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Jennifer Leavy and Naomi Hossain
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Jennifer Leavy and Naomi Hossain

Summary

Who wants to farm? In an era of land grabs and environmental uncertainty, improving smallholder productivity has become a higher priority on the poverty and food security agenda in development, focusing attention on the next generation of farmers. Yet emerging evidence about the material realities and social norms and desires of young people in developing countries indicates a reasonably widespread withdrawal from work on the land as an emerging norm. While de-agrarianisation is not new, policymakers are correct to be concerned about a withdrawal from the sector: smallholder productivity growth, and agricultural transformation more broadly, depend in part on the extent to which capable, skilled young people can be retained or attracted to farming, and on policies that support that retention. So who wants to farm, and under what conditions? Where are economic, environmental and social conditions favourable to active recruitment by educated young people into farming? What policy and programmatic conditions are creating attractive opportunities in farming or agro-food industry livelihoods?

This paper explores these conditions in a context of food price volatility, and in particular rising food prices since 2007. To do so, it analyses primary qualitative research on the attitudes of young people and their families to farming in 2012, a time when food prices had been high and volatile for half a decade. In theory, assuming higher prices benefit small farmers, food farming should be more attractive since food prices started to rise in 2007. But this simple causal assumption overlooks both that in many developing countries, it takes considerable economic power - ownership or access to cultivable land and affordable credit for inputs - to turn a profit in farming. It also fails to take into account more sociological explanations governing work and occupational choice - status aspiration and merit on the one hand, and perceived risk on the other. These two explanations help to explain why young people from relatively low income families, particularly those most likely to innovate and raise productivity levels, do not perceive farming as a realistically desirable occupational choice.

Based on analysis of interviews, focus group discussion and household case studies with almost 1500 people in 23 rural, urban and peri-urban communities in low and middle income Asian, African and Latin American countries in 2012, this research digs deeper into some of the established explanations as to why youth in developing countries appear reluctant to enter farming, and identifies conditions under which capable and enterprising youth are being attracted to farming, and entry-points for youth participation in policymaking around agriculture and food security.

Keywords: agriculture, aspirations, farming, food price volatility, food crisis, social mobility, youth

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Introduction

Background and motivations

Who wants to farm? This paper seeks to answer this question by analysing the conditions and determinants of young people's aspirations and opportunities in relation to farming. It aims to contribute to the growing body of evidence on the implications of the aspirations, expectations and opportunities of young people with regard to farming. This literature has emerged in response to concerns that the need for enhanced smallholder productivity and agricultural intensification to achieve poverty reduction and food security goals may be at odds with the aspirations and opportunities of contemporary developing country youth, most notably signalled by mass withdrawal from the land in favour of urban opportunities and lifestyles.

This overlap between a 'crisis' in agriculture and a 'youth crisis' gives rise to policy concerns about, among others, the skills, size and sustainability of the future workforce for smallholder food farming: will the farmers of the future have the capacities, knowledge and networks for smallholder agriculture to maximise its potential for poverty reduction and food security? Or, as better opportunities emerge in urban, off- and non-farm and cash crop sectors, will smallholder food farming become the last resort for the least skilled, networked and entrepreneurial young people? What kinds of agricultural policies and practices are then needed to advance goals of sustainable poverty reduction and food security?

This paper aims to help answer these and related questions through a close exploration of the influences and determinants on young people's aspirations and opportunities in relation to farming in selected developing country contexts. It asks, 'who wants to be a farmer?' in order to be able to examine the responses for what they reveal about the opportunities and constraints, incentives and investments to which young people respond in their decisions about how they should make a living. This question has taken on renewed significance at a time when world food prices have been rising for several years, and despite some volatility, have been relatively high for more than half a decade. As food prices were (for various reasons) relatively low in the three decades preceding the 2008 global price spike, the present is an opportune moment to consider whether potentially higher earnings may reverse the low esteem in which smallholder (food) farming has been held in developing countries. Might higher prices mean more young people are attracted to farming than in the past? How do the dynamics of food markets influence attitudes towards farming?

In addressing the question 'who wants to be a farmer?' the paper seeks to contribute to a wider research agenda about 'the young people and agriculture problem' by providing broadly generalisable insights into how the opportunities for engagement with farming, both food and, to a lesser extent, other crops, are structured for young people in different contexts. This includes how the perception and experience of different public policy approaches to agricultural investment shape the desirability of and scope for entering farming. In tackling these questions, the paper assumes that people's aspirations are formed from an early age and change over time. Work aspirations may be closely related to but are not necessarily synonymous with lifestyle aspirations. Aspirations are influenced by and evolve in response to many factors including peer effects, role models, personal interests, media etc. as well as their expectations. These expectations tend to be formulated within a person's 'opportunity space', involving reasonable assessments of what is possible within their geographical, socioeconomic and policy context, and given their own qualities and characteristics (see the discussion in Leavy and Smith, 2010). In its approach to these issues, the paper draws closely on the research agenda and conceptualisation of the

opportunity space for young people's engagement in farming as set out under the 'Young People and Agri-Food' theme as part of the Future Agriculture Consortium (see Sumberg *et al.* 2012, 5).

The literature on 'future farmers' is new and relatively limited, and the present paper aims to add value through an analysis of findings across and within dynamic contexts. To do this the paper draws on primary qualitative research conducted in 2012 in 23 research sites in 10 low and middle income countries with food insecurity concerns. Comparison is enabled both between countries with different levels of food insecurity and investments in agriculture and education, as well as between urban and rural communities. The research was undertaken with people on low incomes or in precarious livelihoods by national comparison, and with young people as well as their parents and older key informants and other community members. The analysis of the dynamics of change are enabled because the data was collected at a time of relatively rapid food price changes, and research topics were specifically geared towards understanding how perceptions and life-chances were being affected by the fast-changing costs of consumption and agricultural production. The paper takes an explicitly sociological approach to the study of what influences choices with respect to farming: this adds value because it deepens understanding of, and adds realism to, the reductively economic perspective that higher food prices will automatically be good for small farmers (see, for instance, Swinnen 2011).

The findings of the research presented here affirm key findings from other research on youth and the agri-food system, most notably that the aspirations of young rural people are dominated by formal sector employment and modern urban lifestyles, and a generalised reluctance, found across contexts, to consider farming as an employment option. This paper situates these aspirations within the wider set of opportunities and constraints in which young people are located and the resources on which they can conceivably draw, so that a more structural analysis of the attitudes of future farmers can be made.

It seems clear that the aspirations for formal sector employment and urban life are related to the 'generational break' in the acquisition of formal schooling, which in contexts of particularly rapid change creates or contributes to a parallel break in family and community traditions of smallholder and small-scale farming. Education is partly about learning and instilling respect for a life of the mind as distinct from manual work. Yet it is also connected to modernity and progress, desires for which are found among both rural and urban young people, perhaps reflecting the rapid increase in the use of information communication technologies and the spread of an increasingly globalised culture of modern life. Yet the extent to which desires for a modern life help build realisable life goals depends on where these young people live, on the networks, markets and other resources available to them, as well as to their individual capabilities and dispositions.

The pace of economic growth, and to a discernible degree, of global economic integration, in many of countries in the study is itself a key background variable: the opportunities that may be available to these young people appear to be increasing fast in several (not all) of these places. The rapid increase in the range of work opportunities available as a result of new markets, transport and communications links and skills-sets means that it is difficult to know for sure which aspirations are realisable, and for whom, and which are less realistic and merely likely to lead to frustrated ambitions. Some directions of progress do remain effectively barred to young people from low income backgrounds. People spoke pragmatically about their lack of prospects for public sector employment, for instance, which remains coveted as safe, lucrative and high status in many low and middle income developing countries. This bar relates to the need for connections and/or the means to purchase office, as well as excellent educational qualifications in a competitive field.

It is clear too, that new means and technologies for transmitting cultures and worldviews are changing relationships to farming over the span of a single generation. Better education and communications appear to have had the effect of dramatising the hardships of a farming life: a generation has grown to adulthood which, in some of the less developed locations in particular, has for the first time had the means to compare a future as a farmer (often viewing farming as a way of life rather than as a job, and 'farmer' as an identity as opposed to a job title) with other possibilities. Many of these young people speak movingly about the sorrow they feel witnessing their small farmer parents' often desperately hard struggles to earn a living. The lessons of such hardship have been hard won for many, both parents and children. For young women, in particular, there can be very strong motivations for escaping a life as subsistence farmer or farmer's wife (depending on the context and on how women's roles in agriculture are viewed).

Nor is such hardship the stuff of history or custom: narratives about the toughness of a farmer's life have had new resonance as a result of food price volatility since 2007. Consumer prices seem to move relentlessly upward even while grain producers complain of unstable and often loss-making low prices for their crops. Many rural people see cash incomes as having become more, not less, important, since food prices began their sharp rise in 2007. This is partly because all costs of living have risen, not just the staple foods produced by smallholder and small-scale farmers. It is partly due, too, in several of the more developed agricultural markets, to the fact that small farmers capture rather less of the price increases than consumers end up paying, due to market mediators and rent-seekers of various kinds. And finally increasingly costly inputs, particularly fertilizer, the price of which has risen with world oil prices, add to the uncertainties and hardships of smallholder farming.

It is by no means the case that farming is entirely unattractive, however. Some urban people appear to find the idea appealing, perhaps partly out of a nostalgia for a rural life that is sufficiently far in the past for its hardships to have been forgotten, and partly too out of concern about their uncertain hold on food security. Young people in countries where Governments have signalled a high value for agriculture are also more inclined to view agriculture as having a positive future. Increased public spending on farming and farm support programmes, initiatives geared at enhancing smallholder productivity and skills and efforts that in effect improve the image of the sector through the introduction of modern technology and approaches all seem to appeal to young people. High food prices appears to contribute only to the extent that food prices are seen as high rather than volatile and where small farmers are net gainers (taking into account the higher consumer and input prices they also pay).

The paper proceeds as follows. Section 2 reviews relevant literature on the issue of aspirations with respect to farming, situating those debates within wider debates that establish the case for investments in agricultural productivity, intensification and smallholder farming. Section 3 sets out the conceptual framework of the 'opportunity space' around which the paper is organised. It also explains the methodology used to collect and analyse the data, provides background to the research sites, and sets out the propositions to be explored in more detail. Section 4 presents the main empirical findings, organised under four sub-sections: i) education and social status ii) the challenges of a farmer's life, iii) key constraints and iv) other directions of change that underpin the opportunity space in which youthful aspirations are formed. Section 5 discusses the findings and Section 6 concludes by summarising the findings and reflecting on their implications for policy, and research on the issue of youth, agriculture and food price volatility.

1 Who wants to be a farmer? What the literature says

1.1 The case for agriculture

Agriculture is the main source of livelihood for one billion poor people living in rural areas on less than US\$1.25 a day. Over 80 per cent of food consumed in much of the developing world comes from the smallholder sector. It is seen to play a key role in poverty reduction and food security, with great potential for impacting on nutrition via higher volumes and wider varieties of food produced (IFAD 2013:6). Some argue that growth-poverty linkages in agriculture are also stronger compared to other sectors, with greater potential to reduce poverty than non-agricultural activities, in allowing more poor people to participate in growth and creating more opportunities for employment for poor people (Diao *et al* 2010, on Africa; Lipton 2005). This has been a strong and persistent narrative in rural development: 'A crucial attribute of the narrative is that both growth and equity goals appear to be satisfied simultaneously via the emphasis on small-farm agriculture: its enduring success owes much to this felicitous conjunction of outcomes. Much rests on the rural poor being poor small farmers' (Ellis and Biggs 2001, 441). The macroeconomic figures appear to bear this out: cross country research suggests that the poverty gap is reduced by a 1 per cent increase in agricultural GDP per capita 5 times more than it is by increased per capita GDP in other sectors (Christiaensen, Demery and Kuhl, 2011).

