my land, I have been able to help my sons to set up their businesses.” (BH11)

I argue that these processes have important impacts on patterns of differentiation in Satara district, producing counter-tendencies to the differentiation of petty commodity producers under conditions of generalised commodity production as theorised by Lenin and Kautsky. These counter-tendencies limit the emergence of a dynamic peasant-based capitalism. As Bernstein argues, patterns of differentiation in rural societies display ‘massive variation’:

“The tendency to differentiation that can be identified theoretically by the contradictory class places in petty commodity production is not – and cannot be – evident in identical trends, mechanisms, rhythms or forms of class differentiation everywhere” (Bernstein 2010, p.109, emphasis in original).

This is an important point. In Satara district, the combination of declining land sizes and relatively stable land ownership patterns, and increasingly diverse sources of income in each village constrains polarising tendencies towards differentiation among middle farmers (petty commodity producers). These processes in Satara district reflect a widespread phenomenon of the uneven reproduction of classes of petty commodity producers across India that challenges neo-liberal and neo-classical understandings of rural development and linear agrarian change. Constrained polarisation, however, does not imply a landscape of idealised ‘yeoman’ farmers, as envisioned by the food sovereignty movement. Capitalist development in rural India is highly uneven and petty commodity producers are subject to both inter and intra-household differentiation in both on and off-farm livelihoods. Inequalities persist in access to livelihood resources and assets, as is well documented in this thesis, and many households are relegated to hanging in or muddling through in a context of increasingly fragmented livelihoods. The reproduction of petty commodity producers as a class in India, therefore, perhaps represents a ‘perverse transformation’ where many petty commodity producers struggle to reproduce themselves (Harriss-White 2012).
The other outcome of the processes described above is that sites of accumulation for wealthier households and established capitalist farmers in Satara district are moving off-farm. Given the difficulties of investing in and accumulating land for wealthier households, agricultural surpluses created by predominantly larger landowners are increasingly directed away from agriculture and into non-farm investments such as gold and silver shops (BH03, BH11) and higher education for offspring (BH05, PW1, PW11) as more productive sites of accumulation. The best-off group of farmers in each village increasingly find that the most lucrative sites of accumulation are found in urban-based businesses such as pharmacies, gold and silver shops, the services industry or professional employment. These households engage in “diversification for accumulation” (Hart 1994; quoted in Bernstein 2010, p.107). Such strategies are typically underpinned by access to financial assets (originally accumulated in agriculture), privileged access to tertiary education and social networks that enable households to secure non-farm employment or businesses for their children, who send home substantial remittances. Best-off households also accumulate through ‘gatekeeping’ strategies. In a study based in South India, Pattenden (2011) argues that in the context of increasing fiscal decentralisation to Gram Panchayats, the dominant livelihood group can use their caste and class position to control access to political patronage and funnel state resources such as subsidies, development funds and social programs for private gain. These strategies were evident in each case study village, particularly in the common complaint from lower caste households that they are systematically excluded from political decision making processes, and that dominant Maratha households are able to channel state funds for irrigation programs away from lower caste households. This practice exists despite reservation rules that mandate representation of lower castes and women in Gram Panchayats. As a result, the dominant livelihood group is able to maintain their position of privilege in the absence of traditional forms of control in labour relations between landowners and poorer households, by appropriating access to new sites of accumulation and through gatekeeping strategies.

**Potato contract farming and the agrarian question of labour**

The outcomes of potato contract farming for patterns of differentiation in Satara district is therefore influenced by the place-specific processes outlined above. Potato contract farming in each case study village is touching down onto a livelihood landscape characterised by a lack of accumulation in agriculture, declining farm sizes and increasingly diverse livelihood activities. Each village is numerically dominated by a middle group of petty commodity producers who struggle to reproduce themselves or accumulate through agriculture and therefore engage in a mix of on and off-farm activities, and economically and politically dominated by a small group of best-off households who increasingly

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37 Pattenden (2011) argues that the inclusion of lower castes in Gram Panchayat-based gatekeeping activities only facilitates accumulation by dominant groups, rather than enabling their own upward mobility.
accumulate in the non-farm economy. Importantly, in each case study village patterns of accumulation, and hence key sights of differentiation, are shifting away from agriculture and into the non-farm economy.

My argument here is that potato contract farming acts to reinforce the differentiated livelihood pathways of different livelihood groups, and thus reproduces an agrarian structure dominated by petty commodity producers. In each village, the contract scheme does not allow middle farmers to accumulate, and therefore reproduces a heterogeneous, contradictory and unstable class of petty commodity producers increasingly reliant on non-farm income to maintain their livelihood, who “emerge from capitalism’s compulsion to secure production cheaply and beyond the ‘fair rules’ of the game, and yet are swept away by those same forces, whether as winners or losers” (Baglioni 2015, pp.37-38). The institutional arrangements of contract farming enable the domestic firm and PepsiCo to capture sites of value and accumulation in the chipping potato value chain (input supply, credit, processing, marketing etc.) without having to engage with or transform agrarian structures or production relations. Further, the power dynamics of the scheme limit accumulation by participants, who must struggle over the same surpluses as powerful agribusiness (Lerche 2011). Only those households with access to adequate livelihood assets and capabilities can navigate these power structures and accrue material benefits from each scheme, or in the case of Bhushangad a limited number of lower caste households have improved their livelihoods significantly through the scheme. However, in general potato contract farming in this case neither creates processes of dynamic accumulation from below, nor creates demand for rural labour. The political economy based approach employed in this thesis, therefore, reveals a different narrative to the individual agent approach that dominates the economic literature on contract farming in India (reviewed in Chapter Three). The results of this case study also suggest a different pattern to that found in the more agricultural dynamic states of Punjab and Haryana by Singh (2002), who found large farmers increased their advantage over small farmers as a result of their participation in contract farming. When analysed within the livelihood context of my case study villages, it is clear that potato contract farming in is not sparking new forms of agrarian capitalism and differentiation. Rather, its presence reinforces patterns of differentiation where dominant livelihood groups accumulate through access to non-farm opportunities, in rural spaces dominated by increasingly fragmented and diverse livelihoods. These insights support research by Lerche (2011, p.116) among others, who argues that in India “there is no evidence that successful capitalist farming is becoming more broad-based under the present neo-liberal conditions.” This is certainly the case for these villages in Satara district under conditions of contract farming, where differentiation is expressed more clearly in rural livelihood diversification and the struggles of reproduction of different classes of labour than the emergence of small-scale capitalist farming.
(Bernstein 2010; Cousins 2013). The agrarian question today in these villages is therefore one of labour. Importantly, as Bernstein (2009) notes, the agrarian question of labour is one of the ‘fragmentation of classes of labour.’ Non-farm livelihoods in Satara district are highly differentiated along class and caste lines and subject to their own insecurities and oppression. In each village, it is the poorest households that enter the non-farm economy “on the least advantageous terms” (Li 2009, p.634). Non-farm livelihoods in Satara district reflect a new dualism between privileged and underprivileged households, comprised of those that can take advantage of rural-urban linkages and shift into dynamic and productive activities, using their class and caste position (typically as large landowners) to accumulate and increase their advantage, at the expense of those that are relegated to low value, unskilled, casualised and increasingly scarce non-farm activities that offer little chance of upward mobility. In other parts of India this fragmentation of labour is expressed most clearly in the mass transfer of rural poverty to urban slums, signifying the failure of industrialisation in India to provide a living wage for perhaps the majority of rural people increasingly forced to seek a livelihood outside of agriculture (Davis 2006; Bernstein 2009). It is no wonder that in this context rural people scramble to hold onto their land.

