

*The Pakistan Development Review*  
47 : 4 Part II (Winter 2008) pp. 817–834

## **Persistent Food Insecurity from Policy Failures in Pakistan**

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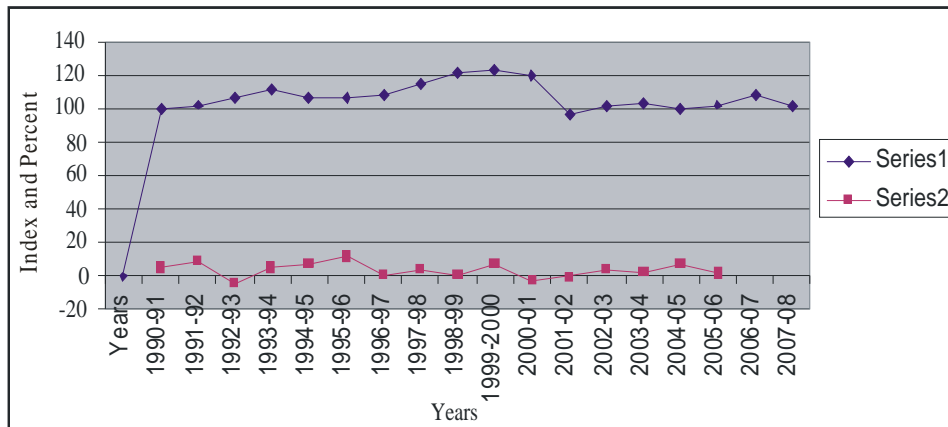
### **INTRODUCTION**

Food security means, “*All the people, all the time, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preference for an active and healthy life*” [FAO (1996)]. Three types of food insecurity generally exist in any country, which are: transitory food insecurity that is short time food insecurity occurs due to sporadic crises; chronic food insecurity that arises as a result of long term but not easily changed conditions; cyclic food insecurity that arises due to seasonal fluctuations. If cyclic food insecurity existed in any country for at least six months than it was called as chronic cyclic food insecurity and if it persisted less than six months than called as transitory cyclic food insecurity.

Pakistan has made a lot of progress since independence in the field of agriculture in terms of production, yields, and growth in area under cultivation. Indus agriculture has experienced a Green Revolution and is striving for yellow and blue revolutions. However, it could have done far better. Though the overall growth of the Pakistan’s economy has largely been dependent upon the performance of agriculture, over the years, not much investment has been made for the development of this sector. Agriculture performance still depends upon, quite a lot, upon the weather conditions every year. The yields of most of crops are far below the levels achieved at the progressive farms (extension gap). From the Figure 1 it is evident that in the last decade (90s) food availability was increasing and then went down and formed the inverted u-shape. After that again fluctuating means there is no surety about food security. It is also comparable with agriculture growth rate.

According to latest statistics in Pakistan as many as 50 million people are engaged in agriculture operations and produce only 25 million tons of food grains. As against this in India, 546 million people are engaged in agricultural operations and produce 176 million tons of food grains, in USA only 6 million people engaged in agriculture, produce 347 million of food grains.

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**Fig. 1. Food Security Index and Agriculture Growth Rate**

### DETERMINANTS OF FOOD SECURITY

There are four determinants of food security in Pakistan:

#### Physical Access to Food

High food prices affecting millions of people across the world and most of all those are living on the edge of poverty and hunger [WFP (2008)]. In spite of being an agriculture country and being a major producer of wheat, rice, milk. Pakistan is facing a problem of nourished food availability. However due to Green Revolution there were bumper crops of wheat and rice in some past years. In 2007-08 agriculture sector grew with 1.5 percent against 4.8 percent. Major crops showed negative growth of 3.0 percent where livestock and minor crops showed reasonable situation [Pakistan (2008)]. Due to erratic production of staple food, the people were facing physical access, economics access, effective biological utilisation, and stability in availability and access.

#### Attention Towards Major Crops

The major cereal crops like wheat, rice, and maize were the centre of attention in order to remove food insecurity. For this purpose farmer has to shift the cropping pattern. Following crops draw major attention of policy makers and implementers.

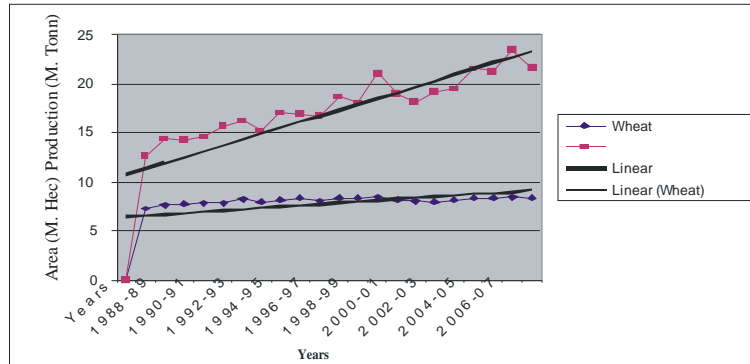
#### Wheat

Wheat is one of the major crops in Pakistan and it covered 8.41 million hectares in 2007-08, there was a decline of 1.9 percent from the last year. This crop is the main contributor to food security. The range of yield of wheat varied from 0.8 to 5.5 tons. It contributed 12.7 percent to value added in agriculture and 2.6 percent to GDP. [Pakistan (2008)].

In Pakistan yield per hectare reaches at its peak during 2006-07 that was 2716 kg/ per hectare, but in 2007-08 decreased and reached at 2585 kg/ per hectare. Pakistan is much below as compared to international per hectare yield.

Measures should be taken to narrow this gap, secondly take some steps to ensure water, better seeds, fertilisers and other farm inputs. The researchers must introduce some high yielding varieties (heat and cold resistant) to ensure food security (see Figure 2).

