Is post-green revolution agriculture in Punjab, India an example of Karl Polanyi’s double movement?

by

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ABSTRACT

IS POST-GREEN REVOLUTION AGRICULTURE IN PUNJAB, INDIA AN EXAMPLE OF KARL POLANYI’S DOUBLE MOVEMENT?

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This research aims to determine whether Karl Polanyi’s concept of the double movement, which has been applied to recent social movements around the world, is also relevant to Punjab, India in a post-green revolution agricultural context. This research describes the double movement and characterises each component: market-oriented movement, crisis, and protective counter-movement. Then it assesses whether this relevant to understanding Punjab’s agricultural transformations through a combination of library and field research over three months in Punjab. Findings show that post-green revolution agriculture in Punjab presents a case for the relevance of Karl Polanyi’s concept of the double movement, including the market-oriented movement (industrialization of agriculture) and crisis (farming crisis), however evidence of the protective counter-movement has not emerged (institutional support for alternative agriculture). While Punjab’s protective counter-movement currently appears relatively weak at the institutional level, some ideological foundations are present. Whether this will collate into a wider movement is uncertain.
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Source: www.d.maps.com, with modifications (underlines, north arrow, title) by author.
Chapter 1: Introduction

Over the past 50 years, Punjab’s rural development policies have promoted industrialization, free market systems, economic growth, interregional and international trade, and rural-urban migration. As a result, farming communities in Punjab have seen rapid economic growth through agricultural development and the green revolution, but this has been coupled with social and environmental decline. Today, Punjab has a budding counter-movement to the green revolution which is slowly gaining momentum in the region. Elements of this movement seek to protect the environment, revive traditional farming practices and seeds, and draw young people into farming futures. With an aging farming population and young people making up the majority of the labour force, young people may be the key to reviving rural communities. Yet rural development policies which promote market solutions (commodification) are failing to adequately address poverty and unemployment amongst this age group. Although many youth migrate to urban centres, some are choosing to take up family farming traditions or joining the counter-movement as social and environmental activists. This context in Punjab, as well as similar situations in many other regions around world, is what motivated the research.

This thesis argues that post-green revolution agriculture in Punjab presents an example of what Karl Polanyi (1957) described as the “double movement”. The double movement is an extended historical process which involves first an expansion of market-oriented ideas and institutions, second an economic and social crisis created as a result of these market-oriented changes, and third a protective counter-movement which resists market-oriented changes and seeks to defend traditional and social ideas and institutions. I argue that these phases can be observed with respect to agricultural transformations in Punjab, albeit to varying degrees. I also argue that while Punjab’s protective counter-movement appears institutionally weak, it manifests through quiet but firm resistance to capitalist agriculture mainly at the level of individual
ideologies of some young farmers. Whether this will eventually generate a wider movement, as more people embrace environmentally sustainable farming models, is uncertain.

Chapter 2 (Literature Review of the Double Movement) establishes a framework to understand the ways in which the double movement manifests, as described by Polanyi himself, and as interpreted by scholars after him. I set out a few questions to dig deeper into understanding the double movement in general and the counter-movement in particular:

1. Is there a market-oriented movement and a crisis caused by the market-oriented movement?

2. How can we identify and characterise the protective counter-movement at the institutional level?
   - Do these values and ideas manifest through institutional counter-movements in Punjab? If not, why not? What are the barriers?

3. What is the role of youth in the protective counter-movement?
   - What values and ideas are at the core of the double-movement?
   - Are similar values and ideas present in Punjab today in the context of agricultural transformations associated with the green revolution?

I hypothesize that youth will have some role to play in the protective counter-movement because young people are so often involved in organizing for social justice as agents of change (Ginwright and James, 2002). I conducted field work in Punjab in 2015 to answer the research questions above. This is detailed in Chapter 3 (methodology). Specifically, I undertook a qualitative study of agricultural transition in Punjab, including in-depth interviews, discussion groups with young farmers and key informants, and observations at the National Organic Farming Convention.

Prior to field work, I had expected that key informant interviews as well as observations at the National Organic Farming Convention would reveal elements of a strong organized social movement, and that I would readily find young farmers interested in alternative agriculture. But
when the data did not emerge as expected, I initially (and incorrectly) thought that perhaps the counter-movement does not exist at all. Perplexed by this possibility, I revisited the data collected in the interviews and started thinking about it in another way. Upon returning from the field, I re-examined Karl Polanyi’s original work *The Great Transformation* to search for his explanation of what is motivating the double movement. With a new understanding of the ideologies at the root of the market-oriented movement and protective counter-movement, I scrutinized my research data again. This final stage of analysis revealed that some foundations for a protective counter-movement are indeed present in Punjab at the level of personal values, beliefs, and choices even though it is not as obvious through strong organized institutional actors and actions.

The remaining chapters, (Chapters 4, 5, and 6) are organized in the following way: Chapter 4 shows the market-oriented changes introduced by the green revolution and subsequent agricultural transformation. It also shows the current extent of the agricultural, economic, environmental, and generational crises in the region which have been caused by the market-oriented transformation. One important facet of the crisis is rural migration and the youth exodus from farming. While there are many push and pull factors driving rural youth to migrate, the agricultural crisis is the main focus in this research. This sets up the context to investigate if and how the protective counter-movement manifests in Punjab and the involvement of youth in this movement. Chapter 5 (Institutional Manifestations of a Protective Counter-Movement) outlines what was expected to emerge as a Polanyian protective counter-movement against the market and discusses why this was not the case in reality. Indeed, there are many challenges in Punjab at the institutional level. Furthermore youth, who were expected to be a vital part of the counter-movement, seem to be missing from the picture.

Chapter 6 (Ideological Foundations of a Protective Counter-movement) presents what I found instead. I argue that some foundations for a counter-movement in Punjab exist at the level of ideas, values, and beliefs, which I observed in a small sample of young farmers. Not all
youth are disengaged from what is happening in Punjab. Some young farmers are actively going against the grain to stay in their villages or return to rural farming lifestyles and farm in a way that aligns with their personal morals, values and beliefs. I interpret this as a response to the market-oriented movement and the crises in Punjab. They are responding through their life choices, ideas, and values, which show that they care about society and the environment more than economic gain. This is the foundational core of a Polanyian protective counter-movement that seeks to preserve traditions, culture and the environment which could be mobilised for a strong counter-movement. Finally, Chapter 7 (Conclusion) summarizes the key findings in this thesis and presents some broad recommendations for further research on this topic.
Chapter 2: Literature Review of the Double Movement

This chapter presents a literature review of Karl Polanyi’s concept of the double movement as described in *The Great Transformation* and other literature, with the aim of creating a framework which can be applied to observe how the double movement might manifest in various contexts. *The Great Transformation* was originally published in 1944 by Farrar & Rinehart, and then again in 1957 by Beacon Press. This thesis uses the 1957 version as its main reference. It was also re-published by Beacon Press in 2001 with a new foreword showing its continued relevance today. *Annex A* contains a table summarizing the various manifestations of the double movement which will be discussed in greater detail in this chapter. Towards the end of this chapter, several research objectives are laid out for further investigation in Punjab.

The Double Movement

Central to the *The Great Transformation* is the concept of the double movement. The double movement has two phases which are hinged on a crisis. In brief, it involves a movement towards economic liberalization, followed by a crisis and counter-movement by the state and society to restrain market forces and protect society and the environment.

Although Polanyi did not receive much recognition during his time for this model (Holmes, 2012), he is now seen as “one of the most important thinkers of the twentieth century. He is regularly invoked by both scholars and activists who challenge unfettered free-market globalization” (Somers & Block, 2014, p. 30). The double movement has resurfaced as a conceptual lens for understanding the challenges that have come with globalization, neoliberalism, and market fundamentalism (Sandbrook, 2011). In the 2001 re-print of *The Great Transformation*, Nobel Laureate Joseph Stiglitz commends Polanyi’s work, equating the drastic changes to European civilization in the 19th century to present-day transformations in...
developing countries across the globe: “It often seems as if Polanyi is speaking directly to present-day issues” (Stiglitz, 2001, p. vii).

**Figure 2 Stylized Model Depicting Waves of the Double Movement**

**Market-Oriented Movement**

Polanyi (1957) characterized the initial market-oriented movement as being driven by the motive of economic gain. It is based on “the principle of economic liberalism, aiming at the establishment of a self-regulating market, relying on the support of the trading classes, and using largely laissez-faire and free trade as its method” (Polanyi, 1957, p. 132). This movement toward liberalism is seen as a feature of modern capitalist societies which have beliefs about the self-regulated market at their core, and are supported by those that stand to benefit from market expansion (Baum, 1996). Market expansion rests on laissez faire approaches and trusting the invisible hand (Polanyi, 1957). The invisible hand is guided by the laws of supply and demand, and promises that when individuals act out of self-interest, there will be better outcomes for all as a result of competition and without state intervention (Adam Smith, 1904).

The market-oriented movement was manifest at the time of the Industrial Revolution when the British government, supported by the trading classes, deregulated markets, commodified land, labour, and money, and opened their borders to the international trading of
goods. Some examples of the rise of ‘laissez-faire’ legislation that Polanyi was referring to include the Peels Bank Act (1844), Anti-Corn Law Bill (1846), and Poor Law Amendment Act (1834) which promoted a competitive labour market and international free trade (Hejeebu & McCloskey, 1999). Furthermore Polanyi (1957) outlines several concrete observations of the market-oriented movement. This includes enclosure of land\(^1\) (p.34), conversion of arable land to pasture or cottage industry\(^2\) (p.34), destruction of houses (p.34), increased exports (p.37), mechanization in agriculture (p.40), self-regulated markets (p.40), commodification of land, labour, and money, and international trading of goods (pp.227-230). With all of these changes taking place, Polanyi (1957) argues that for farmers, mechanization replaced subsistence lifestyles with profit-oriented motives. “The transformation implies a change in the motive of action on the part of the members of society: for the motive of subsistence that of gain must be substituted” (Polanyi, 1957, p. 41). Similar ideas and actions have re-emerged today.

Recent scholars have likened neo-liberalism to the market-oriented movement Polanyi originally spoke of. Today, this movement has taken the form of privatization, international free trade agreements, globalization of financial markets, as well as continued de-regulation, land use changes, industrialization, urbanization, and further commodification of nature through water rights and carbon trading (Stiglitz, 2011). In industrialised economies, it is rare to find farmers aspiring to subsistence lifestyles. Worldwide, economic indicators are used as benchmarks of well-being instead of social and environmental indicators. This links back to Polanyi’s (1957) claim that the market-oriented movement is driven by the motivation of gain.

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\(^1\) Enclosed land was worth two or three times more than unenclosed land; enclosure of land in itself was not the problem if the land was still being farm, but often enclosures came hand in hand with conversion to pasture or cottage industry (Polanyi, 1957).
\(^2\) Conversion of arable land to pasture was detrimental because even though it was more profitable, it eroded the soil, destroyed natural habitats and reduced employment (Polanyi, 1957).
Crisis

Polanyi (1957) argued that expanding free-market economies would diminish societal values and would be antagonistic to prevalent ideas. The result would be social and environmental crises as traditional beliefs – such as spirituality, respect for all life forms, collective rights to the land, and a human subsistence economy based on kinship ties, social relations, and reciprocity – are lost in favour of market-oriented beliefs – such as detachment between humans and the environment, viewing land as something to be conquered and developed, and creation of markets which operate based on prices that are set using ‘rational’ self-interest (Roncallo, 2013). Furthermore, liberalization would marginalize or dislocate certain groups of people, usually those with lower socio-economic status. How devastating the effect of social dislocation would be depended whether the dispossessed could adjust themselves to changed conditions without fatally damaging their substance, human and economic, physical and moral; whether they would find new employment in the fields of opportunity indirectly connected with the change; and whether the effects of increased imports induced by increased exports would enable those who lost their employment through the change to find new sources of sustenance. (Polanyi, 1957, p.37)

According to Polanyi (1957), a crisis is inevitable, and ‘disembeddedness’ and ‘social dislocation’ are central features of the crisis. Human economies operate within social institutional structures. To treat it as if that is not the case is what leads to destruction and crises. When merchants buy and sell raw materials (nature) and labour (human activity) without restraint, many social and institutional beliefs and values are displaced by economic beliefs and values (Polanyi, 1957). The economy becomes disembedded from society because raw materials and labour are viewed as inputs to production and are not valued and protected as natural habitat and human relationships. Furthermore, social dislocation occurs when small-scale farmers are unable to compete with large-scale mechanized operations (Polanyi, 1957). In search of work, people migrate to industrial towns living unhappily in crowded quarters. Polanyi
says, “the country folk had been dehumanized into slum dwellers; the family was on the road to perdition” (Polanyi, 1957, p. 37). Other indicators of the crisis include “the diminution of the supplies of locally available food provisions” (Polanyi, 1957, p. 38), loss of traditions such as the frequency of communal sharing of food (p. 46), an increase in food prices (p. 90), and an overall increase in rural poverty.³

Today, the global crisis, which is a continuation of the crisis Polanyi witnesses and wrote about, has come in the form of land grabs, global food insecurity, deteriorating living conditions and declining working conditions for farmers and labourers in developing countries, transnational migration, climate change, and unpredictability of global financial markets, among others (Stiglitz, 2001). Even though the forms of the crises have changed, disembeddedness and social dislocation are still at the root. In response to such crises, Polanyi and scholars after him saw a rise in collective movements to protect human society and the environment from the destructive forces of the market. “Indeed, human society would have been annihilated but for protective counter-moves which blunted the action of the self-destructive mechanism” (Polanyi, 1957, p. 76).

The Protective Counter-Movement

Polanyi (1957) writes that protective counter-movements emerge as society’s self-defence mechanism. Society seeks to preserve its people, traditions, and natural environment. The ideas and beliefs of the counter-movement are motivated by a desire for overall well-being, in contrast to the market-oriented movement that is motivated by economic gain.

³ Polanyi lists many reasons contributing to rural poverty: “Amongst them were scarcity of grain; too high agricultural wages, causing high food prices; too low agricultural wages; too high urban wages; irregularity of urban employment; disappearance of the yeomanry; ineptitude of the urban worker for rural occupations; reluctance of the farmers’ to pay higher wages; the landlords’ fear that rents would have to be reduced if higher wages were paid; failure of the workhouse to compete with machinery; want of domestic economy; incommodious habitations; bigoted diets; drug habits.” (Polanyi, 1957, p. 90).
Polanyi (1957) posits that early human economies were based on reciprocity, redistribution, and householding. Reciprocity is when community solidarity or social obligations influence one’s economic behaviour and decisions (Sandbrook, 2011). Redistribution involves a central authority collecting from some and giving to others, on the basis of some principle, be it law, custom, socio-economic status, or simply an ad hoc central decision (Karnik, 2008; Sandbrook, 2011; Polanyi, 1957). Householding refers to meeting basic needs of a group of people (which could be a family, a household, a village) without earning additional profit. If profit was earned or sought out, it was for the purpose of continued subsistence (Halperin, 1994). Polanyi does not imply that the aim of protective counter-movements should be to move backwards in human history, but rather to ensure that market-economies operate within social boundaries. The core goal of the counter-movement is to “re-regulate and re-embed the economy in moral and social orders” (Harvey, 2011, p. 378). This is based on the principle of social protection aiming at the conservation of man and nature as well as productive organizations, relying on the varying support of those most immediately affected by the deleterious action of the market…and using protective legislation, restrictive associations, and other instruments of intervention as its methods. (Polanyi, 1957, p. 132)

In England, this appeared in the form of civil protests, minimum wages, abolishing child labour, workers compensation, subsidies for agricultural commodities, and taxes on water usage for irrigation and cattle (Polanyi, 1957). Manifestations of the protective counter-movement also includes “setting limits on competition and de-commodifying the ‘fictitious’ commodities, labour, land and money, through tariffs, regulation and social protection” (Sandbrook, 2011, p. 420). Polanyi (1957) also refers to actions such as citizen resistance; political advocacy; new public policies; restrictive legislations; creating institutions for social and environmental protection; and protests which culminate in important outcomes.

As an extension of Polanyi’s work, Sandbrook (2011) argues that government restrictions on the market prevents the markets from self-regulation and causes a breakdown in its functioning. Hence the counter-movement which imposes these bounds on the markets, in
essence, threatens an economic and political impasse (Harvey, 2011; Hejeebu & McCloskey, 1999). This political tension could lead to extremist movements like fascism or political violence (Sandbrook, 2011).

Polanyi saw the social disruption caused by market expansion resolved through a new wave of interventionist state policies after World War II (Holmes, 2012, p. 476). In a post-WWII context, Ruggie (1982) observes that there was a new economic order. He called this ‘embedded liberalism’, where “power and legitimate social purpose become fused to project political authority into the international system” (Ruggie, 1982, p. 382). Keynesian policies, such as the New Deal in the USA, are examples of this (Levien, 2007). However, this counter-movement was only a temporary fix; a new wave of market expansion would be promoted and markets would be disembedded once again.

The second wave of market expansion resurfaced in the form of neo-liberalism and globalization. The turning point for laissez-fair market-oriented policies was around the time of the collapse of the Bretton Woods system which controlled exchange rates and the 1970 oil crises (Holmes, 2012). Much like nineteenth century liberalism, neo-liberalism is based on the assumption that markets are best left to their own devices. This time, this economic regime was also transferred to developing countries through planned intervention and “policy-based lending of the IMF, the World Bank and the regional development banks (Sandbrook, 2011, p. 432).

These policies naturally led to inequalities and dislocations within countries, including commodification and exploitation of nature, as well as penetrating traditional cultures which valued collectivism in various ways4 such as mass media messaging showing individualism as

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4 There are many complex factors influencing and being influenced by collectivism and individualism. Ball (2001) investigates the premise that “causality runs in two directions: the collectivist or individualist character of a society will influence the course of economic development, and simultaneously economic growth and changes in economic structure will alter the orientation of the society toward individualism or collectivism” (abstract).
more desirable (Sandbrook, 2011). Hence, Polanyian scholars suggest, a new wave of the counter-movement has risen, and “if Karl Polanyi were still alive today, he would regard the mobilization of people on behalf of ecological causes as part of the counter-movement” (Baum, 1996, p. 19). Furthermore, a “shift to decentralised economic democracy or participatory planning would constitute, in effect, a second great transformation” (Sandbrook, 2011, p. 425).

Gaps in the Literature

The double movement literature highlights some gaps which Polanyi missed in his explanation and analysis in the Great Transformation. Watson (2014) argues that Polanyi oversimplifies the means through which the counter-movement can manifest in opposition to market-oriented transformations: more freedom of markets or more market intervention via the state. The critical role of institutions and civil society is missing from the discussion (Watson, 2014). Polanyi makes a wide assumption that the double movement is confined at the national level, and that the state is strong while civil society is weak. Today, however, there is a divide between ‘politicians’ and ‘people’ and the challenges go beyond national boundaries. When people are told that market logic prevails and international markets can influence what happens at home, they feel governments no longer have the capacity to help (Somers & Block, 2014). This is where anti-globalization social movements become so important to combat the failures of the free-market or to lobby their governments for change. Furthermore, the Polanyi literature says little about how counter-movements are politically organized, which class or segment of society will take the lead, and at what scale the movement will take place (Levien, 2007). These gaps will help to inform the research objectives of this paper, which are explained at the end of this chapter.