**Conclusion**

This chapter has situated the empirical findings of this thesis with broader debates about contract farming, differentiation and agrarian change. I have made three key arguments. First, when placed in the context of crowded and diverse livelihood landscapes, I argue that contract farming is best understood as just another livelihood strategy. Further, at this point in time contract farming is not a significant source of capital accumulation or a viable pathway towards upgraded livelihoods for most households in each village. Second, I argue that these insights temper the excessive optimism towards the potential of contract farming as a ‘win-win’ rural development strategy. This view, exemplified in the World Bank’s ‘agriculture-for-development’ paradigm, is often based on a narrow assessment of welfare that does not account for broader livelihood processes. At the same time, however, I also question the excessive pessimism of what I term the food sovereignty approach, which views contract farming as nothing more than corporate exploitation of vulnerable peasant farmers. While households in each of my case study villages are certainly on the wrong end of very uneven power relationships, many have gained some benefits from participating. Indeed participation is fluid, and most participants are engaged in a diversity of livelihood strategies. Perhaps more important, however, is the lack of nuance in both ‘win-win’ and ‘win-lose’ approaches to contract farming. Rural households that participate in contract farming cannot be adequately understood as either a unified poor peasantry, or a classless collection of emerging capitalist small farmers. Rather, as I have clearly shown, livelihood landscapes in Satara district are characterised by diversity and differentiation. To understand the complex place of contract farming within the livelihood pathways of rural households, we must attend to these specificities of place. This
brings me to the third key argument of this chapter. When analysed within the context of these place-specific processes of livelihood diversification and class differentiation, it is clear that potato contract farming is not leading to dynamic processes of accumulation from below, nor the wholesale subsumption of rural households. Rather, I argue that potato contract farming in Satara district is reproducing a diverse class of petty commodity producers who are increasingly dependent on non-farm livelihoods. In my case study villages, contract farming is touching down on a livelihood landscape where patterns of differentiation and accumulation have moved off the farm, and where new agrarian questions of labour are more critical to the livelihoods of rural households. These insights are suggestive of the importance of situating contract farming within concrete understandings of the livelihood landscapes in which they appear. The next and final chapter synthesises the findings of this thesis and outlines implications for policy, methodology and future research.
Chapter 9 - Conclusion

Introduction: recap of research problem and methodology

This thesis set out to explore the implications of contract farming for those at the coalface of agrarian change in India; rural households. The research questions framing this exploration aimed to problematise and contextualise the often-polarised views of contract farming in India by grounding these interpretations in the everyday realities of rural life. Specifically, I asked questions about the characteristics of rural livelihood landscapes and the dynamics of potato contract farming in Satara district. Although this thesis began its life as a study of contract farming, it has revealed much more about the dynamics of agrarian change in Satara district. I used empirical insights from three villages where potato contract farming operates to interrogate how contract farming touches down upon the local livelihood landscape, and what the implications of this might be for future patterns of differentiation and agrarian change.

To answer these questions, I employed a theoretical and methodological framework that sought to integrate the vertical and horizontal dimensions of agrarian change. This approach explicitly recognises that the outcomes of contract farming for rural households are shaped by the relationships between local (horizontal) and global (vertical) processes. To analyse the interaction between local livelihoods and contract farming, I combined the strengths of GVC analysis and sustainable livelihoods frameworks. I conceptualised the vertical dimension of agrarian change as processes of value-chain restructuring that shape agri-food systems on a global scale. Using the insights of GVC analysis, I argued that these vertical processes have given rise to contract farming as a new form of agricultural production in Satara district. I then conceptualised the horizontal dimension of agrarian change as consisting of the livelihood processes, including people and households, which constitute local places. Applying the insights of the sustainable livelihoods framework and agrarian political economy, I argued that the livelihood landscape of each village consisted of different livelihood groups whose historically informed access to assets and capabilities, as well as processes of class differentiation, conditioned the livelihood pathways that they pursue. The novel contribution of this thesis was to tease out the implications for rural spaces at the intersection of these vertical and horizontal processes. Importantly, these insights were situated within a critical agrarian political economy that seeks to understand changes in agrarian relations and the outcomes for peasant farmers in the Global South through the lens of “the social relations and dynamics of production and reproduction, property and power in agrarian formations and their processes of change, both historical and contemporary” (Bernstein & Oya 2014, p.15). The concluding chapter of this thesis brings together the key findings of the research, drawing out the main theoretical contributions, policy implications and avenues for future research.
Key findings

The first key finding of this thesis is that the emergence of potato contract farming in Satara district is linked to value chain processes at different scales. I have argued that each firm uses contract farming as an institutional solution to the governance and procurement challenges of traditional potato supply chains in Maharashtra. Changing urban consumer preferences and value chain-based agri-business accumulation strategies have led to the expansion of the potato chip processing industry in India. This has increased demand for high quality and consistent supply of new varieties of chipping potato as raw material for processing factories. Unable to control quality or ensure consistent supply in traditional APMC markets, firms have established new potato value chains anchored by contract farming schemes. Contract farming enables firms to govern potato production, determining what farmers grow and how they grow it. Importantly, these processes have resulted in new geographies of potato production. The city of Pune in Maharashtra has emerged as a key centre of potato processing, sparked by investment by PepsiCo in a large processing factory in 2001. PepsiCo and the domestic firm have since established potato contract farming in climate-suitable areas of Satara district, taking advantage of growing conditions that allow chipping potato, usually a Rabi (winter) crop, to be grown as a Kharif (monsoon) crop in Satara.