**Fig. 2. Area and Production of Wheat**



Source: Pakistan Economics Survey 2007-08.

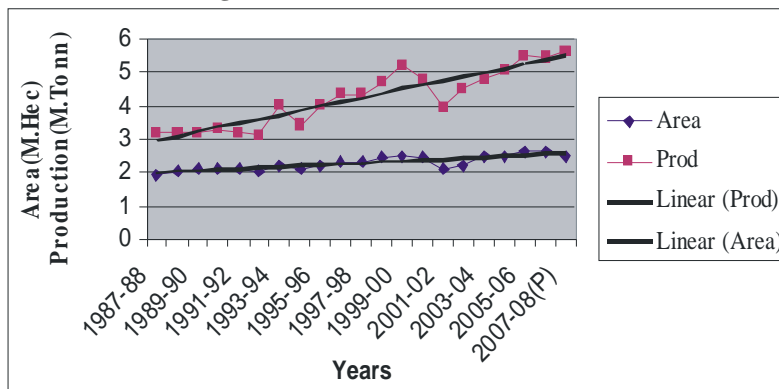
**Rice**

Pakistan is one of the largest producers of rice in the world. In 2007-08, 2.51 million hectares land was utilised for rice cultivation. Its yield per hectares also showed a significant change in 2007-08, that is 2212 kg/ hectare, which were 2107 kg/ hectare in 2006-07.

As compared to 2006-07, the area under rice crop was less by 2.5 percent in 2007-08. The production of rice was targeted by 5.72 million tons. Rice contributed 5.5 percent to value added and 1.1 percent in GDP.

In spite of a largest producer of rice, Pakistan faced a price hike problem in the past. Rice is the second main food item of Pakistani people and its annual consumption across 2.5 million tons. Government actions towards black marketers, incentive to small farmers and announcement of support price before the cultivation of rice will play its vital role in removing food insecurity. The area and production trends were obtained in Figure 3.

**Fig. 3. Area and Production of Rice**



Source: Pakistan Economics Survey 2007-08.

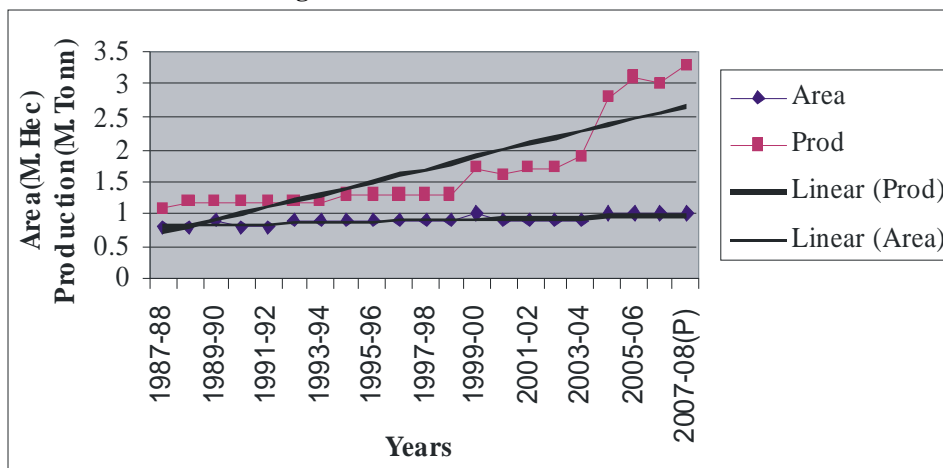
### Maize

Due to the consumption of maize, as a food item it has become an important crop not only in the world but also in Pakistan. It was also used as bio fuel in some countries that's why it was becoming an important crop day by day.

Wheat flour provide 13.14 percent protein, 1.77 percent ash, 1.0 percent fat and 2.88 percent crude fiber to human body while, maize flour provide 13.0 percent protein, 1.80 ash, 1.2 percent fat and 2.68 percent crude fiber [Pakistan (2008)]. Hence, maize provides as much energy as provided by wheat so, increase in its productivity will remove food security problem. The blending of wheat flour with maize flour to the extent of 15- 20 percent would increased the supply of staple food.

In 2007-08, 1.015 million hectares area was under maize cultivation and its yield was 3264 kg/hectare in 2007-08 and that was 3036 kg/hectare in 2006-07. As shown in Figure 4, the area under maize is flattened. In order to make maize a successful crop in Pakistan and in order to export this crop, research and development programmes must be started to introduce Hybrid maize in NWFP.

**Fig. 4. Area and Production of Maize**



Source: Pakistan Economics Survey 2007-08.

### Economic Access to Food

Increasing number of poor people in cities makes food insecurity extreme, pressing social and political issues. Population of Pakistan is increasing with 1.73 (per 1000 persons) in 2008. Due to 20 percent increase in food prices would add 100 millions people below absolute poverty line [Pakistan (2008)]. There occurs large disparity among poor and rich people. Consumption inequality is measured through Gini Coefficient, its value ranges from 0 to 1. If Gini Coefficient is high it means there occurring high inequality.

During 2004-05 and 2005-06 consumption inequality increased from 0.29 to 0.30. Consumption inequality was high in rural areas of Pakistan as compared to urban areas. In rural areas there is subsistence farming and whole families work at one piece of land so their marginal productivity is zero.

Food security problem is mainly related to poverty level. As much as a country is poor, definitely problem of food security will persistently occur. Access of food problem should be addressed holistically as follows.

In 2008 government introduce a wheat-supporting price, which was 625 Rs per 40 kg and in 2009 government raised the price as 950 Rs per 40 kg. The government was also facing another challenge about the determination of issue price of wheat. It is worked out at Rs 1050 per 40 kg. This further increased inflation and have negative impact on government polices to curb inflation. Since wheat was a staple food in Pakistan, thus increase in price hampered physical access to food and becoming a tough target for the people. The government should rationalised wheat prices in the light of border prices and let the free market work.

