

Researching livelihoods and
services affected by conflict

Recovering from war and living in hope:

Fruit and vegetable markets in Pakistan's Swat Valley

Working Paper 43

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May 2016



About us

Secure Livelihoods Research Consortium (SLRC) aims to generate a stronger evidence base on how people make a living, educate their children, deal with illness and access other basic services in conflict-affected situations (CAS). Providing better access to basic services, social protection and support to livelihoods matters for the human welfare of people affected by conflict, the achievement of development targets such as the Millennium Development Goals (MDGs) and international efforts at peace- and state-building.

At the centre of SLRC's research are three core themes, developed over the course of an intensive one-year inception phase:

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Acknowledgements

We thank Paul Harvey, Irina Mosel and the reviewers for their helpful and insightful comments. Any errors are the sole responsibility of the authors: Abid Q. Suleri (SDPI); Babar Shahbaz (University of Agriculture Faisalabad and SDPI); Qasim Ali Shah (WFP and SDPI).

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This and other SLRC reports are available from www.securelivelihoods.org. Funded by UK aid from the UK government, Irish Aid and the EC.

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Acronyms

CEPA	Centre for Poverty Analysis
EMMA	Emergency Market Mapping and Analysis
FATA	Federally Administered Tribal Areas
IDP	Internally Displaced Person
KP	Khyber Pakhtunkhwa
NGO	Non-Governmental Organisation
ODI	Overseas Development Institute
SDPI	Sustainable Development Policy Institute
SLRC	Sustainable Livelihoods Research Consortium
TTP	Tehrik-e-Taliban Pakistan
UC	Union Council
UNESCO	United Nations Educational, Scientific and Cultural Organization
WFP	World Food Programme

1 Introduction and research questions

The Swat Valley in Pakistan is an important producer of fruit and vegetables. During the years 2007-2009, activities were heavily compromised: Taliban militants captured the valley in 2007 and there was subsequently a series of fierce army operations against them. This study analyses the impact of conflict (occupation by the militants and the military operation) on fruit and vegetable supply chains, with a focus on impacts on livelihoods and the recovery of markets. For the purposes of this study, the market is defined as 'any systematic process for market actors (people, businesses) to buy and sell products and services. This includes not just the way that those goods and services are produced, transported, bought and sold, but also the formal and informal rules that govern those interactions' (Gerstle, and Meissner, 2010).

Swat district is the centre of fruit and vegetable production in Khyber Pakhtunkhwa (KP) province of Pakistan. Apples, peaches, persimmons, apricots, pears, plums and walnuts are important crops. The area is also well known for producing tomatoes, potatoes, onions, honey, soybeans and trout (Ali, 2010; Khan, 2012). One of Swat's agricultural specialties is peaches; before the conflict, Swat's peaches made up more than 50 percent of national production (Khaliq, 2011). Similarly, about two-thirds of provincial apple production is in Swat. Many studies, including the baseline survey conducted by the Sustainable Livelihoods Research Consortium (SLRC) research group for Pakistan, have shown that farming is the most important livelihood activity in the conflict-affected areas of Malakand region of KP in general, and Swat Valley in particular (Shahbaz *et al.*, 2012). The conflict had serious impacts on the sector (for details see *ibid.*, 2012). Nyborg *et al.* (2012) claim that Taliban militancy and the army action against them led to about a third of agricultural workers losing their livelihood source.

In this context, the specific research questions were as follows:

- What are the characteristics of major stakeholders in fruit and vegetable markets in Swat?
- How did conflict disrupt the market for fruit and vegetables and how is it recovering?
- What changes occurred with respect to different aspects of the market (composition of crops, availability of inputs, composition of farmers)? Have there been new entrants (post-2008) into the fruit/vegetable/agricultural market in Swat?
- What is the role of women in Swat's agricultural value chain?
- How have government and aid actors attempted to support the sector?

In making such an assessment, it is necessary to consider the nature of market and market-related factors – actors, agricultural inputs, transportation, financial resources, access to markets, etc. – and how they can potentially affect livelihoods (Rota and Sperandeni, 2003).

2 Methodology

The system under study includes all supply chain partners associated with Swat's agricultural produce outputs, including agricultural input providers, farmers, farm labourers, traders, transporters, trade associations and commission agents.

Within this, we reviewed the secondary literature and held semi-structured interviews with key informants in order to grasp how the conflict had affected stakeholders' livelihoods. Direct observations were also recorded during the field visits.

The literature review was based on various papers and reports: the Sustainable Development Policy Institute (SDPI) Working Paper *Livelihoods and markets in post-conflict settings: No short cuts, no quick fix* (Commins, 2012); the various Emergency Markets Mapping and Analysis (EMMA) reports carried out by different donors in post-flood 2010; the Overseas Development Institute (ODI) study *Markets in crises: The 2010 floods in Sindh* (Zyck et al., 2015); and the SLRC working paper *The social life of the onion: The informal regulation of the onion market in Nangarhar, Afghanistan* (Minoia et al., 2014).

Key informant interviews covered the following topics, for both before and after the conflict: actors, products, supply of inputs, terms of trade, recovery after conflict, etc. Key informants interviewed included agricultural input sellers, farmers, agricultural extension staff, agricultural labourers, transporters (individuals and associations), traders, trade association representatives and commission agents.

Interviews were conducted within the following union councils (UCs): Matta, Barikot, Kabal and Khwazakhela, whose main sources of income are fruit and vegetable production. The UC is the lowest tier of administration in Pakistan. A UC usually comprises three to six villages depending on their population. In relation to the agricultural supply chain, the UCs are the administrative units where market-related activities are instigated; middlemen usually visit the main villages of UCs to get in touch with local farmers. The UC office is generally located in the largest of the villages. Markets in the vicinity of the UCs act as a hub for local commercial activities, bringing together small input supplier shops and transporters. Interviews were conducted in villages where the conflict had badly affected fruit and vegetable production. Village selection was carried out after a series of discussions with the district administration, the Provincial Rehabilitation and Settlement Authority and local organisations.

Participatory methods were used to determine large, medium and small farmers. At least one large and one medium farmer were included in the sample from each UC. Labourers, traders, commission agents, small transporters and input suppliers were also selected from the same UCs. At least one big trader/transporter was selected, using a participatory approach. In all, 80 key informant interviews were carried out. We found no females working in the markets and even in the fields in the study area; as such, all of our respondents were males.

Table 1 shows the number of key informants questioned from each stakeholder group.

Table 1: Number of key informants questioned from each stakeholder group

Stakeholder group	Number per UC	Total
Farmers	5	20
Labourers	4	16
Traders	4	16
Transporters	4	16
Trade association representatives	1	4
Commission agents	1	4

3 Conflict-affectedness in Swat

The conflict in Swat began when Taliban militants took control of a large area of the district at the end of 2007 and started to advance towards neighbouring districts. Consequently, Pakistan's army started a war in Swat during 2009 and, after a few months of fierce battles, took control of Swat and other areas (Shahbaz *et al.*, 2012). During the war between the army and the militants, most of the population of Swat and neighbouring districts (around 3 million) left the area and took refuge in other districts of KP as internally displaced persons (IDPs), mostly in Mardan, Swabi and Peshawar. Markets, roads and transport infrastructure were destroyed as a consequence of the occupation of Swat by Taliban militants and the subsequent military operation. Severe floods in 2010 added to the miseries of the population.