The second key finding of this thesis is that in each village, potato contract farming does not operate in a vacuum, or within an agrarian structure characterised by a homogenous group of ‘small farmers’. Rather, I have argued that contract farming is touching down onto an existing livelihood landscape characterised by both diversification and differentiation. Two intimately connected processes inform this landscape: historical processes of class and caste differentiation; and the evolution and contemporary uneven distribution of livelihood assets and capabilities that households require to pursue different livelihood activities. I argued that these processes have led to the emergence of distinct ‘livelihood groups’ in each village. However, contemporary livelihood landscapes in Satara district are not characterised by ongoing dynamic processes of agriculture-led differentiation into classes of capitalist farmers and rural labour, as is imagined by a classical understanding of agrarian transition. Rather, I have shown that in each village a majority of households belong to a diverse ‘middle farmer’ group of petty commodity producers; those that combine the ‘class places’ (Bernstein 2010) of capital (as owners of a key means of production in rural areas – land) and labour (as house painters, construction workers etc.). Below this group are the worst-off households, landless or marginal landowners who rely entirely on selling their unskilled labour, and at the top are a small group of best-off households who represent the accumulating class. Households in each livelihood group construct their livelihoods along different pathways that reflect their dynamic aspirations, as well as the constraints they face. These pathways were conceptualised as ‘hanging in’ (surviving or simple reproduction), ‘stepping up’ (aspiring to
accumulate primarily through agriculture) or ‘stepping out’ (aspiring to accumulate into non-farm activities) (Dorward et al. 2009). Significantly, while agriculture remains an important livelihood strategy in each village, this study found that livelihood pathways of both survival and accumulation are increasingly defined by diversification into non-farm activities and investments. Land fragmentation and declining farm sizes mean that very few households are able to accumulate and improve their livelihoods solely through farming.

The third key finding is that in each village, households interact with the contract scheme in nuanced and complex ways contingent on their position within inherently differentiated agrarian structures. First, through the lens of participation I argued that patterns of contract participation are mediated by the interaction of place-based livelihood factors and the particular dynamics of each contract scheme. Households are motivated to participate in potato contract farming for a number of reasons. These include reducing price risk through the fixed contract price in the context of uncertain agricultural livelihoods, and gaining access to ‘modern’ fertilisers, crop knowledge and farm credit, for which markets are typically ‘thin’ in rural India or inaccessible for asset-poor households. Importantly, however, contract participation is not just a matter of rational-actor based decision making by households. Participation is mediated by livelihood and socio-economic factors, including the uneven distribution of livelihood assets and capabilities and the position of a household within the political economy of each village. I have argued that as a result of these processes in Randullabad and Pawarwadi village, contract participation has coalesced around a group of heterogeneous middle farmer households. Participation patterns are driven by processes of firm selection of households to offer contracts, the acceptance or rejection of households of contract offers, and the decisions of participants and firms to honour the contract and continue in the contract relationship. These processes are influenced by, amongst others, the formal and informal requirements of firms, household perception of risk, the ability of households to produce potato and manage production risks, and a household’s access to other livelihood opportunities. A slightly different pattern of participation has emerged in Bhushangad given its different caste and landholding history, where participation is more widespread and includes lower caste households, although middle farmer households still dominate. Second, through the lens of distribution of benefits, I have argued that most participating households have realised some material benefits from participation. In this sense, potato contract farming has had a positive impact in each village. These benefits are important and have allowed a number of households to improve their livelihoods in various ways. However, by adopting a grounded livelihoods lens, I revealed that these benefits are unevenly distributed and contingent on the livelihood position of each household. Participants with better access to key livelihood assets such as land, irrigation and financial capital, are able to accrue more benefits. Importantly, a household’s livelihood evolution mediates their
current ability to accrue benefits from contract farming; for example, households with a history of significant non-farm income are in a better position to benefit.

Finally, I have used these insights to situate potato contract farming within broader patterns of agrarian change in Satara district. Notwithstanding the benefits accrued by some households, I have argued that the significance of potato contract farming for household livelihood pathways is limited. This is primarily because the power relationships inherent to each scheme are heavily biased towards the firm. Increasingly strict quality standards, the perishable and risky nature of the chipping potato crop, and the credit/debt relations that the scheme enrols participants in limit the ability of participants to accumulate in the scheme, while consolidating the power of the contracting firm. The important point is that households are not accumulating in any significant way through potato contract farming. Potato contract farming is not triggering dynamic processes of accumulation from below. Instead, contract farming is reproducing patterns of differentiation in a context where agricultural livelihoods are becoming less and less viable or desirable. The livelihood assets and capabilities of middle farmer households encourage them to participate in potato contract farming, however for most households, contract farming only reproduces their socio-economic position within the livelihood landscape. Better-off households use their superior livelihood position to ignore the contract scheme and step out (accumulate) through livelihood pathways increasingly focused on lucrative non-farm opportunities and remittances.

Returning to the literature review in Chapters two and three, how do my findings sit within the wider body of case studies on contract farming in India? As reviewed in Chapter three, microeconomic studies of contract farming in India typically support a ‘win-win’ view through their narrow focus on individual welfare gains, without situating contract farming within its broader political economy. I suggest some important counterpoints to this dominant economic narrative of contract farming in the existing body of literature. One exception is a recent paper by Narayanan (2014), who offers a more nuanced economic analysis of the welfare impacts of contract farming across commodities. Echoing the insights of this thesis, Narayanan shows that contract farming has diverse impacts on individual farmer income, both across different schemes and among individuals within the same scheme. The author argues that “it is not self-evident that inclusion will improve farmer incomes unequivocally let alone to the same extent across all farmers. It is important to recognize that there are diverse groups of farmers. Only a subset of them fare well participating in modern supply chains, others are likely to fare poorly irrespective of whether they participate or not” (Narayanan 2014 p. 156). The livelihoods/ agrarian political economy framework that I offer in this thesis is well placed to capture this diversity in future studies of contract farming.
Implications for theory

The theoretical contributions of this thesis are two-fold. First, my findings problematise essentialist understandings of contract farming in India as either ‘win-win’ or ‘win-lose’. Such interpretations are typically based in theoretical and methodological frameworks that analyse contract farming in isolation and are preoccupied with the institution of contract farming itself. Instead, I have shown that understandings of contract farming and its impacts on rural households must be grounded in the context in which it appears. It is these interactions between the specific dynamics of a contract farming scheme and the livelihood landscape where it operates that determine the broader outcomes for rural households and agrarian spaces. In their seminal contribution on contract farming in Africa, Little and Watts (1994) argued that the sheer diversity of contract arrangements makes a general theory of contract farming as an institution problematic. My contribution extends this to argue that analyses of contract farming in India must engage with place-based livelihoods. In India, the complex and place-dependent livelihood landscapes that define the contemporary agrarian spaces that contract farming schemes interact with defy generalisations of contract farming as ‘all good’ or ‘all bad’. Such generalisations will lead to misinterpretations of the role of contract farming in rural development and agrarian change. A key argument of this thesis is that instead of supressing nuance in studies of contract farming, we must illuminate it. This thesis provides a methodological path forward for coming to grips with these nuances. I advocate a multi-disciplinary and multi-scalar geography of contract farming that combines the strengths of GVC and livelihoods analysis, as well as a strong engagement with the insights of agrarian political economy. This approach can integrate structural insights and dynamics of the global economy (the ‘vertical’) with grounded and people-centred understandings of everyday livelihoods (the ‘horizontal’). In this way we can theoretically link restructuring and change in global agri-food systems with impacts on poverty, livelihoods and households.