### Targeting Poor People

The moot point is that who are the poor? And how one can identify?

According to an estimate, 20 percent increase in food prices would add 100 million people below absolute poverty line of one dollar a day. [Pakistan (2007-08)]. Nearly one fourth of the population was below the poverty line (Table 1). The estimates are at variance but the fact remains that large majority of population is below the poverty line. The food inflation is further aggravating the situation. Therefore, it seems imperative to target poor people and income support programmes like Benazir programme should carefully monitored to reach the real at a minimum transaction cost.

Table 1

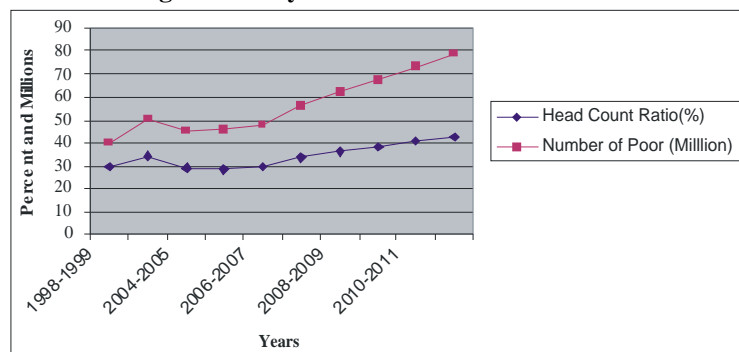
*Trends of Poverty Indicators in Rural and Urban Areas of Pakistan*

Year	Head Count			Poverty Gap			Severity of Poverty		
	Urban	Rural	Pakistan	Urban	Rural	Pakistan	Urban	Rural	Pakistan
1998-99	20.9	34.7	30.6	4.3	7.6	6.4	1.3	2.4	2.0
2000-01	22.7	39.3	34.5	4.6	8.0	7.0	1.4	2.4	2.1
2004-05	14.9	28.1	23.9	2.9	5.6	4.8	0.8	1.8	1.5
2005-06	13.1	27.0	22.3	2.1	5.0	4.0	0.5	1.4	1.1

Source: Pakistan Economic Survey 2007-08.

The poverty trends and number of poor are shown in Figure 5. The graph shows increasing trend of poverty.

**Fig. 5. Poverty Trends and Number of Poor**



### Composition of Farms and Farmers

Small farmers mean a person who has a land less than 2 hectares. Small farmers are generally poor and all their family members are engaged with agriculture and they use most of crops by self consumption. When government announces policies for the betterment of agriculture sector, it mostly gives incentive to big landlords.

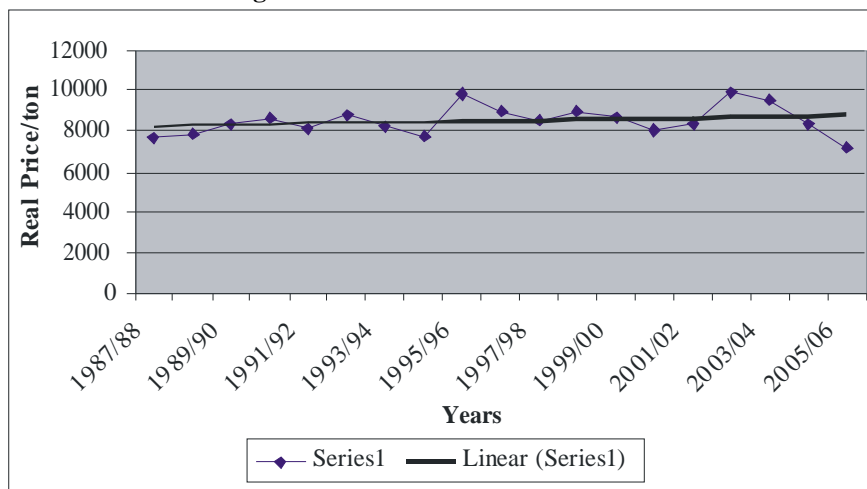
Agriculture census 2000 showed a clear picture of farm size in our country. Farmers having farm size 12.5 to under 25.0 acres played a major role in the cultivation of crops, the cultivated area under this size group was 8.00 million acres are cultivated and secondly, farm size of 7.5 to 12.5 acres provide 7.44 million acres cultivated area. It can be concluded that the rate of cultivated area is high in small farm size and if government adopts small farmer's incentive policy, it helps in removing many problems like food insecurity.

### Input and Output Prices

By stabilising input and output prices, government also controls many problems. If a farmer receives high input price, its cost of production will increase and definitely he demanded high price of his commodity. But unfortunately government is failed to control over its announced prices, both inputs and output.

Low output prices are putting extra burden on the farmers. The real prices for wheat are showing downward trend in the Figure 6.