Another gap, which has not been explicitly mentioned in the literature but this research identifies as a relevant nuance in understanding and observing Polanyi’s double movement, is in unpacking the ideational layers of the double movement. Many scholars (Karnik, 2008;
Levien, 2007; Sternberg, 1993; Watson, 2014; and others) focus on the institutional manifestations, outcomes and consequences of the double movement, and comparatively few scholars (Roncallo, 2013) have studied or acknowledged the precursors or underlying drivers (such as changing ideologies, world views, and cultural beliefs) that are at the foundation of the market-oriented changes, resistance, and counter-movement. Roncallo (2013) interprets the double movement in post-cold war Americas as one of ‘conquest versus co-existence’. He argues that cosmologies (that is, the way in which humans relate to nature) are pitted against each other: traditional cosmologies are characterized by spiritualism, respect for all life forms, subsistence lifestyles, and a human economy based on kinship, reciprocity, and social relations; whereas contemporary cosmologies are characterized by hierarchical separation between humans and the environment, detachment from the land and nature, the belief that land is something to be conquered and developed, and a market economy based on rational exchanges (Roncallo, 2013). He shows how these differing cosmologies manifest in regionalism from below (in the case of traditional cosmologies) or regionalism from above (contemporary cosmologies). While the direction of cause and effect can be debated (whether institutional changes influence worldviews, or vice versa), what is important to this discussion is the fact that those underlying beliefs exist and are closely tied to the outward institutional changes that we observe. These ideological components of the protective counter-movement, which have not been given much consideration in the literature, will play an important role in analyzing field data on the situation in Punjab (Chapter 6).

Despite these gaps, there are many recent examples of protective counter-movements mirroring what Polanyi observed in the 1900s. The next section highlights some examples involving peasants, youth, and alternative agriculture. These topics are highlighted because it is hypothesized that similar actions may be taking place in Punjab in response to the post-green revolution agricultural crisis.
Alternative Agriculture and Youth Movements

There are some compelling connections between Polanyi’s double movement, agriculture, and the environment. The topic arises in discussions on the commodification of land and through subsistence farming as an idealized lifestyle (Polanyi, 1957). Polanyi (1957) states that unrestrained commodification of natural resources (such as land) will lead to human and ecological downfall. He saw farming households as an ideal model of the socially embedded economy because of its family-centered values (Polanyi, 1957). Traditionally, farming was a way of being self-sufficient, and surpluses were exchanged to support one’s family and one’s community, rather than for personal gain (Carlson, 2006).

Hence, it might be reasonable to expect that when Polanyian counter-movements form against free markets today, they will include some elements of farmland and environmental protection. By stating that society would always seek to protect their culture, their people, and their land, Polanyi could have predicted that agro-ecological social movements would eventually respond to the continued commodification of land and labour under neo-liberalism. There are several examples in the literature of social movements that are fighting for the de-commodification of land and protection of indigenous populations and their culture of subsistence.

When it comes to peasants movements and land rights, “the Landless Rural Workers Movement (MST) in Brazil and the Zapatista Army of National Liberation (EZLN) in Chiapas are emblematic cases for scholars and activists” (Vergara-Camus, 2012, p. 1135). While the MST and EZLN both succeeded in their missions to protect rural land, Zapatistas managed to also continue using the land for subsistence farming, whereas “MST settlers are preoccupied with finding ways of re-integrating the market and choosing a crop (soy bean, sugar cane, wheat) that will guarantee them the best possible income” (Vergara-Camus, 2012, p 1150). Hence, despite the MST’s notable successes in de-commodifying land, the settlers are caught operating
in markets that are based on economic priorities. Yet even within the framework of a market-based society, Sabourin (2007) observes several acts of reciprocity and redistribution in north east Brazil at various levels of production including natural resources management, the attitudes of farmer groups, processes of innovation adoption, and in dealings at the political level.

Another example is La Via Campesina, an international peasants movement. In 73 countries around the world, La Via Campesina is building alliances and working to address issues such as space, land, and territory; gender and youth; food sovereignty; resistance to privatization, agrarian counter-reforms, and neo-liberal policies; and resistance to the dominant model of production and development (Torrez, 2011).

Furthermore, citizen-led actions often push the government to support particular programs or policies that protect society and the environment. For example, in 2013, two farmers lobbied the Ontario government to undertake an assessment of genetically modified alfalfa seed, because they felt that if this seed was released for sale throughout the province, it would have negative repercussions on the environment (Organic Agriculture Protection Fund, 2015). Hence, they were fighting against large profit-oriented seed companies and seeking to protect nature.

Similarly, if organic and local food movements are well planned, they can play an important role in reviving environmental values while fostering reciprocity and redistribution. Hinrich (2000) shows that in the American context, agro-ecological movements can socially re-embed markets through local food systems. Even though farmers’ markets and CSAs in the United States are criticized for catering to educated, middle-class families, there are also “farmer’s markets in low-income communities and CSAs run by and for homeless people” (Hinrich, 2000, p. 301) thus also catering to marginalized segments of society. Alternative food markets like these create an environment of trust and personal relationships, thus once again nesting economic exchange within a broader blanket of social values.
There are many ways in which counter-movements can manifest. Although Polanyi placed heavy emphasis on state intervention to counter the forces of capitalism and free-markets, today, (local) citizen-led responses are also playing an important role, and we can see this in several examples of agro-ecological movements around the world. Often youth are intimately involved in responding to situations of crises as passionate pioneers of change. As such, youth can provide a glimpse into the future as they carry society toward new values and beliefs.

As a result of market-oriented agriculture, young farmers around the world are facing the crisis of social dislocation that Polanyi (1957) wrote about. From an economic perspective, there are several push and pull factors\(^5\) leading youth away from farming (Sumberg et al, 2012; White, 2011). Neo-liberal policies have intensified commodification of agricultural land and labour (Li, 2009a, p. 630), resulting in greater competition among smallholders, increased reliance on technology, and surplus labour (Li, 2009a; White, 2011). The economic assumption is that this surplus agricultural labour should get reabsorbed by manufacturing industries, but this has not been the case (Jeffrey, 2009; Li, 2009; Sumberg et al, 2009; White, 2011). Youth unemployment continues to persist in Asia, in both rural and urban areas (Jeffrey, 2009; Li, 2009a).

From a social perspective, there are different push and pull factors causing dilemmas for youth in agriculture: this includes the difficult choice of ‘pen vs. plough’ (Temudo & Abrantes, 2015), and deconstructing the social image of farming and rural life. When faced with the choice between education versus helping on the family farm, many poor families have no choice but to involve their children on the farm, whereas wealthy families prefer for their children to only focus on school and non-farm education (IFAD, FAO, and CTA, 2014). As such, in Sudan, as in other

\(^5\) Push factors include rural poverty, low agricultural productivity, scarcity of land, and a lack of government investment in rural infrastructure (Sumberg et al, 2012; White, 2011). Pull factors include opportunities for higher education and hope of better job prospects outside of agriculture (Sumberg et al, 2012).
parts of the world where agriculture is expanding, rural youth are losing farming knowledge (Katz, 1991; White, 2011). It used to be that children worked and played on the farm, learned from their natural environment, and then later in life applied those skills as youth and adults (Katz, 1991). But the socioeconomic changes along with commodification of agriculture have separated young people from this nurturing environment and deskill the peasant population (Katz, 1991).

Hence, many young farmers are faced with competitive pressure from large-scale market-oriented agriculture, against which small scale family farming can no longer provide a competitive livelihood. As a result many are leaving agriculture to find an alternative. Those who stay in agriculture or return to it often do so despite its economic problems, or they find a different niche within agriculture. Sometimes the underlying motivations are for non-market reasons such as tradition or environmentalism.

Youth are often heralded as passionate agents of change, bringing forth new perspectives and shaping the world through innovative means. Ghimire (2002) cites examples from Mexico, China, Bolivia, Cuba, Indonesia, Philippines, and sub-Saharan Africa in which rural youth are either leading or strongly participating in agrarian and rural movements. For example, in Mexico, Emiliano Zapata was in his early twenties when he led the twentieth century agrarian movement in Mexico, supported mostly by young peasants and workers (Ghimire, 2002). Ghimire adds to these historical narratives with his own case studies in Brazil, Egypt, and Nepal showing that young people in rural areas that are increasingly marginalized both socially and economically have exerted themselves through contemporary social movements fighting for a stable livelihood along with political rights (Ghimire, 2002).

Indeed, there is “substantial literature on students’ role in various anti-colonial, anti-feudal, nationalist and social movements in developing countries” (Srikanth, 2014, p. 30). In Uttar Pradesh, India educated unemployed young men in particular are known to take up involvement in protests and show interest in rural politics (Jeffrey, 2009). In Nepal, youth
activism, energy and drive is recognized but also exploited “by political leaders in often violent multi-party politics” (Fujikura, 2001, p. 30). However, Nepali youth did play a critical role in the Kamaiya Liberation Movement in 2000 which freed bonded agricultural labourers in the western part of the country (Fujikura, 2001). Hence, young people have the capacity to change the rural landscape and beyond. Worldwide there are examples of youth that are actively engaged in protective counter-movements through social activism and political engagement as a response to the crisis in agriculture.

This section on protective counter-movements, alternative agriculture, and youth movements, shows that regardless of how movements against capitalism and free-market ideologies around the world manifest there is one thing in common: it involves a shift in people’s way of thinking. Rather than measuring wealth through one’s economic standing, it involves a worldview where the importance is placed on enhancing one’s personal relationships, contributing to the community, and caring for the environment around them. This also equates to higher personal wealth and well-being. Specifically, we see examples of the protective counter-movement manifesting through reciprocity, redistribution, and markets; often it involves activism and advocacy to change public policy towards protection of people and the environment, or public protests against profit-oriented corporations or capitalistic government policies. Lastly, the examples in this section show that counter-movements involve several segments of society, including youth, rising up and joining forces to push back against something much bigger.

Research Objectives

Polanyian scholars have identified several examples of the double movement taking place in different places across time and space. However, the vast majority of academic studies are related to global issues or industrialized countries, and fewer have tested the relevance of Polanyi’s theories to less developed economies (Sandbrook, 2011). Using Polanyi’s double
movement, Levien identified factors impeding coordinated resistance to India’s ‘New Economic Policies’ which promote liberalization, privatization, and globalization. He concluded that nationwide strong counter-movements are unable to succeed because of 1) economic and social diversity of the people who comprise it and therefore potential disagreements among them; and 2) different ways in which these people are negatively affected by markets, which leads to so many single-issue movements, and a lack of unity among them (Levien, 2007). Levien’s research (2007) is an extension of Polanyian scholarship based on Indian data. Through further analysis in the Indian context, specifically in the state of Punjab, this thesis aims to continue building on Polanyi’s insights to generate a clearer analysis of what is going on in Punjab today.

The central research question is: is post-green revolution agriculture in Punjab an example of Karl Polanyi’s double movement? This will be explored through three research objectives.

Research Objective #1: To identify if there is a market-oriented movement and a crises caused by the market-oriented movement in Punjab

While the greater point of interest is to understand how the counter-movement has formed and responded to the agricultural crisis in Punjab, this rests on the assumption that there is indeed a market-oriented movement and a crisis resulting from that market-oriented movement. Hence, the first research objective will seek to identify if a market-oriented movement and crisis exist and to uncover some of the root causes of the agricultural crisis.

Research Objective #2: To identify and characterize the protective counter-movement in Punjab

This thesis focuses on explanatory analysis on the counter-movement and fills a gap in the literature on this subject. As mentioned previously, the role of institutions and civil society at the sub-national level is missing, and discussion of how counter-movements are politically organized and at what scale is also absent. Hence, the second research objective of this thesis
is to investigate and explain if and how a counter-movement manifests in the agricultural sector in Punjab.

Research Objective #3: To investigate the role of rural youth in the protective counter-movement in Punjab

Undoubtedly, growing up amidst an agricultural transformation (such as that caused by a market-oriented movement and subsequent crisis) will impact the trajectories of rural youth. In a national study on the withdrawal of Indian youth from rural areas, Sharma and Bhaduri (2009) find this to be “another dominant force causing many to quit out of desperation” (p. 116). But what about those who stay and continue in agriculture? There is little literature on Punjab’s rural youth to begin with, and much of it focuses on youth idleness, unemployment, and substance abuse (Advani, 2013). This is the conventional sociological view of youth, as victims engaging in deviant behaviour. This view fails to see youth as actors and critical participants in social change. Hence, this makes Punjab a compelling case study to explore local dynamics of the double movement from youth perspectives.
Chapter 3: Methodology

As described in the previous chapter, the theoretical framework used to arrive at the central research question is based on a focused reading of *The Great Transformation* describing the double-movement, complemented with current scholarly work on this topic. I decided to focus on youth because, during my preliminary field visit to Punjab in 2014, I became aware of some young people that were interested in alternative agriculture and environmental activism in the region. Hence I was curious to know more about their engagement and connection to a possible counter-movement. This chapter explains how data were collected and analyzed in order to address the research objectives and answer the central question.

**Table 1 Summary of data collection and analysis**

<table>
<thead>
<tr>
<th>Research Objectives</th>
<th>Data Collection</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To identify if there is a market-oriented movement and a crises caused by the market-oriented movement.</td>
<td>Literature review Document review Scan of local news Key informant interviews Young farmer interviews Descriptive field notes Reflective journaling</td>
<td>Comparison of data to theoretical framework Theme analysis Trend analysis Written summaries of interviews with memorable quotes Ongoing critical reflection while in the field</td>
</tr>
<tr>
<td>2. To identify and characterise the protective counter-movement at the institutional level.</td>
<td>Descriptive field notes Reflective journaling Scan of local news NGO printed material Government websites Key informant interviews Scan of local news</td>
<td>Comparison of data to theoretical framework Written summaries of interviews with memorable quotes Ongoing critical reflection while in the field Informal discussion with local researchers</td>
</tr>
<tr>
<td>3. To better understand the role of youth in the</td>
<td>In-depth interviews and discussion groups with young</td>
<td>Written summaries of interviews with memorable quotes</td>
</tr>
</tbody>
</table>
Data Collection

Field Visit and Selection of Research Sites

Primary data collection occurred over nine weeks, between February and April 2015. I chose four districts in Punjab for fieldwork: Chandigarh, Faridkot, Jalandhar, and Patiala. I chose Chandigarh because it is the capital and several key informants were located there. It is where the National Convention of Organic Farmers would take place, and the Center for Rural Research and International Development (CRRID) is located here as well. CRRID provided valuable support in discussing this research project, and also introduced me to their networks in Patiala and Jalandhar. In the Indian context, people are much more receptive to taking part in interviews when the researcher is introduced through a trusted mutual contact. Faridkot was selected because Kheti Virasat Mission (KVM)’s head office is located there. I chose Patiala and Jalandhar because, when compared with Faridkot, these three locations each have different social, agricultural, environmental, and economic features. Punjab is divided into three cultural regions: Malwa, Doaba, and Mahja. Faridkot and Patiala are considered to be part of Malwa region. Jalandar is located in the Doaba region. And I did not visit any sites in Mahja region because of its close proximity to the India-Pakistan border and restrictive travel warnings in the region by the government of Canada. The following table compares the three research sites.

| protective counter-movement. | farmers Key informant interviews with youth organizations | quotes Ongoing critical reflection while in the field Informal discussion with local researchers Theme analysis Trend analysis |


### Table 2 - Comparison of Research Sites

<table>
<thead>
<tr>
<th></th>
<th>Faridkot (in Malwa)</th>
<th>Jalandhar (in Doaba)</th>
<th>Patiala (in Malwa)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong>¹</td>
<td>617,508</td>
<td>2,193,590</td>
<td>1,895,686</td>
</tr>
<tr>
<td><strong>Percentage of Population that is Rural</strong>¹</td>
<td>65%</td>
<td>47%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Average Farm Size</strong>²</td>
<td>10-20 acres</td>
<td>1-5 acres</td>
<td>5-10 acres</td>
</tr>
<tr>
<td><strong>Major Field Crops Cultivated</strong>³</td>
<td>Wheat, rice, cotton</td>
<td>Wheat, rice, fodder, sugarcane, potatoes, maize, oilseeds (mustard)</td>
<td>Rice, wheat, fodder, sugarcane, vegetables</td>
</tr>
<tr>
<td>**Main Industries (other than Agriculture)**⁴</td>
<td>Non-metallic mineral products (cement, ceramic, glass, limestone)</td>
<td>Fabricated metal products; machinery and equipment</td>
<td>Fabricated metal products; and chemicals and chemical products</td>
</tr>
</tbody>
</table>

¹ Source: Census of India, 2011. (Population of Punjab = 27.7 million; Population of India = 1.21 billion)
² Source: Personal communication with key informants and farmers in Punjab
³ Source: Department of Agriculture & Cooperation, no date.
⁴ Source: Ministry of Micro, Small and Medium Enterprises, no date.

**Secondary Data Collection**

A literature and document review was conducted to identify if there is a market-oriented movement and a crises caused by the market-oriented movement (research objective 1). These sources included academic journal articles and books obtained from the University of Guelph’s library and from the Center for Rural Research and Industrial Development’s (CRRID) library in Chandigarh. Additionally, online news articles, literature from Indian NGOs (such as reports, educational material, or advocacy pamphlets), and websites and publications by the Government of India and Government of Punjab were reviewed to identify and characterise the protective counter-movement at the institutional level (research objective 2).
In-depth Interviews and Discussion Groups with Young Farmers

In-depth interviews and discussion with young farmers helped to identify if there is a market-oriented movement and crisis (research objective 1) and to better understand the role of youth in the protective counter-movement (research objective 2).

Thirty-three Punjabi youth were recruited for in-depth interviews and discussion groups. There is no universal definition of the term ‘youth’. The United Nations defines youth as 15 to 24 years, however several governments have extended their upper boundary to 35 or has high as 40, as is the case for Malaysia (Naafs & White, 2012). Hence, age is not the best measure of the boundaries of ‘youth’, however age served as a starting point in finding suitable respondents for this research.

When finding respondents, my first selection criterion was to find young farmers, both male and female, between 15-35 years old, and farming full-time as a main source of livelihood. The lower age limit was set at 15 because ‘youth’ is defined as 15-24 by the United Nations and by the government of Punjab. Furthermore, Punjab defines ‘working age’ as 15-59 (GoI, 2011). The youth respondents in this research were all actively farming as their main source of livelihood. The upper limit of 35 was set because in the Indian context, as elsewhere, adulthood begins is marked by marriage and full-time employment. Given that people are staying in school longer, and also unemployment rates are high amongst youth in India and in Punjab, the transition to adulthood is occurring much later than 24. Hence someone as old as 35 may have only inherited land and settled into the role of being a full-time farmer within the last few years, and would still provide a relevant perspective on the agricultural conditions and motivations of a new farmer. In addition to the age constraints, I also made an effort to find and select respondents that represented the different farm types, sizes, and outputs that can be found in each District.
It is worth noting that although I tried to find women who identified themselves as farmers, out of 33 respondents, only one was female. This does not reflect the actual reality of women’s participation in agriculture in Punjab. Only 3% of my young farmer respondents were women whereas in 2000, 28 percent of farmers and farm workers in Punjab were women (Krishnaraj & Shah, 2004). It is possible that this statistic includes migrant labourers and landless farm women, but my respondents were mostly from small-scale land owning families. In these smallholder farming families, I found that many women identified themselves as a farmer’s wife or a farmer’s daughter, and they did not seem interested in responding to my interview questions.

The research respondents were recruited through stratified sampling, snowball sampling and convenience sampling, which are further explained below. Often the introductions were made through a mutual acquaintance or referral.

In Faridkot:

- some of the respondents were introduced to me through KVM; and
- I independently approached the others at the National Convention of Organic Farmers.

In Jalandhar:

- my driver introduce some of the respondents to me from his village;
- I independently met some at the National Convention of Organic Farmers who then later introduced their friends;
- I met some at Punjab Agricultural University’s farmer fair in an informal discussion group; and
- I found the rest by driving through villages and looking for young people working in the fields.
In Patiala:

- through a professor at CRRID, I was introduced to the Director of Punjab Agricultural University’s (PAU) Department of Agriculture, who introduced me to young farmers that participated in their training programs;
- my great-uncle introduced me to his friend who has a son that is a vegetable farmer, and that son subsequently invited more young vegetable farmers in his village for a discussion group; and
- my other great-uncle introduced me to the manager of a bank, who introduced me to young wheat/rice farmers that hold accounts there for a discussion group.

A coded list of interviewees is included in Annex B. In an effort to protect the identity of respondents, throughout this thesis, their names and some details have been changed.