The second theoretical contribution of this thesis is to link the intersection of potato contract farming and livelihood landscapes in Satara district with broader questions of agrarian change. In doing so, I challenge narratives of agrarian change that do not account for livelihood diversification and the place-based ways in which agricultural modernisation and livelihood landscapes intersect. I have argued that contract farming is not leading to dynamic patterns of accumulation by middle farmer participants, but rather it reproduces their status as petty commodity producers in a livelihood landscape increasingly defined by diversification into non-farm activities. In Satara district today, the contemporary conditions facing households mean this landscape is dominated by struggles over (non-farm) labour, rather than capital. Contract farming allows agribusiness capital to resolve questions of agrarian capital accumulation without needing to transform agrarian structures, bypassing the agrarian question of capital in Satara district. However, other agrarian questions of labour, particularly non-farm labour, have
replaced that of capital. New struggles and sites of differentiation off the farm have become more significant than agriculture, as households attempt to step out into new livelihood activities, and as other livelihood assets and capabilities such as education take on more importance for success. These new agrarian spaces require renewed research attention. Similar to recent arguments made by Carlos Oya (2012) regarding contract farming in Africa, this thesis has shown that in Satara district contract farming does not represent a distinct pathway of agrarian transition towards capitalism ‘from below’. This echoes arguments made by White (1997) in Indonesia and others from Africa that contract farming schemes often result in unintended consequences and should not be assumed to represent a dominant driver of processes of differentiation amongst small farmers nor central to processes of capital accumulation (e.g. Orvis 1993; see Oya 2012 pp.24-27). A lasting contribution of this thesis, then, is that at present in Satara district, the contribution of contract farming to accumulation and differentiation are secondary to other processes in rural spaces that enable or constrain access to non-farm income. This does not diminish the importance of understanding the contribution of contract farming to processes of agrarian change in India. As this thesis has argued, contract farming represents a visible and distinct mode of penetration of Indian agriculture by agribusiness capital in an era of enhanced neoliberalisation, and therefore should remain a focus of serious academic enquiry. However, when analysed within the context of concrete understandings of livelihood and agrarian change, other processes have been revealed to be just as, if not more, significant for understanding future patterns of differentiation and agrarian change.

**Implications for policy and future research**

The findings of this thesis have some general policy implications that are worth elaborating on. Most importantly, this thesis problematises the enthusiasm towards contract farming as a rural development strategy evident in recent agricultural policy documents by Indian governments and institutions such as the World Bank. As of 2015, all signs are that the new central government led by Narendra Modi has continued the commitment to a value chain-led model of agricultural development that is premised on using the private sector to connect small farmers to markets. This approach envisages that private sector investment can reverse declining capital formation and productivity in Indian agriculture. Connecting small farmers to markets through private sector-led contract farming is viewed as a promising path to unleash the potential of Indian agriculture and reduce rural poverty.

The insights presented in this thesis suggest that contract farming certainly provides an effective vehicle for private capital penetration of Indian agriculture. However, the agrarian political economy informed approach adopted by this study promotes caution to the ‘excessive optimism’ surrounding the poverty and livelihood impacts of value chain/contract farming development strategies (Neilson & Shonk 2014).
First, the monopsony power of firms in contract farming schemes clearly limits the benefits that rural households can accrue, and this monopsony power seems inevitable, if not necessary, in contract operations. Second, fetishising the contract farming scheme in development or policy interventions without an appreciation of the uneven and diverse terrain of rural livelihood landscapes will almost certainly mean that contract farming development projects fail to be pro-poor at the village level. Instead, as this study clearly shows, a policy focus on contract farming has the potential to ignore or miss other more important processes influencing patterns of rural development, such as lack of infrastructure.

The dominant policy vision of contract farming for development that I problematise here reflects a neo-liberal view of markets and rural development, what Bernstein and Oya (2014) call the ‘markets plus’ approach. In this context, the promotion of contract farming as an institutional innovation that can resolve market failures and drive rural development is based in a faith in free market virtues that only perpetuates an abstract vision of agriculture and development, one that is not grounded in the realities of rural life. Markets are, of course, important. Very few, if any, rural households in India today are able to reproduce themselves outside of markets. However, the insights of this thesis reiterate the need for policy engagement with what Bernstein and Oya call ‘real markets’; that is the actual market dynamics, in all their variety, that different rural households confront in attempting to construct their livelihoods. This includes the inherent unequal power relations in market transactions and the differentiated livelihood positions from which different households engage with markets.

Accounting for the complexity of real markets and rural livelihoods shifts our attention to the concrete realities of agrarian spaces. To begin with, an engagement with real markets does not make invisible the important role of the state in rural development and agrarian change, a factor particularly relevant in the case of India. State intervention will continue to be important and necessary in rural India, as is made plain by the recent passage of the National Food Security Act (2013) that provoked howls of objection from neo-liberal commentators. Second, engagement with markets outside of agriculture, particularly non-farm labour markets, is likely to continue to grow in importance for rural households in India. Therefore rural development policy must be about more than agriculture. Policy should focus on both improving the conditions for small-scale farm production in a way that empowers small farmers (public investment in irrigation and other infrastructure, appropriate credit and input access), and encouraging and facilitating access to livelihood opportunities outside of agriculture, particularly for the next generation of rural Indians.

My findings in this thesis offer ‘exemplary knowledge’ about the case of potato contract farming in three villages in Satara district. Of course, given the case study approach of this thesis, different cases may
produce different findings. As discussed in Chapter one, all social science research of this nature is necessarily partial, and I make no claims to statistical generalizability in my findings. This is not so much a limitation of my study; rather I draw attention to the value of in-depth, nuanced and place-based case studies in building our understanding of the phenomenon of contract farming. My case study illuminates one important case of contract farming that suggests the outcomes for rural households are more nuanced than suggested by mainstream analyses. This calls for further research to test how transferable the findings I present here are to other cases and livelihood contexts, including crops other than potato.