**Fig. 6. Trends of Real Prices of Wheat**



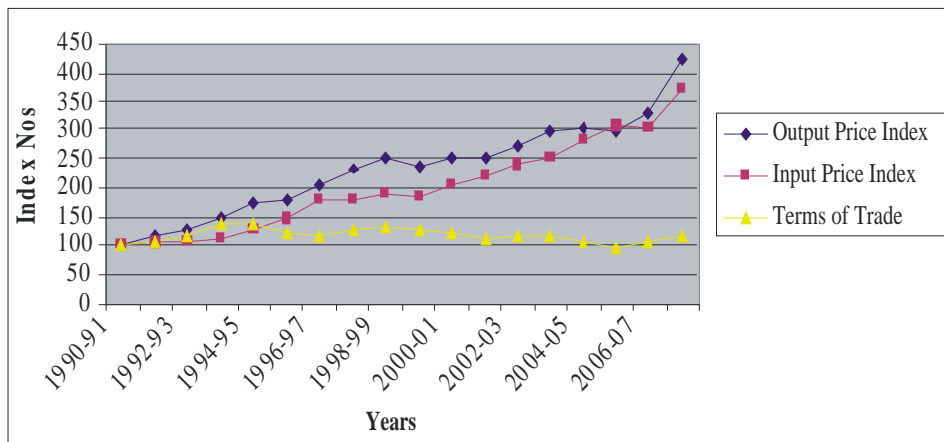
### Prices of Inputs

Average retail sale price of DAP was 1599.0 Rs per 40 kg, announced by government in 2007-08. But in wheat sowing season, DAP fertiliser price was 3100 Rs per 40 kg. The farmers faced cost price squeeze which badly affected the productivity of their crops. The government should allow free interplay of market force both in the factor and commodity markets.

### Terms of Trade of Agriculture

Terms of trade is an indicator to determine the profitability of the sector and influence the supply response of farmers. It can be defined as the ratio of output prices to input prices. From the Figure 7 it is evident that in 2005 the situation was worse but now it is getting better due to higher wheat procurement price and subsidy on phosphatic fertiliser. Historically, the terms of trade flattened out and real income of farmers has gone down leading to poverty and inequality of income. The agriculture is taxed indirectly leading resource transfer from this sector. This is not a happy augury. The government should introduce farmer friendly agricultural policies.

**Fig. 7. Terms of Trade of Agriculture**



### Distribution of Food

The better distribution of food is dependent on supply of food and its population. Unfortunately like other distribution disparities, Pakistan is also a victim of food distribution inequality. To remove this inequality government must pay attention to following issues.

### Urban and Rural Inequality

Out of total population of Pakistan, 67 percent people lived in rural areas while 33 percent are in urban areas. Nearly 2.14 million people are unemployed in rural areas while; 1.46 million people are unemployed in urban areas. [Pakistan (2008)].

Food insecurity problem is due to poverty and unemployment and in urban areas there is a lot of chance to get employment because of factories, mills and other infrastructure development but in rural areas agriculture is the mainstay of where millions of people engaged in this sector, however the marginal productivity is zero due to disguise or under employment. On the other hand public works programme mostly started in urban areas causing inequality between rural and urban areas. To control this situation attention towards rural areas helps in removing the problem of inequality.

**Provinces Disparity**

Pakistan is consisted of four provinces, Punjab, Sindh, Balochistan and NWFP. The ecology of each province is quite different. The NWFP and Balochistan are the food deficit provinces.. Punjab is catering the food needs of other provinces. There is income and asset disparity among provinces. There is a lack of provincial harmony. Now it is the responsibility of government to provide same supply of food items to all over the Pakistan. Secondly, control on the smuggling of food items mainly wheat that smuggles to Afghanistan which is playing a big role in our food insecurity from the very inception of this country.

**Nutritional Requirement**

A strong and healthy body requires certain nutritional food, if nutritional food is not a part of our life we definitely hit by malnutrition. Without taking required nutrition's, a person look pale and weak. In Pakistan caloric availability was 2466 per day and the target is 2529 calories per day in 2007-08. The per capita calories and protein availability in Pakistan is improved from 2078 in 1949-50 to 2466 in 2008 calories per day [Pakistan (2008)].

In order to fulfill the requirement of nutrition, it is needed to promote household vegetable production and also need to promote awareness among people to use pulses, vegetables that provide a large quantity of nutrition. On the other hand rural poultry is also a big source of nutrition so, in order to improve this sector and in order to improve per capita nutrition, finance to small farmers, conducting seminars and research programmes will help in handling this situation.

**Food Insecurity and Environmental Issues**

Many studies argued that due to environmental changes, the problem of food security occurs. A farmer does hard work for better output of crop but environmental factor is not under his control. If the environment is farmer friendly, he/she reaps good harvest. Some environmental issues are discussed below.

Environmental changes also affect the productivity of agriculture crops. Pakistan is facing the problem of shortage of irrigated water now days. In Pakistan where 82 percent of land is irrigated through canals and only 3.96 million hectares land is irrigated through rainfall. Pakistan is also hit by a severe energy crisis and due to this crises the whole economy of Pakistan is stagnant, increase in oil prices in the past some months, increase in electricity prices and its load shading is creating a severe situation for Pakistan in every sector. Due to increase in energy prices, fertilisers prices etc. farmers cost of production of crops increases as a result food items prices increase in Pakistan. Salinity, water logging and fragmented land hit the productivity of agriculture sector. According to an estimate 40000 hectares irrigated land is lost annually due to water logging and salinity. Due to the use of bio fuel non-food demand for agriculture items tends to increase day by day as a result less amount of these items are available for food purposes. A global financial crisis also contributes a lot in the food insecurity in Pakistan.



## Utilisation of Natural Resources

### *Land*

Total land of Pakistan is 197 million hectares and this land has a tremendous potential for all food crops. In 2007-08 out of total area, 57.25 million hectares area is reported area, 4.20 million hectares covered by forests, 22.70 million hectares is not able to cultivate and 23.51 million hectares is total cropped area. [Pakistan (2008)].

The distribution of land is highly skewed and the size of farm is decreasing due to the law of inheritance (virtual land reforms), thus becoming uneconomical. The landed élite of nearly 7 percent owned more land as compared to small farmers (93 percent). Thus small farmer agriculture strategy is the obvious choice for rural development and alleviation of poverty.

