

Agricultural Malfunctioning: A Threat to the Livelihood of Farmers in Saigolabad, Chakwal- Pakistan

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Abstract:

Agriculture sector of Pakistan has had a lion's share to the economic development of the country and well-thought-out as back bone to the economy of Pakistan. As far as Pakistan is concerned, 70 percent people are directly or indirectly connected with the farming. The main objective of the research was to study the problems faced by the agriculturalists living in Chakwal. The study was conducted in Saigolabad, Chakwal on the malfunctioning of agricultural production. The qualitative research design was employed and an exploratory research was conducted through, non-probability, snowball sampling technique applied on the sample size 100. The data was collected through rapport building, key informant method, participant observation, socio-economic census survey forms, structured interviews and in-depth interviews. The farmers of Saigolabad, Chakwal faced numerous problems in the farming. The problems faced by the

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agriculturalist living in the area led them to low production of agriculture and even then farmers' use conventional methods of farming along the inaccessibility to basic agricultural facilities where as the liability is missing from the government side. Most of farmers had subsistence level of agricultural production with meager resources which did not allow them to increase their productivity. Without government intervention it seemed impossible to counter the problems of farmers.

Key words: Technology, Occupation, Fertilizer and Irrigation

Introduction

The study was conducted in Saigolabad, Chakwal and the *main objective of the research was to study the problems faced by the agriculturalists living in Chakwal*. The Agriculture is a main source of livelihood across the world and most of the countries of developing world are agrarian which have, agricultural products, main sources of earning foreign exchange in case of exports. Anderson and Martin (2009) evaluated that majority of population in Asia is poor and almost 81 percent of the poor are engaged directly or indirectly in agriculture. The situation of Pakistan is not different to its counterparts in the world and agriculture contributes 21% to the national income and providing a main source of livelihood (GOP, 2009). Alam and Naqvi (2003) appraised that food production needs to grow by at least the same rate as the population. Agricultural growth rates of at least 5 to 6 percent are required to reduce the country's poverty at a substantial level. Because land and water resources are becoming increasingly scarce in Pakistan.

Agricultural Mal-functioning Worldwide

FAO (2003) affirmed that in the world most of the developing countries are based on agriculture. However, there is nexus of

poverty and food security which depend upon the high degree of production. In those developing countries one or a few agricultural commodities are left for export. Anderson and Martin (2009) stated that the three quarters of the world's poorest household depend on farming for their livelihoods, and most of them live in Asia where more than 80 percent of the poor are engaged directly or indirectly in agriculture. During the 1960s and 1970s, many developing countries had in place pro-urban and anti-agriculture policies. Panda (2006) stated that the human society is dependent upon agriculture for its food, clothing and shelter. Agriculture plays an important role as the supplier of raw materials for industries.

Mary (2003) argued that many Sub-Saharan African (SSA) countries are in the acceleration phase, and its agriculture, is increasingly oriented to the growing home market. Farmers have invested and adopted new technologies but the transition to an urbanized economy has been stuck by poor policies. Atanu *et al.*, (2012) concluded that in order to enhance food production, India has adopted modern agriculture practices and achieved noteworthy success. This achievement was essentially the result of a paradigm shift in agriculture that included high inputs of agrochemicals, water, and widespread practice of monoculture. Olagunju (2007) said that credit is the back bone for any business which is necessary for capital formation, diversified agricultural production and efficiency in agricultural resource-use.

Evenson (2002) argued that technical efficiency with which new technology is adopted and used more rationally is affected by the flow of information, better infrastructure, availability of funds and quality inputs, and farmers' managerial capabilities. Ghazala and Mahmood (2009) stated that the Agriculture in Pakistan depends upon water from rainfall and also melting of ice and snow and glacier ice. High temperature may have optimistic impact on the production of crop. Pakistan also faces the problems like Glacier melting,

flash flood, drought, rising heat index and insufficient water for crops. This achievement was essentially the result of a paradigm shift in agriculture that included high inputs of agrochemicals, water, and widespread practice of monoculture, as well as bureaucratic changes that promoted these changes (Atanu et al.2012).