In this way, we may build a comprehensive understanding of the relationship between modernising agricultural and agrarian change. My analysis of contract farming is also a snapshot in time; it is beyond the scope of this thesis to assess whether potato contract farming will be sustainable and long lasting in Satara, or whether it simply represents “a short-term episode in the overall evolution of an industry” (Jaffee 1994, p.135). The evolution of the policy environment in Maharashtra will be of particular importance. For example, if the Land Ceiling Act was repealed or reformed, this may lead to entirely different patterns of accumulation and differentiation in areas of contract farming. A potential fruitful avenue of future research, then, would be to build on this thesis with long-term studies of contract farming and agrarian change including panel data studies and revisiting field sites.
References


Appendices

Appendix A – Interview schedules

1. Interview guide for semi-structured in-depth household livelihood interviews

Explain project to participant, and allow participant to ask any questions.

**Present livelihood strategies**

Can you tell me more about the activities your household does to earn a livelihood? What resources do you rely on to maintain or improve your livelihood? What are the challenges your household faces in maintaining or improving your livelihoods?

**Follow up questions:**

a) Have you started doing new things lately?

b) How do you identify and take advantage of new opportunities? What kinds of things are you doing to improve your household’s livelihood?

c) What holds you back from improving your household’s position, or pursuing new opportunities?

d) If your livelihood strategies start to struggle, what are your options? How do you respond?

e) Are your livelihood activities seasonal? How do you deal with this?

f) What relationships are do you depend on for the success of your household’s livelihood activities?

g) What are the differences between what men and women do around here?

**Livelihood timeline/history**

Tell me more about the history of your family and your household in this village? How did your household get to where it is today?

**Follow up questions:**

a) How did your family come to live in this village? What did your parents and grandparents do?

b) Are there new activities available now in the village that weren’t before?

c) Were their activities you would have liked to do in the past but couldn’t or didn’t? What held you back?

d) How has farming changed in the village? Is it easier/harder than before? More profitable or less profitable?

e) What influences you to change your cropping pattern?

f) How did you acquire your land?

g) Is your household better or worse off now than in the past?

h) Are more or less people migrating (seasonal or permanent) than before?
i) What has improved in the village over the last 20 years? What problems does the village face?

j) How has the status of women changed in this village over the past 20 years? How have women’s lives changed?

Institutional and contextual settings

This section aims to understand the formal and informal institutions that shape livelihoods in the study area:

Primary question:

What important rules, regulations or traditions influence life in this village? These could be cultural, social, political, government, economic. How do these affect what happens in the village, and your livelihood opportunities and success?

Follow up questions:

a) Why do some people prosper more than others in the village? What are the differences between those that well off in the village, and those that aren’t as well off?

b) Do you think your village is better off, just as well off, or not as well off as other villages in the block and district? Why?

c) How does politics affect yours and other household’s livelihoods? Who has political influence? Who doesn’t?

d) What help is there (formal or informal, SHG, cooperatives, societies etc) in the village for people to improve their livelihoods? Who is able to access and benefit from this? Is anyone excluded?

e) If someone wants more land to farm, or wants to start farming here, how can they do this?

f) How does ownership and access to land differ between men and women?

g) What is the influence of social group on people’s livelihood options? Are there particular people in the village that are disadvantaged, or don’t have the same access to opportunities and resources as others?

h) Are you able to access credit if you need to? How would you describe your access to credit?

i) Is there good governance in the community? Leadership?

Influence of contract farming scheme on household livelihoods and diversification

IF PARTICIPATING

Participation

Primary question:

Tell me about your household’s participation in the potato contract farming scheme? How were you introduced to it? Why did you decide to participate? What is attractive about this scheme?

Follow up questions:

a) Had you participated in any other contract farming schemes before this one?

b) What was your household doing immediately before you started contracting?

c) What skills or assets or resources did you need to begin participating? What barriers did you have to overcome?

d) Was there help available to build your capacity to participate?
e) Were you growing potatoes before you started contracting?
f) What benefits does contract farming bring you versus selling to the APMC?
g) If you couldn’t contract one year, what effect would this have on your household? How would you make up for this? How would you cope?
h) What are the negative aspects of contract farming?

Power

Primary question:

Who controls the contract farming scheme in the village? Who decides who can participate?

Follow up questions:

a) How does your contract operate? How is it negotiated? Do you always meet the terms of the contract? Does the company? What happens if you don’t? What about the company?
b) How important are relationships to maintaining your participation? What relationships are most important?
c) What determines if you renew your contract each year? Have you not contracted in some years? If so, why? What do you do to ensure you maintain your position as a contract farmer?
d) What do you do with rejected product?

Livelihoods

Primary question:

How has participating in the contract farming scheme affected your household’s other livelihood activities? Have you stopped doing other activities to contract farm? Or has it allowed you to pursue other activities?

Follow up questions:

a) How does potato farming fit into your household’s livelihood activities? Is it the most important activity? Are there other more important activities?
b) Does participating involve any risks to your household’s livelihood?
c) Overall, is your household better off, worse off or the same than before you started contracting?

Distribution of benefits

Primary question:

Do you think the benefits of the contract farming scheme are distributed evenly across the village / available to everyone in the village?

Follow up questions:

a) Why do you think your village was chosen for contract farming over others in the district?
b) Who in the village has been able to benefit the most from the contract-farming scheme? Who has not been able to benefit? Why?
c) What factors determine who benefits and who does not?
d) Are there farmers you know who would like to participate but haven’t be able to?
e) What would ensure that the benefits from a scheme like this one are distributed more evenly throughout the village?

The future

Primary question:
Do you think contract farming schemes like this one will be more or less important to your household’s livelihood in the future?

Follow up question:

a) Will you keep participating in this contract farming scheme?
b) What does the future hold for your farm and agriculture in the village? Do you want your children to continue farming? Do they want to?

IF NOT PARTICIPATING

Participation

Primary question:
Why hasn’t your household become involved with the potato contract farming scheme? Do you wish to participate? Why or why not?

Follow up questions:

a) If yes, then what has stopped you from participating? What resources or assets would you need to be able to participate?
b) If no, what influences your decision to participate or not?

Power

Primary question:

Who controls the contract farming scheme in the village? Who decides who participates and who does not? How does politics influence the scheme? Is there any resistance to the scheme in the village? Who and why?

Livelihoods

Primary question:

Has the arrival of the contract farming scheme affected you household’s livelihood activities in any way?

Follow up questions:
a) Does your household benefit in any other way from the contract farming scheme? Are you better/worse off or the same now than before the contract farming scheme came to the village?
b) Has the arrival of the contract farming scheme changed the community/village? Has it been a good thing for the village?