### *Water*

Water is the most important input for agriculture production. Rain, wells, canals, etc are the main source of irrigation to agriculture. Agriculture sector consume 70 percent of fresh water with drawn annually by humans. At the time of independence, water availability for every Pakistani was 5600 cubic meters, which is, now only 1000 cubic meters. In Indus Treaty declaration, it was clear that Pakistan have a right on three rivers Chenab, Sindh and Ravi and India have no right to block those rivers water. Now India constructs Baglihar, Kishan Ganga and Wuller Dams and creates water scarcity in Pakistan.

Indus Water Commissioner said “*India would make Pakistan barren by 2014, by stopping its water and filling its Baglihar Dam at an increased pace*”. In Pakistan where 17.58 million hectares (82 percent) are irrigated through canals and only 3.96 million hectares depend upon rainfall. [Pakistan (2008)]. At present scenario when India is blocking our water, how we can able to get good agriculture output and keeps in mind that our full dependence is on this sector.

Water use inefficiency is also a major threat to food security. It does not only reduce the water availability to the crop but also reduce the crop productivity. Pakistan’s cereal production of 0.13 kg per cubic meter of irrigation water compares unfavorably with 0.39, 0.82, 1.56, and 8.72 kg in India, China, USA and Canada respectively [IWMI (2003)].

### *Energy*

In agriculture sector two types of energy are used, electricity and oil. Due to the crises of electricity and increase in oil prices in the past, effect agriculture output and definitely cause food security problem. Tube wells are one of the main sources of irrigation, 3.88 million hectares is irrigated through tube wells [Pakistan (2008)]. Tube wells, tractors and other machineries is dependent on both types of energy, thus due to energy crises creates food security problems. Due to increase in oil prices, cost of production is increased for farmers who in turn demand more price of that commodity which becomes beyond people’s access. Water and energy crises make food security problem more severe.

### **Climate Changes**

Climate changes mean change in global temperature, weather patterns, rising sea levels etc. Pakistan is mostly hit by only some of them like heavy rain at the time of harvesting, heavy fog at the time of tillering and boot formation. Climate changes also effect the production of agriculture products, there is bumper crop, if crop receives better climate along with other requirements like seeds, fertilisers, better irrigation etc.

### ***Sustainable Availability of Food***

There are many issues that are responsible for the food insecurity in Pakistan. There may be social, environmental and economic issues that are responsible for food insecurity. Large number of population of any country play a big role in creating many problems like unemployment and food shortage etc. people even cannot be able to get the subsistence requirement of daily life such as food, shelter and clothes. On the other hand bad political situation creates uncertainty among peoples and investors. These investors stop their investment in country due to unrest and political instability as a result unemployment takes place and when people have no money to fulfill there needs, food insecurity occur in the country and it will create many problems like robbery, terrorism etc.

### **Role of Inputs**

#### ***Seeds***

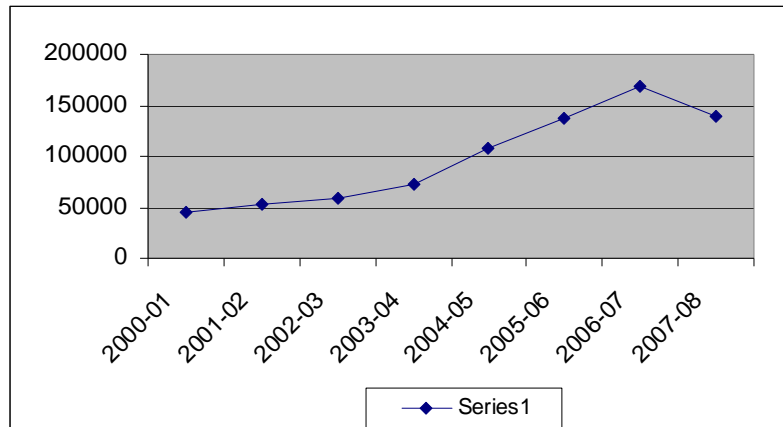
Improved and good quality of seeds plays an important role in any crop productivity. If a farmer uses other inputs efficiently, climate is good but seed is not of good quality than how could he expect good productivity. Unfortunately Pakistani farmer have no access to good quality seeds

In Pakistan, only 10 percent certified seeds are used for cultivation of wheat crop but according to FAO, 25 percent of certified seeds should be used for better productivity. Policies to ensure better seeds availability to farmers are helpful in removing food insecurity and from farmer's side the use of certified seeds will help in order to increase farm productivity.

#### ***Credit***

According to agriculture census 2000 out of total cultivated land, 36.96 million acres was cultivated by owners of land, 6.13 million acres cultivated by tenants, 7.32 million acres cultivated by owner-cum tenants. These farmers are comprised of 86 percent of farming community. Interestingly, only 4 percent credit of the bank portfolio disbursed among the farming community. Tenants and small farmers are largely dependant on informal resources regarding finance for agriculture crops. They borrow credit from commission agents and other private organisation and give them a large amount as interest for the credit them borrowed. Hence the poor farmers and tenants become poor and poor, their life has no development either they have bumper crops. If loans are available to small farmers on easy requirements, it will give benefit to small farmers a lot. The credit disbursement is increasing immensely in recent past but not targeting the small farmers. The trends of credit disbursement are shown in Figure 8.

