

Impact of Land Resources on Food Security in Pakistan

Author's Details

⁽¹⁾Ali Hassan Halepoto, Assistant Professor, Department of Commerce

⁽²⁾Professor Dr. Ghulam Murtaza Maitlo, Dean Faculty of Management Sciences

⁽¹⁾⁽²⁾Shah Abdul Latif University Khairpur.

Abstract

The main objective of this research is to analyze the impact of land resources for maintaining food security in the country. Currently Pakistan is facing challenge of food security. According to Census Report, 1951, the population of the country was 33.6 million. In the initial stage the newly independent country had refugees, industrial and administrative problems, which were given high priority than agriculture development. So this sector remained stagnant and food grains output declined from 6 million tons to 5 million tons during 1950-51 to 1954-55. Population increased by 1.7 percent and growth rate of food grains stood 0.3 percent. It compelled the import of food grains of wheat 3 million tons. This situation continued up to 1965. In 1966 new technology was introduced to enhance the output. New input policy was prepared to facilitate the growers. According to agricultural statistics of Pakistan, 2012-13, 80 percent small growers are engaged in this sector. They could not be benefited from this policy and did not plough entire land. The production of food increased from million 6.50 tons to million 34.48 tons, but could not meet the requirements of the country. In Pakistan more than 8 million hectares land is lying uncultivated, if 50 percent of uncultivable land is brought under cultivation through macro policy, which can make self-sufficiency in food and, surplus food grains will fetch foreign exchange by exporting to other countries.

Key Words: Land Resources. Food Security

Introduction

The land resources play a vital role in Pakistan agriculture, and the economy of the country is dependent on the agriculture. It contributes 21 percent to GDP and employing 44 percent of the labor force (Economic Survey, 2011-12). More than two third of Pakistan population lives in rural areas and their livelihood continues to resolve around agriculture and allied activities. As mentioned above that agriculture sector is a part of land resources. It provides food grain about 180 million people of the country. Pakistan is the sixth largest country of the population in the world (Economic Survey, 2011-2012).

As regards the land resources in Pakistan, the total cultivated area of land has increased about 50% during last 65 years while population rose more than 5 times. The urban areas have been expanded over seven fold, settling pressure of population on cultivated land (Zaidi, S. Akbar, 2015).

Eliminating poverty, hunger and food insecurity are essential goals of the state. Food security and economic growth mutually interact and reinforce each other during the development process. A country which cannot produce the required food quantity and has no resources to buy food from the international market to meet its needs is not food sovereign state, food security thus becomes pre requisite of national security which is generally ignored. The extraordinary rise in food prices in later part of the first decade of 21st century raised an alarm bell about food security particularly for the developing countries like Pakistan where majority of population is poor. In order to achieve food-secure and pro-poor agricultural growth, Pakistan needs to adopt a comprehensive approach towards increasing productivity of all food crops and livestock sector.

Managing food security in Pakistan requires an understanding about the dimensions of food insecurity, what are the future challenges, and how agricultural policies affect food supply and incomes, the poor vulnerable in rural and urban areas, and what is required to be done. The main focus should be given to land resources of the country for achieving food and nutritional security for a growing population in Pakistan.

Food Problem in Historical Perspectives

In Historical perspective problem of food is as old as the man himself. When Malthus in 1798 proposed that population if unchecked increases geometrically while food increases for subsistence increases only arithmetically, there were still vast areas in the world that could be developed relatively easily (Arnon, Isaac, 1987). This is no longer the case and the actual cultivated area of world is far from prevailing, the calculated minimum adequate diet for the

present world population. Agricultural development is possible basically in two different ways which are, however, not mutually exclusive: bringing more land under cultivation and increasing productivity per unit of land.