**Distribution of benefits**

**Primary question:**

Do you think the benefits of the contract farming scheme are distributed evenly across the village / available to everyone in the village? Why/why not?

**Follow up questions:**

a) Has not participating disadvantaged your household in any way compared to those who are participating?
b) Why do you think your village was chosen for contract farming over others in the district?
c) Who in the village has been able to benefit the most from the contract-farming scheme? Who has not been able to benefit? Why?
d) What factors determine who benefits and who does not?
c) What would ensure that the benefits from a scheme like this one are distributed more evenly throughout the village?

**The future**

**Primary question:**

Do you wish to become a contract farmer in the future? What will influence this decision?

**Follow up question**

a) Do you think contract farming schemes like this one will become more or less important to villages like yours?
b) What does the future hold for your farm? Do you want your children to continue farming? Do they want to?

---

2. **Interview guide for semi-structured in-depth interviews with contract key informants**

**Introduction**

Start the interview by asking the participants name, age and occupation and give an overview of what is going to happen in the interview.

**Value chain structure and territoriality**

Ask participants to draw a ‘mud map’ of the links in the value chain.
Primary question:

Can you describe the value chain and tell me about your/your company's role in the value chain? How did you come to participate in the value chain?

Follow up questions:

a) Why does this value chain exist? What advantages does it have over the traditional market?
b) From your perspective, how does the chain function? (main actors, organization, important links)
c) What are the key requirements that influence the operation of the chain? (consumer/processor demands, end markets)
d) Where are all the participants in this value chain located? (farmers, processors, retailers, extension etc)
e) Can you tell me about the particular characteristics of growing potatoes and how that influences the chain? (production, storage, transportation etc)
f) Can you tell me about the characteristics of the farmers that supply the value chain?
g) Where is the most value added along the chain? Who profits most from the value chain? How is value distributed along the chain?
h) Why do you (implement/participate) in this chain? Why not just buy potatoes at the mandi?

Evolution of value chain

Primary question:

What led to contract farming evolving in these places? Why was this area chosen for the scheme?

Follow up questions:

a) What has influenced how this contract scheme has evolved? What defines this contract scheme compared to others?
b) What is the history of growing potatoes in this area?
c) How does this value chain compare to how production and procurement of potatoes traditionally operates?
d) What challenges has this scheme had to overcome?
e) How has growing, procuring and processing potatoes changed over time?
   i. What are the most important changes?
   ii. What has caused these changes?
   iii. Who has been able to take advantage of these changes?
f) How does the scheme establish itself in an area?
g) Does the scheme operate differently in different areas? How do the local characteristics of a place affect how the scheme functions/its success?
h) What advantages do contracted villages gain over other villages without contract farming?

Small farmers and the contract

Primary question:

Can you tell me about the role small farmers' play in the value chain and the challenges they face? How does the contract operate? Why do you work with small farmers?
Follow up questions:

a) What are the advantages and disadvantages for farmers of contracting compared to selling to the mandi?
b) How are potatoes selected? Do farmers meet the terms of the contract? What happens to rejected produce?
c) What factors determine which farmers can participate or not? What kinds of farmers are typically included/excluded? What influences small farmers’ decision to participate or not?
d) How are small farmers recruited? What requirements must they meet to participate? What are the main barriers that small farmers face in supplying the value chain?
e) How does participation in the value chain change farmer’s lives? What are the benefits of participating vs not participating?
f) What resources, services, or help is available to small farmers so they can participate successfully? Who provides these? Are these resources available to everyone? How do small farmers access them?
g) What are the challenges with working with small farmers?
h) Are participating farmers part of any producer organizations/cooperatives?
i) What do you think can be done to ensure that small farmers are included in the value chain and benefits are evenly distributed?
j) How does the scheme affect or contribute to local and district development?

Institutional environment

Primary question:
Can you tell me about the institutional environment in which this contract scheme operates? What are the important formal and informal organisations, rules and policies that influence the operation of the scheme? What about cultural and social norms and traditions? (SCALE – local, state, national, global)

Follow up questions:

a) How have your company’s values and traditions influenced how you operate the scheme?
b) How have changes in the institutional environment shaped this value chain? What have been the most important changes vs the traditional market?
c) How do politics affect the operation of the scheme and small farmer’s place in it?
d) How do standards operate in the chain? How is quality ensured?
e) How does the value chain contribute to regional development? Is this benefiting some more than others? Why?
f) Land
g) Credit

Governance and power

Primary question:
Who controls the value chain? How is the chain managed and who has most of the power to influence what happens?

Follow up questions:

a) Who has the most influence over the chain and its operation and structure?
b) What are the relationships between different participants like?
c) What relationships are important to the operation of the scheme?

d) What kind of information needs to be passed along the chain?

e) Who benefits most in the value chain?

f) How much power do small farmers have to improve their position?

g) Which parts of the chain capture the most value? How much do different participants earn?

**Gender**

**Primary question:**

What role do women play in the value chain? Are women excluded from doing certain things in the value chain?

**Follow up questions:**

a) Are there roles that only women, or only men, do?

b) Are there conscious efforts to involve women or ensure women benefit from the contract farming scheme?
Appendix B – Livelihoods questionnaire

Date:..........................  Household ID:.......................  

<table>
<thead>
<tr>
<th>District Name</th>
<th></th>
<th>Block Name</th>
<th></th>
<th>Village Name</th>
<th></th>
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<tbody>
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</table>

Name of decision maker........................................................................................................ M/F

Name of respondent (if different)............................................................................................. M/F

Mobile number:

Location description:...................................................................................................................

........................................................................................................................................................

Distance to APMC (name them):....................................................................................................

........................................................................................................................................................
### Household characteristics

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Religion</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Social group (ST/SC/OBC/Open)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Household type (extended, joint etc)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Pucca/Semi-pucca/Kutcha</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Owned (note who) / Rented (note lease)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Number of rooms</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Other houses owned by anyone</strong></td>
<td>Y/N, No, Value</td>
</tr>
<tr>
<td><strong>Assets:</strong></td>
<td>Number, Year purchased</td>
</tr>
<tr>
<td>Car</td>
<td></td>
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<tr>
<td>Motorcycle</td>
<td></td>
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<tr>
<td>Other vehicle (truck etc)</td>
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<tr>
<td>TV</td>
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<tr>
<td>Electricity</td>
<td></td>
</tr>
<tr>
<td>Computer</td>
<td></td>
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<tr>
<td>Refrigerator</td>
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<tr>
<td>Internet access</td>
<td></td>
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<tr>
<td>Mobile phone</td>
<td></td>
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<tr>
<td>Toilet facility</td>
<td></td>
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<tr>
<td>Tractor</td>
<td></td>
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<tr>
<td>Plougher</td>
<td></td>
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<tr>
<td>Harvester</td>
<td></td>
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<tr>
<td>Irrigation pump</td>
<td></td>
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<tr>
<td><strong>Drinking water source</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Kitchen garden</strong></td>
<td>Y/N, Size</td>
</tr>
</tbody>
</table>
Who are the current working members of your household?

