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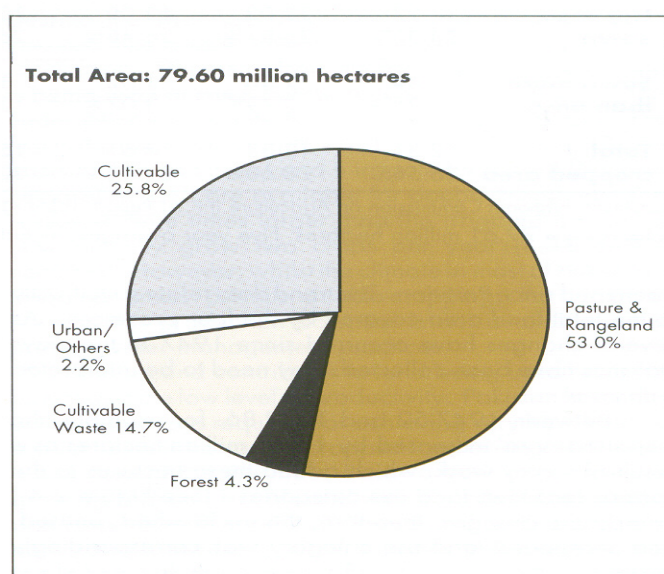
SIGNIFICANCE OF FAMILY FARMING IN THE ASIAN REGION – PERSPECTIVE OF SMALL FARMERS IN PAKISTAN

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Introduction of Pakistan

Pakistan has 88.2 million hectares of land within its borders comprising of high mountains on the North, vast planes of Punjab and Sindh, extensive range lands of Balochistan and Potohar region with desert on the South. 61.8 million hectares of land have been surveyed out of which approximately 25.8 percent is cultivable, cultivable waste is 14.7 percent, pasture and range land is 53.0 percent with forests of 4.3 percent. Approximately 20 million hectares are used for agriculture out of which 16 million hectares are irrigated and just over 4 million is Barani agriculture. Leaving aside Mount Everest the highest mountain of the world, four other high mountains ranging from 25447 ft. to 28250 ft. are located in Pakistan. Out of a total land area of 79.6 million hectares in use, only 16 million hectares are suitable for irrigated farming in Pakistan due to which majority of the people depend on arid and semi-arid areas to support their livelihoods through agro pastoral activities.

CURRENT LAND USE



SOURCE: National Commission on Agriculture Report.

Note: For four provinces only.



Pakistan with a population of 160.9 million in mid 2008 is the sixth most populous country in the world. The country's population is estimated to double in the year 2047 if it continues to grow at the rate of 1.8 percent. The population density has increased to 203 percent per square kilometer today from 42.5 percent per square kilometer in 1951. Movement of population to urban areas attributed to well known "pull" and "push" factors continues and as a result the urban population has increased from 6 million in 1951 to today's 57 million.

Pakistan's Economy

The Pakistan's economy posted a robust growth of 4.1 percent in 2007-2008 when viewed for over a period of 5 years the real GDP is growing at an average rate of 7 percent per annum over the last 5 years (2004-2009) which was lowest of 2.0 percent in 2008-09

Sectoral Contribution to the GDP growth (% Points)

Sector	2004-05	2005-06	2006-07	2007-08	2008-09
Agriculture	1.5	1.4	0.9	0.24	1.00
Industry	3.1	1.1	2.3	0.45	-0.92
Manufacturing	2.7	1.6	1.6	0.91	-0.64
Services	4.4	3.3	3.6	3.41	1.92
Real GDP	9.0	5.8	6.8	4.10	2.00

Contribution to the Real GDP Growth

Notwithstanding its declining share in GDP, agriculture is still the single largest sector of the economy, attributing 21 percent to GDP and employing 44 percent of the work force. More than 2/3rd of Pakistan's population lives in rural areas and their livelihood continues to revolve around agriculture and allied activities. Like any other developing countries, poverty in Pakistan is largely a rural phenomenon, therefore development of agriculture will be a principal vehicle in alleviating rural poverty. The recent global food crises, while creating difficulties in net-food importing country, is equally providing opportunity for developing countries like Pakistan to get their acts together and benefit from the current situation by giving serious attention to agriculture.

Pakistan being an agrobased country playing an important role to the country's economy as Pakistan's main agricultural exports are highly concentrated in a few items namely cotton, leather, rice, synthetic textiles and sports goods. These five categories of export account for 72.4 percent of total exports during the first 9 months of 2007-08 with cotton manufacturers alone contributing 54.7 percent followed by rice 7.1 percent, leather 6.1 percent, synthetic textiles 2.9 percent and sports goods 1.6 percent.



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Per capita income defined as Gross National Product at market price in dollar term divided by the country's population, has grown at an average rate of above 13 percent per annum during the last 5 years rising from 586 dollars to 1085 dollars in 2007-2008.

The income consumption model of the Pakistan's social and living standard (PSLM) survey provides basic information for the incidence of poverty and distribution of income. Poverty was estimated 23.9 percent in 2004-05 as compared with 34.5 percent in 2001 with an improvement of 10.6 percent in four years. Based on Planning Commission estimated head count ratio the percentage of population below poverty line has fallen marginally from 23.94 percent in 2004-05 to 22.32 in 2005-06. Poverty in rural areas declined from 28.13 percent to 27.0 percent showing an improvement of 1.13 percentage point between 2004-05 and 2005-06.

Similarly poverty in urban areas is also on decline from 14.4 percent to 13.1 percent during 2004-05 and 2005-06. Poverty estimates at the national level declined slightly between 2004-05 and 2005-06 but the reduction was not statistically significant.