Most interviews lasted one to three hours and were conducted with the assistance of an interpreter. Interviews were conducted on the farm or in the home of the young farmer, at the Convention of National Organic Farmers, at PAU’s Department of Agriculture office in Patiala. While I had prepared a list of questions to guide the interview (see Annex C), I allowed the interview to flow based on the respondents own way of sharing their story. In general, I was interested to know what life circumstances or personal motivations led them to become a farmer, what challenges they faced or what supports they received along this path, their knowledge and/or experience of the green revolution, their views on whether natural or organic farming is a viable alternative, and their hopes and dreams for the future. The intent of these questions was to understand their values and beliefs which are driving their actions, to identify if they were part of a counter-movement, or had desires to see change or take part in change for the future.
Key Informant Interviews

Key informant interviews addressed all three research objectives of this thesis. For each objective, specific key informants were sought who could provide insights on that issue. I searched for individuals that could provide some insight on the current trends in agricultural development in Punjab, the crisis, the situation of young people and young farmers, and any efforts against the green revolution. Most of the interviews were set up over the phone, with a cold call and self-introduction. In a few cases, a faculty member at CRRID provided the initial introduction and then I followed up to set up an interview at a mutually agreeable time for myself and the key informant. The interviews lasted between 30-90 minutes, and were conducted in a semi-structured format using a prepared list of questions (see Annex C). This allowed us to cover the key questions I had, while also engaging in a conversation and deviating from the questions when necessary. In all, I conducted 21 key informant interviews which are coded and listed in Annex B. Key informants included elderly farmers, researchers, government extension officers, university research and extension officers, non-governmental organizations, a religious institution, and young people from farming families who chose to leave farming.

There were also several other individuals who I wished to speak to, but I was not successful in setting up an interview. This was either because they did not respond to my phone call/email or they were not available for an interview during my field research dates. In addition, I was able to gather information online, which forms part of my document review. These individuals/organizations include:

- Organic Farmers Association of India (OFAI)
- Alliance of Sustainable and Holistic Agriculture (ASHA)
- Farmers Commission (Punjab-wide)
- Bharitya Kisan Union (National Farmers Union)
- Nabha Foundation (promotes organic farming in Patiala)
Descriptive Field Notes & Reflective Journaling

Descriptive field notes and reflective journaling throughout my nine weeks in Punjab provided insights into all three research objectives of this thesis. My approach to recording field notes was shaped by Emerson, Fretz and Shaw’s *Writing Ethnographic Fieldnotes* (2011). Each night I recorded descriptive field notes from my day. To start, I wrote summaries of each interview I conducted (to help with data analysis later). Additional pieces of information I recorded included descriptions of the people I met (e.g. for Punjabi men, the style of their turban and the way it’s wrapped says something about them) and descriptions of their home, farm, and village. This was based on active observations while driving through the village or walking through the farm. My field notes also include highlights of particular conversations (e.g. memorable quotes, or a reminder note to go back and find the exact quote from the recording), and non-verbal behaviour (e.g. if a young farmer appeared reluctant to speak in the presence of his father). Additionally, I recorded lengthy descriptions of two events I attended: The National Organic Farming Convention, which took place from February 28 to March 1st, 2015 in Chandigarh; and Punjab Agricultural University’s Kisan Mela (Farmer Fair), which occurred in Nawanshahr on March 10th, 2015. And lastly, I recorded notes on my work as a researcher: what I accomplished that day, new leads for interviews or new ideas on how to get leads, if potential respondents were unreachable, or people I needed to follow up with.

Reflective journaling served a different purpose than field notes. I engaged in this exercise whenever I felt it was necessary, rather than on a daily basis. On average, I critically reflected on my progress and findings about once a week. Sometimes the purpose was more therapeutic, and other times it helped me to clarify my thoughts and observations. Often this process helped me to create connections with what I was learning or to contemplate new
questions that I had not previously considered. As I went along, I also used reflective journaling to do some early analysis, pulling out reoccurring themes or trends. I also sent early analysis of my findings as email-reports to my thesis advisory committee from time to time for their feedback while I was still in the field.

**Language and Interpretation**

I am fluent in Hindi with a strong understanding of Punjabi, however I was accompanied by a male interpreter for the majority of my fieldwork. The interpreter provided assistance in approaching male respondents and recruiting them to participate in the interview. Early on, the interpreter was helpful in helping me learn technical terms in Hindi and Punjabi, and helping to navigate the cultural context a bit better as well. Also, he was able to assist in my understanding of some rural accents early on. After the first few weeks, I was able to catch on and develop a greater level of comfort in using the local terms and following local customs. At this point, the interpreter was able to provided additional support in the way of discussing findings and analyzing results from a more local perspective. Although the interpreter lives and works in Uttar Pradesh, he is of Punjabi origin and his work involves interacting with farmers on a regular basis. As such, he was able to provide important insights throughout the fieldwork.

I specifically chose to have a male interpreter for my personal safety during fieldwork, and also to put male respondents at ease during interviews. In many instances, the male respondents were more comfortable making eye contact and interacting directly with the interpreter who was standing or sitting next to me.

**Data Processing**

Early on during my field trip, I attempted to translate and transcribe interviews word-for-word from audio recordings into written format each night. However the time required for this was too great, given that I was generating up to six hours of recordings each day. Hence, I
developed the following nightly procedure instead: (1) transfer audio files onto encrypted USB and delete from audio recorder; (2) rename audio files with date and name of respondent(s); (3) record respondents’ names and contact information in separate password protect spreadsheet; (4) type detailed notes and memorable quotes from each interview on the basis of handwritten notes (which were taken during the interview) and by listening to snippets of the interview (with my interpreter) to jog our memory. This process allowed me to capture key points from each interview so that I could return during data analysis and listen/transcribe the important pieces as needed and also use the notes for a trend and theme analysis.

Data Analysis

A key piece in interpreting my field data was first understanding the local context. Each day I was in Punjab, I began to understand the cultural context a little bit better, and I regularly discussed this with my interpreter and local people. The majority of my interactions were with youth, which helped frame my contextual understanding from youth perspectives. I simultaneously collected and analyzed data while in the field through regular reflections recorded in my field journal. I noted key patterns and themes that emerged as I went along. When I began to see major trends repeatedly, I started investigating further by asking myself ‘why’. I discussed these findings with my respondents and other key informants to validate what I learned, but also to help explain why these patterns exist.
Chapter 4: Market-Oriented Agricultural Development in Punjab

This chapter starts with a statistical overview of Punjab today, followed by the progression of agricultural development policies over the past 50 years. Next, the current extent of the agrarian and generational crises are presented, along with a closer look at the political context in which the crises are proliferating. The chapter closes with a discussion of the situation in Punjab, which demonstrates ties to the Polanyian literature’s portrayal of the market-oriented movement driven by the motive of economic gain, and the crisis of disembodied markets and social dislocation.

Statistical Overview of Punjab Today

The state of Punjab is located in the north-west region of India and shares a border with Pakistan which gives it geo-political significance (Joshi, Singh, & Mukherjee, 2015). Despite its small size (1.5 percent of India’s total land area) (Sharma, 2014), it is of great importance to India’s national food security because of its favourable agro-ecological conditions and plentiful rivers (Joshi et. al, 2015). Punjab’s total geographical area is 50,362 km² and total population is 27.7 million (Sharma, 2014). Although 96 percent of the land area is classified as rural, just 63 percent of the population lives in these rural areas (Sharma, 2014). Out of the rural population, 62 percent is under the age of 35, and 36 percent is between the ages of 15 and 34 (Census of India, 2011). Gender inequality is a continuing concern in the state where approximately 80 percent of Punjabi men and 70 percent of women are literate (Sharma, 2014). At the same time, it also has the highest student dropout rate for classes one to eight among Indian states (Joshi et. al, 2015). Compared to other Indian states in 2010-2011, Punjab ranked in the bottom three states for an unbalanced sex ratio of 895 females for 1000 males (Joshi et. al, 2015).
Punjab’s gross domestic product (GDP) in 2013-2014 was Rupees 3.17 trillion ($630 billion CAD), yielding a per capita income of Rupees 92,638 ($1,840 CAD) (Joshi et. al, 2015). Roughly 21 percent of Punjab’s GDP is attributed the agriculture sector (Joshi et. al, 2015). In 2011-2012, Punjab ranked first for intensity of cropping as well as percentage of net irrigated area and gross irrigated area (Joshi et. al, 2015). It also ranked first in average yield of food grains, rice and wheat (Joshi et. al, 2015). In 2013-2014, it ranked first in percentage contribution of rice (29.3 percent) and wheat (43.4 percent) to the Central Pool (Joshi et. al, 2015). In 2011-2012, Punjab had the highest percentage of villages with electricity as well as highest per capita consumption of electricity (Joshi et. al, 2015).

Using a benchmark of Rupees 1,054 per person per month ($21.50 CAD), 8.3 percent of the population was found to be below the poverty line in 2011-2012 (Joshi et. al, 2015). In rural Punjab, roughly 44 percent of income is spent on food alone. In 2011-2012, “the youth unemployment rate (PS) (age group 15-29 years) in the State was 7.7 percent in the rural area and 6.3 percent in the urban Punjab” (Sharma, 2014, p. 150). In India, youth unemployment was 6.5 percent in rural areas and 10.2 percent in urban areas (Sharma, 2014).

Agriculture makes up a considerable part of Punjab’s economy. One third of State Domestic Product (SDP) is from agriculture and livestock (Ghuman, 2008). Punjab has two main growing seasons. The main winter commercial crops sown are wheat, barley, and sugarcane. Predominant summer crops include cotton, tobacco, and rice. Furthermore, 39 percent of total workers are in the agricultural sector as cultivators or labourers (Ghuman, 2008). The majority of farmers have small scale operations. Approximately one third of farming households have less than 5 acres of land, and another one third have between 5 and 10 acres (GOP, 2001 in Ghuman, 2008). “At present, 82 percent of the total geographical area of the State is under cultivation and the cropping intensity is around 191 percent with over 98 percent of the cultivable area being under assured irrigation” (Joshi et. al, 2015, p. 31). From 2007 to 2014, the agricultural sector’s growth rate has been consistently low, under two percent (Joshi
et. al, 2015). This is attributed to stagnating irrigation potential and reduced research and development in the sector (Joshi et. al, 2015).

While agriculture has always been the main activity of Punjab and its economy, the situation was quite different as recently as 50 years ago. The follow section examines the progression of agricultural and rural development policies that have brought Punjab to its present situation.

Progression of Agricultural Development Policies

India experienced widespread food shortages in the 1960s with the domestic demand for food grains exceeding domestic supply by 20 per cent (Sidhu, 2002). This was exacerbated by a war with China in 1962, two droughts between 1964 and 1966, and a war with Pakistan in 1965 (Sidhu, 2002). India was unable to bring in sufficient imports for a lack of resources, and US food aid was threatening to cease if India did not adopt western-imposed policies with regards to its relations with its Pakistani neighbors (Alavi, 1975 as cited in Sidhu, 2002). At that time, the nation chose to respond to the ongoing food crisis through technological and capital intensive solutions, which came to be known as the green revolution. In a nutshell, the green revolution policies incentivized farmers to adopt high yielding varieties of seeds and provided access to subsidies and credit for chemical inputs and equipment. These programs were highly popular; the second generation HYV of rice was adopted by 80 percent of all rice farmers across the nation (Evenson & Gollin, 2003), leading to surplus yields. In 2012-13 in Punjab, 100 percent of area of wheat, rice and millet and 96 percent area of maize were under high yielding varieties (Joshi et. al, 2015). Under green revolution agricultural policies, India went from depending on US food aid in the 1950s to being a net exporter of food to international markets (Hoda and Gulati, 2013). In 2012, India became the largest exporter of rice and buffalo meat (Hoda and Gulati, 2013).
Although agriculture is a state subject under the Indian Constitution, new agricultural policies and schemes are developed and funded at the national level, because most states do not generate enough revenue for themselves (Hoda and Gulati, 2013). “The programmes of support and protection in agriculture are initiated and funded principally by the centre, and states play a role mainly in implementation” (Hoda and Gulati, 2013, p. 5-6).

Given Punjab’s already prosperous agriculture sector, some specially targeted programs were implemented as part of the green revolution\(^6\) to further boost productivity and yields in Punjab. The Government implemented the Intensive Agricultural District Programme which targeted seven of its districts with existing irrigation facilities in Punjab (Brown, 2013; Nicolaysen, 2012). Extension officers helped Punjabi farmers take advantage of economic incentives such as credits and subsidies to adopt HYV of seeds, chemical inputs and machinery (Brown, 2013; Nicolaysen, 2012). For example, the state of Punjab has almost five times as many tractors (43 per thousand acre) compared to all of India (9 per thousand acre) (IFPRI, 2007). Further infrastructure investments were made including building of canals and tube wells (IFPRI, 2007). The green revolution quickly spread throughout Punjab, and its practices are still by far the most popular techniques used today (Dutt, 2014).

Why were these specific set of policies implemented in response to the food shortages of the 1960s? Was there an alternative? These policies were influenced by market-oriented ideologies touted by organizations such as the Ford Foundation and Rockefeller Foundation (Sidhu, 2002), and also by India’s own desire to continue building the economy using existing institutional frameworks without undertaking radical reform of its institutions (Sidhu, 2002). However, there was another option. Instead of the green revolution, the Indian government

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\(^6\) The choice of Punjab as the site of the green revolution is not accidental. The foundation was laid during British rule. Punjab was of strategic importance to the British because of its geographic location and prosperity of cultivators. It was deemed by the British as a ‘model agricultural province’ from the 1860s onwards with heavy investments in infrastructure, institutions and colonial policies that tied Punjab’s agricultural economy to world markets (Talbot, 2007).
could have adopted a more human and environment-centered approach. For example, redistribution of land to landless farm labourers, and implementation of smaller landholdings with ecologically intensive farming practices could have occurred. Scholars at the time had shown this to be a sustainable method of increasing overall farm output (Sen, 1964 as cited in Sidhu, 2002). But, in favor of landowners’ and industrialists’ economic preferences, this alternative was discarded for lack of an organized voice from the people demanding such policies (Sidhu, 2002).

Apart from the agricultural development policies which promoted the green revolution and industrialization in Punjab, there were several other policies which have been implemented in tandem from the 1960s onwards. In the 1990s, in addition to domestic trade between Punjab and other states via the central wheat and rice boards, Punjab also began contributing more and more to India’s international trade agenda. Since 1980, Punjab’s total exports (which includes industries other than agriculture) has been increasing exponentially; in 2014 the total exports were 260 times that of 1980 (Joshi et. al, 2015). Today, Punjab’s key agricultural development goals include disseminating latest crop technology, increasing production and productivity, promoting conservation agriculture, promoting integrated nutrient management and integrated pest management, diversifying crops, and efficient water management for irrigation (Department of Agriculture Government of Punjab, 2016).

Rapid agricultural development in Punjab has also been accompanied by changes in people’s relationship to labour, land and nature. Post-green revolution, the demand for agricultural labour increased. One large scale farm owner explained that small farmer households might still undertake labour on their own or with the reciprocal support of neighbors (YF Int. 10). However, for landowners that can afford it, they use machines, equipment and hire labourers instead (YF Int. 10). Hence, for one, it is a symbol of status and farm productivity to have the means to hire labourers, but perhaps more importantly, intensive rice paddy production (which was only introduced into Punjab during the green revolution) requires more manual
labour during peak times, as does potato cultivation (Dhaliwal, 2014). Today, 23 percent of farmer labourers in Punjab are migrant labourers, mostly from states of Uttar Pradesh and Bihar but also from Madhya Pradesh and Odisha (Dhaliwal, 2014). For many years these labourers were hired as bonded labourers with poor treatment from landlords in the form of little pay and substandard living conditions. This still continues to a certain degree today, although in 1976 the Government of Punjab established the Bonded Labour Abolition Act, and in 1979 the Inter-State Migrant Workmen Act came into effect (Punjab Department of Labour, 1976, 1979).

Families are no longer as connected to their farm land, and arable land is being converted into non-farm uses. Two farmers in Doaba region of Punjab explained that many farms in neighboring villages have been sold to urban developers, and that they will eventually do the same without remorse (KI Int. 04, YF Int. 01). And finally, farmer’s relationship with nature is also changing, as can be seen through how seeds are commodified and controlled. Historically, farmers saved seeds from year to year as a natural process in farming, but now throughout India (including Punjab) seeds are seen as a commodity and multinational corporations have a monopoly on seed sales, protected by patents (Shiva, 2004).

It can be seen that many of Punjab’s agricultural development policies (which mirror policies in most industrialized countries) favour market values over social and environmental values. As described above, this includes industrialization, mechanization, international trade, export-oriented production, privatization, and commodification of land, labour, and seeds. Such policies are in line with what Polanyi described as the market-oriented movement. After several decades, these trends have notably altered the lives of Punjabis and their natural environment.

Agrarian Crises

The current agricultural situation in Punjab has been described by many scholars, journalists, and government agencies as a “crisis”, which will be presented in this section. The crises in Punjab manifests as a complex web of problems, including impacts of the green
revolution, environmental degradation, social and cultural effects, geo-politics, economic rise and fall, and others. These dimensions of the crises are highly inter-related, making it difficult to write about one without touching on the other. Hence, for the purposes of this thesis, this section focuses on four key aspects of the crisis which are deemed most relevant to Polanyi’s double-movement: the green revolution’s impacts on small scale farmers; impacts on the environment; social structures governing agrarian relationships; and rural migration.

**Impacts on Small Scale Farmers**

After the green revolution it became increasingly difficult for small scale farmers to compete with large scale farmers, leading to loss of profitability, increased debt, and in some extreme cases, farmer suicides.

In the short run, the green revolution produced higher yields and high incomes, however, in the medium-term, costs of inputs such as seeds, mechanical equipment, chemical pesticides and fertilizers, and petroleum began to rise (Ghuman, 2008; Nicolaysen, 2012). Farmers had become dependent on these inputs, and as a result, many of them were forced to take on additional debt to keep their farming businesses running (Singh, 2000). Meanwhile, yields started to stagnate beginning in the 1990s, which meant many small farmers were no longer turning a profit (Ghuman, 2008). Keeping up with the rising costs of green revolution technology is more difficult for small scale farmers (Singh and Sangeet, 2014). For large scale farmers, if the costs of inputs rise, and if they want their net income to remain the same, they will have to cut costs on other areas such as the wages and working conditions provided to marginal agricultural labourers, who often have less access to social services to begin with (Singh and Sangeet, 2014). So in this case, both small scale farmers and marginal agricultural labourers are negatively impacted by the trickle down effects of the green revolution.

In recent decades, (small) farmers have noted decreasing returns on agriculture, especially when the market price does not match the local growing conditions. This is a clear downside to market-oriented growth. When farmers are supplying national or international
markets, they have to take the prevailing market price regardless of conditions at home, making them more vulnerable to price shocks (de Schutter, 2011; Lodhi, 2013). The government offers limited protection to local farmers through guaranteed minimum support prices (MSP) for select crops, however, the MSPs have been stagnating in real terms (Ghuman, 2008). As a protest against unfair market prices and lack of MSP for potatoes, potato farmers in Punjab have staged public demonstration where they have dumped potatoes on numerous occasions (Chaba, 2015; ZeeNews, 2011). Furthermore, farmers are incentivized through MSPs to grow wheat and rice for non-local markets, rather than meet local needs for culturally appropriate varieties of food. This is not unique to Punjab or the green revolution, but rather a broader manifestation of market-oriented policies.