However, a recent examination by Collier and Dercon of this model of smallholder-farmer focused agriculture-based growth for economic development and poverty reduction suggests, in Africa at least, that the evidence on which it is based is not as strong as believed, and the context of contemporary global economic dynamics means this strategy is unlikely to work. Instead, a radical transformation is needed over the next 50 years, involving huge increases in agricultural production and labour productivity. In order to effect the transformation in agriculture needed to fuel economic development, changes in scale are likely to be important, at least for Africa, with an emphasis on a 'more open-minded approach to different modes of production', rather than focusing exclusively on smallholder farming (Collier and Dercon, 2014).

Over the next four decades, the need to feed a large and growing urban population will create more demands on the agriculture sector, including in global markets. This means agricultural productivity and intensification need to increase, and sustainably (Royal Society 2009; IFAD 2013: 26). Meeting the twin challenges posed by supplying rising global food needs and the need for sustainable farming practices requires a transformation in farming – in the way people cultivate (both scale and scope) and in the inclusiveness of agricultural policy towards smallholder farmers. Without significant productivity increases, innovations and/or diversification in the near future, small farms will be decreasingly viable as economic and social units (Jayne *et al.* 2010).

Success stories from the green revolution of the 1960s and 1970s demonstrate how technological advances and the right investments and interventions can increase productivity. Overall, improvements in agricultural technology including the development of high yielding varieties of cereals, distribution of improved seeds, fertilisers and other inputs, along with modernised management practices, meant grain production between 1961 and

2000 increased from 800 million to more than 2.2 billion tonnes (World Bank 2007; FAO 2011). This was achieved through intensive crop production and had important poverty-reducing multiplier effects, by stimulating rural economies as well as impacting positively on malnutrition rates (Hazell 2003; Cervantes-Godoy and Dewbre 2010). Improved technology coupled with extension services funded by governments or donors meant that smallholder farmers participated in this 'revolution' and achieved productivity increases, particularly in Asia (IFAD 2013:8).

However, the extent of smallholder participation remains contested (Lipton and Longhurst, 1989) and there are important spatial and agroecological differences in how benefits from participation were distributed (Pingali, 2012; Pinstруп Andersen and Hazell, 1985). Other important threats to the success of 'green revolution' technological advances have been, and remain: increasingly fragmented landholdings that threaten the capacity of landholdings to provide adequate livelihoods (Jayne and Muyanga 2012); lack of investment support to smallholders; and a marginalisation of these farmers from economic and development policy, leaving smallholders more vulnerable (Wiggins 2011; Vorley, Cotula and Chan 2012). (IFAD 2013:9). Further, gains from the green revolution have not been spread equally: "Not all regions in the world or all farmers have benefited equally from the advances brought by the green revolution (Hazell and Ramasamy 1991; Hazell 2003). Significant gains in production were achieved in Asia and Latin America, but impacts in sub-Saharan Africa were much smaller (Ellis 2005)" (IFAD 2013:8).

Turning to the contemporary context, while many of the challenges inherent in agricultural production remain the same, the conditions smallholder farmers face have changed since the golden years of the 1960s and 1970s: "Farmers face a series of unprecedented, intersecting challenges, often originating at global levels: increasing competition for land and water, increased influence of and changing markets, rising fuel and fertilizer prices, and climate change." (IFAD 2013:9). Overcoming these challenges needs innovation, increased take-up of new technologies and farmers need to be able to engage in rapidly changing markets including factor markets.

1.2 The aspirations story

The promise of expanding markets and increased demand for food products from a growing global population would suggest more incentives to engage in farming, making the sector an attractive prospect for the next generation. However, along with the recognition of these "unprecedented, intersecting challenges", or perhaps as a direct result of these, a widespread and powerful narrative and a rapidly growing body of evidence of labour withdrawing from the agriculture sector and on youth aspirations suggest food farming – particularly the small holder food production widely believed most likely to contribute to increased food production and rural poverty reduction – is less likely to draw in young people as a preferred or first choice of work.

The narratives are clear: young people, even young rural people in developing countries where agriculture is still the dominant sector in terms of livelihoods, do not aspire to farming and this is potentially disastrous for the agriculture sector. This 'agriculture in peril' narrative is matched by an equally strong 'youth in peril' narrative, whereby young people are seen to be either 'victims' of the vagaries of the economy and hardest hit by unemployment or 'villains' – lazy and not willing to work hard for a living (Sumberg *et al* 2013; Anyidoho *et al* 2012a). Young people are treated as a homogeneous group, with little sense of social

differentiation, and agriculture and young people are each seen to be the saviour of the other.

What is the evidence base for this apparent withdrawal of young people from agriculture? Historically, aspirations studies from the 1960s and 1970s, mainly in West Africa, suggest that young people in these societies expressed high aspirations and expectations taking them away from farming, which was considered to be low status (Nwagwu 1976; Osuji 1976; Owuamanam 1982; Hurd and Johnson 1967; Gugler 1968; Campionvincent 1970; Imoagene 1976). More recently, low levels of wellbeing – material, relational and psychosocial - were reported by young girls working on South African fruit farms in Kritzinger (2002). While the young people interviewed in Juma's (2007) Tanzanian study considered farming to be dirty and undesirable: 'agriculture is regarded as an employer of the last resort to young people.' (Juma, 2007:2). This sentiment of agriculture being the last resort, something you do if you fail at school, or in business or as a migrant, is echoed in Getnet Tadele and Asrat Ayalew Gella's work in Ethiopia (2012), and is not peculiar to this setting. In the same study, for some young people, agriculture is not even an option as pressure on resources especially land scarcity pose serious barriers to entry for young people (see also Leavy and Smith's 2010 review).

Studies from India also suggest a trend towards young people exiting agriculture. This is prevalent across all sizes of landholdings, but with different motivations. Those with lower access to land are likely being pushed out of the sector while those with larger landholdings are capitalising on their relatively higher education and skills levels to exploit opportunities in other sectors. It has geographical as well as economic elements: it is particularly strong in villages close to urban centres and where the per capita value of agricultural production is low. However, the study suggests that while young people appear to be moving away from farming they are also keen to hang onto their land and other assets – not only for economic reasons but also as an important part of their identity as coming from a farming family. Young people remaining in who do farm often do so because their opportunities are limited by lack of skills or capital (Sharma, 2007; Sharma and Bhaduri, 2009).

Many of the studies of young people's aspirations towards agriculture tend to focus mainly on farming rather than other agricultural-based activities, and as a long-term prospect. However, drawing on insights from the migration literature, it is likely that the constructions of agriculture differ for young people depending on their circumstances, as well as over the life course and with changes to the 'opportunity space' (Sumberg *et al.* 2012, 3; 2013).

A study of young people in Ghana's cocoa growing communities sets out a typology of young people's main stated aspirations towards farming: i) farming on own farm as primary work; ii) farming as a means of capital accumulation towards non-farm primary work; iii) formal work as primary occupation, with no direct engagement with farming (Anyidoho *et al* 2012b: 24). Here, a substantial group of young people were relying on cocoa farming as a stepping stone, a way to earn income to propel them into other, preferred work. This chimes with other work in tomato growing communities in Brong Ahafo, also in Ghana (Sumberg and Okali 2006). Land pressure was driving many of these young people's aspirations out of the cocoa sector, but there was also a perceived 'hierarchy' across the categories of this typology – with formal work seen to be much higher status compared to own-farm agricultural production. A further observation from this research is that the aspirations of young people participating in this study were echoed in their parents' own hopes for them. The young people interviewed also had clear ideas of what it would take for them to

seriously consider cocoa as a long term option, including greater government investment in new technologies and inputs, improved access to credit and higher prices – as well as measures that do not necessarily fall under an agriculture remit but focus more on improving living conditions in rural areas. They saw such actions by government to also signal that government values the sector thus improving cocoa farming's status (Anyidoho *et al*, 2012b).

Recent reports of young people's changing aspirations towards agriculture are symptomatic, for some, of much more fundamental agricultural and rural transformations. The factors identified as key drivers of deagrarianisation are also those cited as reasons why young people are turning away from agriculture. These include reduced land availability, due in part to environmental degradation, economic pressures, and new economic and political opportunities leading to rural populations' realigning their work activities in response (Leavy and Smith 2010). But young people face additional barriers or experience these constraints more keenly.

A key problem with this apparent exodus of young blood is that the sector and sub-sectors need more young people with education, ability and transferable skills to be able to absorb new technologies, innovate, engage in rapidly changing factor markets, and to be entrepreneurial – thus enabling the development of a more dynamic agriculture seen, certainly in Africa, as necessary to bring about the necessary economic growth (Collier and Dercon, 2014). It seems that instead, the brightest and the best are not in general attracted to farming, unless the government and society are sending strong signals about its value and investing in modernising and supporting it.

Public policies could do much to improve the attitude of young people toward small holder farming and/or the wider agro-food system. The evidence in the literature indicates that the lack of appeal of agriculture for many young people reflects: a) lack of effective public investment in small holder farming and the public infrastructure needed to link to markets; b) declining access to land and uncertain access to inputs among young people, including decline in average farm size in many countries in past few decades but also c) social change resulting from rapid increases in mass education provision but which have often resulted in a perceived decline in the status of agriculture.

2 Approach and methodology

As noted in the introduction, the organising concept or framework for the paper is the idea of the 'opportunity space', or the

'spatial and temporal distribution of the universe of more or less viable options that a young person may exploit as she/he attempts to establish an independent life. [The opportunity space of] a situated young person is a function of: global, national and regional factors including institutions, policy and demand; place; and social and cultural norms.'

(Sumberg *et al*. 2012, 5).

The analysis here attempts to draw together a multi-levelled analysis of recent and longer-term change in agrarian, food and wage labour markets. The paper draws primarily on perceptions or attitudinal data, complemented by a profile of the community or place with its key social, economic, political and ecological characteristics including poverty levels, vulnerability to climate change and natural disaster, degree of integration into global

markets, level of economic development and provision of public services. This is in line with Sumberg *et al* who notes that the opportunity space can be characterised with reference to its dynamism, scale, scope and diversity, which will in turn depend in significant part on how well connected and resourced rural communities are. As our research also includes attitudinal evidence from urban respondents, we are also able to add evidence of how the opportunity spaces afforded by rural and relevant urban contexts are compared by young people in their assessment of their prospects, and the criteria they consider most vital in drawing those comparisons.

A key contribution of the opportunity space analysis as it is used here is how it helps to make sense of change in the agri-food sector, in particular in relation to smallholder food farming, which in turn contributes evidence of the social impacts of food price volatility. Sumberg *et al* note that the 'restructuring of the agri-food opportunity space – addresses the processes through which food systems are 'transferred' from one generation to another', including the transfer of values and aspirations, resources, production practices and skills, and food preferences and traditions:

'This transfer takes place at multiple interacting levels, and there are at least three aspects to the dynamics of transfer that deserve critical attention. The first is continuity: the transfer takes place on a continuous basis – one meal, crop operation and harvest after another. The second – incremental innovation and adaptation – sits within this continuity, and brings transformation and transfer into a single realm. The third is discontinuity, as the process of transfer is also punctuated by periods of noncontinuous (radical, disruptive) change and innovation – the emergence of new markets, new technology, new institutions, etc.' (Sumberg *et al*. 2012, 6).

The material presented below will be explored for the types of transfers that are taking place in food systems in these 10 countries in Central and South America, East, West and Southern Africa, and in South and Southeast Asia. While the norm or assumption is of continuity or gradual change, for the majority of the 13 rural communities in which the research was conducted in 2012, the transfer of food systems seemed to be experiencing relatively rapid and radical change, or discontinuity. This was marked in particular by the emergence of new markets for labour and/or new entrants (mainly women) into existing markets, and the related matter of the acceleration of the commodification of the basics of everyday life, chiefly food.