**Fig. 8. Trends of Total Credit Disbursed**

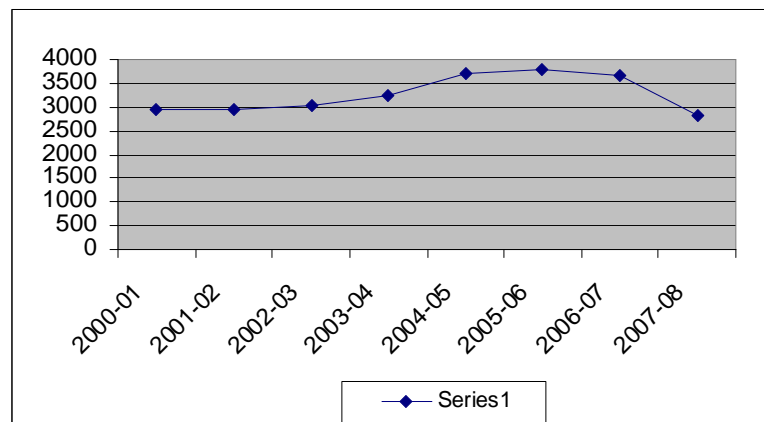


Source: Pakistan Economics Survey 2007-08.

**Fertilisers**

A crop needs proper organic and inorganic fertilisers and fertilisers also increase the fertility of soil and play a big role in achieving productivity. If fertilisers are available to farmers at bearing rate it will decrease its cost of production and their will be increase in farm productivity and increase in farm productivity is our main objective in order to tackle food insecurity. The off-take of fertiliser is showing declining trend (Figure 9).

**Fig. 9. Fertilisers Off-take**



Source: Pakistan Economics Survey 2007-08.

**Pesticides**

Pesticides are the chemicals and these are used to control pests. It helps both of them, plants and farmer. Save farmers economically and save plants from their life point of view. If pesticides are available to farmers at subsidised rate it will help in increasing the productivity of agriculture sector.

### Food Insecurity and Social Issues

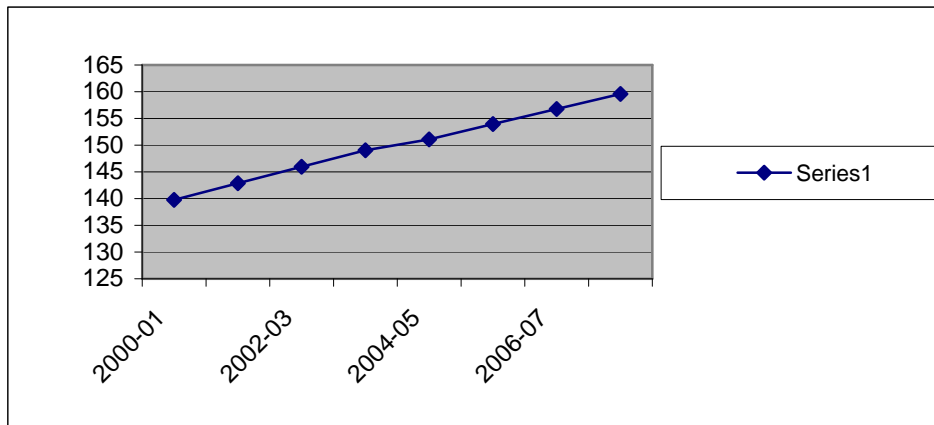
“Hungry people are the poorest of the poor” [FAO (2001)]. If people cannot access the nutritious food, it will create many problems. Poor people move their attention to unfair works and disturbs the whole society. Problems occur like drugs trade, smuggling, population migration, and law and order situation, food insecurity etc.

#### *Population Growth Rate*

Population of Pakistan is increasing with alarming rate. Increase in population play its main role in food security problem. Increasing number of poor people in cities makes, food insecurity, extreme pressing social and political issues [FAO (2001)].

Pakistan’s population growth rate tends to decrease after 2001 from 2.61 (per 1000 persons) to 1.73 (per 1000 persons in 2008). In over populated countries people cannot be able to get even subsistence food requirement of food like food, cloths, shelter and other household facilities. Figure 10 shows the situation of increase in population with increasing rate.

**Fig. 10. Population Trend in Pakistan during last 8 Years (Millions)**



Source: Pakistan (2008).

#### *Fragmented Land*

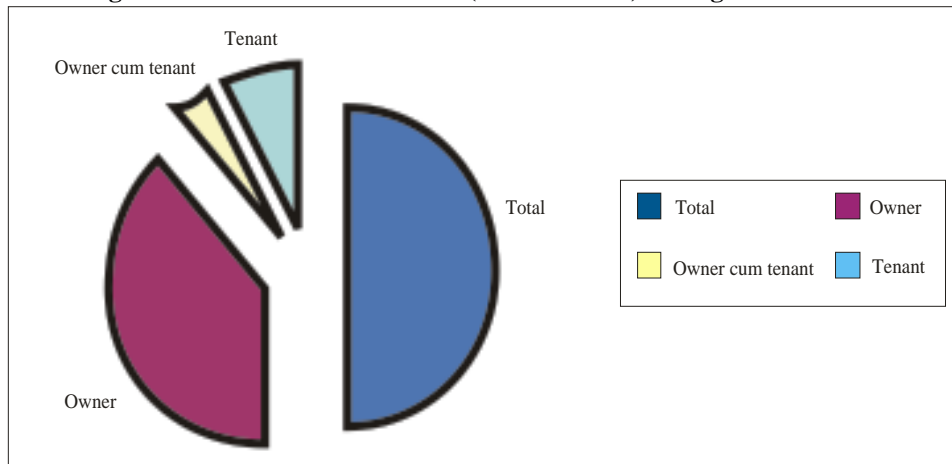
Fragmented land is one of the main reasons of food insecurity. When land is in small pieces, one is unable to use new technology and machinery in this land. Our crops productivity is very low as compared to developed countries and the main reason is that we cannot use machineries in our farms because our farms are divided into such a small parts so, fragmented land is one of the main hurdle in achieving high production in Pakistan.

#### *Security of Tenant*

Security of tenant is one of the main issues in food insecurity. All the landlords are not able to cultivate their lands themselves and rent out to tenants. The tenants get the land from others on rent or on sharecropping.