Given this trend of increasing cost of inputs, and stagnating or decreasing returns, the inevitable result is that smallholder farmers are accumulating debt. The current state of farming in Punjab is such that small farmers have roughly three times more debt than large farmers (Brown, 2013). According to a 2006 report by the Institute of Development and Communication (IDC) in Chandigarh, based on a survey of 24 villages, there were a total of 200 suicides, which averages to more than 10 per village (Bhangoo, 2014). Of these suicides, 81 percent were small/marginal farmers. The most frequent reasons for suicide were indebtedness, a combination of multiple reason (including indebtedness), and in a smaller number of cases it was due to conflict/family discord at home, or poverty/poor situation of the family (IDC, 2006 as cited in Bhangoo, 2014). Unable to cope with these conditions, hundreds of male heads of households commit suicide (Padhi, 2009, 2012; Shiva, 2004). By far, the most common mode of suicide was by consuming pesticides (IDC, 2006 as cited in Bhangoo, 2014).

In other parts of India that have high rates of farmer suicides, such as Maharashtra, a key factor affecting agricultural productivity and debt is the delayed or inadequate monsoons and frequent droughts (Kakodkar, 2015). Since Punjab has a vast network irrigation infrastructure which was installed during the green revolution, farmers are not as dependant on
seasonal monsoons for their agricultural productivity as compared to other states. In 2009, the percentage of net irrigated area to net sown area in Punjab was 97.4 percent (CGWB, 2014). Of the irrigated areas, 29 percent was irrigated from surface water (rivers, canals, ponds, etc.) and the remaining 71 percent from ground water (wells, and electric tube wells) (CGWB, 2014).

During my first field visit in August 2014, which is typically the rainy season, much of Northern India was experiencing a massive heat wave and drought. Despite this, I observed lush green paddy fields throughout the Punjabi landscape because of the availability of ground water combined with chemical fertilizers. However, in recent years, ground water tables have been decreasing in quantity and quality due to over-extraction and pollution (CGWB, 2014). Hence, Punjab may not be as water-rich into the future. This is discussed next.

**Impacts on the Environment**

Agricultural practices that are chemically intensive, promote mono-cropping, and excessive use of water have led to several environmental problems including water pollution and depleting water tables, illnesses, soil degradation, and loss of biodiversity.

There are several causes of water pollution in Punjab including industrial waste, municipal waste⁷, and agricultural run-off (CGWB, 2014). The green revolution popularized the use of hybrid seeds that require greater use of water and chemicals compared to traditional varieties. Trends show that total land area dedicated to hybrid rice increased greatly between 1960 and 2008, while the total land area for maize and bajra (a traditional staple), drastically decreased (CGWB, 2014). High concentrations of ammonia, which affects aquatic life, has been observed in the Satluj River, one of Punjab’s major rivers (CGWB, 2014; Chauhan & Sagar, 2013). A 1995 study by the Punjab Pollution Control Board (PPCB) found that the quality of the Satluj River was safe for drinking upstream, but it was so polluted past Ludhiana that it could not

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⁷ Water pollution as a result of industrial and municipal waste has been linked to rapid increases in population, industrialization, and urbanization combined with a lack of enforcement of laws and regulations which control discharge of waste directly into water systems. While these are the leading causes of water pollution in Punjab, agricultural run-off also plays a critical role (CGWB, 2014).
even be used for bathing or other domestic uses (Tiwana & Singh, 1996). In addition to surface water pollution, the PPCB study also showed contaminated groundwater around major urban and intensive agricultural districts of Punjab. These toxins have been linked to a range of health problems such as damage to kidneys and higher incidence of cancer (Indian Council of Medicinal Research as cited in CGWB, 2014). Furthermore, groundwater tables in Punjab have been depleted to critically low levels as a result of over-extraction for irrigation or other industrial uses (CGWB, 2014; Ghuman, 2008).

In addition to promoting the exploitation of freshwater resources, extensive canal networks which were built to irrigate farmland have “reduced the [natural] flood events drastically and stopped the influx of fresh soil and nutrients from the catchment area” (CGWB, 2014, p.1) resulting in loss of soil fertility. Today, Punjabi farmers have noticed a decline in natural soil fertility, which is prompting them to apply more and more chemical pesticides and fertilizers to keep their yields stable (CGWB, 2014; Ghuman, 2008; Nicolaysen, 2012).

**Social Structures Governing Agrarian Relationships**

Rapid transformation in Punjab since the green revolution influenced changes to social structures governing agrarian relationships in the region. This includes increasing the gap between wealthy landowners and landless agricultural labourers, marginalization of women in agriculture, and social and cultural distress for farming families facing dislocation.

During the green revolution, large scale farmers who were successful in this venture, rose to a higher social status, while many poor small scale farmers that were unable to keep up and compete became hired labourers instead (Brown, 2013). Brown (2013) argues that, more recently, this dominant paradigm of the green revolution has been losing its credibility because it is no longer seen as financially viable option. Hence the large scale farmers who climbed to the top of the social ladder have begun to lose their footing. Brown (2013) refers to this a ‘crisis of authority’. While this may be simmering in the background, evidence from fieldwork shows that youth from middle class farming families as well as wealthy land holding families are still
aspiring for and celebrating their own social status. For example, one young farmer in Malwa region at the beginning of the interview felt it was important to show me a picture on his smart phone of what he ‘normally’ looks like (designer sunglasses, jeans, clean crisp white collar shirt, sitting on top of a shiny tractor) so that I would not mistake his present appearance (shorts and a white undershirt, dirty from farm work) for an indicator of his social status (YF Int. 27).

While this young farmer was one of many cases of young men that came forward and identified himself as a farmer, it was much more difficult to find women, young or old, that called themselves a farmer. They were either farmers’ wives or daughters. While nearly 80 percent of all Indian women work in the agricultural sector (Ramachandran, 2006), in Punjab, only six percent of farm labourers are women (Nicolaysen, 2012). This shocking disparity in the statistics begs the question ‘why?’ The fact that so few women participate in commercial farming in Punjab, even as labourers, might be linked to the mechanization and industrialization of agriculture, which favours men. According to a Millennium study commissioned by the Ministry of Agriculture (a 27 volume publication, including one volume on Women in Agriculture), between 1961 and 2000, percentage of female workers in rural areas of Punjab decreased from 54 percent to 28 percent compared to all of India which increased from 31 percent to 53 percent (Krishnaraj & Shah, 2004). Hence, it appears as though market-oriented development in Punjabi agriculture has reinforced gender roles.

It was mentioned previously that smallholder farming families have faced many challenges as a result of market-oriented agricultural growth which have even resulted in farmer suicides. All of the conditions surrounding those suicides also cause a large degree of social and cultural distress, for families coping with the loss of loved ones, or families who avoided such extreme actions but are still struggling day to day. Many family problems are linked to indebtedness, such as “family feuds, alcohol and drug abuse, conflict with others, court cases and notices, harassment/threats/humiliation before the public, etc.” (Bhangoo, 2014, p. 206). Farmers that cannot compete are facing social dislocation as they search for opportunities
elsewhere (KI Int. 09). This causes additional social distress as families abandon their farms and flee rural areas, or split up as a strategy to generate income from diverse sources to save the family farm (KI Int. 09).

**Rural Migration**

Migration is indeed a consequence of rural development. Polanyi (1957) described this as the ‘importation of labour’ as well as ‘social dislocation’. Connecting this to the context in Punjab, there are two aspects of migration which will be discussed here: the first is the migration of agricultural labourers into Punjab. The second is migration of rural youth out of Punjab.

Singh (1997) shows that the employment of migrant labour in Punjab is highly correlated with the growth in capitalist agriculture during the green revolution. This is partially explained by the large economic disparity between Punjab and the neighboring state of Bihar. Punjab has comparatively more economic opportunities which attract migrants from economically worse off conditions. Furthermore, it is not uncommon that the conditions of their employment violate the Interstate Migrant Workmen Act, the Bonded Labour Abolition Act, the Minimum Wages Act, or the Child Labour Act (Singh, 1997).

There are two types of agricultural migrant labourers (Singh, 1997). The first category is seasonal labourers who arrive during peak times mostly to harvest wheat, transplant paddy, or harvest paddy, and they earn on average 35 percent less than the mandated minimum wage. The second category is bonded labourers who are brought into Punjab under false pretences and sold to rich Punjabi farmers via recruiting agents that are paid cash advances from the same Punjabi farmers. The labourers are promised monthly wages but in fact are not provided any wages at all, and are expected to work all day in exchange for two meals and live in the same conditions as farm animals (Singh, 1997).
Even though the green revolution was associated with technological advancements, there was still a need for help on the farm, as can be seen by the influx of agricultural labourers. Meanwhile, post-green revolution, youth unemployment continues to be a challenge in Punjab.

Unemployment of youth in Punjab is not due to lack of work opportunities in the farm sector per se, but due to the strong preference of these youth for non-farm jobs. But the industrial sector of the state which is dominated by small-scale industry does not offer many skilled jobs and depends on migrant labour for manual work as these workers are available for lower wages, do not create trouble as they have less political clout and bargaining power. (Singh, 2000, p. 1891)

For youth who do not want to farm but wish to stay in Punjab, non-agricultural opportunities are limited within Punjab. The economic assumption is that surplus agricultural labour in rural areas should be absorbed in other areas of the economy. But there is not much scope for this to happen in Punjab given that in 2012-13, the growth rate of the primary sector (agriculture, livestock) was 0.14 percent, secondary sector (manufacturing, construction, electricity) was 2.75 percent, and tertiary sector (trade, transport, banking, insurance, public administration) was 7.95 percent (Sharma, 2014). While the tertiary sector is growing the fastest, these jobs are more difficult to jump into for young people leaving agriculture for lack of skills (KI Int. 10). For youth that stay in rural areas and do not farm, they are likely unemployed, exposed to the temptations of drugs, and socially marginalized.

This connects to one of several manifestations of the crisis that Polanyi spoke of - social dislocation. One rural youth shared his experiences of trying to find meaningful work outside of agriculture (KI Int. 20). He lives in a village but does not have access to family land and also is not interested in becoming a farmer. As such he works as a driver in a nearby city and endures a long daily commute from his village into the city. When asked whether he would consider living in the city, he said he tried it once but felt isolated and away from social comforts (friends, family, familiar surroundings). But he did not entirely fit in in his village either. He described himself as being caught in between two worlds: “I belong neither here nor there.” (KI Int. 20).
This feeling of disconnect from one’s social safety net is an interesting facet of the crisis in Punjab. This is a sentiment that was mirrored by other young farmers, particularly those who went abroad for a period of time before returning back to their village to become a farmer (YF Int. 4, 27, 33).

There are several drivers of youth migration. The agricultural crisis and disinterest in farming are two important drivers which are related to the topic of this research. Having seen or heard about the struggles of their parents, young people in India are under pressure to obtain an education and leave farming (Jeffrey, 2009, 2010). Furthermore, other issues in Punjab such as political and religious conflicts or the drug problem are also motivating people to leave. On the other hand, the wealth obtained during the green revolution has allowed entire extended families to prosper economically, eventually selling their land for profit to developers and leaving Punjab behind. The majority of Punjabis that have migrated and settled abroad belong to the Jat Sikh caste (Taylor and Singh, 2013). “Jat Sikhs are the most economically powerful, politically/socially influential and occupationally privileged group within Punjab and the ‘dominant caste’, owning over 80 percent of available agricultural land” (Taylor and Singh, 2013). Hence, it is the most privileged segment of rural Punjab that is migrating to other countries.

Some youth manage to leave Punjab, but many of them also face unemployment in addition to being uprooted from their social networks. Because of societal expectations, it is hard to return to the farm without having found success outside the village. Meanwhile, when men migrate out of Punjab, women sometimes take their place as farmers; however land ownership titles are not transferred to the women. One woman who is a young farmer explained that her brothers have settled abroad and have no interested in farming (YF Int. 17). She is currently helping her father to farm, but will not inherit the land because it will be passed on to her brothers. If she wants to continue farming, she will have to marry a farmer who owns land or eventually try to buy her own farmland. This aspect of social inequality adds to the agricultural crisis for rural Punjabi women.
Even through youth migration out of Punjab appears to be a source of distress and hardship for those who leave and also for those who stay, youth withdrawal from agriculture is seen as a positive sign by economists. It indicates that neoliberal policies are working, and agricultural production has become more efficient (Sharma and Bhaduri, 2009). The current trajectory in Punjab is that fewer people are farming as agriculture is becoming more mechanized and industrialized like in the western world. Furthermore, youth are generally disinterested in agriculture, migrant workers are fulfilling the need for farm labour, and remittances are incentivising more families to encourage one or several members to settle abroad.

It can be seen that even though the intent behind the green revolution may have been a noble one of increasing agricultural yields to meet national food shortages, it came along with several adverse impacts from the perspective of small scale farmers, the environment, social relationships, and migration. All of the challenges described in this sub-section are linked to market-oriented agricultural development, however there is a plethora of other contributors to the crisis which were not discussed. Some of the other factors include rapid population growth, industrialization and urbanization outside of rural areas, political conflicts and tension at various scales, as well as a certain degree of social/cultural transformation that might have occurred even in the absence of the green revolution.

Discussion

The market-oriented movement and crisis are clearly evident in Punjab today, and they share some commonalities with the transformations that Polanyi (1957) wrote about in Britain during the time of the industrial revolution. However, the contexts are very different. When the British government adopted a disposition towards gain from trade, it did so out of its own choosing, in efforts to place itself ahead of other nations. These views and beliefs were systematically imposed upon India during nearly 200 years of colonization. The British
established many institutions and market-oriented systems and made concerted efforts to replace India's traditions and culture\(^8\) (Pandey, 2015). When India gained independence in 1947, it continued along this path in order to remain competitive in an increasingly globalized world. This is reflected in Punjab's policies for economic and agricultural development as well as in the current values and beliefs of its citizens. In both cases, the revolutions promoted industrialization, mechanization, and productivity enhancing technologies in response to market demands. This promoted agricultural trade, mechanization on farms, land reform, economic incentives for farmers to adopt high yielding varieties of seeds along with chemical inputs, and investments in irrigation infrastructure. Today, Punjab's agricultural policies promote export-oriented production, yield enhancement, and diversification.

The situation in Punjab reaffirms Polanyi's characterization of the market-oriented movement and subsequent crisis. As described by Polanyi and later scholars, the market-oriented movement aspires for economic growth. However, this threatens human well-being. Economic gains have come with great social and environmental costs. The crisis that results from market-oriented movements can appear in many forms and levels of intensity. The next two chapters examine the protective counter-movements that are responding to the crisis in Punjab, attempting to push back against market-oriented systems and beliefs.

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\(^8\) Lord Macaulay submitted his address to the British Parliament in 1835: "I have travelled across the length and breadth of India and I have not seen one person who is a beggar, who is a thief. Such wealth I have seen in this country, such high moral values, people of such calibre, that I do not think we would ever conquer this country, unless we break the very backbone of this nation, which is her spiritual and cultural heritage, and, therefore, I propose that we replace her old and ancient education system, her culture, for if the Indians think that all that is foreign and English is good and greater than their own, they will lose their self-esteem, their native self-culture and they will become what we want them, a truly dominated nation" (Pandey, 2015).
Chapter 5: Institutional Manifestations of a Protective Counter-Movement

The unfolding of social and environmental crises in Punjab’s agriculture leads to the hypothesis that, from a Polanyian perspective, an active counter-movement would be found. This chapter begins with a quick re-cap of the characteristics of a protective counter-movement based on the literature. Then the research findings are presented and discussed vis-a-vis the initial expectations. The research findings are presented in the three major categories which appear in the Great Transformation and related literature: (1) the alternative agriculture movement; (2) citizen activism and political advocacy; (3) government laws and regulation.

Characteristics of Polanyi’s Protective Counter-Movement

Chapter 1 showed that a protective counter-movement forms in opposition to market-oriented movements, and is driven by environmental and social concerns. In *The Great Transformation*, Polanyi observed counter-movement in a number of forms including: citizen resistance, political advocacy, protests, new public policies (such as minimum wage, workers compensation, and subsidies for agricultural commodities), restrictive legislations (such as abolishing child labour, and taxes on water usage), and creating new institutions for social and environmental protection (Polanyi, 1957). Recent literature showcases examples of protective counter-movements around the world that appear in the form of civil activism for agrarian reform (Wolford, 2005), environmental protection acts (Baum, 1996), initiatives for women and youth empowerment (Sandbrook, 2011), protection of workers’ rights (Caporaso & Tarrow, 2009; Holmes, 2012), local and/or sustainable agriculture movements (Hejeeby & McCloskey, 1999; Veldkamp et. al, 2009), and community based natural resources management (Sandbrook, 2011). These manifestations of the protective counter-movement are summarized in Annex A.
The following section examines whether manifestations of the protective counter-movement are found in Punjab, in what forms, and to what extent.

Findings in Punjab

The Alternative Agriculture Movement

One of the most visible NGOs in Punjab that is actively trying to challenge the dominant farming paradigm is Kheti Virasat Mission (KVM), which translates to ‘farmland heritage’. KVM was launched in 2005 by activist and journalist Umendra Dutt (Brown, 2013). This NGO receives funding through donations of individuals and other organizations. KVM runs a number of programs throughout Punjab including demonstration farms, training workshops, and programs specifically targeted to women (KVM, 2013). Rather than encouraging women to enter the commercial farming market, KVM focuses on reviving traditional knowledge. This includes revival of food heritage and traditional recipes based on foods that were taken out of production by the green revolution to make room for more staple crops. Women are then taught how to cultivate these lost varieties of food along with other fruits and vegetables using natural practises in their kitchen gardens (KVM, 2013). KVM’s programs for women also provide training on seed conservation and multiplication. In addition to their direct work with Punjabi farmers through training workshops and demonstration gardens, KVM promotes awareness of the impacts of industrial farming amongst the Indian population more broadly and also engages in political advocacy (KVM, 2013). Most recently, in 2015, KVM also started up several ‘kudrati kheti haats’ (natural farmers’ markets), where farmers can sell directly to consumers (KI Int. 15). This is one of the tangible actions resulting from the National Organic Farming Convention. KVM is the largest voice in Punjab for alternative agriculture and they refer to themselves a ‘people’s movement’ rather than an NGO. Although this use of terminology can be debated, this thesis will also refer to KVM’s as a movement.
KVM, the Organic Farming Association of India (OFAI), and the Alliance for Sustainable and Holistic Agriculture (ASHA) hosted a National Organic Farming Convention from February 28 to March 2, 2015 in Chandigarh, Punjab. The convention was intended to share scientific knowledge of alternative agriculture; to spread awareness amongst consumers; for farmers to exchange knowledge with each other about alternative practices; and to get the attention of politicians. This convention and one of the planning meetings four months prior, was of particular significance to my research observations because even though it was the fifth national convention of its kind, it was the first for Punjab.

During the planning meeting which I attended in August 2014, I had the impression that something big was brewing. The planning meeting began with a young man singing a folk song about the environmental and social devastation caused by chemical farming, and several slogans were repeated throughout the day such as ‘market se thodh, zaamin se jodh!’ (disconnect from the market, reconnect with the land!) and ‘main kam khaaonga par zher nahin khaaonga!’ (I will eat less, but I won’t eat poison!) (Field notes). Organizers expressed that all the activities surrounding this convention would serve as a strategic launching ground to accelerate the momentum of the alternative agriculture movement in Punjab (Field notes). There was even talk of inviting the Prime Minister (Field notes). While there were indeed a few positive outcomes from this convention, there were many more aspects which demonstrated the infancy of the alternative agriculture movement in Punjab in terms of its institutional strength and impact.

One positive aspect of the convention was that the three organizing institutions were able to put aside their philosophical differences to unite against green revolution agriculture. ASHA is already a national network of 400 organizations across 20 states in India (North, 2011), meaning it is used to finding common ground, however there are notable differences between KVM’s ‘natural’ farming approach and OFAI’s ‘organic’ farming in their attitudes towards the commodification of agriculture and the environment. ‘Natural’ farming means that no synthetic
chemicals are used as inputs, and all farm inputs are grown, prepared, or obtained from within the same village and seed saving is encouraged, hence mimicking a natural ecosystem (Brown, 2013; KI Int. 16). Perhaps more importantly, natural farming does not require costly certification (Brown, 2013; KI Int. 16). Organic farming, on the other hand, requires certification and can use an industrial model (i.e. large farms, mono-cropping, mechanization, purchasing of organic seeds) as long as chemical fertilizers and pesticides are replaced with bio-fertilizers and bio-pesticides. For example, one male farmer indicated that he chose to become a large scale organic farmer because he already had the land, could buy bio-inputs from Europe, and sell his products at premium prices in international and domestic markets (KI Int. 01). Hence, his motivations were driven by financial gain in contrast to a natural farmer who prioritizes environment and human health above all else (YF Int. 06). But there was no discussion about these differences during the convention. Instead, the convention emphasized the importance of replacing chemical agriculture with other solutions. The specific form and methods or motivations behind the alternatives were not as important to the convention organizers as the need to replace chemical intensive farming. In this case, “organic” was used at the convention as an umbrella term to capture all possible alternatives.