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>Relation to head</th>
<th>Education level</th>
<th>Literacy</th>
<th>Primary livelihood activity</th>
<th>Secondary livelihood activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision maker</td>
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</tbody>
</table>

Are there any migrated household members?

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>Education/literacy</th>
<th>Reason for absence (note occupation etc)</th>
<th>Permanent/temporary or seasonal absence?</th>
<th>Sends remittances home? How much/year?</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Number of children in household (non-working):....................
<table>
<thead>
<tr>
<th>Total annual household income trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Compared to most other households in the village, do you consider yourself to be:  Better off / Just as well off / Not as well off
Livelihood activities

Can you list your household’s livelihood activities in order of importance?

<table>
<thead>
<tr>
<th></th>
<th>Activity (crop, wage, remittance etc)</th>
<th>Proportion of yearly income (%)</th>
<th>Total income/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td></td>
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<tr>
<td>2</td>
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<td>3</td>
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<tr>
<td>4</td>
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<td></td>
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<tr>
<td>5</td>
<td></td>
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</tr>
</tbody>
</table>

If I asked this question 2 years ago, what would the list look like?

<table>
<thead>
<tr>
<th></th>
<th>Activity (crop, wage, remittance etc)</th>
<th>Proportion of yearly income (%)</th>
<th>Total income/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<td>3</td>
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<td>4</td>
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<tr>
<td>5</td>
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</tbody>
</table>

If I asked this question 5 years ago, what would the list look like?

<table>
<thead>
<tr>
<th></th>
<th>Activity (crop, wage, remittance etc)</th>
<th>Proportion of yearly income (%)</th>
<th>Total income/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td></td>
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<td>3</td>
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<td>4</td>
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<tr>
<td>5</td>
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</tbody>
</table>

If I asked this question 10 years ago, what would the list look like?

<table>
<thead>
<tr>
<th></th>
<th>Activity (crop, wage, remittance etc)</th>
<th>Proportion of yearly income (%)</th>
<th>Total income/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<td>3</td>
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<td>4</td>
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<tr>
<td>5</td>
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</tbody>
</table>
If I asked this question **20 years ago**, what would the list look like?

<table>
<thead>
<tr>
<th>Activity (crop, job, remittance etc)</th>
<th>Proportion of yearly income (%)</th>
<th>Total income/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td></td>
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</tbody>
</table>

Total *number* of different household livelihood activities

<table>
<thead>
<tr>
<th>Current</th>
<th>2 years ago</th>
<th>5 years ago</th>
<th>10 years ago</th>
<th>20 years ago</th>
</tr>
</thead>
</table>

Household savings level

<table>
<thead>
<tr>
<th>Current</th>
<th>2 years ago</th>
<th>5 years ago</th>
<th>10 years ago</th>
<th>20 years ago</th>
</tr>
</thead>
</table>

Household credit 2011-2012

<table>
<thead>
<tr>
<th>Purpose of loan</th>
<th>Source</th>
<th>Amount</th>
<th>Repaid?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Source of credit history

<table>
<thead>
<tr>
<th>Current</th>
<th>2 years ago</th>
<th>5 years ago</th>
<th>10 years ago</th>
<th>20 years ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kisan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Money lender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission agent</td>
<td></td>
<td></td>
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<tr>
<td>Input provider</td>
<td></td>
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<tr>
<td>Cooperative</td>
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<tr>
<td>SHG</td>
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<tr>
<td>Friend/relative</td>
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<tr>
<td>Other</td>
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</tbody>
</table>
**Current consumption expenditure (past 365 days)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost estimate/month</th>
<th>Expenditure increasing/decreasing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staple foods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other foods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packaged food</td>
<td></td>
<td></td>
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<tr>
<td>Etc</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Electricity</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Mobile phone</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Remittances sent to other households</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consumer items</strong></td>
<td></td>
<td></td>
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<tr>
<td>Clothes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entertainment</td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total expenses per month</strong></td>
<td></td>
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</tr>
</tbody>
</table>

**Household involvement in government programs**

<table>
<thead>
<tr>
<th>PDS Cardholders</th>
<th>Number:</th>
<th>Antyodaya / BPL / APL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NREGA/MGNREGS</td>
<td>Participants</td>
<td>Days work per year</td>
</tr>
<tr>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (subsidies etc)</td>
<td>Assistance received</td>
<td></td>
</tr>
</tbody>
</table>

**How would you describe your household’s food security? Does everyone get enough nutritious food to eat?**

....................................................................................................................................................................................
....................................................................................................................................................................................
....................................................................................................................................................................................

**How has your household food security changed over time?**

....................................................................................................................................................................................
....................................................................................................................................................................................
Household food purchase patterns (%)

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>5 years ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home production</td>
<td></td>
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<tr>
<td>Mandi</td>
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<tr>
<td>Store</td>
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<tr>
<td>Supermarket</td>
<td></td>
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<tr>
<td>PDS shop</td>
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</tr>
<tr>
<td>Other</td>
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</tbody>
</table>

Land holdings

Total operational land (acres)

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>2 years ago</th>
<th>5 years ago</th>
<th>10 years ago</th>
<th>20 years ago</th>
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</thead>
<tbody>
<tr>
<td>Irrigated</td>
<td></td>
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<tr>
<td>Rain fed</td>
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<tr>
<td>Cultivable</td>
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<tr>
<td>Fallow</td>
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<td></td>
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<tr>
<td>Non-cultivable</td>
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<tr>
<td>Leased in</td>
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<tr>
<td>Term of lease</td>
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<tr>
<td>Lease value (annual)</td>
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<tr>
<td>Leased out</td>
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<tr>
<td>Term of lease</td>
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<tr>
<td>Lease value (annual)</td>
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<tr>
<td>Total farm land</td>
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</table>

Land title in whose name:

Irrigation sources available canal / electric tubewell / diesel tubewell / borewell / tank / dam / other: ...........................................

Irrigation method flood / drip / sprinkler / other: .............................................

Number of wells on farm:

Availability of irrigation kharif / rabi / summer

How long has this land been in your family?..........................................................................................................................

Farming experience (years):.............................................