The present research was conducted against this backdrop of concerns about the prospects for smallholder agriculture, poverty and livelihoods amidst climate change and commodity price volatility, as well as youth unemployment. The research on aspirations of and for young people with respect to agriculture was undertaken as part of a larger project designed to understand the social impacts on patterns of everyday life of food price volatility. The assumptions on which the research was based were that:

- People's aspirations are modulated within their 'opportunity space', giving rise to expectations that reflect what is possible within their geographical, socioeconomic and policy context, and given their own qualities and characteristics; people are rational agents, making sense of their own realities in line with their desires and ambitions
- Recent adjustments to higher food prices over the past half-decade or more is likely to have made small holder food farming relatively more attractive compared to other sectors
- Young people from rural backgrounds should be drawn more to farming than in the recent past; as part of this, both their own and their parents' aspirations should reflect

a relative rise in the status of farming compared to the recent past. However, constraints on access to land and credit may mean this fails to translate into smallholder farming.

The research on ‘future farmers’ is part of a larger longitudinal research project, which over four years will attempt to uncover the effects of global food price volatility on local lived realities, with particular emphasis on the effects on paid work or livelihoods, the unpaid work of caring for families, and on social relations, specifically informal or customary support networks and systems. In the first year of the research, 2012, in recognition of the fact of five years of price rises and spikes that had engendered considerable uncertainty in markets and in popular perception about the price of food, the decision was taken to explore whether higher food prices were attracting young people into farming, by asking young people, their parents and key informants in communities about their perceptions of the prospects of farming as an employment option.

The ‘opportunity space’ in which people find themselves is directly and closely conditioned by group and individual socioeconomic status, levels of economic development, and public policies that support education and skills development and/or invest in particular sectors. The sites and research participants were not selected specifically because of the scope they offered for comparative analysis across different opportunity spaces with respect to agriculture, but to provide broader bases for comparison across countries. Nearly 1500 people participated in the 2012 research round, including young people, their parents, and key informants from official and customary positions of authority. The research was conducted across 10 countries, selected on the basis of FAO indicators to cover a range from low income countries with severe problems of undernourishment (more than 25 per cent of the population was undernourished) to lower middle income countries with ‘moderate’ levels of undernourishment (less than 25 per cent of the population was undernourished). In each of these an urban and one or two rural sites (three in each of Bangladesh, Indonesia and Viet Nam) were selected on the basis that they could provide an illustrative (although not representative) perspective on the social effects of food price changes. **Figure 1** shows how the countries were categorised according to the FAO indicators for 2012.

Figure 1 Countries selected for the study

	Low-income countries	Lower-middle-income countries
‘Severe’ Undernourishment	Burkina Faso, Ethiopia, Kenya	Guatemala and Zambia
‘Moderate’ undernourishment	Bangladesh	Bolivia, Indonesia, Pakistan and Viet Nam

Among the 23 research sites, agricultural production was observed in the 13 rural sites, but the extent to which food production was for own consumption or for sale, the distribution of benefits from changing food prices, and the extent of other opportunities varied considerably, according to poverty and economic development levels as well as climatic conditions (see Figure 2).

Figure 2 Rural research sites

Site location	Importance of agriculture in local livelihoods	Conditions shaping opportunity space	
Chikwanda, Northern Province, Zambia	Agriculture is the main activity, but is predominantly small-scale, subsistence-oriented, and access to fertilizer without subsidies is unaffordable for the smallholder farmers in the area. No signs of production for sale	Mainly subsistence-oriented	
Nesemtenga, Burkina Faso	Agriculture is the main activity, small-scale subsistence-based, but hit by several droughts /seasons of poor rainfall in the past few years.		Climate-related events shaping perceptions of agriculture
Lango Baya, Kenya	Drought-prone region in the past reliant on small-scale, subsistence agriculture. In past couple of years, irrigation-fed production for own consumption and of vegetables for sale have shifted attitudes to farming. But success depends on access to land near the river		
Eastern Oromia, Ethiopia	Dry region customarily dependent on small-scale, subsistence agriculture, but with rapidly growing interest in irrigation-fed agriculture production and 'model' farming		
Chugüexá Primero, Guatemala	Mountainous region in the west, customarily dependent on corn and bean production for own consumption. Fewer HHs rely on agriculture than in the past, as output does not meet HH needs		New non-ag and non-farm opportunities
Dhamuirhat, Bangladesh	Agriculture is the main source of livelihood, but land ownership is concentrated and it is mainly agricultural labour through which people earn a living. Non-ag sectors are growing fast		
Dadu district, Pakistan	Greatly affected when the Indus river flooded in 2010 and many people fled		Climate events
Koyra, Bangladesh	Until hit by cyclone Aila in 2009, predominantly rice producing region. Now more forest-based livelihoods and shrimp cultivation for export	Market-orientation in agri production is important	New non-ag & non-
An Giang, Viet Nam	The research site is in the major rice producing region, and agriculture dominates the local economy. Local farmers suffer when food prices drop, particularly if they own little land		
Nghe An, Viet Nam	Similar to An Giang, a major rice producing region		
Cianjur, Indonesia	The vast majority of the population live from agriculture, mainly rice production, but land ownership is skewed and most agricultural labour is wage work		New non-ag & non-
Pirhuas, Bolivia	Poor rural community which has featured a lot of reverse migration in recent years. Food farming for own consumption has always been important but dairy farming has been successful recently.		
Banjar, Indonesia	Mainly rubber-producing area of transmigrants from Java, highly integrated into and vulnerable to the global commodities markets	Non-food commodity producers	

Urban people also retain connections with agriculture and food production, but to varying degrees (see Figure 3).

Figure 3 Urban research sites

Site location	Connections with agriculture & food production
Dhaka, Bangladesh	Most people here are migrants, or climate refugees who lost agricultural land due to river erosion. Most people retain some links to rural districts, including family and property but for many these are emotional rather than material.
Kami, Bolivia	Some people still have connections with agriculture and see it is potentially attractive with higher prices, but many people in the town have sold any land they once owned.
Kaya, Burkina Faso	A small town, in which most people are involved in agriculture and livestock breeding.
Kolfe sub-city, Addis Ababa, Ethiopia	Most people here are artisans and wage workers with little evidence of enduring ties to rural communities. Many people rely on international migrant remittances here.
Chichicastenango, Guatemala	This is a market town in a small-scale/ subsistence agriculture region, whose market is famous for its agricultural produce.

Bekasi, Indonesia	Peri-urban industrial area, where most of the workers are migrants with rural agricultural backgrounds elsewhere in Java, who remit funds to and sometimes receive food and funds from their farm homes.
Mukuru, Kenya	Most of the residents are long-term city-dwellers, but some are involved in urban gardening and others retain connections with rural homes of origin.
Karachi, Pakistan	A diverse areas with sections of the local community who are recent migrants after the devastating 2010 floods. Some connections to rural life and homes remain, but people see agricultural inputs as increasingly costly and agriculture as uncertain if potentially profitable.
Ha Noi Viet Nam	Rural parts of the Ha Noi community are involved in rice production, and farming is thought of with respect, although in practice urban people do not see agriculture as an alternative livelihood option.
Kabwata, Zambia	People are long-term city residents, but many are connected to agricultural production through their work as petty traders and food vendors.

Data about the aspirations of young people and attitudes toward farming were collected using focus group discussion and interview checklist topics covering the following issues:

- Views on the work prospects of young people in the communities
 - What do young people & their parents think about their work prospects?
 - What are the risks and opportunities associated with different options and choices?
 - What are young people's hopes and aspirations?
- Present day occupations
 - What work are young people taking up these days?
 - How do these differ compared to their parents'? Why?
- Reliability of farming
 - How reliable is farming / agriculture / agrifood work?
 - Have food prices changes affected that?
 - What other factors are shaping people's aspirations, and in turn their expectations?
- Policies and agriculture
 - How might farming be made more attractive to young people?

These topics were discussed with groups of young people in the communities, as well as with parents and key informants, including local youth leaders, officials and representatives. Issues and concerns regarding local agricultural production and patterns of change with respect to work and wages were also uncovered through other aspects of the research that were not explicitly focused on young people's aspirations.

The interview and focus group transcripts were typed, translated into English and coded using the qualitative data analysis software NVivo 10. On a first reading of the transcript material pertaining to 'youth', the data were coded according to whether it referred to 1) aspirations, behaviour and attitudes, 2) jobs and livelihoods, 3) challenges and needs, 4) programmes and opportunities and 5) delinquency and illegal or risky behaviour by young people. Coded material was further organised according to whether it was from urban or rural people, and from young or older people. Other data about the nature of agricultural production, employment prospects, and broader social change were also drawn on to help make sense of the opportunity space within which young people were crafting work decisions in these communities.

As noted above, the analytical strategy was to explore the material in relation to the three propositions set out above: that people's aspirations are formulated within their 'opportunity space'; higher food prices should have made food farming relatively more attractive sector in

recent years, so that young people and their parents should be more drawn to farming than in the recent past.

The next section reports on the findings from the analysis, organised into findings about social status preferences, the challenges of agricultural life, the key constraints that prevent those would consider farming from doing so, and the broader directions of social change within which youth aspirations are shaped.

3 Findings

Four themes emerged from the interviews and focus group discussions about young people's aspirations and opportunities in relation to farming:

- 1) the desire to use formal education to gain access to high status white collar or professional occupations
- 2) the physical and mental challenges of farming: it is both tough and financially unrewarding (for small farmers)
- 3) key constraints: lack of access to land and inputs prevent young people from considering agriculture
- 4) Other directions of change: new opportunities for education, employment, migration; changing norms (particularly for women)

After looking briefly at what different groups said about each of these in different places, we will analyse these findings for what they tell us about how the opportunity space is being re-structured for young people in developing countries during a period of economic volatility with significant likely impacts on the agri-food system globally and locally. We look in particular at four aspects of the opportunity space for farming by young people:

- Whether/how increased risks in the agro-food system out-weigh perceived benefits from price increases from the producer side
- The extent to which access to land remains a significant obstacle, where and for whom
- How access to other inputs is being influenced by higher commodity prices, and whether younger farmers have access to agri input subsidies or supports
- Whether as consumers, as cost of living rises spread beyond food staples and beyond food, regular formal sector cash incomes become more desirable.

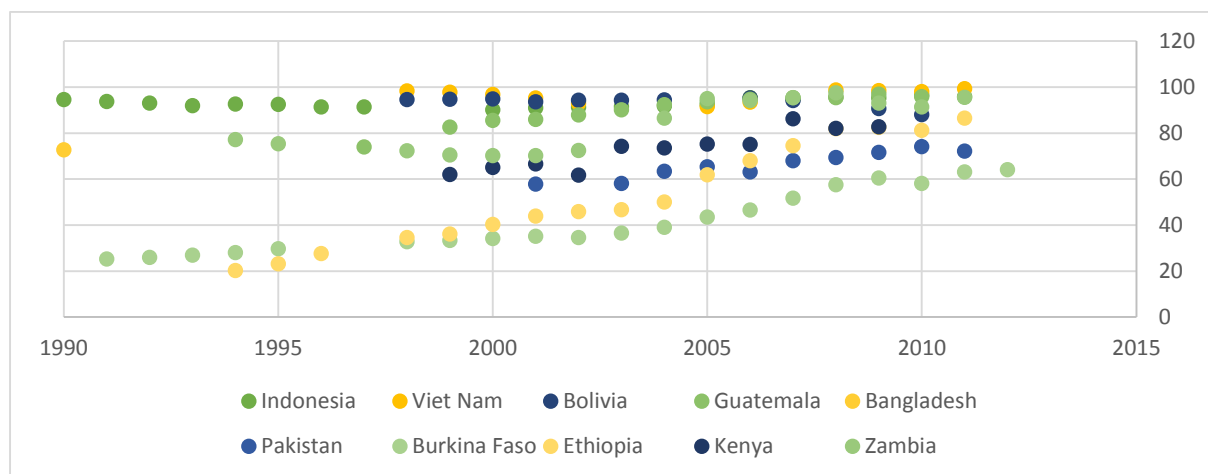
3.1 Education, social status and formal employment

In all the countries, young people had more education than their parents, creating a potential generational break in work prospects and patterns. Figure 4 shows that in all the project countries, rates of primary school enrolment had increased over the past generation, in some cases quite dramatically, so that the majority of today's children can reasonably expect to attend primary school, which was not the case for their parents.