Furthermore, the convention did an excellent job at spreading public awareness. The organizers put on a mela (community fair/festival) during the evenings of the conference. The mela was open to the general public free of charge and included organic food stalls, documentary films, and even a famous singer for live entertainment. The conference reported having brought in roughly 2,500 participants from all over India (The Hindu Business Line, 2015), and overall there was also a good media coverage before, during and after the convention (The Hindustan Times, 2015; Niti Central, 2015; The Hindu Business Line, 2015).

These positive aspects from the convention were overshadowed by several other issues: lack of inclusivity towards Punjabi farmers and women in the planning stages; slow progress of Punjabi women in organic farming; skepticism about organics amongst attendees; absence of
youth voices; and political and NGO leadership which was perceived as insincere by attendees. These are discussed in turn.

In August 2015, a planning meeting was convened in Chandigarh to begin preparations for the convention. Roughly 50 activists, academics, farmers, and students gathered to get involved (Field notes). Even though the meeting took place in Punjab, there were representatives from other regions in India, and the presentations and discussions took place in a mix of Hindi and English. When a Punjabi farmer stood up from the audience and asked the speaker (who was also Punjabi) to speak in Punjabi because he could not understand, the moderator rather rudely denied his request. The moderator firmly stated that the discussions would take place only in Hindi and English, since these are the official national languages, and this is a national convention. After a heated back and forth between the moderator, the presenter, and several other Punjabi farmers in the room, three farmers got up and left. The language issue was not uniformly addressed in the convention itself either. Plenary sessions were in Hindi or English, and some breakout sessions had translators present, while other did not. Hence, sufficient efforts were not made to include regional unilingual farmers in the planning and execution of the convention. This lack of inclusivity shows that the alternative agriculture movement is not operating at the farmer-level, nor it is truly working from the ground up.

Also during the planning meeting, women in general and farm women in particular were poorly represented in numbers. Noting this, a young Punjabi woman stood up and asked, “What will be done to ensure farmers bring their wives and daughters to the convention?” In response, a middle-age male Punjabi farmer (who identified himself as being affiliated with one of the organizations planning the convention) said “What is the point of that? Women have no place in farming. They manage household work only.” The young woman then said, “How can you say that? I am a daughter of a farmer. I have a masters’ degree, I am doing my Ph.D., yet I am considering leaving it to become a farmer.” (Field notes). A lively debate ensued, making it
apparent that the alternative agriculture movement in Punjab is lacking female inclusion and lacking appreciation of what women can contribute. Meanwhile similar movements in other parts of India and the world have either featured farm women at the forefront or incorporated them quite strongly as valued members of the movement (Café Femenino, 2014; Kudumbashree, 2016; Navdanya, n.d.; Sanandakumar & Krishnakumar, 2015).

The convention included one workshop on Women in Organic Farming. During this session a Punjabi woman said, “Organic farming won't bring in any income for our family. My husband wants to try it, but I keep telling him not to. He forced me to come to this convention so I would learn something and stop fighting with him.” (Field notes). The two women on the workshop panel were from southern Indian, and (through a translator) shared their success stories in other states where women’s groups started kitchen gardening, then expanded and started selling to markets as well, and ultimately improved the health and income of their communities (Field notes). The skepticism shown by the Punjabi woman in the workshop was a common trend among attendees in general at the convention and elsewhere in Punjab as revealed by my fieldwork. Several people, both women and men, indicated that someone brought them along and they were not convinced that organic farming could work in Punjab (Field notes).

Another weakness of the convention was the absence of youth voices. There was a plenary session on young farmers, which was moderated by the director of ASHA, a middle-aged woman. It featured a panel of three men, including two young male farmers, and one non-farmer who appeared over the age of 45. It was this older man who spoke the most, and rather than speaking about youth-centered issues, he spoke about general challenges in farming.9 Despite this being a plenary session, it was poorly attended, disorganized, and disengaging to

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9 Once the plenary concluded, I approached the moderator one-on-one to ask why this older man was the feature of a youth panel instead of young farmers, but she claimed to be very busy and left my questions unanswered.
the point that nearly a third of the attendees left in the middle. Some of the young people and activists I spoke with during the convention felt overlooked and unrecognized for their efforts (YF Int. 15, 16, 18; Kl Int. 14, 17). This is discussed further in the next subsection.

In contrast, the closing plenary took place in a room overflowing with people and included engaging remarks from KVM’s leader Umendra Dutt as well as Punjab’s Chief Minister, Prakash Singh Badal. He admitted that the green revolution had motives of feeding the nation but there are problems too and organic is the way forward. He spoke about his love for desi (native) cows and the need to protect and revive traditions. He pledged to strike up a working group to develop policies to support organic marketing and awareness in cities. He said he would personally fund setting up of organic shops in cities. He admitted that Punjab’s support for organics has been insignificant to date, but that would change. He continued that each village in Punjab would have organic demonstration plots facilitated by local panchayats (village councils). Much of this was captured by the media and reported in various news outlets (Niti Central, 2015; The Hindu Business Line, 2015). His promises continued escalating to the point that he said he would give a “blank cheque” to support organic farming. The speech was followed by polite applause. A young farmer who was in the audience later explained that the Chief Minister had made such commitments in the past but failed to deliver (YF Int. 17). The farmer also said that it is common knowledge that he is corrupt, and people in his family sells drugs to youth in Punjab (YF Int. 17), a view repeated by other farmers (YF Int. 04, 05, 09, 10, 11).

Not only was the sincerity of government officially called into question during the convention, but several respondents expressed mistrust in KVM’s leader, Umendra Dutt. Since Dutt is an elderly man who is not from a farming background, but rather was a journalist who decided to take up this cause, people question his true motives. There is speculation that he is trying to build his own political career or that he is affiliated with Rashtriya Swayamsevak Sangh
RSS is a Hindu organization that began as a part of the movement against British rule, and is presently seen as an extremist (sometimes violent) wing of the center-right political party, the Bharatiya Janata Party (BJP) (Encyclopædia Britannica, 2016). This contributes to mistrust that common Punjabi people are feeling for him.

Although Punjab’s alternative agriculture movement made some notable progress in the areas of boosting public awareness and bringing together regional and national organizations to present alternatives to green revolution agriculture, many challenges still remain. There is some evidence that KVM is struggling to meaningfully involve farmers at the grassroots level, including women and youth, and strong leadership and political support are absent. Given that KVM is the largest voice for alternative agriculture in Punjab, it appears that the alternative agriculture movement is institutionally weak.

Citizen Activism and Political Advocacy

Even after decades of farming crisis in Punjab, efforts to protect society and the environment from market-oriented industrial agriculture are not strong enough which would be an important constituent of a Polanyian counter-movement. Acts of civil protest and activism or political advocacy are not at the levels expected; a small number of individual farmers have adopted alternative agriculture but are not creating a broader movement; and young activists who are interested in being a part of a change movement are not finding meaningful opportunities to do so.

In general, the Punjabi population does not shy away from public protests, however the number and intensity of protests related to agriculture, farmers’ rights, farmland, food prices, and the like, in Punjab are quite small. On a positive note, in the parliamentary elections in 2014, Punjab voters brought in a sweeping change by electing the Aam Aadmi Party, whose

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10 While I did not verify these speculations myself, scholar Trent Brown writes about Dutt’s affiliation in political organizations and explains the controversy in a detailed footnote based on his first hand interactions with Dutt,. See Brown, 2014, p.54.
platform included a strong focus on corruption-free governance. The website home page of Punjab’s Aam Aadmi Party states “Punjab is at the cross roads of change, and the Aam Aadmi is leading the revolution towards a new and strong Punjab” (Punjab Aam Aadmi Party, 2016). In December 2015, AAP, supported by its youth wing, lead civil protests against government officials that allowed sub-standard pesticides to be sold to farmers, which did not address the pests and instead destroyed quintals of crops (Weekly Times of India, 2015). Protests led to police brutality and close to 20 activists were critically injured (Shaikh, 2015). While these protests were orchestrated by political party members, earlier in 2015, potato farmers came forward with a public demonstration of their own. In response to drastically falling prices and lack of government intervention, potato growers gave away potatoes for free or dumped them on the roadside in August 2015 (Chaba, 2015). A similar demonstration also took place in the year 2000 and 2011 by potato farmers as well (ZeeNews, 2011). While these events indeed show the engagement of civil society and Punjabi farmers when it comes to opposing market-oriented (or otherwise corrupt) government policies, their actions are idiosyncratic in response to specific government policies rather than constituting a systematic opposition and resistance. As a comparison, other Indian states such as Maharatra have demonstrated more strength in their activism to expose and fight against industrial agriculture. A search of Google News in the last six months shows over a dozen public protests in Maharashtra compared to five in Punjab.

Even though there was not strong evidence for farmer protests, some examples of young people’s responses did emerge both publically and privately. In 2012, a group of young social activists associated with the NGO Sukrit Trust organized a flash mob at Punjab Agriculture University’s Kisan Mela (Farmer Fair) in Ludhiana, Punjab (Indian Express, 2012). The underlying theme of their flash mob was to instill the value of hard work for rural youth as a healthier alternative to idleness or substance abuse (Indian Express, 2012). This is important because the current image of Punjab rural youth is heavily associated with apathy and drugs, and the youth flash mob quite publicly showcased the contrary.
Field work also revealed that some young farmers are rather quietly opposing green revolution agriculture. They are doing so by adopting alternative practises, yet are not interested in being involved in a broader social movement (YF Int. 06, 17, 18, 33). One such example is a young farmer in Malwa region of Punjab, Gurjot (YF Int. 18). Since an early age, he has always been interested in nature and traditions. He learned about natural farming in a pamphlet. He later visited the natural farmer featured on the pamphlet in another village, and when he eventually took over the operations of his grandfather’s conventional farm, he decided to adopt those practises. He undertakes all of the labour on his own, and asks his friends for help (as a reciprocal favour) during busy times. His father, along with the rest of the village, did not (and still do not) support his ways. Yet Gurjot feels strongly enough about his choices that his community’s opinion does not bother him. Among other things, he grows traditional medicinal crops and seeds and sells them in a shop dedicated to selling only Indian ayurvedic medicine or gives them away for free. He joined an organic farmers’ co-op in his region, but when he saw that some farmers were deceiving others in the group, he quit. He said, “This is selfish and wrong. The prices should be fair, and a farmer should have the goal of providing good food to others rather than his own financial gain.” When asked if he ever tried to promote natural farming among other people in his village, or if he would consider taking a more activist role in spreading these ideas to others, he said no and explained, “It’s a personal choice, and if others want to follow suit, that’s fine too. I am content in my ways.” Gurjot is one of several examples of young farmers that I met who embodied values which go against industrial capitalistic farming, yet have no interest in being part of a larger movement for change.

On the other hand, some young activists in the midst of the alternative agriculture movement are frustrated with the slow progress and lack of opportunities for personal growth. Mandeep is one such activist (KI Int. 14). Originally from a farming family, she left her village to pursue higher education, and now wants to use that education to help Punjabi farming families like her own. While she has no interest in being a farmer herself, she feels she can advocate on
behalf of farmers and add a greater sense of purpose and meaning to her life. This is why she decided to volunteer with KVM. However at the end of the Organic Farming Convention, Mandeep expressed frustration at several things. To being with, she did not see any measurable changes during her time volunteering with KVM. She once asked for statistics on the progress KVM has made in its 10 year history, but no one could respond. Without data collected to track their progress, she felt uncertain whether her efforts were having any impact. From what she observed on her own, little had actually changed. She described the organization’s leader as unfocused and haphazard from day to day, with no clear vision or goals for the future. Furthermore, she felt undervalued in the organization, and did not see enough opportunities for personal growth or advancement as an activist and an academic. For these reasons and more, she decided to leave KVM and search for opportunities elsewhere, and she knew of at least one other young KVM volunteer contemplating doing the same. Hence, it is not a sign of a strong counter-movement if an organization like KVM is unable to attract and keep passionate young activists like Mandeep.

If a Polanyian counter-movement was indeed present in the region, the expectation would be to see strong and frequent acts of civil protest and political advocacy, along with involvement of farmers and activists in growing numbers. While there is some evidence in this respect, overall, the momentum is not strong at this time.

Government Laws and Regulations

The extent of the counter-movement from the perspective of government policies, laws, and regulations that protect society and the environment from market-oriented forces tells a similar story to the sections above. The following paragraphs outline examples of state intervention for the protection of the people and the environment, along with areas where state intervention is lacking. While there are some protective policies and legislation in place, the effects are not far reaching and impactful enough to constitute a Polanyian counter-movement.
In the last few decades, there has been some state intervention to protect migrant labourers, as well as Punjabi farmers. The capitalist nature of green revolution agriculture is such that farm labourers start being seen and treated as a commodity and as merely an input into production rather than a human life. As such, the treatment of migrant workers from neighboring states during busy farm seasons is poor. To combat this, bonded labour was abolished in 1976 (Punjab Department of Labour, 1976). Once abolished, minimum wage laws, which had already been in place since 1948 for local workers, also now applied to migrant farm labourers (Punjab Department of Labour, 1979). These conditions are outlined in the Inter-State Migrant Workmen Act of 1979 along with many other basic conditions the employer is required to provide the migrant worker, including: dislocation allowances, fair wages, suitable accommodations, free access to medical care, and protective work attire (Punjab Department of Labour, 1979).

To protect farmers, in the late 1960s, the Central Wheat and Rice Boards began offering minimum support prices to farmers (MSP) for their crops nation-wide (Sidhu, 2002). Currently, 25 crops are eligible for MSPs (Farmers’ Portal, 2015). The minimum support price helps farmers deal with price shocks and avoid bankruptcy in years where market prices fall below their cost of production. Farmers have come to like their MSPs so much so that some of them are willing to grow whatever the government is willing to give them a MSP on (YF Int. 11, 12, 13). “If I could get a MSP on organics, I would grow organics, but that’s not the case.” (YF Int. 13).

In Punjab, environmental protection on farms is consistent with national regulations. Specifically, there is a list of 27 pesticides that were banned from use in agriculture between the years 1989 and 2003, to which Punjab must adhere (ENVIS, 2012). Furthermore, the national government implemented the Insecticides Act in 1968, Environment Protection Act in 1989, Biological Diversity Act in 2002 (ENVIS, 2016). In addition to these, the Government of Punjab established the Punjab Land Preservation Act in 1900 and the Punjab Preservation of Sub-Soil
Water Act in 2009 (ENVIS, 2016). The Sub-Soil Water Act intends to address the issue of depleting water tables in the region (Central Ground Water Board, 2014). Apart from laws and acts, government research and extension offices are speaking to farmers about reducing chemical inputs and using integrated pest management techniques (KI Int. 11, 12, 13). Additionally, one of the positive outcomes of the National Organic Farming Convention was the creation of the Punjab Organic Board (Business Line, 2015).

However, this long list of law and regulations is only impactful if it is monitored and enforced. Similarly, special government programs or incentives are only impactful if the public is aware of them and can fairly access the benefits. Both of these areas are lacking in Punjab as a result of corruption and bribery. In a separate study, Punjabi farmers indicated that they were aware of fellow farmers who use banned chemicals on their fields, yet never reported out of fear that the enforcement officers would come after them or demand bribes (Nicolaysen, 2012).

Also, certain government incentive schemes are not uniformly accessible to all farmers. One young farmer indicated that he could not access farmer subsidies for cold storage because he did not have the proper connections with officials (YF Int. 08). More generally, several research respondents also spoke about corrupt government officials and politicians (YF Int. 04, 05, 10, 11, 12, KI Int., 20). While statistics on accessibility to agricultural schemes could not be found, one study shows that only 10 percent of agricultural labour families have access to health care, and less than 37% have access to primary school, high school, or secondary school (Singh and Sangeet, 2014).

Summary of Findings in Punjab

Overall, there was some evidence of elements of a counter-movement, similar to the characteristics described by Polanyi and other scholars. This included positive aspects of a nascent alternative agriculture movement such as creation of new organic farmers’ markets for direct sales, creation of a new Organic Farming Board in Punjab. Organizers of the National Organic Farming Convention put aside their different philosophies to unite and oppose chemical
agriculture, and the convention generated a good deal of positive public awareness and media attention. However, the Convention was not free from its share of challenges. There was evidence of lack of inclusivity and respect for women and farmers, and slow progress of Punjabi women’s involvement in the movement as compared to farm women from other states, as well as ongoing skepticism from attendees as to how viable organic farming actually is. Additionally, there was a small youth presence during the convention, and youth are not actively being engaged in the movement despite the genuine desire of some young activists. There is also a trend of false promises by politicians, and some mistrust of the leader of the natural farming movement by volunteers and the farmers.

Similarly although there have been some protests lead by the Aam Aadmi Party and by farmers group, they are limited and may not relate directly to the agrarian crisis or an alternative agriculture. Some farmers who are passionate about bringing about change are operating at an individual level and disinterested in being a part of a larger social movement. The national and state level governments have been working over the past few decades to implement several laws to protect migrant workers, farmers, and the environment, however there is poor enforcement and wide spread corruption preventing these actions from reaching their intended benefits.

Discussion

The previous sub-section presented the characteristics of the market-oriented movement that were present in Punjab. This sub-section will discuss what characteristics were not present, and speculate as to why not and what changes might strengthen the protective-counter-movement in Punjab. The three questions which will be analyze and discussed here are: Why wasn’t the National Organic Farming Convention more impactful? Why aren’t acts of civil protest stronger? Why aren’t more young people engaged?
It should be noted here that the main objective of this research at the outset was to investigate how a counter-movement emerges and what it looks like, which was on the assumption that a strong counter-movement would be found. For this reason, the field research did not seek to investigate why the counter-movement was not present. Hence, the discussion in this section will only engage in high-level speculation on the basis of conversations with key informants in Punjab as well as literature. This is why the three discussion topics in the previous paragraphs are presented as questions rather than definitive statements or conclusions.

The National Organic Farming Convention

The National Organic Farming Convention was a platform that had high potential to make an impact but it was apparent that the alternative agriculture movement is still in infant stages in Punjab. Yet the impact that this convention achieved was important in terms of increasing awareness of the consequences of industrial chemical agriculture and educating farmers and the general public about the merits of organic farming. The very fact that this level of awareness and education is required shows that the movement is in such early stages. Hence, it might be incorrect to dismiss the relevance of Polanyi’s double movement at this point in time. A possible explanation as to why the alternative agriculture movement is not presently stronger could be that it is simply too early, and the movement needs more time to generate its strength and impact. To illustrate, Polanyi wrote about the protective counter-movement which emerged around the 1930s, which was in response to the industrial revolution which began around 1760s and continued to progress through other economic development policies over the next century. This time frame spans over 150 years. In Punjab, the green revolution began in the 1960s, and Kheti Virasat Mission began their work as the leading voice of alternative agriculture in the year 2000. Hence it is possible that with more time, the alternative agriculture movement will grow in strength and impact. Another point of comparison is in the number of years India’s National Organic Farming Convention has been taking place. In the year 2015, they held the 5th National Convention. It takes place in a different location each year, and that
was the first time it was held in Punjab. In contrast, for example, Canada’s Organic Farming Convention held in Guelph, Ontario has been running for 35 years, and still, the organic farming movement in Canada is small compared to the extent of large scale industrial farming.