The first alternative was possible without changing traditional farming methods, whereas the second was entirely dependent on applying improved farming techniques. In this, there lies the essential difference between the significance of land for the traditional grower and for the modern grower. The modern grower could grow to a large extent, increase production on a given area by using appropriate inputs, such as fertilizers, irrigation, drainage, etc, so that, in his case, land can be partly replaced by know-how and capital. For the traditional grower, land is the most important means of production and his only guarantee of survival. As long as the population pressure on the land is not excessive, even traditional agriculture could produce sufficiency of food to maintain an acceptable level of supply. This explains why traditional agriculture has been able to provide subsistence to a farming population for a surprisingly long period of its history. But as growth of population is over, takes the possibility of expanding land-use, the ability of traditional agriculture to produce even at a subsistence level decreased and a state of continuous deterioration. This actually results in loss of productivity of huge land-areas, in irreversible processes. As an example, the traditional farm of land-use in the tropical humid regions-had been surprisingly stable as long as a critical population density was not exceeded. When once this occurred however, population pressure resulted in a shortening of period and a lengthening of the cultivation period. The result was a rapid decline in soil fertility, inability of the natural plant cover to reestablish itself and finally remains destructed of the soil cover by erosion. In this way vast areas in Central Africa had been lost. Another example is afforded by overgrazing-frequently a result of population pressure-which has devastated so many of the natural pastures in the world.

Food Security

The term food security refers and accesses to adequate amount of food for meeting dietary energy needs that implied for many as self-sufficiency at the national level-producing required food domestically (Pinstrup-Andersen, 2009). A country is self-sufficient in food when it is able to manage supply and demand balance by producing domestically irrespective of whatever the equilibrium price is which may not be affordable to majority of the population in developing economy. The focus of national and global food security is generally on the supply side of the food equation whether sufficient food is available (Pinstrup-Andersen, 2009).

Review of Literature

The availability of food, however, cannot assure the access of the people to food. To ensure food security at the household or individual level, the access part needs to be addressed. This leads the World Food Summit in 1996 to redefine the term as food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for a healthy and active life. This definition describes five fundamental aspects: availability, access, stability, nutritional status and preferences of food. All of these components are influenced by physical, economic, political and other conditions within community's and even within household, and are often destabilized by shocks such as natural calamities (Ahmed, Munir and M. Iqbal, 2006).

The availability and access are two major dimensions of food security. The availability states to quantities of quality, nutritious food available to all people however, even with enough availability of feed at the country level, food availability is a serious concern in areas having, non-availability of arable lands, and existence of prolonged droughts this is true for many areas in Pakistan. The distribution of food stuff in these areas is also negligible.

The access describes to the capacity to produce, buy or acquire appropriate nutritious food by the households and the individuals (Timmer, 2000). It is observed that the availability of sufficient food at the country or local level does not guarantee that all people are food secure, since low incomes, lack of roads and infrastructure. The main cause however is poverty that people lack sufficient purchasing power to acquire required quantities of quality food. Therefore, both availability and access parts of food security are inseparably linked to each other (Pinstrup-Andersen, 2009).

The access entails both physical access and economic access. The former refers to a place where food is available and the latter entitlement to food. The former requires efficient market infrastructure to have access of people at low cost. The entitlement can ensue through own production or having food buying capacity from the market or having access right to other sources of getting desired food. Therefore, there is a direct relationship between poverty and food insecurity since the very poor cannot take precautionary measures against food insecurity and thus they are the first to be vulnerable to it (Cullet, 2003).

Stability explains to consistent supply of nutritious food at the national level as well as stability in access to food at the household and individuals levels. It is, therefore, directly affected by the performance of the agriculture sector. Only a small proportion of consumers in developing countries can afford to store food for the whole year. Therefore, besides production, stability requires better management of domestic production, food markets integration, and rational and effective use of buffer stocks and trade (FAO, 2002).

Pakistan has faced severe floods during 1975, 1992 and 2010 and droughts in 1970/71/72/, 1974/75 1998, 2000, and 2001. Fluctuations in food grains production have therefore been very common in Pakistan. At times, the government has had to import significant quantities of food items to meet the shortages. In order to meet the shortages in deficit urban areas and save consumers from high food prices, the government has been actively pursuing the policies of support prices, storage and distribution though at a very high cost. From the above discussion it is observed that food insecurity in Pakistan still continues due to poverty, water and environment disasters and conflicts, increasing population and expanding sites spread out productive land, reducing the agricultural production including food production. This indicates food security is challenging issue in future for Pakistan.