Figure 5 shows a more diverse picture with respect to secondary school enrolment: as few as one-fifth of children in Burkina Faso but as many as 70-75 per cent of children in middle income countries like Bolivia and Indonesia, enrolled. Yet the pattern of change remains the same: with respect to secondary school, too, young people are considerably more likely to have attended than their parents. This inevitably creates a sense of progression which is likely to involve different and higher expectations by and for these young people, for their choice of work and mode of living, than in the current adult population.

Children’s educational attainment was invariably viewed as a positive achievement and a priority investment for a range of reasons, not purely to do with income earning potential. Knowledge of how the world works, how to interact with markets and officialdom and avoid being cheated, the general awareness and sophistication associated with formal learning, and not being left behind while others gain education were all aspects of educational attainment. Parents also had expectations that investments in their children’s schooling should be recouped in material and social status terms, sometimes with an explicit claim on their children’s support in old age. These expectations were in general shared with their children. Perhaps because of their closer proximity to the realities of local job markets, and possibly also their greater knowledge of the limitations of the types of education and training to which they had access, young people, particularly from poorer and less well-connected backgrounds, were sometimes cynical or perhaps sceptical about the extent to which their own educational investments might translate into formal sector employment. Government jobs, still the main source of formal sector employment in the lower income countries, were known to be not only scarce, but also mainly available to those with connections or (in Bangladesh) the means to bribe. Higher aspirations for white collar and formal sector professions were found mainly in the middle income country contexts but also in some of the cities in the lower income countries. In countries with a more flourishing private formal sector such as Indonesia, Viet Nam and Bangladesh, manufacturing industry and related jobs were an achievable aspiration. For many rural people and the lower income groups, the goal was for non-manual work. Migration to the city or abroad was often mentioned as a possibility.

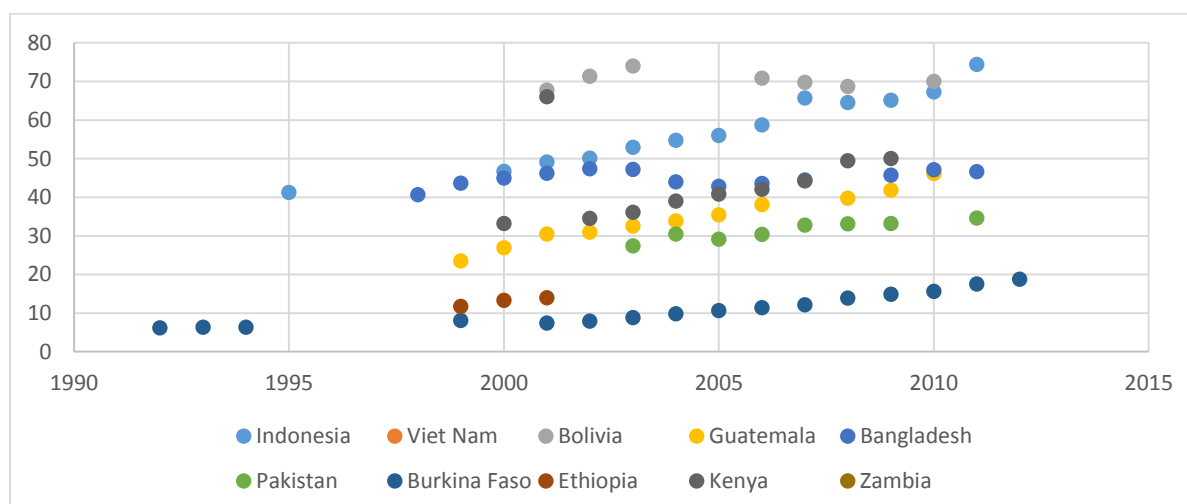
Figure 4 Primary school net enrolment ratios in project countries, 1990-2012



Source: Unesco Institute for Statistics

http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&IF_Language=eng&BR_Topic=0

Figure 5 Secondary school net enrolment ratios in project countries, 1990-2012



Source: Unesco Institute for Statistics

http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&IF_Language=eng&BR_Topic=0

A parental norm of investment in children’s education ‘to give them the chances I never had’ was heard in several sites, and was most marked in countries where the generational gains in education had been most rapid. A 24 year old farmer and father of five in rural Ethiopia said:

‘I want to educate my children. I was not able to complete my education but my children should complete secondary education. I will work hard to educate them. Then, I wish for my children to have a government job.’ (Mr D, Eastern Oromia)

When Mr D had been of primary school age, less than one-third of children could expect to gain some primary schooling, but almost all of his own children’s generation could expect to have that opportunity. This dramatic shift in the educational chances of the current generation showed plainly in parental aspirations. For Mrs A, a 30 year old mother of seven who had had no schooling herself from the same community in Eastern Oromia, the sacrifices involved in educating her children were worthwhile: her plan was to work hard to provide for her children so that they could study and get good office jobs in the future, and then, in turn, support her. Others in the same community had civic-minded ambitions beyond their immediate family: Mr A, a 22 year old farmer educated to standard 10, wanted his children to learn enough to get high posts in order to be able to develop the country. For his local community, his hopes were that people would be able to work hard enough to move beyond production solely for home consumption, to produce food for sale, signalling awareness of the shifts in the market conditions of the local economy.

The transition to mass education was also having wider and more transformational effects on gendered aspirations, changing parental desires for how their girls and boys should prosper. While the primary ambition for girls in communities such as in Gulshan-e-Iqbal in Karachi in Pakistan was still for a good married life, this did not rule out the possibility of a profession or paid employment. Mrs K, the 60 year old matriarch of an extended family, mother of nine in a household of 17, set out her family’s educational ambitions:

‘God knows what will happen to the children once they grow older. We wish that they would get a good education and become rich but we don’t know what will actually happen. They will live better lives if they get educated and become

officers. May Allah give us strength so that we are able to educate them. Their father has an ambition that we will educate them whether they are boys or girls. We don't discriminate between genders. If a boy gets an education, he will go out and get a good job while if a girl is educated, she will manage the whole household. Education is mandatory for everything. Girls can give tuition classes and it is girls who make the environment at home. My youngest granddaughter says that she will become a doctor; her brother also says that he wants to be a doctor and fly planes. If Allah pleases, they will grow up to become doctors and engineers.'

Mrs K and her family were Karachi people born and bred; her husband and one son held posts as peons (or clerks) in a local college, while others were day labourers or drivers. She herself had worked as a domestic for 15 years, until poor health forced her to stop. Yet despite the difficulties of her family situation, she firmly ruled out the possibility of rural life. Interestingly, this was despite her perception that agriculture could generate a good livelihood (a view that people in some other cities also held); her view was that agricultural work was inconsistent with the broader learning and modernity, or 'knowing the ways to live in this world' that she associated with education:

'May Allah forbid our future generations from farming. Although you can get money from it, we don't want the money; we need our children to be educated so their future may be better. If they cultivate land they might get money but they will not have a developed mind. They will not know the ways to live in this world.'

Investments in education are often costly, and in a number of cases, involved a direct trade-off between a future on the land and a future in a profession. In An Giang, in the agricultural South Western Mekong region of Viet Nam, one family was planning to sell their land to finance further education. This was a strategic choice rather than a distress sale, and reflected an ambition for the younger generation to enter public service with an eye to the future benefits such a position entailed. 37 year old Mrs V, farmer and occasional medical services provider, explained that her older daughter had already studied law, and that her 15 year old son planned to attend the National Security University to enter the police force.

'I want him to become a police officer so our family can get advantages in the future. Because we intend not to live permanently here but move to Tri Ton to live and do business as long as our land is sold. So they [the children] will be helpful to our business.'

Mrs V seems to suggest that a prosperous business may depend on family connections with the state and the world of officialdom and the law, echoing Mrs K's point about 'knowing the ways to live in this world'. Mrs V's son had told them he did not want to become a farmer because he had witnessed their hardships as farmers, concluded that they were too old to continue in such tough work, and advised them to quit farming for other work, selling their land to finance the shift.

Land had become an asset that education was helping people make more calculated decisions about. This seemed to be most true in densely populated Asian country contexts, where the economies have been undergoing a rapid economic transition out of dependence on agriculture. In the rural community in Naogaon, in the north west of Bangladesh, the research team encountered a young man who declared plainly that 'agriculture is in a broken-like condition'. He explained that

'Last night my father and me found with calculations that this year we didn't get a single taka more than production cost – [that] means no profit. We did such hard

work, engaged labourers in rain and scorching [heat], we cultivated by turning our blood into water, but if we do not profit from it how will we survive? What is the benefit of this crop cultivation? [He said with a smile] We will sell all our land and go to the city. I said to my father, let's go to the city.' From field research notes from Naogaon, Bangladesh.

Despite the willingness to sacrifice present day wellbeing and even ancestral agricultural lands for education and the promise of future jobs, many people were aware that office jobs, particularly the security of public sector employment, were not guaranteed. In Bangladesh, Burkina Faso and in Ethiopia, people reflected that connections and sometimes corruption were also necessary to get a good job - 'even for a job as a [government] street sweeper', as was pointed out in Bangladesh. In Mukuru, in Nairobi, Mrs M, a 50 year old community health worker, mother of six and grandmother of one, had the following hopes:

'I have hopes that my younger children in school will score good marks, get admission to university and will have good jobs in offices. My prayer is they get permanent jobs and live better lives than mine. Currently my eldest son works as a cleaner in a certain company in industrial area, my daughter is in the kazi kwa vijana [youth public works] programme cleaning the Mombasa road. They are barely surviving and sometimes they come here for food. So my hope is to see these young ones get employed in big offices, and earn good salaries.'

Even higher levels of education did not translate automatically into good jobs. In Addis Ababa, a group of men in their late teens and early twenties said that even though their community valued education highly and many people invested a great deal in higher education, some graduates had to turn to daily labour of the most menial kind. This, they felt, adversely affected the morale of younger children who saw little value in completing education because the job prospects were so limited. The bitterness about the lack of prospects for educated youth among this Addis Ababa group seemed to reflect their own experiences: the group comprised young men of mixed education levels, some with little functional education and others having completed junior secondary, yet all working as daily labourers.

For those whose educational careers were less successful and did not lead to further or higher education and the gold standard of a good office job, agriculture was seen as the fall-back position. In Lango Baya, a dry coastal region in Kenya, there was a clear hierarchy among the youth: those who had done well at school were expected to attend university and seek top tier professional jobs as doctors, bankers, teachers and government servants. Mrs C, a 30 year old mother of seven had seen her *posho* or maize flour mill business fail and had turned to peddling vegetables to make a living. Echoing the community view, she said dismissively:

'If you say agriculture, it is second class priority for youth in this area. Those who did not go to school can do agriculture.'

In Eastern Oromia in rural Ethiopia, young farmers were more positive about how education could benefit even those with less glittering academic careers. Their view was that even if children did not have great educational success, they could still aspire to be better farmers, to produce surplus food crops and to prosper in that way. Possibly reflecting significant public investment in agriculture in Ethiopia in recent years, while agriculture was not the preferred occupation for the brightest and best scholars, there was some optimism about the prospects of a career in agriculture, and about how schooling could contribute to greater productivity.