Levien (2007) examined the double movement in India, in response to neoliberal economic policies at the national level, and his findings as to why the counter-movement is weak also partially apply to Punjabi agriculture. He found that the economic and social diversity of participants of the counter-movement lead to disagreements and that there is a lack of unity among different groups. I will comment on the second point first. In Punjab, the level of unity among the various alternative agriculture organizations at the National Convention was strong. As mentioned previously in this chapter, they put aside their difference and united under the umbrella term ‘organic’ to indicate any form of agriculture that opposes chemical, industrial, green revolution farming. The organizational conflict was apparent in maintaining inclusivity of various socio-economic groups. As mentioned in the findings above, the conference organizers hailed from higher social classes (educated activists, academics, city dwellers) and did not make efforts to address barriers (such as language and level of education) for farmers to participate in the planning meetings or in the research-oriented seminars at the convention. This observation, which aligns with Levien’s (2007) finding at the national level, may help to explain why the movement is not proliferating at the grassroots level and is not rapidly reaching farmers.

Another possible short coming of the alternative agriculture counter-movement in Punjab is that the leader of Kheti Virasat Mission may not be the correct leader to unite peasant farmers. As discussed in Chapter 2, Ghimire (2002) wrote about many successful agrarian social movements around the world, which were led by strong individuals living in rural farming communities and experiencing challenges as part of their everyday lives. Some of those leaders were in their youth when they began their uprisings. It is hypothesized that these personal characteristics implied a long-term commitment to a solution and allowed these leaders to personally connect with peasant farmers and recruit them to join a movement. KVM’s leader,
Umendra Dutt is not able to connect with Punjabi farmers on that personal level. He is currently 53 years old, he did not come from a farming family, and does not have children to carry on a family farming tradition (Good News India Magazine, n.d.). Prior to setting up KVM, he was a journalist from a middle class urban family before starting up KVM. Furthermore, he is of the Brahmin caste and has past and present affiliations with the RSS, a Hindu nationalist organization (Brown, 2014), whereas the majority of Punjabi farmers are Jat Sikh (Taylor and Singh, 2003). Hence, the mistrust and lack of support for Umendra Dutt’s action that some key informants and farmers identified (KI Int. 12, YF Int. 15) could be due to his personal characteristics and background, which are making it difficult for Punjabi farmers to connect with him.

Civil Protests and Youth Engagement

In order to understand why actions and civil protests are not stronger in Punjab, the literature points to two possible explanations. The first is that perhaps the crisis is not actually a full blown crisis yet, and the media is over-exaggerating the problems. One of the key indicators of the agrarian crisis is farmer suicides. Mayer (2016) shows that between 1997 and 2014, the all India suicide rate has remained steady around 10 (per 100,000 population) whereas cultivator suicide rates have fluctuated between 10 and 15 from 1997 to 2009, followed by a sharp decline to a rate of five by 2014. Hence the suicide rates of farmers are actually declining and are currently below the suicide rates of non-cultivators. Additionally, if we look to Punjab specifically, in 2014 the suicide rate was 3.3 per 100,000 people compared to rates over 20 in the states of Tamil Nadu, Chhattisgarh, and Telangana (Mayer, 2016). So even though the numbers show that there are other segments of society and other states that are facing much greater crises, Mayer argues that in certain states the agricultural crisis and farmer suicide crisis have been politicised and publicized much more in the media and by activists (Mayer, 2016).

Another possible explanation for why civil protests have not been stronger is offered by Jeffrey (2010) based on his research with young people in Northern India. He posits that
“anticipation of future benefits mediates the immediacy of political opposition to the economic disruption or deterioration produced by reforms” (Jeffrey, 2010, p. 8). I heard this from a group of young farmers in the Doaba region who took up conventional wheat and rice farming operations in their families (YF Int. 11, 12, and 13). They are dependent on the Central Wheat and Rice Board, minimum support prices, and bound by contractual obligations with seed and fertilizer companies. When asked what needs to happen to solve the crises, they explained that the government and corporations brought about all these changes to farming, and the lives of farmers did improve, so they would not want to go back. “It is like when you upgrade from a bicycle to a motorcycle, you would not be satisfied only riding your bicycle anymore.” (YF Int. 12). They are waiting for government and corporations to once again develop innovative solutions to help farmers out of their current slump, using the current set of economic policy frameworks. “I don’t farm organically, but I know how. I studied all of this. If the government guaranteed us MSP for organics, and I had a contract with a buyer, then I would absolutely do it.” (YF Int. 13). Hence farmers like these are waiting for future benefits rather than taking their own initiative to bring about change now.

Furthermore, the findings in Punjab showed that the small handful of people that were interested in bringing about social, environmental change, were doing so on a miniscule scale: only on their own family farm, and through some informal networks in other villages. The earlier example of Gurjot showed that his desire to farm for subsistence and to share with his friends in contrast to farming for profit is consistent with the ideological divide between the market-oriented movement and the protective counter-movement. However, he was not interested in changing the farming world beyond his immediate network. The other ongoing challenge is that very few young people like Gurjot are in fact interested in farming. So the pool of potential youth interested in bringing about long term systemic change to Punjabi agriculture is small to begin with.
Therefore, it can be seen that there are several barriers preventing the alternative agriculture counter-movement from flourishing in Punjab. The discussion here points to reasons such as lack of time for the movement to pick up, the influence of powerful agri-business, socio-economic diversity of participants causing conflicts in planning and disengagement of peasant farmers, and a leader that farmers do not feel connected to. Furthermore, it could be that the crisis is not dire enough yet, and anticipation of future benefits from markets is preventing farmers from rising against it. The dwindling number of young farmers with a long term vested interest in the future of Punjabi agriculture make it more challenging to find passionate individuals ready to push back against market-oriented forces.

Attempts to counter mainstream industrial agriculture are only slowly emerging and are faced with enormous challenges. Despite many localized manifestations of the counter-movement, in order to contest a system as vast as neoliberalism, the counter-movement must also be well organized at much larger scales which requires resources (Levien, 2007). At present, Punjab’s efforts to address market-oriented policies and the crisis resulting from the green revolution in agriculture have not yet reached a level that can be classified as a protective counter-movement, similar to what is seen in Polanyi’s *The Great Transformation* and other recent global examples.
Chapter 6: Ideological Foundations of a Protective Counter-Movement

The previous chapter has demonstrated that the anticipated protective counter-movement does not presently exist in Punjab. The institutional manifestations of the counter-movement are indeed weak, however there are some ideological foundations. A handful of young people are resisting neoliberal policies and market-oriented agricultural growth by choosing to stay in villages and farm sustainably. Such values and beliefs go against the norms of the green revolution and could provide the ideological foundations of a counter-movement. While the manifestations are not at sufficient levels to be treated as a widespread counter-movement (which would be rather overt and explicitly go against mainstream policies and practises), the ideologies of these young farmers might be the early underpinnings of an institutionalized counter-movement.

Collective vs Individual Actions

A Polanyian counter-movement exists when people unite to protect their culture, traditions, and environment against market-forces which prioritize personal/individual gain above all else (Polanyi, 1957). Hence the ideas, values, and believes that motivate the counter-movement actively resist market-oriented values while prioritizing social and environmental values instead. A counter-movement is a collective set of actions where people come together over a common purpose and vision, often with the aim of overturning something so large that no individual could tackle it on their own (Polanyi, 1957). But that is not to say that individual-level actions are not important. Individuals form the foundation of a collective movement, often with a strong leader to unite them and provide an overarching vision and goals. Without a strong leader, organization or institutional support, the political significance of individual-level actions is debateable. In Polanyi’s The Great Transformation, the goal of the protective counter-movement
is to protect people and nature from the devastating consequences of market forces (Polanyi, 1957). And this inevitably requires organized collective action.

Findings in Punjab

In the short period of time that I spent in Punjab I did not observe strong collective actions however I did see examples of strong individual-level actions that were consistent with the ideologies that underpin a counter-movement. The findings are grouped under three themes: 1) Views for society; 2) Views for the environment; 3) Views against markets.

The findings presented this section are from a small, purposely selected sample of young farmers and they are not meant to be representative of the entire state. For every farmer I met who expressed certain beliefs and values consistent with Polanyi’s counter-movement, there are currently many more who feel the opposite way. However, these few young farmers show that there is indeed some opposition to markets, even in small ways. Out of the 33 young farmers that responded to the in-depth interviews, only four are natural farmers (YF Int. 06, 16, 17, 18) and one is a certified organic farmer (YF Int. 33). The remaining 28 are conventional farmers. Of the conventional farmers, some have natural vegetable gardens for domestic consumption but still use conventional chemical farming practices on their farms. Of all the young farmers interviewed, the natural and organic farmers showed the strongest social and environmental values, but they are working in isolation, often the only alternative farmer in their entire village.

The quotes and evidence that will be presented in this section draw from three natural farmers: Sukhpal (YF Int. 16), Kuldeep (YF Int. 17), and Gurjot (YF Int. 18). Gurjot’s story was described in the previous chapter. Before getting into a fuller discussion of their values and beliefs that came through in the interviews, what follows is a short narrative on these young farmers.
Kuldeep attended the National Organic Convention in Chandigarh with the aim of learning natural farming techniques so that she could return to her village in Malwa and teach her father. She is 26 years old, and the eldest of three children. Her two younger brothers are currently abroad, studying in Australia. Her parents also wish for her to go to Australia and leave the farm behind, but she wants to stay. She has a master’s degree, but all she wants to do is farm. “Because I am a girl, people in my village tell me I am crazy to want to be a farmer. I might be crazy, but I like being that way.” (YF Int. 17). She has a strong sense of responsibility towards her parents and her country, and would feel sad to see her farming traditions abandoned. She aspires to have a family and live a subsistence farming lifestyle. She is not concerned with how much money she will make. Her family values, taking care of the environment and being happy in her day-to-day life are more important.

Sukhpal inherited his 12 acre farm from his grandfather. In his early youth, he traveled to the U.K. as a student, but later decided he wanted to come home and be a farmer. When he made this decision, his mother tried to convince him otherwise, but his father, who always had an office job, was supportive. Ironically, his mother’s memory is what motivates him to continue farming today. When she died of cancer, Sukhpal quickly decided that he had to convert his farm to an organic farm and he did it all in one go, in contrast to most farmers who start with a small section of their plot to avoid a sudden loss of profit. He heard about a natural farmer in a village nearly 200 kilometers from his own farm, and went there to observe and learn. He sells his products directly to customers through personal networks. He drives food baskets to them, or calls them and they come and pick it up. Building these personal relationships with the people eating his food is important to him. Sukhpal wants natural farming to continue spreading throughout Punjab. In order to make this happen, he feels it is important to get more young people involved and spread awareness to consumers about the benefits for organic food.
Views for Society

Gurjot, Sukhpal, and Kuldeep all demonstrated in different ways that their motivations for becoming a young farmer are driven by a sense of responsibility towards their ancestors and traditions as well as their deep connection for their land, community, and country.

Gurjot: “I am one of the only ones around here that uses traditional native seeds. Everyone else uses new seeds because they want more profits. From my perspective, there are only two farmers that are true natural farmers...so all the knowledge I’ve received is from these two farmers. I met them and even spent several days working with them in their fields. And they told me that from the new generation of boys, no one is taking up traditional seeds, only the elderly. They said if you do it, it would make us so happy. And they didn’t take any money from me for the seeds they gave me. Because in their hearts, they have love for our country.”

Since a young age Gurjot has always felt connected to the land, and was always interested in learning about traditions. So when he developed a personal connection with the two elderly natural farmers, Gurjot felt a sense of responsibility to carry on their knowledge of traditional seed saving and make them happy and proud. Furthermore, he links the work of natural farming to a sense of responsibility and love for your country rather than out of personal interest or personal gain. Similarly, Sukhpal’s describes his decision to become a farmer as follows.

Sukhpal: "I grew up in a house that was surrounded by farms, so part of me always knew I would either be a farmer or join the army. There was never a third option in my mind. So I decided to take up my grandfather’s farm."

It is interesting to see that from the start, the two options in his mind were farming to feed the nation or army to serve the nation. While at the organic farming convention, I heard the slogan “Jai jawan, jai kisan”, which is a salute meaning ‘hail the soldier, hail the farmer.’ This 1965 slogan was popularized around the time of the India-Pakistan war and national food shortages. It can be seen that this cheer of patriotism is still embedded in some people like Sukhpal even today. Kuldeep also feels a strong sense of national pride and desire to stay in Punjab and face challenges head on.
Kuldeep: “Once someone goes to Australia they don’t want to come back. The situation in my family is that ever since I was in plus two [referring to grade 10, plus 2, meaning grade 12] and I was doing my courses, my parents thought maybe I would go to Australia too. But I clearly refused and said I don’t want to go there...At that time, my short term goal was that I would be in the army, and keep myself strong, and then after that, I would transition into the field of farming. The army would provide me with income, so I could start up my own farm. But that plan didn’t happen. So after plus two, I did my B.Sc. in Biotechnology, and then I’ve also completed my M.Sc. Biotech here. So at least this much I have established within myself now that I have a base, I have created a social circle. So even if I were to travel abroad for a short while, I would be easily drawn back to India. And when in your heart, from the start, from childhood you have a bug, and when from the start you tell yourself that this is what you want to do, you can make it happen...At the end of the day, regardless of what I do in between, I want to come back to farming. So even if I were to go to Australia, I would earn income and then come back here and farm.”

Clearly Kuldeep values her roots, her social ties, and has an internal desire to live in Punjab and have her own farm. She states that anything else she does will always be for the end goal of coming back to the farm. Unlike Kuldeep, many Punjabi youth are settling abroad rather than staying and contributing to Punjabi society. Sukhpal feels this is in part due to lack of government support for social policies and a lack of pride on one’s homeland.

Sukhpal: “Actually, the problem is that no government body has taken responsibility for our next generation, for our youth. And there has been so much detriment to our youth. The same youth who isn’t ready to work on Punjabi fields is ready to go abroad as a labourer. If they drive a truck or a tractor here, they don’t feel pride. But they feel proud to do it in a foreign country.”

Despite the social challenges of farming in Punjab, some young people like Gurjot, Sukhpal, and Kuldeep are driven by social motives to farm sustainably. The following passage shows that Kuldeep is against those who go abroad for social status and for what appears to be an easy luxurious life. She values hard work, determination, and contributing to Indian society through her love and labour.

Researcher: What advice would you give to other young people who are considering farming?
Kuldeep: “If you go to any farming village, you’ll see that ever second or third person is settled abroad. The reason for this is that they aren’t receiving any government support. So if someone wants to go into farming, and if they want to go into organic farming, it is very difficult. So for youngsters that want to have a good life it seems easier for them to go abroad and get that. But the only person who can really stick as a farmer is that person who has pride in their home country, and is a little bit crazy, and has a bug in their heart that says no, I only want to stay here, I want to face these challenging situations, I want to fight these people, and I want to accomplish what I’ve set out to do, and I want to prove to everyone that those other people who leave are wrong. You can do what you set your mind to.”

Researcher: “So you are staying that if you want to stay here and farm, you have to be strong willed.”

Kuldeep: “Yes, and you have to be ready to fight society. Like I told you, people call me crazy. If I, as a girl, go out on the farm daily and all that, I have to be ready to hear all the gossip that society will spread about me.”

Even though a large part of her society criticizes her beliefs, values, and farming aspirations, she was able to connect with like-minded individuals at the organic farming convention in Chandigarh. She values social support networks and working together to build knowledge and improve their local villages and communities.

Kuldeep: “One of the best things I’m enjoying about this conference is that I’m talking to so many people and collecting cards, so that in a couple of years when I’m ready to start my own farm [that is, separate from her father’s farm that she is currently helping with], I will have a good network so I can learn now to do marketing, how to farm sustainably, which model farms I can go to and visit, and whose footsteps I can follow. So this is a great platform for that.”

Therefore, these three young natural farmers demonstrate that they hold their social values in high regard. They have an internal desire to uphold traditions, make their elders proud, and serve their country. They would rather stay in Punjab and deal with the challenges head on instead of going abroad and seeking an easy life like so many other young Punjabis have done. Even if they have to face the criticism of society now, they are working to build positive supportive networks, and continuing on a trajectory where they see themselves contributing to an intricate web rather than trying to come out on top. These values, ideas, and beliefs are
consistent with Polanyi’s counter-movement. It can be see that the underlying motivations of these farmers are not financial. They care about society and the environment. Their views on the environment are discussed next.

Views on the Environment

Despite the social and economic challenges of becoming a natural farmer, these three young farmers strongly believe in their personal responsibility to improve the environment around them. Sukhpal and Kulwinder in particular were both intimately aware of the environmental impacts of the green revolution, and they felt compelled to take individual actions to find a solution.

Researcher: “And what motivated you to transition to organic farming?”

Sukhpal: “At first when I started farming, I was using chemicals. I used to hear about organic but never really thought it would be possible. Then in 2009 my mother fell ill. She had cancer. That time, from 2009 to 2012, when you have sick person in your household, you run here and there trying to find a cure. And that became my daily environment and my daily topic of conversation. When a relative came to visit, or a doctor, or anyone that I would talk to, they would ask, ‘What’s the cause of this? Why is this happening?’ And after a roundabout conversation we would always land on the same point: our food and drink has become dirty. Our whole environment is polluted. That’s all there is to it. So from that point on, I had no choice but to start thinking about what we, as farmers, are doing. I mean, I used to do the same thing. I used to use sprays, urea, DAP…so if there is an illness in my family, it very well could have been my fault, or any other farmers fault. So this is what got me thinking that I should stop this. Then I started thinking about what else I could do to change. Then eventually I found the address of a farmer and he was farming organically. So I went to see his farm, and it was so beautiful.”

Like Sukhpal’s family, many families in Punjab have grieved the loss of a loved one due to cancer. Most people throughout the region are aware of the links between chemical farming, environmental pollution, and increased number of illnesses such as cancer. But Sukhpal is among a small subset who feels agency over bringing about some change to the way he grows food and contributes to the environmental health of Punjab. The researcher asked, “Are there others in your village that are also farming organically, or are you the only one?” Sukhpal
responded, “There are two or three who have converted one acre of their farm land to start. But there isn’t anyone else that is totally organic in my village like me.” Now that he has learned about natural farming techniques, he explained how simple and safe those methods are, and why he felt completed to convert his entire farm to organic rather than just a small parcel.

Sukhpal “The techniques that we are using are very simple. So for that, I don’t really need to inputs from outside, I just don’t need it. And very common things, I can use very smartly on my farm. Like there is black salt. I make a spray using black salt. And my crops grow very well. It’s very simple, it’s very cheap, and most of all it doesn’t harm the environment.”

Researcher: “So how did you convert to organic in the beginning? Did you also start with one acre and then slowing increase it, or did you convert your whole farm to organic in one go?”

Sukhpal: “I basically converted all in one go. Only in the first season, I grew organic wheat in about one acre for six months. At that time I thought I would increase it by two acres the following season. That’s what I was thinking. But then around that time, Dr. Amar Singh Azad…you must have met him? He’s our main health advocate. He looks at health and environment concerns. He had a lecture in Jaitu. So I went there to listen. He talked about the health of Punjab and how it is linked to the environment. Once I heard what he had to say, I felt there is no time to increase my organic farm little by little, I should just convert the whole thing. I just had this strong desire from inside to do it.”

On the other hand, Kuldeep did not experience cancer in her family like Sukhpal, but she saw it around her, and also experience declining health of her farm animals as a result of environmental pollution from chemical farming.

Kuldeep: “Initially I wasn’t really aware about what the green revolution was all about when it first happened. But in more recent years I’ve slowly become aware of what exactly it was and what the impacts of it were on Punjab’s agriculture. So according to that, my views are that we had no need for it. Because already India and Punjab were producing so much that it could feed the entire nation, and was doing even more than that. And then these people introduced pesticides and chemicals and destroyed all of Punjab. You must have heard about Batinda region. There is a lot of cancer there. So I don’t think that we needed that.”