An Analysis of Agricultural Development in Pakistan During 1947/48 to 1964/65

Pakistan inherited an agricultural economy at the time of the partition in 1947 (Zaidi, S. Akbar, 2015). The development of agriculture was ignored in the initial years, in spite of the fact that the agricultural sector was the largest single contributor to the GDP. It employed 80% of the population directly or indirectly, accounted for 73% of the foreign exchange earnings, provided raw material for cotton, sugar, vegetable and industries, and served as a market for industrial products (Nasir, M. Saeed, 2004). The emphasis was, however, placed on the development of industrial sector.

The main challenge of development efforts in Pakistan laid in the rural sector which suffered from widespread poverty and a number of attendant problems encompassing social, economic and technological factors. The social problems arise mainly from a pattern of skewed distribution of land ownership which made the rural society both rigid and iniquitous. The technological problems were the result of traditional cultivation methods perpetuated by pressures of population on land, the small size of cultivation units, and tenancy farming which blocked incentives for technological progress. The economic problems stemmed primarily from the inability of the agricultural sector to provide adequate opportunities for full employment and its resulting failure to yield incomes adequate for providing a satisfactory living standard to the rural population at large. Also, there was not enough saving capacity to enable capital formation for raising the productivity of both land and labor to optimize their potentials.

Crop production in Pakistan, influenced by irregular monsoon rains varies considerably from year to year. Feelings of optimism and pessimism fluctuated with weather. During 1953-55 two good crop years, caused by favorable weather. Since the two previous years, output was below trend. So, it was observed that the agricultural sector could not meet the requirements of the population growth rate during this period. Keeping in view this problem, the highest priority was given to agricultural sector during the first five-year plan (1955-60) (Viqar and Amjad, 1984).

The agricultural sector grew at an annual rate 1.8 percent during the first five year plan (1955-60) against the sector target fixed an increase of 9 percent in the production of food grain. This created the gap between consumption and production of food in the country. Another feature of the agricultural sector during the first five year plan (1955-60) period was the growing shortage of food grains and increasing dependence of the country on food imports. Except for two years, during the early fifties wheat production did not show very significant year to year fluctuations. These fluctuations made storage and price sterilization difficulty problems. Taking the reproduction statistics and indices together, it appears that over the entire 13 years period since partition, agricultural production barely kept ahead of population growth and in some cases (e.g. wheat), it decreased far behind the requirement per person at a constant level (Christoph, Beringer, 1962).

Pakistan became a net importer of food grains, instead of giving top priority to food self-sufficiency, Pakistan resorted to asking for massive food aid. The rapid growth of import and their impacts on Pakistan's economy in the early 1950s shows the weakness of development programs and planning in the country (Ibid, 1962).

The first plan claimed to have given priority to agriculture. This is surprising at first sight because the share of the total investment going to agriculture as well as the contribution to additional output that it was expected to make was much less than industry. It is clear, therefore, that the plan gave priority to agriculture in special sense of the word. It was only in the perspective of the past level of investment in the agriculture that the "priority" given to agriculture by

the planners becomes understandable. In this way, we see that by end of the first five-year plan the stagnant character of the agricultural sector was emerging as the most important bottleneck in the way of paid economic growth industrialization efforts and export promotion schemes.

After analyzing situation of agricultural from 1947-48 to 1959/60, it was observed that this sector remained in stagnant position and could not meet the food requirements of the people. This can be visualized in Table 1.

Table 1
Average Annual Growth Rate of Food grains in Relation to Population Growth Rate and Import of Wheat

Year	Growth rate of food grains in percent	Growth rate of population in percent	Import of wheat
PRE PLAN PERIOD			
1947-48 to 1954-55	0.3%	1.7%	3 Million Tons
FIRST PLAN PERIOD			
1955-56 to 1959-60	2.6%	2.8%	4 Million Tons

Source: Government of Pakistan (1990), Economic Survey 1989-90, Islamabad, Statistical Section, pp. 3-4 and 45-46. It is evident from the Table 1 that during the period 1947-48 to 1959/60, the growth rate of food grains was low as compared to population growth rate and wheat was imported. This situation continued during this period and 7 million tons wheat were imported from abroad with the result that the huge amount of foreign exchange was spent in million dollars on this items.