Agriculture was one of the main affected sectors: when the war began, the wheat and fruit were almost ready to harvest but the farmers had to leave their homes. When they returned after peace was made, almost all of the crops were damaged. According to the World Food Programme (WFP) (2010), 80 percent of surveyed markets in the (then) North-West Frontier province (now KP) and the Federally Administered Tribal Areas (FATA) were affected by the conflict, and also by looting. The same study points out that traders' access to most markets was restricted during 2007-2009, whereas in FATA increased transaction costs were reported as a major outcome of the conflict. And it was not just farmers who were affected: most labourers and traders also lost their source of income because agriculture is the major source of employment in Swat. Productivity was reduced by more than 45 percent during 2008-2010 as a result of the severe loss of markets and other infrastructure (Ali, 2015; Nyborg *et al.*, 2012).

Most of the skilled labourers associated with fruit production in Swat migrated to other cities in the country in search of peace and safety, which caused delays in harvest; 60 percent of wheat crops on thousands of acres was not harvested (Nyborg *et al.*, 2012). Moreover, potatoes, onions and other vegetables could not be transported to the markets because of road blockages and prolonged curfews. A change in production patterns is also evident, such as a shift to peaches from apples. In 2013, about 250,000 tons of peaches were grown in Swat; the number had been 40,000-50,000 tons in 2002. Apple production went down because of this increase in peach production, which came to pass mainly as a result of higher demand for Swati peaches during summer, particularly during the fasting month of Ramadan (Farooq, 2013).

Before the conflict, 500-600 trucks of fruits were transported daily to the rest of the country during the harvest season. Swat in the pre-war era was a centre of orchards and held multi-utility processing industries, cold storage and a huge amount of dry storage, along with an efficient transportation and marketing mechanism. It also used to be a training centre for the budding and grafting of plants (Bari, 2010). Labourers from the district were highly in demand in KP and Baluchistan, particularly for their skills in fruit harvesting. Skilled workers from other districts, particularly Punjab, migrated to Swat to work in the fruit-growing areas to learn the efficient techniques of the district (Zareef and Maula, 2014). Swat's plant nursery production was graded third best in the country after Pattoki (Lahore) and Tarnab (Peshawar) (Ali, 2010).

In pre-war times, the overall gross output from farming activities in Swat district was estimated to be Rs 9 billion (USD 1 was about Rs 65 during 2007-2008) per annum. According to the Department of Agriculture, 55-70 percent of the total fruit produce in Swat went to waste as a result of the hostilities, artillery shelling, blowing up of bridges in bomb blasts, road blockades, attacks and curfews (Ali, 2010). Overall losses were estimated at between Rs 3 and 8 billion (Nyborg *et al.*, 2012; Zahid, 2009).

Studies indicate that, in conflict-affected areas of KP and FATA, traders adopted coping strategies that were likely to be harmful to consumers. These included increasing commodity prices; reducing the scale of operations to minimise the losses from looting – which in turn led to increased prices and reduced supplies; quick rotations of stocks to meet high demand in Afghanistan rather than selling in FATA – which again led to local shortages and increased prices; and changing the terms of trade from credit to cash, thus limiting buyers' options (WFP, 2010). These coping strategies negatively affected the ability of households to purchase food, and sales supplies decreased. For instance, Bhatti (2015) reports that, during the conflict, if local people wanted to sell their animals, the traders made these 'distress sales' by offering a price up to 20 percent lower than the market rate. And Shah (2010) indicates that, during the conflict, villagers sold their animals and other farm produce at less than half of the market price to meet their daily needs. Thus farmers received a substantially lower price for their livestock, which have traditionally served as a complementary source of income. This put more pressure on farmers who had previously made some income from the sale of milk and butter.

There was a big influx of donor-supported aid interventions immediately after the military operation. Shahbaz *et al.* (2012) indicate that donors paid relatively little attention to either the private sector or key market linkages, in the post-conflict development phase as well as the 'emergency setting': 'There is often little focus on market systems and their role in the rebuilding of livelihoods.' Shah and Shahbaz (2015) indicate that there was a mismatch between the demand of communities and supply from external aid providers. Shahbaz *et al.* (2014) also note that, in addition to being supply side-dominated, most of the external interventions either ignored the importance of markets – both as a physical place with shops and stalls and as a broader commodity exchange for buyers and sellers – or were unable to capture the political economy of markets (e.g. the relationship between market chain actors, the governance structure of markets and market access, etc.).

It is also reported that, in designing donor interventions for KP and FATA, relatively little attention was paid to the private sector and to market systems and their roles in the rebuilding of livelihoods. It can be argued that the processes of elaborating market relations, especially if carried out in participatory ways, can be important interventions in themselves – directly improving linkages and relationships between market actors and preparing local communities to introduce or generate innovation in products, processes and market access (Albu and Griffith, 2005, 2006).

4 Swat's agricultural supply chain and how it changed during and after the conflict

Farmers, traders, commission agents, transporters and labourers are identified as the major actors of the fruit and vegetable market in Swat. This section presents the main characteristics of these stakeholders and the following section describes how they were affected during and after the conflict.

4.1 Farmers

As the conflict may have had a different impact on farmers possessing different sized farms, we grouped farmers into small, medium and large. In KP and Punjab, farms are classified by the area under cultivation.¹ In the mountain areas of KP, this classification becomes meaningless, as farms are determined by the terrain, and even small landholders owning 1 acre of land can be considered large. Like other mountainous areas of Pakistan, in Swat most of the farmers are subsistence farmers.

As it is difficult to categorise mountain farmers on the basis of the size of their landholding, then, we used a participatory approach, asking our respondents how they differentiated among small, medium and large farmers. The majority of respondents perceived large farmers to be those who had comparatively large landholdings and employed labourers on their farm, or those who had rented their land to small, in some cases landless, farmers. Large farmers grow multiple crops (wheat, maize, fruit, vegetables) for commercial purposes; medium farmers grow crops for their own consumption and fruit and vegetables for selling in the markets; small farmers generally grow crops for their own consumption only. However, most of the small and medium farmers were not solely dependent on farming and had additional sources of non-farm income, such as a small shop, taxi-driving, working as a daily wage labourer, government or private employment and livestock-keeping. The key informant interviews indicated that non-farm activities were of importance for small and medium farmers but not pursued by all as this is against the legacy of their ancestors and therefore is perceived as a social taboo.

Farm size also has an impact on access to upstream and downstream markets. The majority of small and medium farmers do not have sufficient cash available to buy inputs and rely on local commission agents to provide cash and/or inputs in advance of the harvest. In return, the farmer is bound to sell the harvest through the agent at his (the agent's) terms and conditions, usually at a price lower than the normal market price. The commission agent is acting as a moneylender and insurance agent for the farmer, as he offers a loan without collateral and bears the risk by buying the standing crop. The farmer relies on the inputs the commissioner provides, which are usually of low quality. As he has to sell his produce to the commission agent, he is also dependent on the prices the agent pays. Microcredit facilities are very limited in the area and farmers have no choice but to rely on the credit the commission agents provide. This implies that smallholders should be provided easy access to microcredit to safeguard them from exploitation by commission agents.