Agriculture Problems in Pakistan

GOP (2008) described that agriculture contributes to the livelihood 44.7 percent of the labor force, 21.8 percent to GDP and about 60 percent to the foreign exchange earnings. Agriculture is not the only source of food and fiber of the 170 million people of Pakistan but also the major supplier of the raw material and labor force to manufacturing and services sector (GOP, 2008). He also enlisted a number of problems generally encountered by farmers i.e., lack of proper technology, improved agronomic practices, crop management techniques, timely availability of water and modern inputs, marketing and supportive infrastructure, raising production cost, unstable year to year prices and supply of credit (Alam and Naqvi, 2003).

Irfan (2000) argued that due to small holdings, low crop yields and small income there is very little saving among the majority of the farmers of Pakistan. Ahmad (2007) stated that the majority of our farm community consists of subsistence farmer who are not in a position to use high quality seeds, sufficient fertilizers and improved farm implements. Chaudhry (2013) argues that the guarantee of modernization and development has not yet been satisfied; rather the "nearby individuals" are jumbled into the "advancement conundrum." Alam and Naqvi(2003) pointed out that water shortages, combination with salt affected soils, soil erosion, low yielding varieties, Electricity and the limited use of modern farming technologies are the major issues of this sector.

Chaudhry and Chaudhry (2011) stated that large emphasis was on indigenous practices' lack of compatibility with current day challenges. The advent of mechanical tools in farming practices and commercialization of agriculture only allowed wealthy farmers to adopt them and get benefit from use of modern methods. Kazmi et al., (2014) argued that traditional farmers are willing to use modern methods but they have apprehensions towards the techniques with changing life style.

Hanif (2004) argued that the development loans were supplied for purchase of agriculture equipment to help out small farmers by extending loans to them on easy terms, government made agricultural credit policies. Hamid and Nisar (2001) described that the imbalanced uses of fertilizer nutrients, lack of its integration with organic sources along with poor management are the main factors affecting fertilizer use efficiency. PCST (2003) almost 30 percent of the irrigation water at the farm gate is derived from groundwater, whose quality is far inferior to canal water. Out of over 562,000 private and 16,000 public tube wells in Pakistan, 70 percent are pumping brackish water.

FAO (2006) suggests that Pakistan is important in Asia in terms of land area and population. Pakistan has the largest network of irrigation canals in the world but Lack of water is one of the major constraints to agricultural growth in Pakistan. Pakistan is a country with diversified climate and soil, hardworking men power, huge irrigation and agricultural research system that give competitiveness and edge to our farmer (Khan, 2001). The major cash crop of the study locale was Wheat which is the main staple food in Pakistan as documented by FAO (2006). Pakistan produced more wheat than all of Africa and nearly as much as all of South America.

Materials and Methods

The research was focused on the problems faced by the agriculturalists of Saigolabad, Chakwal wherein the respondents were identified and sampled by the key informants' methods through a census survey form and eventually a large number of households were brought into contact and spelled out. Different research techniques were employed and target population was encountered and hence enumerated. Qualitative research design was employed in this study. One hundred households were enumerated through Non-probability; snow ball sampling technique. The data was collected through key informant technique, observation, interview guide, socio economic census survey form and FGDs. In-depth interviews and focused group discussions were carried out and the responses were taken along with direct observation to get insight into the problems of agriculturists. The narratives taken from respondents were discussed categorically.

Results and Discussions

Table 1: Age Wise Distribution of Respondents

Age group	Frequency	Percentage
25-35	9	9.0
36-46	18	18.0
47-57	28	28.0
58 and above	45	45.0
Total	100	100.0

Table 1 shows the age group of the respondents. Total respondents were hundred among them 9% lie between 25-35 years. 18% respondents lie in between 36-46. 28% respondents recline in between 47-57 and rest of the 45% respondents occurred 58 and above age. The results show that mostly old people were attached with agriculture as compared to young

people. Young generation is going to the other sector of economy like government jobs, private jobs, business and foreign movements, since they got better education and wanted to serve in urban sector.