The second five year plan 1960/1-1964/65, therefore, accorded very high priority to agriculture through necessary public sector intervention and extensive tapping of private sector initiatives. During this period, the government (i) abandoned compulsory procurement; (ii) attempted to ensure adequate supplies of fertilizer; (iii) developed public sector groundwater pumpage capacity; (iv) encouraged the development of private tube wells; (v) created two provincial Agricultural Development Corporations for the procurement and distribution of farm produce and inputs, respectively; (vi) strengthened the Agricultural Development Bank; (vii) introduced support prices for sugar-cane and rice and increased the support price for wheat; (viii) introduced subsidization to promote the use of fertilizer and pesticides.

As a result of these actions, as well as good weather, food grains output increased to 7 million tons by 1964-65. During this period, groundwater supply increased two and a half fold and fertilizer off-take by a factor of four. The structure of water supply-surface-cum-groundwater-also changed significantly which strongly supported the demand for fertilizer and contributed to increased grain yields.

Table 2
Cultivated Area and Food Production
From 1960/61 – 1964/65

Year	Cultivated Area in Million Hectares	Index Increase or Decrease	Production of Food grains in Million Tons	Index Increase or Decrease
1960/61	7.71	100	5.93	100
1961/62	8.14	+05.58	6.48	+09.27
1962/63	8.20	+0.74	6.54	+01.01
1963/64	8.19	00	6.59	+0.76
1964/65	8.84	407.74	7.33	+11.23
Total	41.08	+14.06	32.87	+22.22
Average	08.22	+02.81	06.57	+4.44

Source: Government of Pakistan, Pakistan Basic Facts 1980-81, Islamabad, PP. 35-38

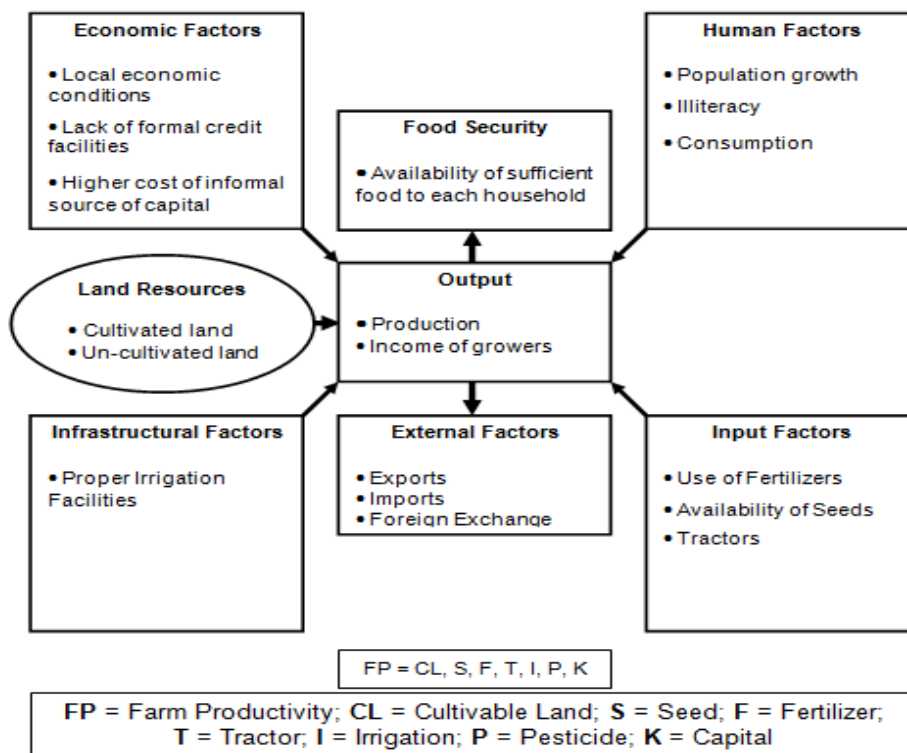
The cultivated area and food grains production is described in Table 2. It is evident that the cultivated area under food grains increased from million 7.71 hectares to million 8.84 hectares and average cultivated area stood million 08.22 hectares. The output of food grains increased million 5.93 tons to million 07.33 tons and average comprised million 06.57 tons during the second five year plan 1960/61 – 1964/65. Keeping in view of the results of above discussion, the food production could not meet the needs of the population and government, continued the import of wheat. Therefore, it was essential to introduce new technology in agricultural sector to enhance the output of food grains for discouraging import.