4.2 Labourers

Labourers are the integral component of fruit and vegetable markets. Most work on daily wage basis, either on the farms of big farmers or with traders and even in some shops. In markets, labourers perform a variety of tasks, from sorting and packing to loading fruit/vegetables on trucks. They work for an average of five to eight hours per day. Some labourers also own small pieces of land and also perform non-farm activities as an additional source of income. During the military operation, most

¹ http://www.sbp.org.pk/acd/Acd_Definitions.pdf

labourers were displaced along with their families. Some of them were able to find manual work at their new destination. However, many remained dependent on humanitarian aid in the form of food and cash in IDP camps. After the conflict, the majority came back but some of them started work in other markets situated in the lowlands. Interviews indicated that the composition of labourers did not change after the conflict. However, labourers with experience in growing apples and apricots told us that, after the conflict, there were fewer opportunities for them because new products, such as peaches, plums and turnips, were in demand and they did not have expertise in these. Changes in markets affect labourers' terms and conditions of work. Similarly, changes in the composition of products mean some labourers have gone out of a job and some have started working in construction or gone to other cities to try their luck. The construction sector flourished after the conflict because government and aid agencies started to repair damaged infrastructure. There was demand for labourers, and many agricultural labourers started to work in the sector (more detail in the following section).

4.3 Traders

As for farmers, there are three major categories of traders (big, medium and small). To clarify these categories, we again used a participatory approach, asking respondents to classify themselves and others. Big traders are perceived as those who have a wholesale business and deal in wheat and maize as well as fruit and vegetables. They hold their business in the markets of the major towns (e.g. Mingora). Big traders buy crops directly from farmers and also from commission agents, before the harvest, when it is in the field. They also buy fruit and vegetables from external markets (of other districts) to sell in the local market. Some respondents perceived big traders to be those who came from other cities (Lahore, Rawalpindi and Peshawar) to buy fruit and vegetables from the local market.

A (self-perceived) big trader from Matta commented, *'Sometimes we buy these products [fruit and vegetables] directly from the farmers and sometimes from commission agents. We are dealing with both local and outside markets. In winter we go out to other markets and in summer we buy fruit from the local area. We also buy from small, medium and big farmers through contract. The normal practice is that the traders visit the orchards and buy fruit when the fruits are at the flowering stage.'*

Medium traders have medium-sized businesses, such as general stores in the town, and are retailers but dealing with different commodities (wheat, maize, fruit, vegetables). They buy fruit and vegetables from local markets (*sabzi mundi*) through open auction, from commission agents or from wholesalers (in Mingora market). Small traders typically deal with vegetables and fruits. They purchase these from wholesalers and sell to consumers on handcarts (as street vendors) or at roadside shops.

A medium trader commented, *'I always buy from different people. The reason behind this is that I look for my profit and benefit. Some of the vegetables here are not of good quality so I buy local produce as well as from down town.'*

In the absence of any formal tax collection mechanism among traders in this area, governance is informal. There is no licensing mechanism; all that is needed to open a store is the availability of a shop in the local market.

4.4 Transporters

Transporters transport the commodities within the local market or from the local market to down-country markets. Big transporters have proper transport companies and possess different vehicles, such as trucks (six-wheelers or more) and mini-trucks, Suzuki vans, etc. They transport all kinds of commodities to other cities of Pakistan. Small transporters usually have just one or two small vehicles and their operation is limited to Swat district. Many perceived that big transporters were those who went to Lahore and Karachi, whereas medium transporters went to adjoining districts such as Dir and Mardan. Some vehicle owners also do contracted transport for large companies.

The owner of a large vehicle commented, *'We are connected with the transport companies. The transport companies take commission from us and give us the opportunity to carry the products. The second option is the commission agents, who contact us directly to deliver the goods. The third priority is the traders. The big traders talk with us directly to deliver the goods.'*

The buyers of fruit and vegetables hire the transport and bear all transport-related expenditures. The transportation cost is usually based on distance (per kilometre) and buyers also have to pay road taxes while transporting the goods. They also have to deal with the police. A big transporter from Kabal commented, *'There are no taxes on fruits and vegetables transport. We pay road taxes only. However, on every trip police fine us forcefully. Now on the last trip I had to pay two fines, one on the motorway and the second in Mingora. I did nothing wrong, but the police charged us fines.'* Police impose fines for different reasons (e.g. speeding, lack of necessary documents, overloading, etc.) and sometimes these fines are illegal.

During the winter, most of the large transporters transport onions, tomatoes and some fresh vegetables from Punjab. In summer, they deliver fruit and vegetables from Swat to other parts of the province. There is a union for local transporters but it is not very active and most of the transporters do not see any benefit in it; however, big transporters and transport companies are connected with the regional transport union, which helps them in case of emergency (accidents, etc.).

4.5 Commission agents

Commission agents (middlemen) are an important actor in the market. They have multiple identities and can be local businessmen and farmers as well as traders. However, they have one commonality – that is, they link the farmers with the traders. They buy the products from the farmers and sell to the big and medium traders. In most cases, they give loans to farmers and then farmers are bound to sell their harvest through their respective commission agent. In some cases, the commission agents buy the standing crop from the farmers (at a pre-agreed price) and give advance money to the farmers.

A commission agent from Barikot commented, *'We provide them [farmers] seeds and fertiliser and after that they give us products. This is how we are running our business with them.'* Similarly, a commission agent from Matta told us that, when farmers are in need, agents provide them with money and inputs and in return they agree to sell their produce back to the agent. A positive role of commission agents is that they provide new varieties of seeds to the farmers because many small and medium farmers are short of money during the cultivation season – so this is a win-win situation for both parties.

The rate of commission depends on the commodity, quality and the market situation. Most commission agents have developed long-term relationships with the farmers. Some farmers said the price the agents offered was somewhat below the market price. The farmers usually use the money to buy inputs and household items.

Most commission agents sell their products to traders in open auction. Most of the traders interviewed acknowledged the importance of commission agents. For instance, a trader from Kabal said, *'These people are important for us because we have long-term and lasting relationships with farmers [through them].'* Another trader, from Khwazakhel, commented, *'We prefer to buy products only from these people [commission agents] because they deliver the goods on time.'* Interviews with some traders revealed that agents also provide goods on credit to traders. In most of the cases there is no element of interest involved and the only benefit for them is guaranteed transaction.

4.6 Women

The role of rural women in farming and market-related activities is minimal. Although women are involved in the care of livestock, very few work in the fields. Local cultural barriers restrict women's movement and prevent them from working in the fields/markets.