In 1999 total cultivated area was 47.31 million acres in which 30.72 million acres cultivated by landowners, 8.89 million acres by owner-cum tenants and 7.61 million acres by tenants [Agriculture Census (1999)]. In 2000 share of tenants in cultivation is decreased and reaches at 6.133 million acres where share of land owner was 36.96 million acres and share of owner-cum tenants was 7.32 million acres. The data shown in Figure 11 tells the clear picture of division of land tenure in Pakistan.

**Fig. 11. Land Tenure in Pakistan (Million Acres) during the Year 2008**



Source: Pakistan (2008).

### Economics of Food Insecurity

It is essential to understand the economics of food security. There are mainly three players in this whole system. Food security problems not only arise due to social and environmental issues but economic issues also play a vital role in the food shortage problem of any country.

### Stakeholders

Stakeholder means an individual or a group of individuals who are linked with the production and supply of that commodity. Stakeholders play a big role in the stabilisation or destabilisation of any commodity. Because food security is linked with agriculture, thus key stakeholders are farmers, commission agents and traders, processor group, government and international markets.

First and very important stake holder in agriculture sector is farmer. Pakistan agriculture comprised of small farmers who are resource deficient. They look for different formal (govt. institutes) and informal (traders and commission agents) sources for capital. The exploitation of the small farmers is common practice among these stakeholders. Moreover, due to poor infrastructure and lack of knowledge, they are unable to get the price announced by government and sell it at low price in the hand of traders and commission agents. Secondly, important stake holder is processors group, who processes different crops for household consumption.. Flour mills, rice mills etc. are the processor groups turn into a cartel for profiteering.

### Consumers

Consumer or landless people are at worst hit due to food insecurity. Farmers are somewhat able to store the sufficient crop for them to fulfill their requirement but the landless people have to purchase this crop, e.g. wheat. When the price of food commodities tends to increase then landless people are not able to get that food. Federal government started a Benazir Income Support Programme and allocate 37 billions for it. On the other hand Punjab government started a program and allocated 22 billion rupees for the vulnerable group of people. Government should give more attention towards that group who are living hand to mouth due to recent food crises in Pakistan.

### Government of Pakistan

Government of Pakistan is one of the stakeholders regarding agriculture items. Government announces the price of crops and then buy these crops from the farmers. Pakistan Agriculture Storage and Supply Corporation (PASSCO) is in working for procurement, storage, Distribution and marketing of essential food items. In the situation of shortage of some crop domestically, Government of Pakistan supply that item in order to fulfill the requirement of the people. In this regard government takes several measures like support price, procurement price and release price to control the fluctuations during the year. Our past flour crises was due to the mismanagement by the authorities, firstly they import wheat below international price and then export it at high rate as compared to the price on which they import their wheat.

### Global Market Integration

There is no country in the world that claims, *"I am able to produce every thing domestically."* So, every country needs other countries for the fulfillment of their needs of life, that's why we called the world *"a global village"*. Like Pakistan, who imports certain commodities like wheat, sugar, dry milk, petroleum products etc, and also export some of its products like cotton, rice, leather products etc.

Trade is also one of the main issue or we can say a main in creating food insecurity problem. The restricted trade adversely affects the supply of food. Since the inception of human life no person or no country can produce all required things themselves.. Trade policy will effect food security from both sides directly and in directly.

Global financial crises also play a big role in the food security of any country because now world has become a 'global village'.

*"963 million people are unable to get adequate food as compared to last year in whole world"* [FAO (2001)].

The financial crises increase poverty, poor political situation, economic instability, social unrest and poor law and order situation not only in developing countries but also in developed countries. Increase in oil prices, increase in prices of fertilisers, increase in the use of bio fuels and some other similar factors are responsible for global financial crises on the other hand every country in the world is going to increase its defense budget and spend all it's effort to improve death instruments.

Bio fuel is used as a substitute of oil. When oil prices goes up and up mostly countries like Brazil, preferred to use bio fuel as a source of energy. Sugar, maize, cassava, oilseeds and palm oil are used to generate energy as a substitute of oil.

According to FAO assessment

*“There was 40 percent increase in maize utilisation 2007 due to bio fuel.”*[FAO (2001)].

Due to bio fuel non-food demand for some agriculture items tends to increase day by day as a result less amount of that items are left behind for consumption or for eating purpose. Above agriculture items are used, as bio fuel so it has good market price and farmers prefers to cultivate them in the place of other main agriculture crops like wheat and rice.

## **Food Security and Policy Failures**

### ***Formation of Poor Policies***

Some past years showed that government policies are failed in its attempt to protect consumer as well as farmer. From consumer point of view government failed to remove shortage and also failed to control the prices of flour.

Despite the bumper crop of wheat last year, we are badly hit by wheat crises and the main reason behind this was that we export wheat below international market price and after the shortage; we imported wheat at high price as compared to our exported price. All this happened because of policy maker's poor estimations about demand and supply of wheat in our country.

Government of Pakistan is now shifting its attention towards facilitating trade and marketing and trying to meet WTO challenges. In order to export its agricultural commodities, a big challenge is to meet the requirements on sanitary and phyto-sanitary (SPS) standards. This is the one side of picture that Pakistani agricultural commodities are facing and the other side is due to policies failure Pakistani agricultural sector is in a fix. Policies are not formed well, there implementation in time is also a big factor and on whole politicians sincerity to their masses is very important. Some of the factors that are the responsible for policy failure in Pakistan are as under:

### ***Policies for Big Landlords***

In Pakistan most of the policies are formed that give benefits to big landlords. Where as there is need to give incentive small farmers because they are mostly poor and they are unable to provide better seeds, machinery etc. Farmers having farm size 12.5 to less than 25.0 acres play a big contribution in the cultivation of crops. [Pakistan (2000)].