New Technology and Input Policy for Agricultural Development

It is pointed out that agriculture was allowed to stagnate up to 1965 because the ruling elite believed at that time that it was essential to industrialize at all costs and at great speed. Government policies were heavily biased against agriculture, and it became clear that growth in agriculture was necessary for the survival of the country. However, realizing the pressing problems, like food shortage, foreign exchange scarcity, and raw material constraints on industrial development, which forced the planners towards an agricultural policy. This policy aimed at achieving the self-sufficiency in food, increasing production for domestic use and export, reducing unemployment and under employment and restriction of land. During 1960's changes took place in agriculture sector and new technology i.e. Green Revolution was introduced in Pakistan (Viqar and Rashid, 1984).

In this regard, the following research model was developed in the light of input policy to enhance food grains output.

Research Model



Cultivable Land

It includes only farm area used by the growers for food crops. The cultivated area under food crops was million 8.68 hectares which increased to million 13.05 hectares and production of various food grains enhanced from million 6.50 tons to million 34.48 tons during the period 1965/66 to 2011/12 (Agricultural Statistics of Pakistan, 1981, 2004 and 2012).

Improved Seed

The new technology requires the use of high yielding varieties of seed which offers the advantages of greater productivity through higher response to water and fertilizer and greater crop intensity. The use of improved seed was

extended by the growers to increase the output of their farms. Its application rose from 9(000) tons to 346(000) tons during the period 1971/72 to 2011/12 (Agricultural Statistics of Pakistan, 1981, 2001 and 2011/12)

Fertilizer

The HYV needs chemical fertilizer. It is used by the growers according to size of farm. The application of primary types of fertilizer like urea for nitrogen and DAP for phosphate have shown good result in production of agriculture sector. The growth in fertilizer usage has been increasing by the growers from 112 (000) N. Tons to 3861(000) N Tons during the period from 1966/67 to 2011/12.

Tractor

This variable is included in mechanization. Therefore, tractors are used for ploughing farms and also in transport. Its progress was slow during 1960s and later on continued to increase. Thus, tractors had become a major ingredient in agriculture sector of Pakistan. The use of tractors has been increasing by the growers from 22,241 to 51,796 during the period 1986/87 to 2011/12 (Agricultural Statistics of Pakistan, 1988, 1998 and 2012). The local production does not meet the requirements of growers. Therefore, the import of the same is being made by the government.

Irrigation

Green revolution which was aimed at self-sufficiency in food grains of the country. In this regard, irrigation is the basic component of any combination of agricultural input for bringing more land under cultivation. Keeping in view of the importance of new technology, water resources such as barrages, and dams were constructed to provide irrigation facility to growers during summer and winter season. The progress of water availability is mentioned in Table 3 and Figure 1.

Table 3
Progress of Water Availability (MAF)
1965-66 to 2011-12

YEAR	Water Availability MAF	Index 1965-66=100
1965-66	63.87	100
1969-70	75.50	118
1974-75	88.02	138
1979-80	91.14	143
1984-85	102.81	161
1989-90	117.14	183
1994-95	129.65	203
1999-2000	133.78	210
2004-05	135.68	212
2009-10	133.70	209
2010-11	137.16	215
2011-12	135.86	213

- Source: (i) Government of Pakistan, Economic Survey 1997-98 Islamabad, 1998, Statistical Appendix, P.47
(ii) Government of Pakistan, Agricultural Statistics of Pakistan, Islamabad, 2002, P.141, Ibid, 2011-12, P.1