For instance, a farmer elaborated, *'In our village women don't work in the fields. Some of them work in their kitchen gardens and grow vegetables for household use, but there is no concept of wages for women for helping in animal husbandry or kitchen gardening. There is no space for them in the market too.'*

Another farmer commented, *'Women are not working in farms because they cannot do such [hard] work. Moreover, there are culture barriers for them. Our women work in houses only and this is enough. There is no need of women to works in fields. Women should do domestic chores only.'*

Unlike in the plains of Punjab and Sindh, where women help family members in farming (especially women family members of small farmers and tenants), there is social stigma against women's mobility in KP in general and Swat in particular. This taboo means there is no evidence in the literature of any (visible or invisible) role of women from this region in farm management or their contribution to the vegetable and fruit supply chain. The silence of the literature means an in-depth anthropological study is needed to determine any indirect support women provide to orchard management, the smooth running of fruit and vegetable markets and other means of supplementing the household income, such as poultry husbandry, kitchen gardening, embroidery, etc. Women are mostly confined to fetching water and firewood, and are also involved in backyard poultry-rearing and tending to small ruminants. Hardly any women were seen working in the open fields, except a very few working in the potato fields in upper Swat in non-Pukhtoon villages. They buy food for household consumption from local shops (within the village). These small contributions should not be overlooked, however, and our respondents' acceptance of women's engagement in kitchen gardening might be taken as an entry point for thinking of innovative ways of making the most economic use of the social space offered to women through this activity.

5 Changes in the conflict-affected context

5.1 Shifts in crops and occupation

During the Taliban occupancy, Tehrik-e-Taliban Pakistan (TTP) established a state within a state. Mingora's Green Square, which was the centre of business in the valley, received a new name, Death Square. Dissidents were hanged, shot or whipped in this square. The markets were deserted. TTP set up its own system of tax collection. In Swat, *ushr* (Islamic tax), which is one-tenth of the crop and fruit produce, was collected to pay salaries to TTP fighters and to equip them with weapons and ammunition. Other sources of fundraising included kidnapping for ransom, looting banks and taking items from the captured households of opponents (Khan, 2009).

The miseries of orchard farmers continued during and immediately after the military operation. This began in Malakand in 2009 and continued for about six months. Civilians were asked to vacate the area to avoid any collateral damage. Farms were abandoned. Vegetables and fruit could not be harvested and rotted in the fields and orchards (WFP, 2010). Those farmers who had some harvest before the military operation could not sell their crops because of market closures. There were no farming and market activities during the military operation, because of the ongoing curfew, and vegetables such as tomatoes and onions were rotten. Information collected during field visits indicated that small, medium and large farmers suffered equally. Most of the IDPs stayed in camps or with relatives/friends in safer districts for four to six months. Afterwards, they gradually started to come back to their homes.

A big farmer from Barikot explained, *'It was a very bad time and no one was ready to bring agricultural inputs to be sold. People used to save their money for their survival. It was a totally uncertain environment and I almost stopped farming.'*

Similarly, a medium orchard farm owner from Matta told us that during the military operation they were unable to do anything except migrate to Mardan district. When they came back after four months, after the harvest season, the fruit had fallen from the tree. According to him, medium orchard farmers suffered more financial losses than the others. Another medium farmer from Khuwazakhela said, *'We had some produce in the field but couldn't sell during the war because everything was closed and people were fleeing from the area to safer places.'*

A small farmer from Kabal related his experience: *'During the military operation, we faced a lot of trouble. At first we were displaced, our children and women walked down from the mountains to the IDPs camps. Here, we were dependent on the support from NGOs [non-governmental organisations] to fulfil our basic needs. My fields were destroyed and when we returned the onions were in the field, we uprooted these onions one month later than the usual harvesting time.'*

Traders were also severely affected by the conflict as businesses were halted during the military operation and the majority of people were displaced to nearby cities. Almost all of our respondents said there was zero business because people had started leaving even before the war; within a few weeks almost the entire district was deserted and a curfew was imposed. The situation was no better before the military operation (i.e. during the Taliban occupation). For instance, a big trader said, *'During TTP rule we faced several problems. I bought apples worth Rs 1 million (USD 10,000) in the fields. At that time we were busy packing them, and suddenly they [the militants] fired on us, my brother was severely injured and we took him to the hospital and left the fruit there. After a few days when we visited the field everything was destroyed, so I lost more than Rs 1 million.'* A medium trader said, *'During TTP rule, I loaded one truck of apples and handed it over to a transporter in Matta but because of the continuous curfew all of the fruit was rotten and we threw it in the river.'*

When the army took control of the area and peace was restored, IDPs were allowed to return to their homes. Infrastructure (roads, bridges, schools, etc.) had been damaged by heavy firing from both sides, as were places of work. However, farms and orchards remained in place. In many cases, though, farmers had to start afresh to revive their orchards and farms. Most started by clearing debris and rotten vegetables. Aid agencies provided some basic inputs and seeds to farmers, which helped them resume their activities. Apart from the initial losses, there was a slight increase in the farming income for most farmers.² Some farmers talked about the high price of inputs but this may have been because of overall inflation and the high price of petrol rather than the conflict and the army operation.

A noteworthy change observed is the shift towards high-value crops; however, this has been limited mostly to large and small farmers. This change can be attributed to two factors. First, almost all the farmers temporarily migrated to other districts, which improved their down country linkages. Second, some aid agencies distributed vegetable seeds and established fruit nurseries in many locations.

Depending on the demand in down-country markets, most large and some medium farmers reported changes in their farming pattern. For instance, many farmers shifted from wheat/maize to vegetables while many others went from vegetables to fruits. Most of them said a better profit margin was the motive for making such a change. For example, a medium farmer from Kabal commented, *'I now prefer to grow fruit rather than vegetables, because it gives more profit.'* Likewise, better tomato prices in down-country markets have led to increased tomato production, and high prices for strawberries compared with apples have led to the replacement of areas under apples by strawberries.

For most small farmers, there has been no or very little change. It is also pertinent to mention here that, despite this gradual shift towards fruit and vegetables, cold storage facilities are very limited. Mostly, the freshly picked fruit is packed and sent down country as fast as possible.

Some other actors in the supply chain also noticed this change. For instance, a rice mill owner from Barikot said, *'I am running a rice mill but now the peaches have made problems for us because farmers are shifting from rice crops to peaches, and therefore our rice market business is no more profitable.'* Swati rice was famous for its quality, but now farmers prefer to grow vegetables and peaches. The rice crop is vanishing and people have to buy rice imported from other regions.

Apart from better prices, the shift from vegetables to fruit might be attributed to interventions by donor agencies regarding the distribution of fruit saplings and the establishment of new fruit nurseries in some areas of Swat. Trainings on nursery-raising have been given to some farmers and they have started work (Shah and Shahbaz, 2015). For example, a medium farmer from Matta said, *'Only one change [after the military operation] has been observed: the number of fruits nurseries is now more, this is as a good development for all of us farmers.'* Similarly, a large farmer from Barikot explained, *'After the army operation the situation is now calm and life is going on as it was before the conflict. Now inputs [fertiliser, seeds, saplings] are abundantly available in the market and I can buy inputs from the local market because the government and aid agencies have ensured the supply of inputs in Swat.'* Some farmers have received new variety saplings and seeds from aid agencies and tried these (more profitable) crops. A small farmer from Khwazakhela said, *'Now we have increased the varieties, including wheat, maize and vegetables [...] an NGO supported me by giving me vegetable seeds.'* Although provision of seeds and inputs by aid agencies was a one-time intervention it increased awareness among farmers regarding the use of better seeds and inputs and also had some implications for input suppliers (discussed in following sections).