Table 2: Literacy Rate of the Respondents

Literacy	Frequency	Percentage
Illiterate	52	52.0
Primary	9	9.0
Middle	22	22.0
Matric	14	14.0
F.A	2	2.0
B.A	1	1.0
Total	100	100.0

Table 2 explains the level of education of the respondents. The total respondents were 100 among 52% were illiterate, 9% were primary, 22% were middle, 14% were metric, 2% were F.A and rest of one percent was B.A. The table results show that mostly illiterate people were attached with agriculture and educated people were going to other sectors. Illiterate agriculturalists faced difficulties to adopt modern methods because they could not read and write and also were not well aware of the use of technology.

Table 3: Do You Have Cultivable Land

Cultivated Area	Frequency	Percentage
2acre-7acre	59	59.0
8acre-13acre	27	27.0
14acre and above	14	14.0
Total	100	100.0

The table 3 explains the cultivated area of the respondents. 59 respondents had 2acre-7acre cultivated area. 27% respondents had 8acre-13acre cultivated area whereas others 14%

respondents had 14acre and above area for cultivation. The table clearly reveals that most of the respondents had between 2acre-7acre cultivated area, but less cultivated area did not cause of low production. One may had large cultivated area but he could not cultivate that because of poor financial position. As income table showed that 85% respondents were earning between 2000-7000 that clearly revealed that most of the farmers were poor who had not enough money to purchase expensive seeds, fertilizers, medicine and other machinery related to agriculture.

The situational analysis indicates that farmers were suppressed and coerced to depend upon the conventional methods of farming which was alarming situation and they have had been facing it since the existence of Pakistan. Farmers initially lack awareness and knowledge to be disseminated by the concerned authorities as Evenson (2002) concluded that flow of information is necessary for managerial skills of farmers, so that farmers could access the basic facilities and get benefitted evenly to generate high degree of production which could help them in raising their living standard as well as contribution to the national economy. During the 1960s and 1970s, many developing countries had in place pro-urban and anti-agriculture policies (Martin, 2009). The problems faced by farmers of the locale are discussed in the following section:

Agricultural Problems in Saigolabad, Chakwal

Farmers faced discrimination widely in provision of loans either by banks or by the government or by agro-based organizations whereas small and middle class farmers were unable to get loans because of the hegemony of dominant farmer class. Only influential and large farmers along with vested interest groups were benefitted by government loan schemes. The dilemma behind it, conceived by them, was more important to gauge that small farmers had neither political background nor strong

contacts with people culminating such facilities and eventually deprived and coerced to depend upon the traditional modes of agriculture while the dominating class of farmers were enjoying these facilities and sabotaging the rights of weaker section of farmers. Easiest and quickest way to boost the agricultural production is provision of cheap credit to farmers at the earliest (Olagunju, 2007; Hanif, 2004; Khan, 2011; Kazmi *et al.*, 2014; Irfan, 2000). Farmers enlightened the unavailability of seed provision and totally depend upon their local methods where they sow their own seeds which they separate at the time of harvesting and cultivate it for new year crops. The small (poor) farmers had to use, either lower quality seeds or their own seeds separated from their crops at the time of harvesting, due to inaccessibility of high yielding variety (HYV) seeds. On the other hand, if seeds were available but they could not purchase due to low income and high rates of seeds were not subsidized evenly to all the farmers. Acute attention is accumulated around the provision of superior quality of seeds and subsidized seeds are a building block in better agricultural production (Panda, 2006; Atanu, et al. 2012; Evenson, 2002).