38 1 = share cropping, 2 = fixed rent in cash, 3 = fixed rent in kind, 4 = against labour
### Cropping pattern 2011-2012

<table>
<thead>
<tr>
<th>Season</th>
<th>Crop</th>
<th>Area (acres)</th>
<th>Prod. (qt)</th>
<th>Sale price (rs./qtl)</th>
<th>Market</th>
<th>Own consump. (% or kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Kharif</td>
<td>Chipping potato</td>
<td></td>
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<tr>
<td></td>
<td>Table potato</td>
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<td>Perennial</td>
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</tbody>
</table>

### Cropping pattern history

<table>
<thead>
<tr>
<th>Season</th>
<th>Crop</th>
<th>2 years ago (area or %)</th>
<th>5 years ago (area or %)</th>
<th>10 years ago (area or %)</th>
<th>20 years ago (area or %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kharif</td>
<td>Chipping potato</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Table potato</td>
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<tr>
<td>Rabi</td>
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<td>Summer</td>
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<tr>
<td>Perennial</td>
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</tr>
</tbody>
</table>

39 1 = contract, 2 = APMC, 3 = village trader, 4 = farmers market, 5 = other
**Potato farming**

**Crop experience (years)**

**Have you grown chip-grade potatoes under contract?**

**Which year did you first start growing chip-grade potatoes under contract?**

**Contract potato growing history**

<table>
<thead>
<tr>
<th>Year</th>
<th>Grew contract crop</th>
<th>Area planted (acres)</th>
<th>Contract price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
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<td></td>
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<tr>
<td>2010</td>
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<td></td>
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<tr>
<td>2009</td>
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<td></td>
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<tr>
<td>2008</td>
<td></td>
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<tr>
<td>2007</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Grew contract crop</th>
<th>Area planted (acres)</th>
<th>Contract price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Non-contract potato growing history**

<table>
<thead>
<tr>
<th>Year</th>
<th>Grew potato crop</th>
<th>Area planted (acres)</th>
<th>Market price</th>
<th>Own consump. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
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<td>2010</td>
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<td>2009</td>
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<td>2008</td>
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<tr>
<td>2007</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Grew potato crop</th>
<th>Area planted (acres)</th>
<th>Market price</th>
<th>Own consump. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td></td>
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</tbody>
</table>

**Do you ever sell your contract potatoes to other buyers?**

......................................................................................................................
Potato cultivation costs

<table>
<thead>
<tr>
<th>Input</th>
<th>Source</th>
<th>Contract crop (Rs./acre)</th>
<th>Table crop (Rs./acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

How are these costs payed for (credit, savings etc)?

How do potato cultivation costs compare to other crops in the area?

Livestock (current)

<table>
<thead>
<tr>
<th>Animal</th>
<th>Current</th>
<th>2 years ago</th>
<th>5 years ago</th>
<th>10 years ago</th>
<th>20 years ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo</td>
<td></td>
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</tr>
<tr>
<td>Bollock</td>
<td></td>
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<tr>
<td>Cow</td>
<td></td>
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<tr>
<td>Chickens</td>
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<tr>
<td>Pigs</td>
<td></td>
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<td></td>
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<tr>
<td>Goat</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Sheep</td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
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</tbody>
</table>

Compared to other farmers’ lands in your village, would you say that the agricultural land you own is:

1) More fertile; 2) Equally (or just as) fertile; 3) Less fertile
1) More productive 2) Equally productive 3) Less productive

How would you describe your overall agricultural activities compared to others in the village?

<table>
<thead>
<tr>
<th>Progressive, high value inputs &amp; technology</th>
<th>Middle ground</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

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### Farm labour

**2011-2012**

<table>
<thead>
<tr>
<th>Season</th>
<th>Crop</th>
<th>Full time</th>
<th>Seasonal</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>Rs</td>
<td>F</td>
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</tbody>
</table>

**Labour change over time**

<table>
<thead>
<tr>
<th></th>
<th>Full time</th>
<th>Seasonal</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>2 years ago</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5 years ago</td>
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<td></td>
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<td>10 years ago</td>
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<tr>
<td>20 years ago</td>
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</tbody>
</table>

### Which crops are most labour intensive?

.................................................................

.................................................................

### Family/Social Networks

Do you have relatives in the village? Y/N

Do you help, and receive help, from other households with farming or other work (who)?..........................

.................................................................

Do you receive or give regular cash or gifts from/to relatives or villagers?........................................

.................................................................

Do you have relatives outside of the village (but within Maharashtra)? Y/N

Do you receive help or cash from them/do you help them (describe trend)?.................................

.................................................................

Do you have relatives elsewhere in India, or overseas? Y/N
Do you receive help or cash from them (describe trend)?..............................................................................................................
...........................................................................................................................................................................................................................
...........................................................................................................................................................................................................................
Are any of your household members of a Societies/SHG’s/Cooperatives?...........................................................................................
...........................................................................................................................................................................................................................
...........................................................................................................................................................................................................................
Political access
Please describe to me your involvement with politics and access to the political process? Do you feel your concerns are listened to and acted on by local government?
Appendix C – Livelihood group ranking exercise

Questions:

1. How did these households come to be in a particular group? What is it about different household’s history (evolution) that determines which livelihood group they are in?
2. Which livelihood groups are participating in the contract-farming scheme? Does one particular group dominate participation? Why?
3. Which livelihood groups are benefiting most / doing the best out of the contract farming scheme? Why?
4. Is the contract farming scheme changing which households belong to which group (moving up or down)? Has the contract-farming scheme influenced the wealth gap between these livelihood groups?
5. How are new opportunities in the village (on and off-farm) distributed between these different groups? Are households able to move into a new group? Why/why not?
6. What will be the future for households in each of these groups?
7. What are the major challenges facing each livelihood group? What are the major challenges / problems in the village?
8. Ranking:
   a. What are the most important livelihood activities in the village?
   b. What are the most important development priorities for the village?
   c. What are the most challenging development constraints the village faces?
9. What are the most important village institutions? Which livelihood groups benefit most from these institutions?
10. What is the history of agriculture in the village? How have cropping patterns changed? When did cash crops come to the village? Which livelihood groups have been able to take advantage of new cropping patterns and cash crops?
11. What are the major resources (water, electricity, roads, schools, banks etc) that households in the village rely on? Where are they located? Are there differences between access and use for different livelihood groups
<table>
<thead>
<tr>
<th>Livelihood group</th>
<th>Average land holding</th>
<th>Caste groups</th>
<th>Cropping Characteristics (cash crops / staples etc)</th>
<th>Wealth and vulnerability status</th>
<th>Off-farm income sources</th>
<th>Typical livelihood activities</th>
<th>Proportion in overall population</th>
</tr>
</thead>
<tbody>
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