Another factor that has negatively affected the demand for vegetables in down-country markets is the import of vegetables from India. For instance, a farmer from Khuwazakhela told the SDPI team that, *'My*

² This was an overall impression; we did not analyse commodities separately.

main products were tomatoes, turnips and other vegetables like spinach and radish but now tomato is the main product and most of the farmers are growing tomatoes because of good market [prices]. However, this year the market is not feasible for our domestic tomatoes because the government is importing tomatoes from India.'

After the conflict, many farmers shifted cultivation from vegetables to fruit, and one of the reasons for this was the former's non-competitiveness with imported vegetables with regard to prices and quality. Despite the volatile relations between India and Pakistan, the bilateral trade in vegetables remains persistent. Indian imports are obtained when a particular crop in Pakistan fails (and vice versa).

Tomatoes from Swat never dominated Pakistan's market. The decision to import tomatoes from Indian Punjab via Lahore was based on overall production in Pakistan. Once an import arrives, an oversupply can easily disturb the price of local produce. Likewise, the quality of Indian produce can lead to competition whereby local farmers come under pressure to either grow quality produce or shift to other crops: *'We cannot compete with foreign produce because we are using low-quality seeds and fertilisers.'*

It seems that, originally, vegetables from Swat were sufficient to cater not only to local markets but also to the needs of nearby major markets. Hence, imported vegetables could never capture a market share. However, during the conflict, the suspension of vegetable supplies for an extended period may have opened up this market to imported vegetables, which means now many vegetable farmers from Swat are switching from vegetables to fruit.

Like the market for vegetables, the fruit market is quite volatile in Pakistan. Fruit-processing is not very sophisticated and lack of cold storage means a bumper crop of fruit will often have an inverse correlation with profit. Profitability is also measured through better storage life of the fruit. Better seed varieties that give a yield with a long storage life mean increased profitability. This profitability is the key factor in deciding which fruits to grow. Some peach farmers agreed that peaches made a better profit than other fruits and vegetables. Another factor was the destruction of crops during the war and the loss of local markets. Wheat and corn were sold in the local market but fruit and vegetable were sent to other districts. Therefore, farmers started to think about adopting alternate cropping patterns. For instance, a large farmer from Matta commented, *'Before the militancy, the main products were peaches, wheat and maize but during the military action we couldn't sell them because of the war and the crops were damaged in the field. Now we are growing apples along with rice and maize.'*

Some small and medium farmers who decided to stick to their previous cropping patterns started to use new and better varieties of crops. This indicates that, although they could not diversify their crops, they were, partly because of government and NGO livelihood interventions that introduced and distributed improved seeds and saplings, able to grow new varieties of crops and vegetables.

Traders did not report major changes in terms of commodities, although trading of apples has reduced because of the destruction of apple orchards and also some diseases. Similarly, trade in pears and persimmons was also reported to have declined, whereas the market for peaches and plums is increasing. This change may not be completely because of the conflict: other factors include economic value, introduction of improved peach cultivars, a prolonged bearing season, better adaptation to the climate and abundance of water application sources. Farmers have gained skills in peach farming and the Department of Agricultural Extension has technically sound experts in the area. Skilled labourers with experience in growing apples and apricots reported that there were now fewer opportunities for them in agriculture because they did not have expertise in new products such as peaches, strawberries, plums and vegetables; therefore, some of them have started working in construction and some have migrated to the big cities.

Investment in post-conflict infrastructure development has had some positive impacts on the local labour market as it has opened up a new avenue for labourers, with more and more skilled and

unskilled labourers opting for construction-related labour. The following comments of labourers from different parts of Swat district demonstrate this:

'Agricultural labour is low wage and it is seasonal and when the season is off then we have to go for other labourer work. Many labours are now going towards the construction field.'

'Now there is a shortage of labourers in the market and wages have increased from Rs 400 to Rs 500. Before the conflict, labourers were in surplus; now construction activities are abundant and demand for labourers is higher.'

'There is a huge difference before and after the conflict; because of loss and lack of money some [small] farmers have left farming and started daily wage labour because they want to earn money and want to sustain their lives.'

'The conflict has changed the composition of skilled labour because they are now working in other fields [construction].'

Although militancy and poor law and order affected the business of transporters before the army operation, these actors were immediately in demand when the government asked locals to evacuate the valley. Local community members hired them to shift household equipment and people to IDP camps (or to relatives in adjacent districts where applicable). During the operation, many transporters started plying new routes, which helped them build new professional networks.

When life returned to normal, some of those networks remained intact. One large transporter from Mingora told us, *'[Before the conflict] we used to ply trucks between Swat and Peshawar, and Islamabad. Sometimes, we used to take fruit to Lahore. However, during the military operation, we based our vehicles in Peshawar and started taking bookings from Peshawar to Punjab and to Karachi. After the military operation, we returned to our base in Mingora but are serving our clients up to Karachi.'*

Mini trucks and vans mostly cater to the needs of the local population, as before the militancy.

Since the operation, the number of security check posts has increased. This causes delays during transportation, affecting all types of transporters.

According to Article 247 of Pakistan's Constitution, Malakand (including Swat) is included in the Provincially Administrated Tribal Agency and is a tax-free zone (Khaliq, 2013). However, some minor taxes are to be paid, such as road tax and municipality taxes. Nevertheless, freight charges have become higher since the conflict, partly to take care of delays and partly to meet the high fuel cost, which saw an increase between 2008 and 2014 (before the recent dip in prices). A mini truck owner from Matta said, *'The price of diesel has increased manifolds. We have to pay bribes at different police check posts (not at the army check posts) to avoid delays in security clearance. Our client has to include all these costs in the freight costs, we are not going to pay it from our pocket.'* Similarly, a trader told us, *'There are no taxes on us, the transporters mostly have to pay road taxes when we are bringing our products. As far as the crisis is concerned, when we were bringing commodities from Batkhela and Timergara the police were there for taxes. They were taking Rs 100 in the name of district tax. They told us we were crossing the district so we had to pay the tax.'*

The increase in the number of security check posts has increased transportation time and costs, although the majority of transporters said they did not have to pay any extra at these posts.

During the military operation, many transporters charged much more than usual. For instance, a transporter commented, *'Those transporters who survived in the crises they were using the Shangla route to the downtown and were charging double.'* Transporters with contacts in the police and army were successful. After the military operation, some transporters left the business because of damage to their vehicles during the conflict. Interviews with traders revealed that the composition of transporters

had changed because of the conflict, with some transporters leaving the business and starting work in other fields. There are also some newcomers: local people who can afford to start a transport business. Remittances received from the Gulf and from the big cities of Pakistan are an important source of income for the majority of households in Swat, and the conflict has not affected this. Many new entrants in transport have used remittance money to invest in the business.