In 2000, share of tenants in cultivation 6.133 million acres where share of landowner was 36.96 million acres and share of owner-cum tenants was 7.32 million acres. [Pakistan (2000)]. In Pakistan tenants are uncertain about their share but due to illiteracy they are not well aware about their rights.

There is a need for land because big farms are uneconomic and they are doing nothing for the alleviation of food insecurity. In 1959 and 1972, land reforms were

introduced to eliminate landlords estates in the country but these reforms failed to dent powers of landlords due to lack of government will and sincerity.

### **Time in Implementation**

The main problem in Pakistan is that there is a big gap in policy formation and its implementation. Red-tapism is the main hurdle in the policies implementation in Pakistan. Support prices for agriculture commodities are announced after the cultivation of that crop. The Agricultural Prices Commission (APCom) was established in Pakistan in 1981. The objective of this commission is to fix support prices for agricultural commodities that give a normal profit to farmers. If APCom announce support price before the cultivation of that crop it will be better then announcing the price after cultivation.

*“Every increase of Rs 4 per 40 kgs in the support price of wheat over the existing level of Rs 300 per 40 kgs is expected to raise the CPI by 0.09 percent, other things remaining the same.”* [FBS (2008)].

### **Lack of Check and Balance by Government**

In 1947 there were only two units for producing sugar. Today, there are total 84 units, 43 units are in Punjab, 33 in Sindh and 8 units in NWFP. On the other hand in the case of flour mills most of the mills are belonged to a certain group of people. When government announces some policy these groups make a cartel. Due to these cartels, government policies are failed.

In 2007, September Punjab food department issued subsidised wheat to flour mills at 480 Rs per 40 kg and after the announcement of crop price, mills raised the price of 40 kg bag up to Rs 625 in February [Pakistan (2008)].

History of Pakistan tells us that most of the crises are due to the power of black marketers, smugglers and stockers. They give artificial shocks to commodities to gain profit. In both cases, farmers and people suffer badly. But, unfortunately, the policy-makers and concerning departments are unable to catch that group.

### **Poor Infrastructure**

Policy-makers are not working for the development of rural infrastructure such as lining of water courses, farm-to-village road construction etc. development of rural infrastructure is very important to improve the distribution of inputs and the marketability of outputs, especially high value agricultural products.

### **Agriculture Subsidies**

The farming sector has lost subsidies instead of that has been taxed. When subsidies are granted, they are routed through the same cartels of manufacturers or traders, which never allowed the money to reach the farmers.

Had the Government been sincere in granting subsidies? Is the most important question towards Government, it could have studied the mechanism in other countries and found ways to ensure that the money reaches the intended target. A subsidy of Rs 12



billion on the DAP in 2006 was announced after almost eight years of stubborn insistence of running the sector without it. Instead of giving money directly in the pockets of farmers, it was given to importers and manufacturers, who were expected to honestly pass it on to the hand of farmers. It was done, and is still being done, by government and policy makers, despite farmers' protest that they did not get even 50 per cent of the total allocation.

### **Political Instability**

Since the inception of Pakistan, our country is badly affected by political situations. Ruling party and opposition party always try to fill their own pockets and they neglected their people who elect them. Politicians formed such policies that benefit their party members and their supporters only. On the other hand politicians do not work for the long run vision of the country, they seem to be instruments in the hand of other countries and other countries definitely do such works which are beneficial for them.

Due to political unrest, investors ran away from our country, not only foreign investors but also the domestic investors. Before elections every party promised to give as much facility as they can to their peoples but after came into power, all their promises go in vain.

### **POLICY RECOMMENDATIONS**

In order to control the severe condition of food security in Pakistan, government should take some measures. Firstly, government should take some policies to check and balance of concerning departments. History of Pakistan tells us that all the crises Pakistan faces or is facing now are truly due to miss management of concerning departments and due to our mean politicians. Secondly, government should provide finance on easy terms and conditions especially to small farmers. Thirdly, government should take some measures in order to control its announced prices of inputs and output. To control water logging and salinity, that disturbs not only the production but also make land useless, government must start new programmes with new techniques. Fourthly, it is needed to introduce the awareness about bio fuel among peoples, if we use second or third generation of biofuel, it will help to reduce farm cost of production. Finally, government must start research programmes and also work for human resource development.

From the grower side, firstly, if farmers pay attention towards major crops like wheat, rice etc., it will help in removing food shortage. Secondly, education is very important for the development of any sector so, in order to increase farm productivity farmers must attain education. Thirdly, farmers should move towards bio fuel in order to reduce the cost of production, which is increasing due to increase in oil prices and shortage of electricity. The third generation of bio fuel should be used for this purpose; it has 30 times more energy than second generation. In Pakistan most of the crises are created by stockers, black marketers, smugglers etc., artificially. These persons have only the objective to gain profit. Government should take strict actions against those persons who are responsible for those crises.

Finally, research is very important for the development of any sector e.g. new technologies, evolution of new varieties and biological and chemical control. Without the

research in key areas, we are unable to remove food insecurity and low productivity problems. The supply of land is fixed; population is increasing day by day, now the only solution to fulfill food requirements is that to increase productivity of land. This would increase by the use of modern way of cropping and by the good research programmes.

#### REFERENCES

- FAO (Food and Agriculture Organisation of the United Nations) (2001, 2004) FAOSTAT.
- Pakistan, Government of (2000) *Pakistan Agriculture Census*. Islamabad: Government of Pakistan.
- Pakistan, Government of (2007-08) *Pakistan Economic Survey 2007-08*. Islamabad: Ministry of Finance, Government of Pakistan.
- UNDP (2007) *2007/2008 Human Development Report*. Retrieved December 20, 2007, from United Nations Development Programme.