Figure 1
Progress of Water Availability (MAF)
1965-66 to 2011-12

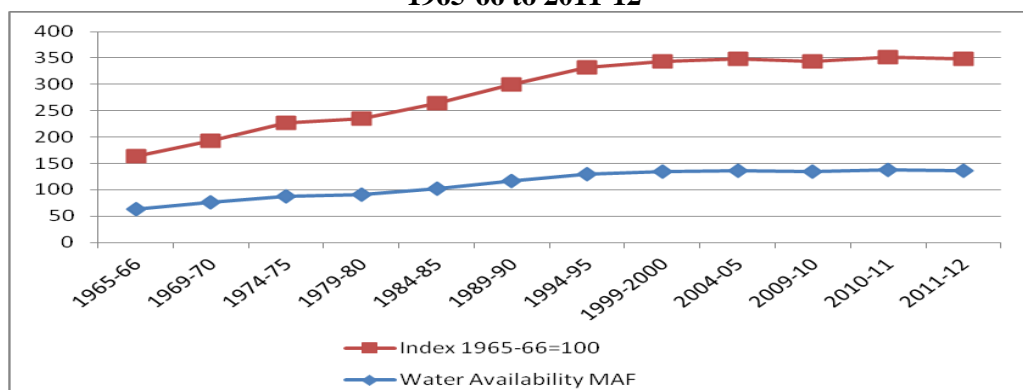


Table 3 and Figure 1 indicate that irrigation facilities were extended more than double to growers during the period 1965/66 to 2011/12 for increasing the output of agricultural sector. But small growers could not get timely irrigation facility due to intervention of influenced landlords and they did not cultivate their entire land of farms. Similarly Table 4 describes the public sector expenditure for the development of agriculture and water.

Table 4

Public Sector Expenditure on Agriculture and Irrigation Development during Various Five-Year Plans in Pakistan (Rs. Billion).

Sector	First Plan 1955-60	Second Plan 1960-65	Third Plan 1965-70	Non Plan Period 1970-78	Fifth Plan Period 1978-83	Sixth Plan Period 1983-88	Seventh plan Period 1988-93	Eighth Plan Period 1993-98	1998/99	1999-2000	Ten Year Perspective 2001-2011
Agriculture	0.46	0.91	1.38	6.49	14.86	17.302	15.6	05.7	0.43	0.54	36.1
Water	0.97	4.60	4.51	12.81	15.77	22.015	28.4	55.6	12.32	11.38	425.5

Source: (i). GOP, Agriculture Statistics of Pakistan 1998-99, Islamabad, 1999, P.267. Ibid, 2000-01. Islamabad, 2002, P.270.
 (ii). Ibid, 2011-12. Islamabad, 2012, P.256.

Pesticides

A large portion of output is wasted due to attack of different types of pests and insects crop production. The result is that crop damage was fairly high, particularly in rice, during 1966-70 and 1976-77, in cotton in 1973-74, and in sugarcane since 1971-72. The problem has become more acute in recent time due to the expansion in the use of modern inputs and the increasing intensity of cropping. Chemical fertilizers make the plant more succulent and vulnerable to pests. Some of the HYV, particularly Maxi-Pak, are delicate and susceptible to pest infestation. Attempts to develop insect and disease resistant varieties are ineffectual because some of the major pests tend to develop new bio types. The crops losses were estimated due to pests and plants about 20 percent (Viqar and Amjad, 1984).

Capital

Modern technology requires more capital in agricultural sector. According to Agricultural Statistics of Pakistan, 2011-12, 80% small growers and 20 percent middle as well as large growers are involved in this sector. The large and middle growers have their own capital or some time they can easily arrange from the owners of cotton and rice factories. Simultaneously they can get loan facility from formal institutes. The small growers have not their own capital and they mostly reply on business sector. They get loan facility from them at high rate of interest or they sell their output of farms in advance at low rate. A very small percent of this group get loan facility from the formal

institutes. The loan facility has been extended to growers from Rs. 132 million to Rs. 293,850 million by the formal institutes during the period 1965-66 to 2011-12 (Agricultural Statistics of Pakistan, 1983, 1995 and 2012). But it is only 6.5 percent overall share of the agriculture in the total loan (Dawn, 6th April 2015). It is pointed out that the small growers were ignored in distribution of loan and due lacking of capital they did not cultivate their entire land. The analysis of model describes that input was increased with the introduction of technology in agricultural sector. It has brought positive impact on cultivable land and food grains production as mentioned in Table 5. It is pointed out from the table that cultivable land increased from million 8.68 hectares to million 13.05 and the output of food grains rose from million 6.50 tons to million 34.48 tons during the period 1965/66 to 2011/12.