5.2 Changes in input supply

During the war, inputs were unavailable and the government banned the sale of fertiliser because militants could use them to make explosives. After the conflict sales were re-established but some changes were reported. An important change was improved cash flow. The Federal Government provided USD 250 per household during the displacement. A few of our respondents (mainly shopkeepers) received financial support from Qatar Charity and Save the Children, of around USD 600 for restarting their businesses. The Provincial Disaster Management Authority paid USD 4,000 as compensation to those whose houses were completely destroyed; those whose houses were partially damaged were paid USD 1,800. Many invested the extra cash in hand in restoring their livelihoods, including in orchard and farm reconstruction.

After the military action, the government of KP and NGOs such as Literate Masses distributed fertilisers and new varieties of seeds. This brought about the entry of new seed varieties into the valley. Now there is an increased supply of seeds in stores operated by the provincial Department of Agriculture as well as by private owners. Nevertheless, because of limited access to microcredit and bank loans, farmers are still dependent on loans from commission agents. International humanitarian agencies and some NGOs have also provided fertiliser, seeds and saplings to farmers, but some big farmers said they now bought seeds directly from authorised dealers for multinational companies.

A large farmer from Barikot explained the input situation in relation to the pre- and post-conflict scenario as follows: *'Before the conflict everything was going well and all the inputs were available easily at local markets. War/conflict adversely affected local markets and they turned non-functional. The supply of inputs got suspended and so did farming. After the army operation, life is back to normal and all inputs (fertiliser, seeds) are now available in the market. I can buy the required inputs from the local market now. Moreover, some NGOs have visited Swat, and they supported me too.'*

Initiated by post-disaster aid (from governmental and non-governmental sources), and sustained by the improved physical security conditions, the availability of seeds in the market is greater since the military operation. For example, new stores have opened in the local market and the Department of Agriculture has also provided seeds to affected farmers. A medium farmer from Kabal said, *'Yes, things have changed [since the operation]. Previously we were buying seeds from Mingora but now there are four new stores in our local market in Kabal. Now commission agents are also coming to our fields and there is also a government store in Kabal market. The Department of Agriculture is also providing us with some seeds.'*

However, access of small farmers to microcredit remains limited: *'Opportunities [for bank loans] are there but not for us because we do not have our own land [collateral] and therefore we cannot receive loans from banks. The owners of land are receiving loans from banks.'*

The above remarks show that, since the conflict, new varieties of seed and fertiliser have been introduced in the area. The number of fruit nurseries has also increased and some farmers are taking part in trainings. However, the access of small and medium farmers to formal credit facilities remains limited and business for them remains as usual – that is, they take advance cash and/or seeds from commission agents in the agreement that they will sell their produce to them (sometimes at lower than market price).

Responding to a question on familiarity with microcredit schemes, a medium farmer said no microfinance schemes or other benefits were available to them, but now in their village a new trend had emerged of commission agents coming with new and high-yielding seeds, which they give to farmers on credit. At the time of the harvest, the farmers must sell the produce to them at their prices.

5.3 Selling the harvest

Generally, small farmers sell their crops in local markets to those commission agents from whom they bought inputs (on credit) or borrowed money. Large farmers have resources and can sell their fruit and vegetables in the main market. In most cases, the harvest is sold to a person with whom the farmers have been in contact for many years.

A large farmer elaborated: *'I used to sell my produce in the local market of Mingora and Swat and sometimes also to other cities (Mardan, Peshawar and Rawalpindi). Sometimes I used my standing crop as collateral and received money before the harvest. The wave of militancy disrupted everything. However, things are back to the same routine and my marketing trend remains the same.'*

Regarding pricing, the fruit market was reported to be performing well but vegetable growers were unhappy because of imports from India. The majority of farmer respondents felt the increase in prices was an outcome of the conflict. According to most of them, *'Because of conflict and flood, supply decreased, demand increased, prices changed and nowadays they are too high.'* One farmer said the fruit market was working smoothly but that vegetable imports from neighbouring countries had caused Pakistani vegetables to become non-competitive; domestic tomatoes are rotting in the market because they are of low quality and have a shorter shelf life than Indian tomatoes. It was the shortage of vegetables immediately after the conflict that first created the space for imported produce. These imports, particularly of tomatoes, affected prices in the local markets and caused produce from small and medium farmers to become non-competitive.

As we have seen, many farmers have shifted to peaches from rice and some vegetables. This shift has also impacted the labour market. In the words of one farmer, *'Most labourers are now unemployed because peach orchards are less labour-intensive.'* Nevertheless, interviews with labourers indicated that many skilled labourers had started working in construction, again, as we have seen.

The majority of medium farmers used to sell in the local market: *'We were selling to local buyers. Unlike big farmers, we didn't have the finance and resources to sell in other provinces or in external markets. Now [since the conflict] we are trying to sell commodities out of the district market and also outside the province but it requires more money to invest in this business and it is very risky for us as we cannot take the risk of a big loss. Sometimes big farmers and dealers take the risk but they have the potential to take risk.'* There is a lack of storage in the area; onions can be stored for a period of three months but other commodities produced in the area cannot be stored for more than a week because of their perishable nature. An onion grower commented, *'We cannot store the tomatoes for a longer time. We don't have facilities to store vegetables. We can store onions from January to March but not for a longer time.'*

Some respondents complained of lack of sufficient support in the form of subsidies from governmental and non-governmental sources to revive the market after the military operation. One medium farmer said, *'During the conflict, the crops were destroyed and the price of inputs increased manifold but there was insufficient support from the government and donors when the situation became normal. Input prices have increased whereas the profit margin on commodities has gone down, partly because of cheap imported vegetables.'*

The increase in the cost of inputs and transportation is due mainly to increased inflation and the higher price of fuel (in Pakistan) since the military operation, and therefore cannot be fully attributed to the conflict. For instance, a big farmer from Barikot said, *'Now we are trading better but the situation is not*

like the pre-conflict situation, now inflation is high and fuels rates are also high therefore freight is high. But we cannot sell our commodities at high rates because our commodities are not in good condition.'

Post-conflict, the several new security check posts are creating problems for traders. Transporters have to wait in long queues for hours and the products come late to market and their quality deteriorates. Traders have asked law enforcement agencies (army and police) to issue them special passes so they can cross the check posts on a priority basis.

5.4 New entrants and leavers

Some farmers have left farming because of losses and some farmers have also sold their land. Fear of loss and conflict remains in farmers' minds. Most are not ready to take risks. For instance, a medium farmer commented, *'I think farmers are leaving this field because of the small profit margin. Their investments in agriculture are on the decline. Before the militancy, people were investing Rs 2-4 million, but now they are shy of investing in agriculture. They are facing financial losses and market rates are also unpredictable. Government has allowed the import of some vegetables (especially tomatoes and onions) from other countries particularly from India, which has had a huge effect on local farmer. In my opinion, more people are leaving the field than new entrants.'*

Another medium farmer from Barikot explained, *'Some farmers are going away from this field because they suffered losses during the conflict and army operation. But some are coming towards farming. They are not aware of the risk of this field and therefore they are coming towards this field. Most of the [small] farmers have to work for their subsistence.'*

Interviews with some key informants also indicated that some small and medium farmers had left farming and attempted to adopt alternate livelihood strategies, such as petty business and labour, but they had had to come back to farming because of a poor labour market and lack of experience. *'Some farmers left this field but immediately they come back to farming because they did not have other skills and therefore they were not successful'* said a farmer from Khwazakhela.