Beside low yielding varieties of seeds farmers stated that there were many other factors that caused low production such as fertilizers, irrigation system, and credit etc. The farmers has had been using *Gober* in place of fertilizers and water their fields through ground water of poor quality along with inferior seeds which are more customary practices since long and could not raise their production efficiently. Fertilizers play important role to increase the production of agriculture but due to the dilemma of low income all farmers could not use fertilizers or use it in small quantity. Most of the small (poor) farmers depended on *Gober* and used in their lands, but because of insufficient livestock all fields could not be fertilized and the method of collecting it is also a difficult job while all the farmers have different size of land to cultivate and the livestock cannot incapacitate the total land on *Gober*. *Gober* does not

provide the required quantity to fields; resultantly the agricultural production is reduced. *Gober* also effects human health and persons who deal it are often vulnerable to diseases. Fertilizers need dire induction in making the production efficient (Atanu, et al.2012; Khan, 2011; Alam & Naqvi, 2003; Hamid & Nisar, 2001). Small and middle class farmers had no access to the modern medicines available in the market because of low income. High prices of medicines coerced small and middle class farmers to rely on the traditional methods of curing plant diseases and they could not use medicines in their fields. There was one herb called *Poli* which could be seen in wheat crop. It had been affecting the wheat crop from last so many years but no medicine or spray was available for that in market. Medicines are the main source to control the plant diseases and ultimately the better agricultural production and farmers access medicines and sprays through cheap loans (Olagunju, 2007; Evenson, 2002; Khan, 2001; Chaudhry & Chaudhry 2011; Irfan, 2002; Ahmed, 2007).

According to farmers most of the things depended on electricity i.e. irrigation, fertilizers and tube wells. These supplements could not run without electricity. The traditional methods of farming were followed except the tube wells which were used to water plants and were highly effected by the electricity short fall and If, there were load shedding then farmers could not provide water to their crops, so it would have ultimately affect the agricultural production. However, there had been electricity problem in the country from past many years that not only affected the agriculture but also other means of production. A small area of rural population of our country was facilitated with electricity because of low electricity production and high shortfall (Hamid & Nisar, 2001; Chaudhry, 2013; Alam & Naqvi, 2003; Kahn, 2001). Labor were available abundantly but mostly people liked to work with their own hands because small and poor farmers could not afford expensive labor as their crop production is at small scale to

raise their economy or they have barter system with other farmers to facilitate each other whereas the marginal productivity remains high in rural areas (Panda, 2006; Anderson & Martin, 2009). Most of the farmers did not have enough knowledge to fight with plant diseases because government and ministry of agriculture did not launch such awareness programs which could increase agricultural knowledge and that could be helpful to adopt modern techniques. The farmers were illiterate and ill trained so, their efficiencies were poor. They had only traditional knowledge and depended upon the customary practices for long. Basically farmers were poor dependent on the traditional methods which could not uplift their social and economic status and had low level of income (Evenson, 2002; Khan, 2001). The old methods of agriculture, no doubt affected the production because they consumed too much time and labor but resulted low production. Presently, modern modes of production had quickly taken place the older one and agricultural activities became easier and faster. Many years back people used wooden plough but presently this tradition had almost finished in urban areas whereas still prevalent in rural areas and tractor had replaced plough which worked faster and saved time. No doubt, mechanization of agriculture has had been increasing in Pakistan, but in most of the areas, the old implements were still being used for agricultural production especially in rural landlocked area. Old and orthodox techniques of production could not increase the production in the present scenario (Mary, 2003; Atanu, et al. 2012; Evenson, 2002; Khan, 2001; Alam & Naqvi, 2003).

Agricultural Landholding Disparities

The continual of discrimination has had grim impact upon the social status, economy, and health of small and middle scale farmers. It restricts the productivity and hence the momentous

impact upon the health and education of children which are deprived of basic facilities and forced to labor in the early age (FAO, 2003; Anderson & Martin, 2009). Generally, due to limited financial transaction ability farmers were not able to purchase expensive seeds from the markets for sowing purpose (Olagunju, 2007). This is one of main reason for their low productivity and it confined their abilities to a circle where the small farmers were kept away from the minimum available facilities of seed. Agricultural production was badly affected because of inferior quality of seeds and there was no subsidy provided in making the seeds accessible to all the farmers evenly. The scarcity of seeds has had always been one of the reasons for inclination of agriculture because low yielding variety seeds reduced the production of agriculture to the great extent (Ahmad, 2007). The use of *Gober as* fertilizer does not provide the total need of fertilizers in the fields because it depends merely upon the livelihood which is another interest of people and it is clear that a land owner might have less interest in livelihood and consequently it effected the production and if there would be no proper use of fertilizers ultimately it would affect the agricultural production and low yield as well. In this case agricultural production could be decreased up to 50% which is very bad sign for the farmers who totally depend on agriculture because there were no others means of income. Without the use of fertilizers the crop would be mere a lush green field and the land could turn into barren. A limited number of farmers took benefit and used fertilizers which increased their production (Atanu, et al. 2012; Khan, 2011; Alam & Naqvi, 2003).