The idea of agriculture as a last resort was also tempered elsewhere by the idea that education could at least improve agricultural productivity. The historically agricultural region of Cianjur in West Java in Indonesia has seen rapid economic development, and non-farm jobs are increasingly available to those with good qualifications. Mr A, an unemployed 30 year old farm labourer whose wife had recently taken up a job as a garment worker in Cianjur city said:

'I want to look for [any kind of job] ... anything as long as it's legal. Yeah, but if possible I want to get more income than farming. But it is now hard to find work, especially as I only went to elementary school. Whatever occupation is fine as long as it's legal and sufficient to make a living. [His toddler son] can be a farmer. But a better farmer, unlike his father (me). One with land so his income will be larger than mine. Do not be a labourer like me!'

But education alone was not enough: Mr A's experience was that as a labourer, agricultural income was inadequate, especially as the price of basic needs was rising.

'When you have land, you can do better!'

Young people from low income backgrounds in An Giang, agricultural heartland of the Mekong delta in Viet Nam shared the view of young people in Hanoi of agriculture activities as tough, unstable, low status, low income and prone to indebtedness. What was interesting in this region, the 'granary of Viet Nam' as it is known, was that these views competed with, and appeared to be more powerful than, an older culturally-determined and patriotic respect for agriculture as a way of life. Nominal respect was still paid to farming and farmers, yet in reality, there was little desire to pursue this as a life-style.

3.2 The challenges of a farmer's life

The local elite in the agricultural community in Cianjur, in Indonesia, confirmed Mr A's analysis of why the younger generation was reluctant to enter farming. Their analysis was that young people in their community did not choose farming because it had low social status, seen as dirty work, 'made their skin darker' (in a context in which fair skin is associated with high socioeconomic class and skilled rather than manual work), the benefits or profits from farming can be delayed. In addition to the uncertainty widely associated with the returns from farming, this analysis by the Cianjur elites resonated with views on the challenges of a farmer's life across a range of contexts.

A common concern was that for small farmers, at least, agriculture did not adequately compensate for its physical strenuousness. Mr A, lifelong resident of Kalyanpur slum in Dhaka in Bangladesh, but like all slum-dwellers, from a rural background, offered his take on society's view of agricultural life:

'The young men these days don't want to do farming as it requires working in the mud and water; rather they prefer to do service [formal sector occupations, usually government jobs] staying in urban areas so that they can wear a shirt and trousers.'

Associated with the physical strenuous of 'working in the mud and water' is the low social status of farming.

'A person wearing shirt-trousers [as distinct from the traditional lungi or loin cloth for men] appears to be a gentleman even if he is a robber and everyone respects him. On the other hand, no one respects the farmers living in the rural areas as they are doing farming activities. A lot of people state that farming is the

occupation of illiterate people. Moreover, some people state that it is the work of elderly persons. They don't have to study to learn the agricultural activities; rather they have come to learn the farming by doing work in the fields for a long time. Everyone wants to educate their children and establish them as either doctor or engineer. Do you want your children to join farming after completing their education?'

Yet while no educated person would in fact want to be a farmer, the urban upper classes appeared to take a romanticised view of farming. Forty year old Mr A, currently unemployed due to ill-health, and dependent on his 26 year old wife's roadside manual labour, was particularly derisive about this, highlighting its distance from the realities:

'A few days ago I watched some college students on television plucking potatoes and wheat from the lands. Will they regularly do this? I think they will not. They are always thinking of driving luxury cars, staying in air-conditioned rooms. To be safe you people always sit on the back seat of a taxi and if there is any accident the driver on the front seat will die first.'

Mr A's commentary on attitudes to agriculture was a direct response to the educated urban research team's questions about whether farming was a possible work choice for future generations. He marks out a clear class differential with respect to agriculture, in which the poor who can get out of agriculture, do so, with upward mobility in mind. By contrast, the educated rich can indulge their fantasies of rural life without ever having to 'sit in the front seat'.

The hardships and uncertainties facing even relatively prosperous farmers were visible to their children, and their relative prosperity enabled them to choose to get out. Mr C, a moderately successful 52 year old dairy farmer in Pirhuas in Bolivia, spoke proudly about his daughters, one of whom was studying physiotherapy at university, and the other of whom wanted to study to be a systems engineer.

'They don't want to be farmers, they see how one works so hard. Nobody can be a farmer, because the producer produces blindly, at times they lose; the children see this, and for this we make them study ... we don't know if we will earn. Now, this little rain is damaging, it is out of time; all of us make the children study and above all we are badly treated. At times [people] eat well and at times no, when you grow old it is worse; for this, we don't wish that our children become farmers.'

Mr C's 22 year old physiotherapy student daughter M, agreed with this view, but went on to take a more systemic view of the effects of the toughness of contemporary agricultural livelihoods:

'The work is very tiring, they work all day and don't eat enough; they have to pay day labourers, buy the seed, water [the crops], the water costs, everything costs money. Because of this, I think that the people of the countryside will cease to produce, this is already happening, they don't manage to live well, they suffer. I have seen it since I was a child, starting with my father.'

In the city, it is good to work and live here. This is my dream, to have an estate, sow only for ourselves, to eat, and to work in the city, produce all our own food.

People travel, leave the country.

The producer ought to eat the best, but it isn't like this, here it is the opposite, they export.'

The view that the appealing aspects of traditional farming had been displaced by the greater uncertainties of market-based food production was echoed by others in this community, where mass migration and the decline of customary food production systems had been a feature over the past generation.

This nostalgia for a simpler reliance on the land for food production contrasted with the perspectives of young people in rural Nessesemtenga in Burkina Faso. There, reliance on agriculture still meant an emphasis on small-scale production largely for home consumption, and living day to day, but a series of recent droughts had contributed to greater uncertainty about farming. Older men in Nessesemtenga noted that younger people preferred the cash incomes from the gold mines to a farming lifestyle, and were leaving in large numbers to try their luck in the dangerous mining sector. Drought and variable climate conditions coupled with the volatilities of input and product prices were highlighted as particular risks for farmers in Eastern Oromia in Ethiopia and Lango Baya in Kenya, both areas in which recent dry spells had created great uncertainty and hardship for farmers.

Yet even where farming had the potential to mean a reasonable living, there were social status reasons to view a farmer's life as challenging. Mr G, the 34 year old head of a youth association in Eastern Oromia in Ethiopia noted that:

'The youth aspires to be employed for government jobs or to assume office jobs and live in the urban areas as a first choice. This is because life in urban is better, its neatness, better eating, sanitation, services, infrastructure, lifestyle, water etc is well available, and [people] are better-off. In terms of the income, if [people] worked on irrigated land, rural is better. However, they choose the urban one since livelihoods there are becoming better. Those who are working on irrigation are making their livelihood better. They buy homes in the urban, have a number of assets, live well etc.'

Rubber farmers in Banjar, in Kalimantan in Indonesia, similarly noted that even if the income from rubber farming could be good, the physical toughness of the life involved was less appealing than the ease of an office job. In the industrial area of Bekasi, near Jakarta in Indonesia, Miss S, a 19 year old migrant job-seeker from a nearby rural area said that in addition to the declining availability of cultivable land:

'I never want to be a farmer, ever ... I don't to work under the sun; my skin will be darker. My mother said that I shouldn't be a farmer; the [earnings] are not enough to provide for life; it doesn't have a future; it'd be better to look for a job in the city...

It is better becoming a factory worker; I don't have to work under the heat, it is not dirty. The wage can be used to buy a cell phone, clothes, cosmetics, bags or other things needed by a teenager. It can be saved for parents, too.'

This view was echoed further west in rural Cianjur, by 21 year old Mr H, a high school graduate working as a farm labourer:

'Working in the rice field is very hard, you get money only once in three months, and there is no excess money to save. Working in a factory is much better, you get money each month, and the money can be saved for buying land for the parents.'

Mr H felt that working as a farm labourer was better than some other jobs such as being a construction worker, particularly if that meant leaving his hometown. As a farm worker, Mr H still had time to rest, relax and play football with his friends. But as a factory worker, he felt he would still have Sundays off to play football, but he would also be able to save money.

3.3 Key constraints

People recognised that the tough working conditions faced by those trying to make a living in contemporary agriculture, described by Mr C's daughter M, above, coupled with the perceived low status of farming meant some coveted jobs as factory workers: payment is regular, wages can be used to acquire consumption goods, there is potential to save. But also that this comes at a cost – the loss of freedom and self-reliance of the self-employed, as well as potentially having to relocate to pursue these opportunities. However, the freedom of farming is a choice only for those who can access the land and inputs needed to make a go of it. For many young people, the lack of access to land, capital and other inputs prevents them from considering agriculture. Mrs I in Dhaka highlighted the independence of own-account farming as an important advantage over working in a job and being reliant on others, one that far outweighs the barriers posed by land scarcity and high and rising costs of production:

'It is better to get involved in farming [and] agro based food production because it lessens the dependence on others as a job holder. A job is good when salary is regular but when it becomes irregular misfortune starts playing in the family. But despite a trend is seen in farming it is not so easy, as farming land is not available. Everybody does not have cultivable land and one cannot afford the cost of farming. The agricultural production cost has increased as the price of fuel, fertilizer, and seed has increased. Despite all these setbacks people would mostly do the agricultural job if they would have land because one cannot depend on others who do cultivation unlike other job holders.'

In Indonesia lack of land was also cited by Mrs P as the biggest impediment to making a living from rice farming, which was otherwise considered to be not too onerous and easily able meet a family's daily needs. However, in the absence of more land for rice they had to supplement their income via rubber tapping. The morning could be spent rubber tapping and the afternoon on farming – but this level of control over work is only possible if you own your own field. Similarly, Mrs M, a 56 year old matriarch of an extended family and carer of two grandchildren, in Banjar, Indonesia, talked of her thwarted ambitions to grow vegetables due to lack of land, despite her husband's experience in this area.

For some young people, even in urban areas, the availability of land and capital are seen as the main impediments to farming – not a lack of interest. For example, people in Nairobi noted that it was a lack of access to land, not a lack of desire to cultivate, that kept them from farming. One key informant, a public health community volunteer, had grown enough maize on a patch of land near the slum to feed his family for 9 months in the previous year.

For some, farming was considered to be a desirable activity alongside a formal sector job, with the job providing the capital to enable them to farm as an 'entrepreneur', as in the case of a 16 year old boy in rural Bolivia, who said that:

'I want to be a policeman, but if I could, I would like to have a plot of land in order to make it produce. But with capital, as entrepreneur, because as farmer you don't earn anything and you get sick.'

Rural agricultural jobs, however, rather than providing the much-needed capital to pursue self-employed agricultural or non-agricultural activities, can hinder movements out of agriculture. One informant, Mrs M, a 35 year old mother of 5 living children, pregnant with her seventh, in Banjar, Indonesia, described young people (both young men and young women) 'locked in' to rubber tapping jobs, leaving them in a position similar to landless

labourers, preventing them from going to the city. She wanted her children to be able to continue their education to junior high school and become permanent employees in a company but due to low education the reality was most of her children would only have very limited job opportunities, just like the children of other poor families who lacked the funds to go elsewhere: 'here, there are no other options but rubber tapping' she commented. However, if land was more readily available then farming would be a more realistic and desirable option. When asked whether the informant would allow her younger children to become farmers, she said that if the family had had enough land then all of the children would have wanted to become a farmer and the informant would have allowed them to work in the farming sector. Only lack of land was driving the ambition to get out of agriculture. In some instances, environmental pressure (for example, river erosion) drives migration to town, pushing people out of agriculture – as reported by a group of women in Dhaka, Bangladesh. By contrast, two brothers living in Dhaka and studying for diplomas in college in Gazipur, have left behind sizeable landholdings in a rural area while they study in town to 'get a good job'. In the meantime the land is being cared for by family and caretakers, and the boys plan to return at a later date.