The same logic might be valid for new entrants: lack of farming skills may mean they have to change their new profession. For instance, a farmer from Matta commented, *'I think the trend is going to increase in farming as every day new people are coming, but they go back after one or two years because they cannot survive in this field. It is a tough and hardworking field. Less experience and training make new farmers lose [out].'*

A farmer from Barikot explained, *'I think there are now more people in this field from previous time and more farmers are going towards peaches and new people are entering farming. Most of those who left the area during the military operation are coming back and restarting their farming because now these people have no other skills except this farming. However, some are not coming back because they cannot take risks and they have started working as daily wage labourers. [...] I am trying to go to a foreign country so I can earn money for a better future for my children.'*

Likewise, a trader from Barikot said, *'I was a farmer but now I am a trader of vegetables. I think people are coming because it a good job. However, some people are going to foreign countries therefore they are leaving this field.'*

The above comments and interviews with other respondents indicate an increasing trend of going abroad by the local population since the conflict. Swat has traditionally been a remittance-based economy (Steimann, 2005). Shahbaz *et al.* (2014b) also point to the importance of remittances in the household economy of Swat and a study by Suleri and Savage (2006) underlines the resilience of remittance-dependent households in the event of disaster. Therefore, we can argue that the local people see migration as one strategy to deal with conflict affectedness.

Composition of traders has not changed much in the area, although some 'new' traders have entered the market and fewer people have left the field. *'The restoration of peace has given some confidence to locals. The authorities are encouraging the opening-up of new stores of inputs. With improved varieties of seeds and fertilisers, better produce is being expected and this leads to the entry of new traders in the market'* commented a commission agent in Swat. Similarly, a vegetable trader from Matta said, *'New people are coming to this field [trading] rather than leaving. The reason is that there are fewer employment opportunities. Peoples are compelled to limit their work to trading. Few people are going back. Those who are going back have employment in foreign countries.'*

One popular strategy for new entrants is the transport business: this is perceived as an easier business and some farmers have sold their land and bought a vehicle. However, *'I would say this is not an easy business but many people think this is easy and those who have no experience in other skills are coming towards transport,'* said a transporter. New entrants also have to face resistance from those who are already in the field. A transporter from Barikot said, *'This work looks easier but it is very hard. Some fool[ish] people don't know about the difficulty of this work and getting into this work.'*

6 Surviving conflict – living in hope

Immediately after the military operation, when IDPs returned, contacts with the army and the police were found to be an important factor. Some influential farmers and transporters learned quickly how to use contacts to transport their produce to the market. Typical comments of farmers in this regard are as follows:

'I was in loss because I was not aware of some ways to supply vegetables to market but some farmers made profits because they have relations with the army, police or other security agencies, therefore they made profit during the war. And those who couldn't have contacts were in loss.'

'Some people made a profit because they were aware of ways to transport commodities to the external market and some were in loss because they were not aware of such processes.'

'Some farmers (and transporters) survived during the crisis because they had links with the army and had permits with them and others were in loss because they could not do anything. Some people's relatives were in foreign countries and they were also in benefit because they have good contacts.'

Social relations played an important role in the rehabilitation process for some actors (particularly transporters and farmers), who used their contacts to influence police and army personnel and obtain favours from them. The wealthier transporters and farmers were able to establish contacts but we did not hear of any cases of bribery in this regard. Social linkages seem important in this case. A study by the Centre for Poverty Analysis (CEPA) (2006) also indicates the importance of social networks and political and social linkages in moving out of poverty in conflict-affected areas of Sri Lanka.

Survival for people living in the mountains was reportedly more difficult than it was for those living in the valley and closer to the market. For instance, a farmer commented, *'In my area [Matta], some people transported products [during and after the army operation] but they were very few in number. You can say that 20 percent of farmers and traders did that. These people transported goods by animal, donkeys, etc. [...] The people of Mingora and down took benefits while the people of Matta, Charbagh, Khwaza Khela and adjacent areas were in trouble because of frequent curfews.'*

Interviews with farmers revealed that, although most commercial and farming activities ceased during the conflict, farmers and traders were recovering slowly and steadily. Donors' interventions had had some positive impacts in terms of new seed varieties and fertilisers. Most farmers were happy with the seed supply and the increased availability of fertilisers.

They [NGOs] worked with farmers and there is a positive impact, especially on vegetables. They provided us seeds and urea, which helped us a lot to re-sustain our jobs.

I have observed one change that the numbers of fruits nurseries are in now more and these can be found in most villages, this is as a constructive and positive thing for all of the farmers.

One of many post-conflict livelihood interventions by international and national aid agencies in Swat was the provision of seeds, fertilisers and fruit saplings to farmers. Some international and local organisations, such as the International Rescue Committee; the Food and Agricultural Organization; the Sarhad Rural Support Programme; the Provincial Relief, Rehabilitation and Settlement Authority; Lasoona; and Hujra distributed seed and fruit saplings and some also conducted trainings on nursery-raising. These interventions are perceived as having been beneficial and the shift from the production of subsistence crops (rice) to cash crops (vegetables and fruit) may be attributed to these interventions (for detail see Shah and Shahbaz, 2015). Introduction of fertilisers and better seeds by donor agencies in the local market has also led to the opening-up of new stores in remote areas because of increasing demand.

Shah and Shahbaz (2015) divide post-conflict interventions in conflict-affected districts of KP into two wide categories: (1) immediate or short-term relief efforts; and (2) rehabilitation or long-term interventions. Short-term interventions began immediately after the start of war between TTP and the army and gained momentum when IDPs returned home after the end of war. At this stage, food and non-food items and cash grants were distributed to those who returned from IDP camps. This approach helped address urgent needs. These interventions were mostly supported by international organisations and implemented at the local level in coordination with government agencies. The focus of long-term interventions is on rebuilding livelihoods through the distribution of agricultural inputs, agricultural tools, livestock and poultry; arranging capacity-building trainings; and rebuilding infrastructure, etc.

Some of the comments given below support our argument:

'After the conflict, it is now a calm situation and life is going on as it was before the conflict so inputs (fertilisers, seeds) are now available in the market and I purchase such inputs from the local market and at that time [immediately after the army operation] NGOs [humanitarian organisations] visited Swat, so they support me regarding seeds and fertilisers.'

'After the conflict the same pattern [buying and selling] is being followed and the seeds and fertilisers are available from local shops and NGOs also supported me by giving me seeds. Now new seeds are introduced and new better fertilisers are entering in the market.'

'Yes, changes are there, before the conflict we had to buy the seeds from Mingora but now there are four stores in our local market [Kabal]. Now the commission agents are also coming to our fields with seeds. The Department of Agriculture is also providing us seeds. So we have a large variety of seed in the markets.'