Table 5

Development of Cultivated Area and Output of Food Grains in Pakistan from 1965/66 to 2011/12

Year	Cultivated Area (In Million Hectares)	Output of Food Grains (In Million Tons)
1965/66	8.68	6.50
1969/70	9.78	11.05
1979/80	10.25	13.50
1989/90	11.93	19.41
1999/00	12.83	28.39
2004/05	10.94	29.90
2005/06	10.29	30.396
2006/07	10.52	32.337
2007/08	13.02	31.20
2008/09	13.88	35.12
2009/10	13.76	33.97
2010/11	13.09	34.30
2011/12	13.05	34.48

Sources :(i) Government of Pakistan, 1983, Pakistan Basic Facts 1980-81, Islamabad, 19th Edition. (ii) Agricultural Statistics of Pakistan 1996/97. (iii) Economic Survey of Pakistan 2013/14, Islamabad, Statistical Section

Population Growth in Pakistan

The population of Pakistan has been increasing continuously since 1947. It has shown more than fourfold during the last 67 years as indicated in Table 6.

Table 6

Population Growth in Pakistan

Year	Population (In Millions)	Annual Growth Rate (%age)
1951	33.6	1.8
1961	43.0	2.4
1972	65.2	3.7
1981	85.0	3.3
1991	112.6	3.1
2001	142.9	2.7
2012	180.71	2.0

Sources :(i) Government of Pakistan, (2004), Economic Survey 2003-04, Islamabad, Statistical Section. (ii) Ibid, 2013-14, Islamabad, Statistical Section.

It is observed from the table that 1.8 percent growth rate was in 1951, 2.4 percent in 1961, 3.7 percent in 1972 but a slight decrease occurred from 1981 to 1991 as 3.3 and 3.1 percent. It started to decline from 3.1 percent to 0.20 percent in 2012. The population of Pakistan would be 307 million by 2050 (World Population Datasheet, 2003).

It indicates future challenge for the policymakers. The new technology enhanced the output of food grains, but could not meet the requirements of the country. The government continued to import wheat from abroad as shown in Table 7.

Table 7
Import of Wheat from 1961-2012 from Abroad

Year	Wheat (In Million Tons)	Year	Wheat (In Million Tons)
1961	1.080	2000/2001	1.59
1976	0.292	2001/2002	1.67
1980	0.604	2002/2003	1.479
1990/91	2.047	2003/2004	1.080
1994/95	2.500	2004/2005	1.390
1995/96	2.270	2005/2006	6.820
1996/97	1.930	2006/2007	1.70
1997/98	2.380	2007/2008	1.708
1998/99	4.11	2011/2012	2.685
1999/2000	2.33		

Sources:- (i) Govt. of Pakistan 1964 Agricultural Statistics of Pakistan 1962/63, PP. 205-207.

(ii) Ibid, 1982. Agricultural Statistics of Pakistan Islamabad, PP. 207-209

(iii) Ibid, 2004. Agricultural Statistics of Pakistan 2003/2004, Islamabad, P.212

(iv) Ibid, 2008. Agricultural Statistics of Pakistan 2008-2008, Islamabad, P.206

(v) Ibid, 2012. Agricultural Statistics of Pakistan 2011-2012, Islamabad, P. 205

The security of food can be maintained by launching macro policy to bring uncultivable fertile land under cultivation. It will save import expenditure of wheat and surplus food grains will be exported to other countries to fetch foreign exchange earnings.

Conclusion

This research paper highlights the impact of land resources on food security in Pakistan. Agricultural sector is a part of land resources. There are about 80 percent small growers and 20 percent comprises middle and large growers. In the initial stage the newly independent country had refugees, industrial and administrative problems which were given high priority than agricultural sector. Therefore, this sector remained stagnant during 1950s. The population was 33.6 million which continued to increase. But the output of food grains declined and million 7 tons were imported during this period. Family planning program was launched in 1964 to control growth rate of population, but it could not prove successful.

In 1966 Green Revolution was introduced with input policy for maintaining self-sufficiency in food grains. In this regard, the required input for the development of agriculture sector was extended to growers as discussed in model. The cultivated area under food crops increased from million 8.68 hectares to million 13.05 hectares and output of food grains enhanced from million 6.50 tons to million 34.48 tons during the period 1965/66 to 2011/12. At the same time population rose more than four times and security of food could not be maintained. Pakistan imported wheat continuously as described in the table 7. It created huge burden upon the balance of payments.

The growers do not cultivate their entire land due to lack of irrigation and capital facility. In this regard, macro policy be prepared by the government to bring uncultivable land under cultivation. It will increase the production of food grains on one hand and on the other hand it will maintain the food security in the country.

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