Where land is more accessible, for many farming families water scarcity is the main constraint to production with the ensuing fluctuating production levels makes crop incomes unpredictable from year to year, which means in some cases people need to resort to loans to get by. Lack of reliability of crop incomes in turn exacerbates input constraints, as cash is needed to hire labour and purchase other inputs including fertiliser. Mrs J, a 35 year old cotton farmer's wife and mother of two small children in Dadu, rural Sindh, Pakistan, describes the key constraints to production her family faces in cotton farming, and how this shapes her aspirations for her own children:

'We do not want our children to do wage labour and cultivate land after they are grown up. We are what we are but our children should at least make some progress. They should not cultivate land as there is no benefit in it. There is no water so crops cannot be cultivated. The production of the crop fluctuates up and down. Sometimes there is much wheat and at other time there is nothing. And hence we come under heavy debt. If we have someone's debt over us, they squeeze us. They say that we are poor.'

'You can't rely on agriculture as a means to earn a livelihood. If it was reliable, we would not be doing the work that my husband and I do. Agriculture only works when someone has money to pay labour and buy inputs.'

For others, ambitions towards farming have been thwarted by the need to sell land, often as a coping strategy in the face of shocks such as illness. For example, 61 year old Mr S, a market official in Kaya, Burkina Faso, expressed regret at the loss of his family landholdings, wishing his children had the opportunity to farm:

'I wish they [his children] did [work in the fields]...but...they sold the plots. My mother and my brother did. My mother was ill and they sold the land. I wish I had a house in the field, with rivers, ducks.'

However, he acknowledges that the preferences of young people may not match those of their parents with young people preferring jobs in the gold mines or office jobs, or aspiring to prestigious careers in football. Mr S sees a link here between changing attitudes towards agricultural employment and farming and the constraints to farming associated with broader systemic change such as climate shocks, particularly poor rainfall. He believed agriculture

could be made more attractive young people via improvements in seed and other technological advances, to take advantage of high food prices, especially for cash crops such as cowpea and groundnut.

For some parents, the thought of their children taking up farming was an anathema to them. In Bekasi, Indonesia, 52 year old Mrs S, a widow, and mother of six, despite (or perhaps because of) having once been a farm hand herself, did not want any of her children to become farmers, seeing no future in such seasonal activities as farm work especially as landholding fragmentation means fewer jobs in the sector. Neither had any of her children expressed an interest in farming, working instead as industrial labourers.

'If possible, I don't want them to work as farmers. It is tedious and tiring to work under the sun, yet only a small amount of money received, it is not enough to make ends meet.

Let my children stay in school and study up to middle school. Hopefully, then they can get a job easier, as an employee or a teacher.'

Land fragmentation linked to rising populations also means people were concerned that young people will not even be able to fall back on agriculture if they cannot get a non-farm job after completing their education. Again, the willingness to work on the land might be there, but a lack of land and capital limits this choice, often leaving only daily labouring jobs as an option for young people seeking farm employment. Some parents worried about the psychological effects on young people of widespread youth unemployment without even traditional family farming activities to fall back on due to lack of land/ land fragmentation.

Many of these constraints are not new – in many places lack of access to capital or good quality land have for a long time been barriers to making a good living out of agriculture. But today's young people are feeling the effects of these in new ways: land fragmentation exacerbating the land availability problem in some places, in a context of rising populations; climate change exerting further pressure on rural occupations and pushing people out of agricultural activities and rural areas; global recession leading to high youth unemployment and a shrinking of opportunities for young people at every level. The account of Mr C, a 44 year old former farmer now leasing farm machinery in rural Bolivia captures the multi-layered nature of the challenges facing people trying to make a living from agriculture

'Dairy [milking] is producing more. Not only here, but also Ancorani - a community "above" [in the highlands] where my parents came from, we produced potato, wheat, goose, but the market isn't secure/assured. There isn't technical assistance nor anything else. So, people have left. There wasn't road or anything. This demotivates.

From the communities higher up, all have come down here because they look for their development and the schooling/education of their children. You have to see it, there are more houses here. And from here it is the same: many are moving out to Santa Cruz in order to establish a store or they migrate to Spain. As well, we don't have [much land]... most have 4000 square meters or one ha at most. It is not enough for anything. If people have children this is not enough for anything. There is no future in agriculture anymore.

If there was support and a price guarantee, one/people would produce. One would produce, if one knows that you are going to win [earn]. You can't risk.

So, if you see other branch/area so you can leave [inherit, give] something to your children...'

This set of circumstances, for many, points to the need for official support to agriculture and agricultural markets in order to make the sector a realistic career prospect across a range of activities. P, a 52 year old primary school teacher in Pirhuas in Bolivia, echoes the sentiment that people can no longer make a living from agriculture, placing lack of support to the sector squarely at the heart of the problem.

'Precisely because of there not existing any form of help or protection, and because agriculture does not now provide for living, it is that the people, above all the youth, now don't want to dedicate themselves to producing. Now that access to the universities has been facilitated, the majority of the youth of this community have enrolled in private universities.'

While support for accessing land and capital are expected to encourage young people to pursue their farming ambitions, there was also expressed a need for assistance with farm implements and for markets for farm produce to be more readily available. However, these material inputs are only one part of the story, to which Mr M, a councillor from Kabwata, Zambia attests.

'If the youths were provided with land, farming implements, a ready market or farm produce, maybe that would attract them to farming. But if we also get a role model who is in farming and doing so well, this might motivate the youths. Youths can't go into farming because they are not exposed to it. They don't know what the benefits of farming are. So it's just a matter of sensitisation so that this issue can be internalised. The best approach would be to have an NGO sensitize the youths on farming.'

But some young people have also taken the initiative, forming producer groups and creating the kinds of support they are not receiving through official channels, and these tend to be young people with higher levels of education. For example, fish farming cooperatives have been set up by young people in Eastern Oromia, Ethiopia, with multiple and far-reaching goals. They focus on working together to improve fish production, with group members also setting their sights on irrigation activities to support agricultural development and savings clubs to invest in opening shops in the community. The group members hope to be role models to other young people, and to try to use the group as leverage for government assistance to access land they can irrigate and farm as a group. Another youth association in the same region has worked to access land for young people. Mr G, a 34 year old youth association leader from Eastern Oromia, talked about how his association helped young people to access land provided under a government programme:

'The Kebele administration has provided farmland of 24 kert and motor pump for about 24 youths. The youth association assisted the Kebele administration in recruiting those to be included in the provision of the land. However, the majority of youths of the locality do not have farm land yet. Those youths who do not have farmland are living and helping their parents. So problem of land is the most severe problem for the Kebele.'

Initiatives like this are small scale and localised but demonstrate that there is demand by young people for both the means of agricultural production and the services such groups provide, and that there is potential for organising on a larger scale.

Mr M's observation above that young people are unable to go into farming because of lack of exposure linked to a more fundamental issue: the lack of agriculture in education curricula, despite agriculture being a dominant sector and employer, while education coverage has been expanding and average levels increasing. Mr J, a 19 year old rubber seedling grafter in Banjar, Indonesia, described how the vocational school he graduated from did not offer an agriculture major despite its location dominated by rubber plantations owned by local people.

'It is ironic that there is no agricultural majors in the vocational school, while it is located in the middle of many of rubber plantations.'

However, Mr J also believed that most teenagers like him were more interested on getting jobs in mining sectors or large offices in bigger cities, believing these would command higher salaries than agriculture and would be seen to be more successful. Further, working in an office would boost their social status to the 'upper level'. This seemed to be reflected in the way many young people, even those coming from farming backgrounds, took little interest in the agricultural activity all around them – for some this meant not knowing the size of their parents' landholding - translating into low levels of agricultural knowledge, and acting effectively as a break on practices and expertise passed on from one generation to the next.

Even for young people who had migrated to town, a 'return to the village' would not mean engaging in agriculture, as in the case of Miss D and Miss T, 20 year old factory contract workers from West Java, migrants to Bekasi near Jakarta, Indonesia. They had graduated from a vocational school specialising in Accountancy and Miss T described how the agriculture vocational school in her village had been replaced by one specialising in computer science. If Miss D and Miss T returned to their home villages they would do so to start a business, the implication being this would not be an agricultural concern. For others in town farming's lack of appeal rested in its seeming irrelevance, even where people retained linked to the rural areas or, as in the case of urban centres like Mukuru, in Nairobi, Kenya, where urban gardening was practiced. Ms M, a 44 year old community healthworker in Mukuru, described how young people did not attend agricultural training centres offered in the area often providing free seeds and seedlings, because they did not see how agriculture could help them, partly due to location - agriculture just was not seen to be part of their opportunity space - but also because of a perceived low return.

'If you ask them to come for the seminars, they say that they won't attend them because they do not see what agriculture would help them with ... they are not in the rural areas.'

For young people who do pursue vocational agricultural training, this is with the intention of being able to farm with greater ease than their parents. In Cianjur, Indonesia, Y, a 17-year-old agriculture student at the vocational school, observing that his father was a hard worker and expending much physical energy in his farm work, hopes that by going to farming school he will be able to approach agriculture differently, making a successful living in the sector by applying his intellect as opposed to physical force.

'I want that I don't have to do physical work, but make a lot of money'

Even so, agriculture was not his first choice. Y would like to enter the military but was concerned that his parents could not afford to pay his military school fees, or that he would be good enough. With his agriculture background he could at least work as an agriculture extension service worker should he not have the funds to continue on to college, to major in agribusiness, saving the wages to go at a later date without being a financial burden on his

parents. In this way, he would be able to use agricultural employment to springboard him into 'higher level' entrepreneurial agribusiness activities, such as fertiliser and agricultural products. He would also be able to capitalise on his networks - his uncle supplies vegetables to supermarkets.

Y considered farming's lack of appeal for most young people in his village to be down to three main factors: farm incomes tend to be infrequent, with at least a 3 month interval between planting a crop and harvesting/ selling; farm work is dirty; and globalisation has meant jobs in factories or as a trader are in greater supply, with people paid more frequently compared to farming. As an educated young man, Y had clear ideas of how farming could be made more attractive to young people. As well as making examples of success more visible to young people, he talked of the potential value of developing 'clean farming'(such as hydroponic farming) using water or waste woodchip media, or using charcoal, which bacteria and sterilises the yields – though these would have to be made affordable and would require greenhouses.

3.4 Other directions of change

Other sources of social and economic change, not all directly related to the opportunity space for farming in these communities, also influence the aspirations of and for young people. These changes do not all deter young people from farming as we will see below, but they do appear to be the source of fairly rapid and deep-seated shifts in the conditions under which decisions about work are constructed.

New information communication technologies and the powerful desire to possess mobile phones and to access the internet appear to be opening young eyes to the promise and prospects of the wider world. Yet it was also seen to instil a desire – or perhaps a need - to consume new technology, which mitigated against a life in farming with its limited cash incomes. That new technology was creating new desires for consumption that pushed young folk away from agriculture seemed most striking to observers of youth, as these views were expressed mainly by older people and outsiders. An NGO manager in Naogaon, northwest Bangladesh gave an example of a young man from the locality whose father had land, but who preferred to work in a factory because, he said, farming was not profitable: 'who would do this old, outdated job?' the young man had asked him. The NGO manager said of the youth:

'He has two cell phones. One is a Chinese-made Symphony [brand] which he used for rough purposes. The other is a Samsung touchscreen phone, which is high in price. It has audio-video and the visual quality is good. He was playing a [popular] song. He couldn't afford that phone by doing farming. He was later seen wearing jeans, shirt, belt in the village.'

This description captures a perception that young men who resist a farming lifestyle aspire to a particular kind of modernity comprising pop music, expensive high-tech gadgets, and fashionable clothes. The reference to his clothing - a village youth would normally be expected to dress in the local gear of *lungi-genji* (loin-cloth and vest) – and his possession of two phones – are chosen to highlight the power of these youthful consumerist desires.

There is also a sense in which new technology is a novelty which naturally appeals to young minds. The 31 year old former leader of a youth association in Addis Ababa noted that '[t]he youth want to know about internet, using Facebook and computers because it is new technology. There are young people using these.' He also spoke of young people's need for entertainment, and linked this to how some better-off youth were being drawn into substance abuse and addiction.