'After the conflict there are many varieties of seeds and fertilisers available in the market and we are trying to buy good quality of inputs.'

However, a few farmers complained about the quality of seeds and fertilisers. *'Good seeds and fertilisers are not available to us and it creates a big problem because when we purchase fertilisers from the markets they do not work effectively.'* Similarly, small farmers said they did not receive seeds and fertilisers from any humanitarian organisation; rather, they bought from the local shop. This is in line with the findings of Shah and Shahbaz (2015) – that small farmers were generally excluded from access to livelihood-related interventions by international aid agencies; however, the positive impact was such that interventions boosted the trend of new seed varieties and fertilisers in the local market.

The positive thing that surfaced from this research was hope for the future. Most of the respondents were optimistic and foresaw a better life for their families. Some typical comments were:

'I am seeing in the next two or three years that the market will become better because now people are aware of their problems and new products are available in the market for more production [...] I am looking at upcoming years in a good sense.'

'I hope the coming years will be better than previous years. Now the new seeds are introduced in our market and people are also coming back in this field.'

'In the coming five years the market will be better for all commodities and small traders will become bigger ones.'

'We have hope that it will be a better time in the future and are looking for a good market.'

'I hope the future will be better. Farmers and traders always wait for the coming year with hope. The same is the case with me and I am also living in hope.'

It is pertinent to mention here that Pukhtoons are very resilient: historically, they have confronted different types of conflicts, wars and natural disasters. In their folklore and traditional songs, they are

taught to face difficulties with courage and honour. An English translation of a Pukhtoon folk song is, 'If we show resilience and courage, we can easily face any difficulty. We can have our thorny paths turned into flowery tracks. It also implies that we should not be afraid if we fall on bad times. We should face challenges with courage' (UNESCO, 2013). Likewise, the people of KP in general and Pathans (a major ethnic group of KP and of Swat district) in particular are thought to possess entrepreneurial spirit and have a reputation for being successful traders and businesspersons.³

³ <http://www.encyclopedia.com/topic/Pathans.aspx>

7 Analysis

Two things appear to be important here. One is the change in produce: farmers are replacing apples with peaches and crops (particularly rice) with vegetables, partly because of interventions by aid agencies in the form of seeds and nurseries and partly because of increased linkages with the down-country. The second is external but was reported only in the vegetable sector and relates to competition with imports, especially from India.

The shift from subsistence to cash crops (vegetables) and vegetables to fruit and fruit to other varieties of fruit indicates a general level of discontent with existing cropping patterns. Farmers hope for a greater profit margin by changing their specialty, which is both an opportunity and a challenge for them. One of the factors in this shift could be livelihood interventions by international and national agencies in the form of provision of seeds, fertilisers and fruit saplings as well as trainings in nursery-raising. These interventions had direct and indirect impacts on farming and the fruit and vegetable market – direct in the sense that those who received improved seeds and better fertilisers were able to grow more and indirect in the sense that the introduction of new varieties paved the way for small business at the local level. Small farmers were generally excluded from access to livelihood-related interventions by international aid agencies but the positive impact was such that interventions boosted the trend of new seed varieties and fertilisers in local market. This is evident from the opening of new input stores by individuals and also by private companies. Many farmers said they had bought new varieties of crops, fruits and vegetables from newly opened local shops.

The cost of doing business has gone up considerably in the post-conflict scenario, mainly because most people (except transporters who have their vehicles) have had to start from scratch. Almost all actors are able to understand the impact of imported vegetables from India on local agriculture. However, some actors fail to understand that the import of Indian vegetables has been a regular feature for many years. It is the vacuum in supply from the local area owing to conflict that led Indian imports to capture the market share, and now they have to compete with these imports. The WFP (2010) report on negative coping strategies of traders, such as increased prices and stocking of goods, etc., may be valid for other markets (groceries, etc.) but in the case of fruit and vegetable markets in our study area we could not find such evidence.

A notable strategy in post-conflict rehabilitation is actors' use of social contacts and linkages in their rehabilitation efforts. IDPs established contacts in down-country markets while they were in camps between April and September 2009. They use these contacts now to market their produce. Similarly, some labourers who stayed in IDP camps during the conflict started work in nearby cities and are earning more wages. During wartime, social linkages became more important; some influential farmers and transporters used their contacts at security check posts to get favours from policy and army personnel.

Many skilled agricultural labourers have started working in construction and receive better wages than they did for work in the fields or with traders. Construction flourished post-conflict because the government and aid agencies started to reconstruct damaged infrastructure and there was demand for labourers.

This paper has also revealed that small and medium farmers have multiple livelihood strategies and sources to supplement their (often limited) on-farm income. Meanwhile, large farmers are largely dependent on their on-farm income and have a major stake in agricultural markets functioning smoothly. There is an absence of cooperative farming in Swat, and small and medium farmers have to rely on local dealers and commission agents for the supply of agricultural inputs. However, large farmers think local dealers charge more for inputs.

The role of middlemen (commission agents) is important in the context of recovering from conflict because – owing to the very limited role of formal credit-providing institutions – they provide loans to farmers and in return the farmers sell their crops through them (usually at less than the normal market rate). In many cases, the commission agents purchase the standing crop from the farmer and thus provide advance money to the farmers and buy their crops on their own terms. Microcredit facilities are rare in the study area and particularly small farmers have no choice but to rely on the credit the commission agents provide. This implies that smallholders should be provided easy access to microcredit to safeguard them from exploitation by commission agents.

Transporters assisted communities to go to ‘safer’ places during the militancy and the army operation, so their livelihoods remained intact to some extent. Some have now moved on to commercial cargo business.

We did not find any evidence of women working in fruit and vegetable markets in the study area (the major reason may be the taboos and restrictions on women’s mobility in KP). Some women are involved in household kitchen gardening on a very limited scale but it is not perceived as commercial activity by the locals.

The local population also reported an increasing trend of going abroad since the conflict. Swat has traditionally been a remittance-based economy, and remittances from overseas labour and from the big cities of Pakistan is the main source of income for the majority of households. Our data also point to the resilience of remittance-dependent households during the conflict. Some households used remittance money to invest in small business (especially transport), and social linkages and networks of overseas migrants also helped during the conflict in the form of obtaining favours at security checkpoints.

To sum up, there is some good news here. The conflict was enormously disruptive, with large numbers of people displaced and essentially one agricultural harvest being lost, causing substantial difficulties for farmers and traders. But the recovery has been fairly rapid, with farmers able to re-establish production and traders, commission agents and transporters able to re-establish marketing networks. The role of external assistance (aid agencies or government) seems to have been helpful, in the sense that livelihood interventions in the form of the provision of seeds, fertilisers and trainings have brought direct and indirect impacts. A few input distributions have been directly helpful to those who received them but there have also been many indirect benefits (discussed above). One main impetus appears to have been improved security and the entrepreneurial spirit of the local population in terms of returning and re-establishing their livelihoods.

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Funded by UK aid from the UK government, Irish Aid and the EC.

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