Researcher: So have you seen any specific cases of effects in your village?
Kuldeep: “Yes. Like take my family for example. When I was a kid we had animals, and there would never be problems. Like pregnancy problems or problems with giving milk. But in recent years the problems have increased. Like humans and animals are having reproductive problems. The food we grow with chemicals, that’s what we feed our animals. On top of that we also give them injections. So that impacts their pregnancy and their offspring often die. When I was a kid I was very interested in our farm animals, and this never used to happen. But in recent years this is what I’m coming to hear around the village. Or I hear about tumours in the udders and they can’t properly give milk. We have this problem with our buffalo right now. Also, take the example of my great grandparents. They lived to be close to a 100 and they never had any health issues, never had BP [high blood pressure] or sugar illness [diabetes]. We never had doctors coming to our house even in their old age. But now my parents are 50 and 52, and they have BP problem. My father is slim, and slim people don’t get BP, but he has it. That’s all because of pesticides and fertilizers only. And kids these days don’t have as much stamina as my grandfather or great grandfather had either. They tell us stories about how much work they used to do when they were our age. All of that effect is because of the food chain and what we are eating and how we are growing our food. This is just an example in my household, but this is the same problem in every household.”

In addition to experiencing the environmental decline in Punjab after the green revolution, these young farmers have faith in the alternative solutions. Many farmers I encountered during fieldwork were doubtful of the effectiveness of alternative agriculture. But Kuldeep, Sukhpal, and Gurjot all shared the view that alternative agriculture was possible in Punjab, that it is a much needed solution, and that more research and awareness should be invested in this area.

Gurjot: “I started farming about 5 years ago. Before that I used to ask my father ‘What are you doing? Why do you use these sprays?’ I don’t know why this question came to me, but it just did. And he said, ‘How else will I grow these crops?’ So one time I planted jowar [sorghum] for my animals, and I didn’t let my father use sprays on that part. And that jowar ended up being so sweet. I showed my father, ‘Look how sweet this is.’ And then I happened to meet Sharma. I didn’t realize it at the time, but that was a foreshadowing of what the future had for me. He introduce me to natural farming…My farm is eight acres. I have one acre dedicated to cultivating natural traditional seeds. Like I have jowar [sorghum], sawa bajra [pearl millet]. I got it from Sharma who has traditional native seeds from our ancestors. The rest of the farmers that
are large scale farmers, they only grow rice and wheat. So the type of work I'm doing on seeds, there are very few people doing this."

Gurjot developed the view that alternative farming is possible through internal curiosity and hands on experience, while Kuldeep developed this view through academia.

Kuldeep: "I had a friend who did her research on natural micro bacteria that increase yields. And I saw with my own eyes the results that this had and how well it worked. Compared to the control group, the one with the bacteria fared so much better, and comparatively the growth was quite good. So we need to prepare these types of presentations and show people. NASA is doing experiments in space with plant tissue culture and all that. So when they are doing so much like this, why can’t we do more research here on sustainable ways to increase yields? We should be able to get grants and do this research. It’s these types of things, when I get talking, people tell me that I’m seriously crazy…I love the fragrance of the earth and the dirt on the land. Especially after it rains. People don’t know this but the smell is from bacteria multiplying. I like it so much I wish I could make perfume out of it. [Laughter.]"

The common thread in these young farmers’ narratives is their recognition of the harmful environmental effects of the green revolution, they have experienced some degree of negative health impacts, and they exercised agency over finding an alternative. It is evident that they hold their environmental values and beliefs in high regard.

Views on Disembedded Markets

The third theme that emerged in the interviews which aligns with Polanyi’s protective counter-movement is the young farmers’ views on disembedded markets. As was discussed in the literature review in Chapter 2, the protective counter-movement is not trying to reject markets and ignore financial needs all together, but rather it is trying to re-embed markets. A disembedded market is one that operates outside of social principles and without regard for the environment. Hence, re-embedding markets involves treating people and nature well, and earning enough to sustain an honest livelihood instead of aspiring for more and more economic wealth. This section discusses the young farmers’ views on the disembedding of agricultural markets via the green revolution. It also highlights some of their ideas and actions which are
making small contributions towards re-embedding Punjabi agriculture within social and environmental frameworks.

During the green revolution, large multinational seed companies proliferated their seeds to Punjabi farmers along with chemical fertilizers to enhance yields. Referring to this trend which has swept over all of Punjab, Gurjot said:

I’ve met so many people from big institutes, they think they are big people, but they are just full of greed. And they sell their seeds at very expensive rates. They don’t have any love for anyone, from my perspective. They don’t have any love for our land. They are just thinking of their own benefit. And they don’t listen to any of the lessons of our ancestors. They think that making fertilizer is a big discovery. But our ancestors had knowledge of techniques much better than those fertilizers.

Here, Gurjot clearly demonstrates his frustration at companies which seek to profit from others and the expense of people and the environment. Profits are a major concern for most Punjabi farmers as well, but after losing his mother to cancer, Sukhpal feels that the situation in Punjab is too dire to worry about finances.

Researcher: “I’ve often heard from other farmers that they are hesitant to convert because people say it takes three years to start profiting from an organic farm, if at all. Where you afraid of this as well?”

Sukhpal: “When you experience loss close up, then you have to choose between your fear and what must be done. You have to choose. And this is what I chose. ... The other thing is that since I converted my whole farm to organic all at once, my only option was to make it work and do it well.”

Hence, once Sukhpal understood the consequences of chemical farming, his priority became finding a way to make sustainable agriculture work. Kuldeep echoes this sentiment. She feels that first people must understand the issues before they will be ready to come together to do something about it.

Kuldeep: “The problem right now is that even in my village people are not aware of this. I talked to Umendra sir, the director of Kheti Virasat Mission, and talked about conducting a meeting in my village so people can be made aware. Even if I am the lone organic farmer in my village, I will have problems with marketing through the normal routes. But if more people are aware and we do it together, we will have an easier time with marketing.”
We see from Kuldeep’s statements that access to markets is very important even for natural and organic farmers. Here she suggests forming organic groups and developing a collective marketing scheme as an alternative to the current agricultural supply chains. This shows that Kuldeep values economic progress so long as it is also benefiting the community and the agricultural products are sustainably grown. Hence this would be moving towards re-embedding agricultural markets. Drawn by the same values as Kuldeep, Gurjot tried joining an organic farming group in his region. Here, he describes his experience.

Gurjot: “I used sell my crops in the markets. I wanted to be a part of the organic farming group here, but then I hit a roadblock. The bigger organic farmers in the group weren’t thinking about the small farmers like me. Like, we went to Chandigarh to sell our rice once. And one of the big farms played a trick on us and went and sold his rice for 100 rupees per quintal. I was with the group, and the group rate was set at 60 rupees. So when I got to the market, the customers started doubting me. They thought since my rates were lower then I must be using chemicals. And the other large scale farmer got all the organic sales and ducked out of there. He didn’t care about me or anyone, you see? Those of us that are honest, we would think that even if we wanted to sell for 100 rupees, we would also want our neighbors to get that 100 rupees rate too, right? But those big farmers are selfish. So I said that’s enough. I don’t want to be a part of this group. And so now I don’t care about selling to the market. I grow food for myself, for my friends, that’s it. And I share what I grow with others out of love. Like I grow some medicinal plants, and I just give that away to people who need it.”

So here we see that Gurjot wanted to sell his products through a collective organic farming group but instead he is now working only for himself and his friends. It was unfortunate that even with this organic farmers group, which was well-intentioned to begin with, some people were acting out of self-interest instead of the collective good of the entire group. Gurjot is now primarily a subsistence farmer, but he also sells his medical plants to a specialty Ayurvedic pharmacy near his village which is owned and operated by a personal friend. In all of Gurjot’s interactions and exchanges, he prioritizes his relationships and friendships instead of monetary exchanges.
This process of pushing back against the market-oriented movement by finding ways to re-embed agricultural markets in social and environmental bounds is clearly still a work in progress. Definitive solutions have not been developed, however we see evidence of the underlying values and beliefs that are could eventually create lasting changes in the long-term.

Towards the end of the interviews, I asked each farmer about their dreams for the future, and here is how Kuldeep and Sukhpal responded.

Researcher: “What is your dream for yourself going forward?”

Kuldeep: “For me, my dream is just that…farming is everything for me. I want to dedicate my whole life to this only.”

Sukhpal: “That everyone prospers together. There is an old Punjabi saying that goes like this. People say it but they don’t do anything.”

Researcher: “And what about Punjab? What is your dream for Punjab?”

Kuldeep: “That we would have another green revolution, but in an organic way. That would have a good revolution this time, and the whole of Punjab could be disease free, cancer free, sugar [diabetes] free. And like I said, that the previous image that was once Punjab, that the people are strong and cheerful, and that we could somehow go back to that phase of our ancestors. They had limited dreams, but their lifestyle gave them a lot of happiness. And today farmers are committing suicide, because of these new policies and the green revolution. If you open the newspaper, every day you’ll find a case of a farmer who committed suicide on the front page because of lack of profit, because of debt. So I want that old phase to come back where people are happy with whatever they are making, and they can survive with zero budget [i.e. subsistence] organic farming.”

Sukhpal: “What we had in Punjab before [the green revolution], that we could be like that again. My dream is that we are once again like those types of farmers, those types of families, those types of people. I wish that we had those types of meals, our traditional foods that we once had.”

This final vision for the future, as expressed by these two young farmers, shows that their ideologies are tied to traditions, to nature, and to a simpler pre-green revolution farming lifestyle where profit was not at the center of farmers’ goals. The fact that economic prosperity became so intricately tied with farmer’s happiness is connected with the changes Punjab
underwent during the green revolution. This is, in essence, the disembedding of agricultural markets. This section highlighted through the views of three young farmers how the green revolution has cause negative impacts as a result of operating outside social and environmental principals, as well as how they view financial risks associated with converting to organic agriculture, and their ideas for marketing their organic goods in ways that prioritize human relationships and personal connections over profit and personal gain.

Discussion

Gurjot, Kuldeep, and Sukhpal have several things in common. They are actively resisting market-oriented values, they are choosing to be farmers despite the trend of young people leaving farming, and their approach to farming is prioritizing social and environmental values above market values. This is the core essence of Polanyi’s counter-movement.

When these young people choose to enter farming, they took active responsibility for creating their own livelihoods rather than being at the mercy of the market. Land was inherited from parents and ancestors, hence family ties remain strong. Having witnessed the agricultural crisis first hand, such as Sukhpal whose mother passed away from cancer, and Kuldeep who has seen her livestock suffering from diseases, these youth are passionate about changing the way they farm. They are more consciously caring for the environment and producing a nutritious variety of food. They are upholding their native culture and traditions. They are adopting a rigorous work ethic, and in Gurjot’s case he is even sharing his food with others without asking for anything but friendship in return. They are engaging in direct-marketing of their crops and building relationships with their customers, instead of selling their food through impersonal lengthy supply chains. This way of life that these three young farmers have created for themselves is a direct response to the crisis, as well as a quiet form of resistance to the green revolution and market-oriented values and beliefs.
These ideological foundations are an important facet of the protective counter-movement that are often overlooked by Polanyian scholars as well as social movement theorists. As was the case with this thesis in early stages, the original focus was on observable manifestations of the counter-movement such as acts of civil protest, creation of institutions, and change in government policies. But all of these observable actions begin with ideas, values, and beliefs. Polanyi wrote about the great transformation of society, but he also wrote about the transformation of ideologies that drive those cultural changes. After all, Polanyi was a cultural anthropologist as well as economist. Hence when scholars are seeking to understand social transformation, examining people’s ideologies might provide a fuller picture.

Therefore, the examples in this chapter show that the ideological foundations for a counter-movement may exist in small pockets throughout Punjab. But currently, farmers like these are difficult to find. Furthermore, the significance and impact of the actions of these few individuals are not far reaching in terms of pushing back against something as large as the green revolution. As Sukhpal said, there is indeed a need to continue engaging more young people in the movement, but also to bring these individual values, beliefs and actions together under one umbrella and create a fierce push back to industrial agriculture.
Chapter 7: Conclusion

Summary of Research Findings

The objective of the thesis research was to identify a Polanyian double-movement in the agricultural sector in Punjab. The results of my research show that the manifestations of the market-oriented movement are evident in Punjab consolidated over nearly six decades since India’s independence, manifested in the form of industrialization, urbanization, deregulation, commodification, and internationalization of agricultural trade. But the research revealed that the protective counter-movement in Punjab is very weak compared to the strength of the green revolution. Almost all farmers in Punjab are connected to green revolution seeds, technology, government schemes, and the like; whereas less than one farmer per village, on average, is aware and involved in alternative agriculture movement. Some small actions have been taken in the realm of promoting alternative agriculture, citizen activism and political advocacy, and there have been some protective government laws and regulations. While these examples constitute institutional forms of the counter-movement, Punjab’s institutions are weak. It cannot be said that there is a notable challenge being made to neoliberal policies and industrial agriculture. At present, the actions being taken to counter market-oriented agriculture are not strong enough to be classified as a Polanyian counter-movement. Despite these unexpected findings, research results did show that the ideological foundations for a counter-movement are present at an individual level among a few young farmers. This has yet to translate into a wider movement or collective. Both the institutional and ideological counter-movements in Punjab are miniscule in the face of industrial agriculture and the neoliberal policies that support it. This is true at the level of NGOs and public policies as well as at the level of individual views and choices.
Contribution to Polanyi Literature

The Polanyi literature most often discusses the double-movement as manifested in revised public policies, organized public resistance, and on-going political tension. In the agricultural sector such manifestations might take the form of farmer advocacy and activism, the creation of new institutions to protect social and environmental values, or public policy reforms. Organizations such as Via Campesina and the MST in Brazil have succeeded in protecting rural land and small farmers’ livelihoods through well-organized and sustained institutional efforts over a period of time. But this research shows that in Punjab, where the green revolution has been most dramatic, the counter-movement appears weak.

Polanyi’s key message in *The Great Transformation* is that as the principles of market society are promoted further and further, a variety of unacceptable social and environmental consequences will be created. Then, people will come together and push back against the problems and the market forces which caused the problems. How they resist the market and how successful they will be will vary case to case. So even a weak alternative agriculture "movement" can be interpreted as a nascent counter-movement if its underlying ideas are anti-market or lead to market constraining behaviour and policy demands. The counter-movement might fail or might begin with periods of weakness (as now in Punjab).

This empirical finding adds to the Polanyi scholarship by presenting what is largely a counter example. It invites Polanyi scholars to reflect upon the factors that may prevent the emergence of a counter-movement under conditions where a counter-movement can reasonably be expected. In the Punjabi agricultural context, it is suggested that a combination of the following factors may be preventing the alternative agriculture counter-movement from flourishing:

- The movement might need more time to mobilize and organize supporters and plan stronger, more impactful opposition to industrial, capitalistic agriculture.
- The socio-economic diversity of farmers, researchers, and activists interested in alternative agriculture might be causing conflicts in planning collective grassroots actions.
- Absence of a strong, charismatic leader who can inspire people and farmers to mobilize.
- Farmers might be waiting in anticipation of future benefits from markets.

Furthermore, this thesis unpacked the values, ideas and institutions that are being mobilized even if weakly in Punjab. This includes respect for traditions, desire to uphold family values, a sense of patriotism for the country and an attachment to the land, valuing nature as a gift as opposed to a commodity, and viewing profit as a means to sustain one’s family and community and live a happy life. This set of findings also invites Polanyi scholars to consider the role of such foundational ideologies in both the market-oriented movement and the protective counter-movement. It was shown for Punjab that counter-movement values, beliefs, and choices are shared by a few young farmers. Even though the current level of impact of these select few farmers is small, these individual ideologies could spread to others and eventually lead to a widespread movement for change. The discovery of these ideological foundations are an important insight into understanding Polanyi’s protective counter-movement. What will happen in the future is difficult to predict, but Polanyi’s double movement framework along with these foundational ideological findings leave the door open to future possibilities.

Reflecting upon Polanyi’s double movement and the discoveries in Punjab, I would not say that Polanyi was wrong. Apart from the institutional manifestations of the counter-movement which might come with time, the remaining components of the double movement were indeed present in Punjab. As such, I conclude that Polanyi’s double movement provides a relevant framework with which to understand social responses to rapid economic changes even in cases where the unfolding of the double movement has not complete an entire cycle.
Implications for Counter-Movement Mobilization in Punjab

Kheti Virasat Mission has made some important strides in promoting awareness and actions towards improving the environmental health and well-being of Punjab. However, there are several areas for improvement to further strengthen (what they refer to as) their ‘people’s movement’. First, KVM may have to find a new leader that farmers can trust and connect with. Second, they should engage farmers and particularly young farmers in more meaningful ways, as critical agents of change. Currently, the NGO staff organizes workshops, occasional public demonstrations, and private lobby efforts with government officials. However farmers are not involved in designing these actions, they are merely invited to participate once all the details are set in place.

Additionally, young farmers and activists should be given a meaningful space to contribute to the movement. I had initially hypothesized that youth would have some role to play in the protective counter-movement because in other contexts young people are often involved in organizing for social justice as agents of change. This was not the case in Punjab. Therefore, perhaps the key to strengthening the counter-movement to a point where it could realistically challenge the market-oriented movement might be through mainstreaming youth concerns and further engaging them within existing organizations at the institutional level.

Lastly, the protective counter-movement in Punjab could be mobilized by forging connections with other grassroots NGOs within Punjab as well as national and international agrarian movements. The National Organic Farming Convention was an excellent opportunity for KVM to connect with national organizations like the Organic Farmers Association of India and the Alliance for Sustainable Holistic Agriculture, and they took full advantage of the national level support. Hence with international support of strong, well-organized groups, Punjab’s movement might get the strength and direction it needs to increase their impact. For example, the movement could partner with Indian organizations that are members of Via Campesina’s.
This includes the Bharitya Kissan Unions (active in Punjab, Haryana, Maharashtra, New Delhi, Rajasthan, Uttarakhand, and Uttar Pradesh), Karnataka Rajya Ryota Sangha, Kerala Coconut Farmers Association, Nandy Raita Samakya (Andhra Pradesh), and Tamil Nadu Farmers Association (Via Campesina, 2013).

Implications for Rural Planning and Development

There are some relevant lessons that can be drawn out to help in planning for more effective transitions in developing economies. Polanyi does not suggest we revert back to pre-market societies. He encourages society to move forward and engage in market transactions while still retaining the integrity of human social values and traditions. The world is heavily entangled in dualities, opposites, conflicts. But if planners ensured that economic changes in rural areas occurred within social and environmental bounds, some degree of conflict could be avoided. Understanding the concept of the double-movement can help planners better anticipate and diffuse social and environmental problems before they grow into a crisis. This first requires an acknowledgement that market-oriented moves do cause problems such as social dislocation and environmental degradation. By anticipating these problems and the push back that market-oriented policy might evoke, planners can plan better. This might be achieved by engaging stakeholders in the planning process, ensuring that industry voices are balanced out with people interested in preserving cultural traditions and the environment. Or this could be dealt with, for example, by putting social safety nets in place before implementing market-oriented policies. While it is impossible to revert back to the romanticized notion of pre-market society, it is possible to retain elements of it while moving into the future.

Limitations and Suggestions for Further Research

There were some important limitations to this study. First, it only examined whether the double movement was present, and how one can identify and observe the presence of a
protective counter-movement. It did not seek to explain why the counter-movement was not present. With more time, this additional research question would have been an interesting one to explore. Second, the young farmers interviewed as part of this research were few in number, were almost all men, and mostly belonged to middle-class land owning families belonging to mostly castes higher in the social hierarchy. And third, there were several NGOs representing farmers and promoting sustainable alternatives that could not be reached for an interview during the fieldwork. Hence, the analysis of NGO involvement in promoting alternative agriculture is limited to KVM. Even though KVM is the largest voice against the green revolution in Punjab, there are others who may also be carrying out valuable work.