The depiction of modern ways of life was also mentioned by a 35 year old development project coordinator in the town of Kami, in Bolivia, who said:

'No, [agriculture] is not appealing to [young people]. They associate it with low category, as I said before, even though many of them come from rural families. I think this is what they see and they are not attracted to it. Other factors include fashion, alienation of other products by the media; TV shows imported products and food and that makes you feel in, but if you eat local products (like quinoa, potatoes, chuño) you are out.'

As people customarily (and until relatively recently) ate what they grew in that region, the need to consume imported foods and products would entail a shift out of farming to be able to purchase those foods. (Ironically, quinoa, a protein-rich grain, is currently a highly fashionable food in Europe and North America, as part of diet industry trends for 'super-foods').

Perceptions of farming were also influenced by views on how climate and environmental change were affecting prospects in the medium- to long-term. In the cyclone-affected Khulna community in Bangladesh, paddy fields had been salinated and were yet to recover their productive capacity. The break with the tradition of rice cultivation there appeared to have given people space to consider their options. Those who passed lower secondary school exams were taking jobs in NGOs, while others sought work in garment factories or brickfields beyond the local area, or as motorcycle drivers. But a local leader, 50 year old Mr S, president of the market committee, explained that if local agriculture was to recover, he knew some young people were thinking about taking up farming using more modern techniques, while others were planning to get involved in shrimp cultivation for export, a sector which had been growing rapidly in the area in the decades before the cyclone, causing considerable environmental damage in the region as part of a 'fake blue revolution' (Deb 1998).

In Nessesmtenga in Burkina Faso and in Lango Baya in Kenya, the protracted drought was mentioned as a factor deterring young people from farming. There was a widely held perception that climate change was adversely affecting agricultural practices, making agriculture less attractive – in some instances impossible. Across the sample, people described how more uncertain weather patterns and events have increased agricultural risk, for example excess rain damaging crops and lowering yields.

Natural disasters and extreme weather events – such as cyclones – were not only destroying homes and belongings and displacing people from their dwellings, but also destroying livelihoods reliant on natural resources such as land or forests, for some people resulting in the need to change jobs as their main assets were damaged or destroyed, as in this account from a key informant in the Khulna community in Bangladesh:

'After [cyclone] Aila they cannot produce crops on their farmland. It has resulted in a complete diversion of most of the local people from their traditional main occupation; farming. Therefore, their income has been reduced while the sources of income have been curtailed. Cyclone Aila resulted in a complete destruction of their houses and other valuable belongings which includes furniture, livestock and timbers.'

People also cited the widespread effects of drought, and desertification, such as rivers drying up, as having seriously compromised people's ability to farm in affected areas, with loss of crops and cattle, and households barely able to meet the consumption needs of their family.

In rural Ethiopia, one informant reported: 'The impact of weather condition has been huge in the past three years. Last year we lost our crops. In addition, the length of dry season will have negative impact on the life of cattle. Drought affects both the people and animals'. Y, also from rural Ethiopia said: 'I have not seen such kind of climate change years since I was a child. I lost my cattle before two years due to lack of grass and water'. Impacts were also felt by small processors in communities, such as millers, by agricultural labourers as demand for their labour fell. Even with the provision of modern irrigation, the absence of complementary inputs such as hybrid seed and farm implements lessens the impact on yields.

People described how floods on the one hand and drought on the other point to increasingly uncertain conditions and unpredictable rainfall (either too little, too late, or rain that stops too soon, or it rains too much at the wrong time – ie the wrong kind of rain):

'At times the rain will not come on time, at times it becomes too high and floods the farmland and sometimes drought affects them.'

Rain started very late. After it was started, it became heavy shower and created flooding. The heavy raining was in July and it was stopped in August. As a result the farm production was not good, which led to shortages of food in the community. So, this summer was very bad for many of the poorest households. They are forced to purchase food crops from the market at a higher price.'

So while a bad harvest generally raises prices, this is bad for consumers - and many of the poorest smallholder farmers are net food buyers, and the raised prices are a direct consequence of factors that make agriculture more challenging. The impact of drought and other environmental shocks have led to people employing coping strategies that include children dropping out of school – often secondary school – to work and help supplement family/ HH income, but at the same time compromising their long term prospects. Where people have been forced to sell their cattle as a coping strategy this has led to an erosion of the value of livestock assets as livestock prices were driven down.

For others, the increased sense of insecurity caused by climate change coupled with land fragmentation has directly raised concerns for them about the future prospects of farming work for their children. One man from rural Ethiopia described how the impacts of climate change mean he emphasises the value of education and 'learning well' to his children [as a route out of agriculture] because he no longer considers rain-fed farming as secure work.

Despite its drawbacks for consumers, food price volatility did appear to be turning the attention of some to farming. The President of the school management committee in the Khulna community in Bangladesh noted that local youth did not consider agriculture as a future profession.

'Why would not they consider it as an unrespectable and small job? In our country, no educated person works in the field, rather people who work in the field are called chasha [literally, farmer, but also meaning person of low status]. Young people, in their future, will also take up business, driving motorcycles etc. as their profession.'

After this strong statement about the low status of agriculture, he added that 'some people are becoming agriculture-oriented', because of rising price of vegetables at present. In Pakistan, by contrast, a young Karachi shopkeeper commented that even though the prices of agricultural produce were rising, agriculture remained unattractive, as young people did not want to quit their urban jobs and return to their villages.

Higher food prices were more likely to signal attractive occupational prospects where public investment in agriculture had created a perception of a sector with the scope to modernise. Yet opportunities for modern agricultural production were not typically available to poor or small farmers, such as many of those with whom we were researching. A former youth association leader in Eastern Oromia, in Ethiopia noted that young people from the locality who lacked access to irrigated land had been migrating to urban areas, mainly to work at Sher Ethiopia, in the cut flower industry. But those with access to irrigated land were staying at home. Mr G's view was that food crop price increases presented an opportunity for the youth and that those able to take advantage through adoption of modern agricultural methods and irrigation, particularly in order to cultivate vegetables (the prices of which had risen particularly high); however, he also felt that poorer farmers and the country as a whole suffered from higher food prices.

Mr G's view – that higher food prices could attract young people into agriculture if they had access to modern agricultural techniques and inputs – was echoed by others. An FGD with young people in the same area in Ethiopia uncovered a desire to follow model farmers, to learn from their experiences, and to get involved in irrigated farms and other farm-related activities. The group included some ambitious young men who saw the prospects of upgrading agricultural activity, and saw this as offering opportunities for wider community development:

'I want to work hard. I want to get involved in irrigation work and produce vegetables. I want to breed animals. I want to produce various kinds of food crops. I want to accept the advice from agricultural extension workers, and to change their advice into practice. I want to follow in the footsteps of model farmers. I want to advise my friends to work hard and change the life of the young people. We have to be organised to bring changes to the community.'

In rural Ethiopia, at least, there was a perception that investment in agriculture and support through technical expertise and technological advances could mean progress for young people. This is likely to owe to the Ethiopian Government's efforts to raise the profile of farming among young people, and to invest in more productive production processes. Similar views were expressed by young people in the dry region of Lango Baya, in coastal Kenya: there some people had been successful with vegetable-growing using irrigated land, with support from a local international NGO. Although in the past year, some of the irrigated lands had flooded and some farmers had lost crops, over the longer term, this was seen as the way forward for those who had or could get access to land near the river. Young people there thought they could get help from the 'government youth kitty' to help them get started.

Elsewhere, in contexts in which public investment in agriculture for the next generation had been less prominent, the view was that although farming had its attractions, higher prices also meant a need for larger investment and a safety net for farmers. For urban slum-dwellers in Dhaka, return to the farm is a possibility that some consider, as most retain rural connections and some also maintain some rights to land. Some views of the land, particularly among urban people, appeared to blend nostalgia and realism about the challenges of farm life, at a time when the prices of agricultural produce appeared to be relentlessly on the rise:

'Agriculture is at the top position than any other profession. But it is impossible to take the profession without a piece of land. If we think to establish a farm without having food in our stomach, it will not work. But it is mandatory to return back in the village to start our livelihood with agriculture or farming. However, we have a challenge that if we return to the village, we will not educate our children. On the other hand, it is not possible to nurture poultry in the city areas; the landlords don't

prefer us to do that. Those who have money and land, they can take the profession and they can shine in their life. The profession is determined by investment, if anyone wishes to invest Tk 5,000 taka (US\$64), he would face a loss. On the other side, it will not be perfect during the time of price hikes. I will not advise them to continue with agricultural work, those who don't have enough money, or no experience regarding to the profession. If anyone wants to continue one's profession with agriculture, government should supply them the capital. Without having any related experience, the profession would rush down anytime. We need experience and support. If anyone takes a decision on a sudden and return to village will never be succeeded. He could enjoy the profession for a sudden, but it will never continue. He will close his profession in a couple of days after the trial. The rate of production cost is increasing in such a way that the farmers are being neglected. So, how could a person desire to be a farmer?' (Mrs H, a 33 year old daycare centre supervisor, Kalyanpur, Dhaka.)

Within the context of her deep concerns about the rising prices of food, and the challenges for urban people of securing decent meals, Mrs H's view that agriculture is a 'top profession' appears to have been shaped by the fact of high food prices, and the expectation that it is possible, at least in theory, to flourish as a farmer. She veers between an idea that it is possible to 'shine' and the view that it is uncertain, particularly when prices are volatile. She also notes that people from her own background, who claim agricultural backgrounds, have been de-skilled with respect to farming, having lost the knowledge of the land from their decades in Dhaka since they lost their farmlands from river erosion.

The views of other urban people about high food prices similarly displayed a sort of nostalgia for agriculture as associated with customary rural ways of life:

'Everybody wishes to live in the city, and likewise you will not see anybody that wishes to produce food in the city. This has increased in recent times. In the countryside the youth now have no wish to cultivate, it seems that they like modernity and are leaving for the city, in this one must assume that there are also climatic phenomena [such as] ice and drought destroy the production and force families to migrate to the city. It would be nice if people could return to the countryside, it would be good if the government would support these policies so that we might return and have lands, because in the countryside one lives well if you produce well; you can eat well, you don't pay for light, for plumbing, water, you live a tranquil life, and this should be supported by the government. Only like this will there be a return to producing food that provides for all.' (A woman market trader in Cochabamba, Bolivia.)

This view was echoed by another woman from the area, 72 year old Mrs P, who had seen rapid changes in food production in her time. When asked how she would feel if young people in her family wanted to go into farming, she said:

'It would be great. I would like to ask the government for the land uphill, not take it away from the government, ask if the land is idle perhaps we can cultivate it. We return the land whenever they ask for it. We would ask the government for tractors and all of us would farm. I would love to have a source of employment. We would buy and sell. I would like that. There are many plots of land...'

Mrs P's vision seems far removed from the realities of market-based production in that region, and one in which a paternalist government will play a supportive, responsive role.

New technologies are beginning to making farming look more modern and attractive even in the cyclone-hit region in the south of Bangladesh:

[Mr D] plans to enrol his son in the army. But nowadays it needs to bribe even to get a job in the army. If that is not possible, he is very keen to appoint him a job in an NGO (non-governmental organisation). But his son eagerly wants to go to Dhaka in search of a job as he thinks that there is a better opportunity for employment there. Now he earns money by working as a data-entry operator at [the local] bazaar. If he doesn't get a job, he will work on their farmland when the cultivation season begins. "My son has no objection in this regard," Mr D said. The respondent thought that the use of modern machineries and hybrid seeds may make the new generation interested in farming.'

It is significant that Mr D's son 'has no objection' to farming because the scope for modern machineries and hybrid seeds is making it interesting for young people, despite the wide range of other alternatives available, and the fact that he already has a 'modern' job as a data entry clerk.