There were no subsidized medicine stores available for the farmers evenly so that they could get benefitted. There is an extreme ignorance of such fertile area by the Agro-based organizations and GO's. Government did not pay attention to provide subsidized medicines to farmers that ultimately caused low production (Olagunju, 2007; Evenson, 2002; Khan, 2001).

Although farmers occupied arid area but mostly faced problems of irrigation (PCST, 2003). The provision of electricity was insufficient so that the crops were not properly irrigated and eventually effected the growth of agriculture (Hamid & Nisar, 2001).

Farmers did not have sufficient money to use labors in their fields, so poor farmers worked from dawn to dusk in their fields and earned livelihood. They believed that if they worked by themselves that would have been much better because labor charged too much and they also did not work honestly which reduced their income owing to expensive labors (Panda, 2006). All farmers believed that lack of agricultural knowledge had created difficulties to adopt the modern method of agriculture because a farmer could only adopt modern methods when they had agricultural knowledge and proper vocational training. Farmers had been facing problems regarding modern techniques (Mary, 2003; Atanu, et al.,).

The lack of credit profoundly affected the agricultural production because agricultural products totally depend on income of farmers and it required an amount to buy the agricultural products necessary to raise the agricultural production like seeds, fertilizers, medicines and others machineries. Most of the poor farmers could not utilize their land because they did not have sufficient capital to have necessary agricultural products to plough in the field and even they could not purchase agricultural goods. Credit that could facilitate agriculture was not available easily (Hanif, 2004). The farmers had ascribed status and they had either low education level or totally illiterate. They did not have any know how to use modern technology and get benefitted by it. However, the government and other stakeholders did not intent to improve their condition to get benefitted from the new modes of farming (Khan, 2001; Kazmi, *et al.*).

Conclusion

The farmers in Saigolabad *Chakwal* faced numerous problems in development of agricultural sector. Most of them have subsistence level of agricultural production with traditional methods of farming and have meager resources which do not allow them to increase their productivity. The uneven distribution of land and unavailability of basic facilities coerce them to rely on conventional practices. The farmers had no other source of income other than agriculture which is based on the ascribed status whereas literacy level is also low and awareness is needed among the farmers along with the initiatives from the government and nongovernmental organization are immediately required for the adequate provision of all the necessary facilities and spreading knowledge so that farming could get benefitted.

Recommendations

- 1) Awareness programs need to be launched that will be useful for farmers in familiarizing with agricultural knowledge, tools and machinery.
- 2) Government needs to provide subsidized fertilizers; seed, medicines, machinery and diesel to all large and small farmers along with effective system of irrigation as Indian and china government facilitated their farmers.
- 3) All the stakeholders should make efforts to stabilize the agriculture growth rate.
- 4) Government must also provide loan schemes without interest to small scale farmers.
- 5) Government must provide subsidized quality agricultural goods and tools which could change their life by establishing subsidized stores and ensure that small scale farmers get access to them.

- 6) Rural infrastructure like, roads, storages, transports etc. could only be improved and sustained with Governmental intervention.
- 7) The living standard of farmers could be improved by eradication of dominant feudalism.

Only when the farmers are the given freedom of speech to express and share their ideas they can contribute effectively to the economy of the nation. The farmers should have been given decision making power as well; all these revolutionary steps could help in building the living standard of the farmers. Plans and policies when plotted and implemented under the supervision of a group of experts could be used to educate the poor farmers.

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