Therefore, if another researcher were interested in studying similar issues in Punjab, I would suggest strengthening the study by adding another research question at the outset to investigate why the protective counter-movement has not yet emerged as expected. I would also suggest increasing the number of young farmers interviewed from a variety of background, and spending more time in the field connecting with NGOs operating in Punjab other than KVM. It would also be interesting to dig deeper into understanding why more youth are not presently engaged in the alternative agriculture movement. Lastly, further research in this area could also compare successful agrarian social movements around the world to the situation in Punjab. This comparison could aim to isolate factors which are present in these other contexts but are missing in Punjab’s agricultural scene and potentially posing barriers to the protective counter-movement.
Reference List


Annex A: Manifestations of the Protective Counter-Movement

**Table 3 Characteristics of the Double Movement**

<table>
<thead>
<tr>
<th>Key Features</th>
<th>Market-Oriented Movement</th>
<th>Crisis</th>
<th>Protective Counter-Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polanyi</td>
<td>Economic gain</td>
<td>Disembeddedness &amp; social dislocation</td>
<td>Human &amp; environmental well-being</td>
</tr>
<tr>
<td></td>
<td>Industrial Revolution</td>
<td>Nature is valued as a raw material</td>
<td>Citizen resistance</td>
</tr>
<tr>
<td></td>
<td>Deregulated markets</td>
<td>Humans are valued as labour</td>
<td>Political advocacy</td>
</tr>
<tr>
<td></td>
<td>Commodified land labour,</td>
<td>Small farmers unable to compete</td>
<td>New public policies</td>
</tr>
<tr>
<td></td>
<td>and money</td>
<td>Rural-urban migration</td>
<td>Restrictive legislations</td>
</tr>
<tr>
<td></td>
<td>Opened their borders to</td>
<td>Urban slums</td>
<td>Creating institutions for</td>
</tr>
<tr>
<td></td>
<td>the international trading</td>
<td>Families broke apart</td>
<td>social and environmental</td>
</tr>
<tr>
<td></td>
<td>of goods</td>
<td>Local food unavailable</td>
<td>protection</td>
</tr>
<tr>
<td></td>
<td>Enclosure of land</td>
<td>Increasing food prices</td>
<td>Protests</td>
</tr>
<tr>
<td></td>
<td>Conversion of arable</td>
<td></td>
<td>Minimum wage</td>
</tr>
<tr>
<td></td>
<td>land</td>
<td></td>
<td>Abolishing child labour</td>
</tr>
<tr>
<td></td>
<td>Destruction of houses</td>
<td></td>
<td>Workers compensation</td>
</tr>
<tr>
<td></td>
<td>Increased exports</td>
<td></td>
<td>Subsidies for agricultural</td>
</tr>
<tr>
<td></td>
<td>Increased mechanization</td>
<td></td>
<td>commodities</td>
</tr>
<tr>
<td></td>
<td>in agriculture</td>
<td></td>
<td>Taxes on water usage</td>
</tr>
<tr>
<td>Recent</td>
<td>Privatization</td>
<td>Climate change</td>
<td>Agrarian reform</td>
</tr>
<tr>
<td>Literature</td>
<td>International free trade</td>
<td>Land grabs</td>
<td>Protection of water and</td>
</tr>
<tr>
<td></td>
<td>agreements</td>
<td>Global food insecurity</td>
<td>biodiversity</td>
</tr>
<tr>
<td></td>
<td>Global financial markets</td>
<td>Deteriorating living conditions and</td>
<td>Women and youth</td>
</tr>
<tr>
<td></td>
<td>Continued de-regulation</td>
<td>working conditions for farmers and</td>
<td>empowerment</td>
</tr>
<tr>
<td></td>
<td>Land use changes</td>
<td>labourers in developing countries,</td>
<td>Human rights</td>
</tr>
<tr>
<td></td>
<td>Industrialization</td>
<td>Transnational migration</td>
<td>Protection of migrants</td>
</tr>
<tr>
<td></td>
<td>Urbanization</td>
<td>Unpredictability of global financial</td>
<td>and rural workers</td>
</tr>
<tr>
<td></td>
<td>Further commodification</td>
<td>markets</td>
<td>Sustainable agriculture</td>
</tr>
<tr>
<td></td>
<td>of nature (ex. water</td>
<td></td>
<td>Community based natural</td>
</tr>
<tr>
<td></td>
<td>and carbon trading)</td>
<td></td>
<td>resources management</td>
</tr>
<tr>
<td>Punjab –</td>
<td>Green revolution</td>
<td>Local, traditional food unavailable</td>
<td>Creation of NGOs for</td>
</tr>
<tr>
<td>primary and</td>
<td>Agricultural trade</td>
<td>Soil degradation</td>
<td>sustainable agriculture and</td>
</tr>
<tr>
<td>secondary</td>
<td>Mechanization</td>
<td>Loss of biodiversity</td>
<td>political advocacy</td>
</tr>
<tr>
<td>data</td>
<td>Land reform</td>
<td>Water pollution</td>
<td>Government</td>
</tr>
<tr>
<td></td>
<td>Economic incentives to</td>
<td>Illnesses (ex. Cancer)</td>
<td>encouragement to reduce</td>
</tr>
<tr>
<td></td>
<td>use HYV seeds</td>
<td>Farmer suicides</td>
<td>chemical usage and diversity</td>
</tr>
<tr>
<td></td>
<td>Chemical inputs</td>
<td>De-prioritizing family</td>
<td>crops</td>
</tr>
<tr>
<td></td>
<td>Irrigation infrastructure</td>
<td>Rural-urban migration</td>
<td>Religious institutions</td>
</tr>
<tr>
<td></td>
<td>Export-oriented</td>
<td>Youth unemployment</td>
<td>supporting ecological</td>
</tr>
<tr>
<td></td>
<td>production</td>
<td>Youth withdrawal from agriculture</td>
<td>restoration</td>
</tr>
<tr>
<td></td>
<td>Individualism</td>
<td></td>
<td>Research and extension</td>
</tr>
<tr>
<td></td>
<td>Consumerism</td>
<td></td>
<td>institutions promoting</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>Citizen</td>
<td>Industry</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Reciprocity</strong></td>
<td>Revival of sharing, community customs</td>
<td>Urban mutual aid organizations (Sandbrook, 2011)</td>
<td>Corporate social responsibility: a local company giving part of its profits to local causes</td>
</tr>
<tr>
<td></td>
<td>Urban mutual aid organizations (Sandbrook, 2011)</td>
<td>Informal credit schemes amongst friends (Sandbrook, 2011)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Faith-based, families and friends (Holmes, 2012)</td>
<td>Building alliances between local &amp; global issues (Levien, 2007)</td>
<td></td>
</tr>
<tr>
<td><strong>Redistribution</strong></td>
<td>State policies for alternative agriculture</td>
<td>Private donations to NGOs to support others in need.</td>
<td>Cooperative management of natural resources (Sandbrook, 2011)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Citizen-led demands for the government to support (through</td>
<td>Cooperative village enterprises: women’s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cooperative village enterprises: women’s</td>
<td></td>
</tr>
<tr>
<td>Markets</td>
<td>Creation of organic or local community markets (Hejeeby &amp; McCloskey, 1999)</td>
<td>Corporate social responsibility: a local company self-regulating its pollution</td>
<td>Creating trust in markets (Block, 2004), example online security for Banks, PayPal, eBay, etc.</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Other</td>
<td>Political institutions to maintain the peace, e.g. local police (Sandbrook, 2011)</td>
<td>Changing the way we think: fulfillment of social and religious obligations as wealth (Sandbrook, 2011)</td>
<td>Facism (extreme case)</td>
</tr>
</tbody>
</table>

**Table 5 - National Manifestations of the Counter-Movement**

<table>
<thead>
<tr>
<th>State</th>
<th>Citizen</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reciprocity</strong></td>
<td>State sponsored television advertisements in which show citizens engaging in reciprocity.</td>
<td>Corporate social responsibility: A national company giving part of its funds to national causes</td>
</tr>
<tr>
<td><strong>Redistribution</strong></td>
<td>Creation of bureaucracy and tax system (Sandbrook, 2011) Higher taxes (Jones, 2015)</td>
<td>National Alliance of People’s Movements (India) forced government to revamp their resettlement and rehabilitation policy (Levien, 2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corporate social responsibility: a national company doing an internal fundraiser across all branches for a charity.</td>
</tr>
<tr>
<td>Markets</td>
<td>Regulations</td>
<td>National Alliance of People’s Movements (India) lobbied for ‘Right to Information Act’ (Levien, 2007)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Social Protection</td>
<td>Unions protect employees against firms and also give certain benefits to those who are part of the union (Holmes, 2012)</td>
</tr>
<tr>
<td></td>
<td>Acts of territorial sovereignty to protect the national environment (Baum, 1996)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overseeing rules of competition (Sandbrook, 2011)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regulating capital markets (Sandbrook, 2011)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Political institutions to maintain the peace, e.g. National Army (Sandbrook, 2011)</td>
<td></td>
</tr>
</tbody>
</table>

**Table 6 - Global Manifestations of the Counter-Movement**

<table>
<thead>
<tr>
<th></th>
<th>State</th>
<th>Citizen</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reciprocity</strong></td>
<td></td>
<td>American workers in global firms ‘gifted’ more time and labour than stipulated in their employment contracts (Karnik, 2008)</td>
<td>Corporate social responsibility: a multinational company giving parts of its profit to philanthropic causes</td>
</tr>
<tr>
<td><strong>Redistribution</strong></td>
<td></td>
<td></td>
<td>Corporate social responsibility: a multinational company organizing a fundraiser for a global cause.</td>
</tr>
<tr>
<td><strong>Markets</strong></td>
<td>Protection of worker’s rights in Europe through the European Court of Justice (Caporaso &amp; Tarrow, 2009)</td>
<td></td>
<td>Corporate social responsibility: a multinational company improving the working conditions for their employees.</td>
</tr>
<tr>
<td>Tariffs on imports/exports</td>
<td>National governments press demands for social control of international markets (Sandbrook, 2011)</td>
<td>labourers in a developing country</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Political institutions to maintain the peace, e.g. UN (Sandbrook, 2011)</td>
<td>Advances in information sharing and transportation have made transnational movements easier to organize (Evans, 2008)</td>
<td></td>
</tr>
</tbody>
</table>
Annex B: List of Interviewees

YF = Young Farmer  
KI = Key Informant

<table>
<thead>
<tr>
<th>Code</th>
<th>General Description</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>YF 01</td>
<td>Wheat/paddy, conventional farming</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 02</td>
<td>Diary, conventional</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 03</td>
<td>Wheat/paddy, conventional farming</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 04</td>
<td>Diary, conventional</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 05</td>
<td>Diary, conventional</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 06</td>
<td>Wheat, vegetables and speciality crops, natural farmer</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 07</td>
<td>Wheat/paddy, vegetables, mixed-methods</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 08</td>
<td>Dairy, wheat, vegetables, fodder, mixed-methods</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 09</td>
<td>Horticulture, conventional farming</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 10</td>
<td>Rents his land for conventional farming, owns an urban business</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 11</td>
<td>Wheat/paddy, fodder, maize, vegetables, conventional farming</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 12</td>
<td>Potatoes, maize, conventional farming</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 13</td>
<td>Wheat/paddy, vegetables, maize, fodder, conventional farming</td>
<td>Doaba</td>
</tr>
<tr>
<td>YF 14</td>
<td>Driver</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 15</td>
<td>Wheat/paddy, conventional farming</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 16</td>
<td>Natural Farmer</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 17</td>
<td>In process of becoming a natural farmer</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 18</td>
<td>Traditional crops, medicinal plants, natural farmer</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 19</td>
<td>Mushrooms, nursery, compost, mixed-methods</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 20</td>
<td>Vegetables, mixed-methods</td>
<td>Malwa</td>
</tr>
<tr>
<td>-------</td>
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<td>-------</td>
</tr>
<tr>
<td>YF 21</td>
<td>Vegetables, mixed-methods</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 22</td>
<td>Diary, conventional</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 23</td>
<td>Vegetables, mixed-methods</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 24</td>
<td>Vegetables, mixed-methods</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 25</td>
<td>Vegetables, mixed-methods</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 26</td>
<td>Vegetables, mixed-methods</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 27</td>
<td>Tomato farmer, conventional</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 28</td>
<td>Wheat/paddy, conventional farming</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 29</td>
<td>Wheat/paddy, vegetables, conventional farming</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 30</td>
<td>Wheat/paddy, vegetables, conventional farming</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 31</td>
<td>Wheat/paddy, conventional farming</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 32</td>
<td>Sugar cane, wheat/paddy, conventional farming</td>
<td>Malwa</td>
</tr>
<tr>
<td>YF 33</td>
<td>Vegetables, certified organic</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 01</td>
<td>Vegetables, certified organic</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 02</td>
<td>Elderly Farmer, specialty crops</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 03</td>
<td>Elderly farmer, fish farming</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 04</td>
<td>Elderly farmer, conventional farming</td>
<td>Doaba</td>
</tr>
<tr>
<td>KI 05</td>
<td>Elderly farmer, conventional farming</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 06</td>
<td>Elderly farmer, natural farming</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 07</td>
<td>Research Institution</td>
<td>Capital</td>
</tr>
<tr>
<td>KI 08</td>
<td>Research Institution</td>
<td>Capital</td>
</tr>
<tr>
<td>Code</td>
<td>Type</td>
<td>Location</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>KI 09</td>
<td>Research Institution</td>
<td>Capital</td>
</tr>
<tr>
<td>KI 10</td>
<td>Research Institution</td>
<td>Capital</td>
</tr>
<tr>
<td>KI 11</td>
<td>Government Extension Institution</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 12</td>
<td>Government Extension Institution</td>
<td>Doaba</td>
</tr>
<tr>
<td>KI 13</td>
<td>Research &amp; Extension Institution</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 14</td>
<td>Non-Governmental Organization</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 15</td>
<td>Non-Governmental Organization</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 16</td>
<td>Non-Governmental Organization</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 17</td>
<td>Non-Governmental Organization</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 18</td>
<td>Non-Governmental Organization</td>
<td>Malwa</td>
</tr>
<tr>
<td>KI 19</td>
<td>Religious Institution</td>
<td>Doaba</td>
</tr>
<tr>
<td>KI 20</td>
<td>Young driver, from farming family</td>
<td>Doaba</td>
</tr>
<tr>
<td>KI 21</td>
<td>Young social worker, from farming family</td>
<td>Malwa</td>
</tr>
</tbody>
</table>
Annex C: Interview Guides

In-Depth Interview Questions with Young Farmers

1. Tell me about your farm.
   a. Location, size
   b. Inputs (labour, equipment, animals, seeds, water, fertilizers, etc.)
   c. Outputs (crops, feed, fertilizer, medicine, average yield, average profit)
   d. Special/innovative practices or techniques

2. Tell me about the process of starting up.
   a. How did you get land?
   b. If inherited, did you buy more?
   c. Land prices: rising, falling, availability
   d. Did you take credit/borrow money when starting up?
   e. What happens when there is no successor for the land?
   f. What is someone wants to start but doesn't have land?
   g. What is the ownership structure: joint family?
   h. How did you learn about farming? Did you take any formal courses, training?
   i. What do you do different from your parents' generation on the farm?
   j. How do you access markets? Where do you sell?
   k. What did others say when you decided to be a farmer?

3. Challenges and supports to become a farmer.
   a. What were your biggest struggles?
   b. What are the general barriers for other young (or new) farmers
   c. What makes you different from other young people who choose not to be farmers?
   d. What were your biggest supports when starting out?
   e. What supports do you wish you had?
   f. In general, what assistance is available for young farmers? (government, social support, community support, online, family, friends, financial support, etc.)

4. What advice would you give to other young people in Punjab that are trying to decide what to do with their lives?
   a. Would you encourage them into farming? Why or why not?
   b. Is it easier or harder to become a farmer now compared to when you were starting?

5. Green revolution
   a. What was the GR?
   b. What are your experiences with the GR?
   c. Was it good or bad? Why?
   d. Have you experienced any changes in the environment (soil, water, air)
   e. Have you experienced any changes in health (illness, cancer in the family, etc)

6. What are your views on Alternative Agriculture?
   a. What is organic vs natural farming?
   b. What are your personal experiences? Do you use natural/organic techniques?
c. Can Alternative Agriculture be successful in Punjab?

7. Forty to fifty years ago, Punjabis had an identity of being strong healthy prosperous farmers.
   a. Does this still exist? Explain.
   b. What is the new identity?
   c. What do young people aspire for today?
   d. What is your personal inspiration/mentor?
   e. To what extent are your choices restricted/influenced by your parents?

8. What is your dream for the future?
   a. For your farm
   b. For your family
   c. For your village
   d. For Punjab

9. Tell me about your life story… What where the key factors/events that led to you becoming a farmer?
   a. Family size, grandparents, parents, siblings
   b. Childhood memories
   c. Family upbringing, traditions, values
   d. Friends, social networks
   e. Leisure, interests, movies, urban lifestyles
   f. Education
   g. Work, other jobs outside farming
   h. Religion and level of devotion
   i. Spouse, marriage, difficulty finding spouse
   j. Community groups
   k. Sharing, helping, reciprocity within village
   l. Interest in politics or world events
   m. Internet connectivity

Discussion Group Questions

Same as above, with the exception of the last question.

Key Informant Interview with Young Farmers Association of Punjab

1. When did this organization start, and what is your mandate?
2. How many people work here; what portion is under 35 years old?
3. Do you have branches elsewhere?
4. Where do you get funding? What portion comes from what source?
5. How much do you interact with young farmers?
6. What are the major concerns of young farmer’s today?
7. Why aren’t young people going into farming?
8. For those that go into farming, what sets them apart from others?
9. What is the government doing to encourage young farmers?
10. Do you have any annual reports or literature that I can take away?
11. Can you provide any contacts of young farmers I can meet?

Key Informant Interview with Organizer(s) of the Organic Convention

1. Please tell me about the planning and preparations. How many people were involved/what is there background (farmers or academics or students)? Where did you gather the workshop ideas from? How is this conference different than the first 4? Where is the stimulus coming from (international, national, ground level concerns?)

2. Most people are blending natural and organic farming together, and I didn't see a distinction being made during the conference itself. What is the difference? Is this important? Are there any tensions between the two? How important is the market aspect/certification/premiums/surplus?

3. Are you happy with the outcome of the conference? Did you achieve your goals?

4. What did you think of the Chief Minister of Punjab's speech? How much sincerity was there, and what are your realistic expectations for next steps at the policy level? Agriculture Minister of Haryana deflected responsibility and said that citizens must lobby corporations to give more attention organic. What did you think about this?

5. There are a lot of young people that were involved in putting together and volunteering at the conference but none of them want to be farmers. What is being done to encourage and motivate young farmers?

Key Informant Interview with a Religious Figure

1. What was the village of Seechewal like at its worst? Can you tell me what it was like here before you started restoration efforts?

2. What are the causes of these environment problems? To what extent is it caused by chemical farming, industrialization, overpopulation, or a loss of traditions, religion, etc?

3. How did you motivate people to volunteer to clean up Kali Bein? Tell me about the process and results.

4. Please tell me about how is involved in your volunteer projects. What is their age, education level, profession, are they farmers?

5. What are your future plans? Anything about reducing pollution at source? What about irrigation and environmental farm management?

Key Informant Interview with Punjab Agricultural University’s Extension Services

1. Please tell me about the programs and training and support you provide to farmers.
   a. What topics are covered (anything on organic?)
   b. Frequency of trainings?
   c. Number of staff?
   d. Number of participants (small/large farmers, age, gender)

2. Who designs the curriculum for your workshops and who selects the topics? Is there any input from farmers?
3. Please explain the relationship between KVK and KGS and PAU. Which way does information flow?
4. What is being done to encourage/support young people into farming?
5. What are your thoughts on the trend of young people leaving farming and leaving Punjab?
6. Can you introduce me to young farmers, and particularly young female farmers?
7. Any literature I can take with me?