The idea that agriculture could acquire status among young people to the extent that it was modern and cash-based rather than small-scale and home consumption dominated was also heard in Burkina Faso. A common view was that young people differed from their parents in that they prefer to cultivate cash crops such as sesame and beans, rather than food staples (millet); this was also expressed as the view that young people interested in agriculture were interested in modernised, market-oriented farming and not 'traditional', subsistence-based agriculture. Views on why this shift has occurred included that young people have new needs which require cash. However, in rural Nessesmentenga in Burkina Faso, some young people had tried cash crops such as beans, sesame or groundnuts) or gardening (melon, watermelon), and had not done well, so cash crops without modern techniques could still be risky.

Also reflecting the idea that agriculture can be attractive to young people if it is modern and technologically advanced were the results of an FGD with young people in a secondary school in Hai Ba Truong district in Hanoi. There, discussions about the most popular jobs included one person's desire to train as an 'agricultural engineer'. Half of the focus group respondents said they would be willing to enter agriculture if their families had farming land, but not in the current mode of a small piece of land to plant rice and vegetables, but with the idea of a bigger model farm, skilled farming and training agricultural technologies in mind.

A final area of change appeared to involve deeper social structural shifts underpinning being a farmer, in particular in relation to generational and patriarchal bargains to do with the care of the elderly and male protection of and provision for women. Where young people no longer cared for their parents in the old ways, and where young women had more options for paid work outside the home and community, this was changing the social relations customarily associated with agriculture.

Mr M, a 52 year old dairy farmer in Pirhuas, Bolivia, described how things had changed there:

'Here ... although we work only for food, with sacrifices we make our children study. Although it has improved from how things were before, the irrigation has improved everything, the people have returned, now there is transport, the children can go to study and return too.'

To continue as a producer these days, there would have to be a rent, we don't have retirement, there is no insurance for the elderly, the dignity bond [old age pension] isn't enough to live.

Now there isn't this care of the parents by their children, it is clear to me how the elderly walk alone, without anyone that might help them. I have seen this in my own father, for working for our children, now we don't reach [provide] for our parents, now there are more demands from the children, before with the school it would be that they moved on, now they have to go to university and this costs. We make ourselves old working for them and afterwards they go, we elderly remain alone, like my aunt too, she had so much money and land, her children have demanded that she part with it, now she remains alone with nothing.

I wish to sell the land, I am thinking of a shop in the city that I would like to buy, with my wife we could just get by right? Because the children are only for a little while, later with their spouses, their children, and they ask [for us] to part with the lands and later they don't remember the elderly, there is no trusting the children. “..the farmer is no more than a slave of the town..”.

This somewhat mournful depiction of changing social relations notes in particular the connections between land (assets that may be inherited by the younger generation) and care of the elderly. Where younger people move off the land, this reduces the prospects for being looked after by one's children. But the risks there are that, as Mr M's aunt discovered, when the proceeds of land are shared among one's children, they may not meet their side of the traditional bargain. The sale of land inevitably means a final break with agriculture within that family, but this is necessary because 'there is no trusting the children' – social relations are no longer strong enough to sanction failures to care for older parents.

A 16 year old boy in the same community gave the perspective of young people:

'I think the youth, we have changed. We have seen the hard life of our parents and we don't want to go do the same. We want to be professionals [university graduates], to work in the city. Some friends have worked hard in order to save money for studying without having to ask for it from their parents.'

For this young man, the desire to have a different way of life has also meant some of his friends have separated their interests, saving their own money in order to further their education without having to ask parents. This suggests a generational break in aspirations but also in investments in the family enterprise.

In other countries, the ways in which marriage forms underpinned rural life were also changing. For young Indonesian and Bangladeshi women, there were views that life as a farmer's wife was less appealing than marriage to men in other occupation groups, reflecting the recognition that it is a tough life for the wife of a farmer. Perceptions of polygamy were said to be changing in rural Ethiopia and Burkina Faso, with likely implications for how farming is organised. In rural Ethiopia, youth commented that they had learned about the harms of polygamous marriage and wanted to put their learning into practice by having men marry only one wife. Their view was this would have a positive impact on reducing family size which was crucial for improving family life, but this presented 'a big challenge for the old and adult people'. Large bridegroom payments also meant that the cost of marriage was huge, and younger people did not want to have to pay bride wealth and spend large amounts of money and crops on marriage ceremonies. This reflected the need to better plan their spending, which some felt older people did not do (in deference to customary norms).

4 Conclusions

This paper sought to explore who wants to be a farmer and under what conditions, in the context of global food price volatility and its effects on local lived realities and on the agri-food system globally and locally. Qualitative data from interviews conducted in 2012 with nearly 1500 people, including young people and their parents, across 10 countries were analysed in relation to three propositions: that people's aspirations are formulated within their 'opportunity space'; higher food prices should have made food farming relatively more attractive sector in recent years, so that young people and their parents should be more drawn to farming than in the recent past. We were also concerned with what the research could tell us about how the opportunity space is being re-structured for young people in developing countries in the current moment – a period of economic volatility with significant likely impacts.

The key conclusion of the paper is in line with the other literature on the topic: that farming is not a favoured option for the younger generation in rural areas of developing countries, even those in which agricultural remains the mainstay of livelihoods and the rural economy. Analysing their views within their contexts and settings, the paper looks at how young people's aspirations and work expectations are formed within their opportunity space, and at how that space in their lives and around farming is configured and reconfigured. These dynamics can be seen in the four themes emerging from the research and in the ways they interact:

4.1 Social status preferences

There was strong and widespread desire to gain and use formal education in respected white collar or professional occupations. There was a sharp generational break in educational prospects and patterns, with young people on the whole better educated than their parents in terms of higher levels of formal education. This creates a sense of progression which is likely to involve different and higher aspirations than in the current adult population. With higher levels of education come greater expectations – both of young people themselves but also parents' expectations for their children. The latter are sometimes couched in terms of recouping investments in education that for them have often involved trade-offs. The "level" of aspiration depended on context and from the perspective of young people appeared to be realistic given their personal context and circumstances. Higher levels of education did not translate automatically into good jobs and this affected educational aspirations as people perceived there to be little value in completing education where job prospects are so limited. For those whose educational careers were less successful and did not lead to further or higher education and the gold standard of a good office job, agriculture was seen as the fall-back position. We found some optimism about the prospects of a career in agriculture, and about how schooling could contribute to greater productivity (particularly in Ethiopia, Indonesia). There were instances of better-educated young farmers mobilising effectively in groups to generate support.

4.2 Key constraints

Agriculture is a viable choice only for those who can access land and inputs. For many young people, the lack of access to land, capital and other inputs prevents them from considering agriculture. For some, farming was considered to be a desirable activity alongside a formal sector job providing the necessary capital enabling them to farm as an 'entrepreneur'. However, some jobs, particularly in the rural sector, were so badly paid that this was not a possibility. Land fragmentation linked to rising populations also meant people were concerned that agriculture could no longer be a fall-back option in the future. It was clear that people considered material assistance in accessing land and inputs, while necessary, would not be enough to make farming attractive to young people, citing a need for successful role models in agriculture. Not only that, there was a strong sense that government had a key role to play in creating the right signals that agriculture is a valued sector and farming a worthwhile profession by implementing effective support policies and improving the provision of agricultural training at all education levels.

The physical and mental challenges of farming and agricultural labour: There was a clear signal from people interviewed that working in agriculture – interpreted as farming/ farm labour - is viewed as both tough and financially unrewarding (for small farmers). It is seen as low status, dirty work. On the whole, urban life perceived to be easier, cleaner, and more comfortable. The physical toughness of farm work combined with poor cash flow from farming made it an unattractive prospect for many. People recognised that the tough working conditions faced by those trying to make a living in contemporary agriculture, coupled with the perceived low status of farming meant some coveted jobs as factory workers where payment is regular, wages can be used to acquire consumption goods, and there is potential to save. But people recognised that this comes at a cost – the loss of freedom and self-reliance of self-employment and, for some, the need to be mobile to access these opportunities.

4.3 Changing opportunity space

In discussing aspirations towards farming and agriculture more broadly in the context of food price volatility, people signalled new opportunities for education, employment, and migration, as well as changing norms (particularly for women). The analysis suggests that factors such as new information communication technologies and associated desire for consumption are a source of fairly rapid and deep-seated shifts in the conditions under which decisions about work choice are constructed. Agriculture could acquire status among young people to the extent that it was modern and cash-based rather than subsistence oriented. Higher food prices were more likely to signal attractive work prospects where public investment in agriculture had created a perception of a sector with the scope to modernise. In this instance, they presented an opportunity for young people and that those able to take advantage by adopting modern agricultural methods. Yet opportunities for modern agricultural production were not typically available to poor or small farmers interviewed for this research. The research also points to deeper social structural shifts underpinning agricultural life. These were particularly prominent in relation to generational and patriarchal bargains around care of the elderly and male protection of and provision for women. Where young people no longer cared for their parents in the old ways, and where young women had more options for paid work outside the home and community, this was changing the

social relations customarily associated with agriculture. So we see not only a generational break in aspirations, but also in investments in the family farm or enterprise. Young people saving to put themselves through higher education and training without having to ask their parents to pay, do so at the expense of investing in the family farm presumably with the view that this is not where they see their future.

Reading across these themes, the analysis uncovered four key determinants of the opportunity space in relation to agriculture within which aspirations and expectations were formulated and interpreted:

- the extent to which / how increased risks in the agro-food system out-weighed perceived benefits from price increases from the producer side;
- The extent to which land remains a significant obstacle, and where;
- How access to other inputs was being influenced by higher commodity prices, and whether younger smallholder farmers were seen to have access to agricultural input subsidies or supports;
- Experiences of being consumers; as cost of living rises spread beyond food staples and beyond food, for some, regular formal sector cash incomes seemed to become more desirable.

It is clear from our research, and this is found elsewhere in the literature, that young people are facing inter-connected challenges exacerbated by the contemporary context of volatility. Far from making advances in poverty reduction, there is a real risk that this generation of young people will end up being worse off than their parents. Not just economically but, taking a broader wellbeing perspective on poverty, in other ways and this is alluded to in the research with the concerns voiced over the psychological impacts on young people of the situation they are facing – general insecurity, high youth unemployment and constrained prospects. Youth aspirations are of independent importance to policymakers, regardless of whether or not young people actually end up on small farms. This is because a) raising the status of the sector is important to attract entrepreneurial skilled individuals to raise productivity and improve the prospects of people living and working in rural areas; and b) because the frustrations of young people who lack both food security and alternative job prospects must be managed in a constructive way and governments recognise this. To prosper as a stable society (economically and socially) need clear pathways for young people through education into useful/ secure employment.

The findings of this research resonate with those in the literature that agriculture's lack of appeal to young people reflects i) lack of effective public investment in small holder farming and the public infrastructure needed to link to markets; ii) constrained access to land and uncertain access to inputs among young people, including land fragmentation in many countries in past few decades; and iii) social change resulting from rapid increases in mass education provision but which have often resulted in a perceived decline in the status of agriculture.

But in digging deeper, the research also finds that agriculture could be made more appealing to young people, with the right kinds of measures and support. First, public policies need to improve the fit between the aspirations of young people and opportunities in agriculture and agri-food more broadly. This could include providing the right kinds of training at appropriate levels to reflect the demands of the job market and broader public investment. Second, an important factor in enabling young people to see the potential of different employment choices, in agriculture and other sectors, is the presence of positive, successful role models. Finally, a strong message emerging from across all the countries in this research is that

farmers, across all generations, need support for accessing markets and to improve productivity, such as access to inputs and in the uptake of modern technologies. It is clear that in a time when food prices are volatile, such policies would help to reduce or mitigate other areas of uncertainty in farming and would go some way towards creating the kind of dynamic agricultural sector that will drive poverty-reducing growth as well as attracting the 'talent' of future generations.

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