Pakistan has a tensile land, with four times as many people per hectare as the globe as a whole, and faces rapid population increase. Yet with a gross national product per capita i.e. 1/9th the world average, the pressure of those numbers on global estimate is surprisingly light. The average Pakistani e.g. consumes less than 17 as much energy as is used globally. Thus on average for every person in the world responsible for releasing 1.7 tons of carbon per annum (CO₂), average Pakistani contributes only a 10th of a ton. Similarly per capita carbon monoxide emission in Pakistan is 1/3rd of the global average, and Pakistan contribution to emission of sulphur dioxide (SO₂) is only 0.4 percent of the global total.

Agriculture in Pakistan

Water Resources

Pakistan has a vast watershed resource base which consists of Himalayan and Hindukush Mountains of about 155,000 mile² (401554 km²) with numerous glaciers feeding the Indus river System. In order to harness this resource, 3 major reservoirs, 19 barrages, 12 link canals, about 38000 mile (61152 km) long irrigation canals, more than a million mile (1.61 million km) long watercourses and 10,000 mile (16093 km) long surface drains have been constructed. In addition, there are over 290,000 public and private tube wells to tap the sub-surface water available in the basin.

The above source of water is used for irrigating 16 million hectares of land. Pakistan's agriculture output is closely linked with the supply of irrigation water the availability of which was 103.5 million acre feet (MAF) at the canal head which decreased by 5.9 percent in (2003-04) to 20.6 percent (2004-05) which further remains less by 2.5 percent in 2005-06. Availability of water from the canal heads is on the decrease affecting major crops both in the Rabi and Khareef season. The production of major crops is given in the table below:-



Production of Major Crops (000 tons)

Year	Cotton (000 bales)	Sugarcane	Rice	Maize	Wheat
2003-04	10048 (-1.6)	53419 (2.6)	4848 (8.3)	1897 (9.2)	19500 (1.6)
2004-05	14265 (42.0)	47244 (-11.6)	5025 (3.6)	2797 (47.4)	21612 (10.8)
2005-06	13019 (-8.7)	444666 (-5.5)	5547 (10.4)	3110 (11.2)	21277 (-1.6)
2006-07	12856 (-1.2)	54742 (22.6)	5348 (-2.0)	3088 (-0.7)	23295 (9.5)
2007-08	11655 (-9.3)	63920 (16.8)	5563 (2.3)	3605 (16.7)	20959 (-10.0)
2008-09	11819 (1.4)	50045 (-21.7)	6952 (24.9)	4036 (11.9)	23421 (11.7)

Pattern of Land Distribution

In the present system of ownership at the top of social ladder is the big landlord owning in its individual capacity and entire estate or lord's landed property. Generally he gets his land cultivated by tenants who pay rent in cash or in kind or both.

Next in order the peasant proprietor who owns a very small area which he cultivates himself with the help of his family or through hard labor.

Tenant or the non owner cultivator who has no permanent interest in the land, at the lowest level is the casual agricultural worker who is employed on daily wage basis.

According to the latest economic survey 2006-07 published by the finance division of the Pakistan following is the land utilization table.



No. And Area of Private Farms with its Distribution to Small Farmers

Farms			Farm Area		Cultivated Area	
Size of Farms (Hectares)	Number	Percent	Total Hectare (Million)	Percent	Total Hectare (Million)	Percent
Under 0.5	0.68	13	0.19	1	0.18	1
0.5 to Under 1.0	0.69	14	0.51	3	0.47	3
1.0 to Under 2.0	1.04	20	1.45	8	1.33	8
2.0 to Under 3.0	0.84	17	1.97	10	1.81	12
3.0 to Under 5.0	0.86	17	3.31	17	2.97	19
5 to Under 10.0	0.62	12	4.13	21	3.55	23
10.0 to Under 20.0	0.24	5	3.03	16	2.42	15
20.0 to Under 60.0	0.09	2	2.61	14	1.84	12
60.0 Hectares and above	0.02	0	1.94	10	1.04	7
Total	5.08	100	19.14	100	15.61	100

According to the above table no. of farms falling in the category of 0.5 -5.0 hectares is 4.11 out of total no. of 5.08 million that is 81%, whereas farm area is 7.43 million hectares out of total 19.14 million that is 39%. All these farms are nonsubsistence-holding farms, as subsistence holding level is five hectares. Those holdings 5-60 hectares and above control 61% of total farm area ,where as no. of farms is only 19% and most of these are absentee landlords.

Problems of Family Farmers

The Table above indicate that there are large percentage of small uneconomic holdings leading to food insufficiency at household level and contributing poverty in rural areas. According to house hold surveys under the two hundred village project, at least 36% of the house holds are food insecure. It is further evident that out of the total population of farmers living in the rural areas, approximately 54 percent of these are small family farmers living below the subsistence level. The problems encountered by these small farmers are lack of credit facilities which whenever available are at an interest rate of 17% to 20%, small land holding, lack of infrastructure, non-availability of agricultural inputs like agricultural machinery, fertilizers, adulterated pesticides and certified seeds at the pre-harvest season. The post harvest problem are again the non-availability of harvester, thresher etc., lack of local storage facility and difficult access to the market. All these factors result into higher cost of inputs and reduce income. The agricultural machinery is available mostly with the bigger landlords who make this equipment available on rent after the equipment is free from their personal lands and at higher rate.

Moreover due to the poor economic conditions of the small farmers, they are socially at the lower ladder of the society lacking adequate housing facilities which in majority of cases are



mud houses, lack of sanitation, pure drinking water, health facilities and education to the children.

Political Participation of Farmers in the Country:

Pakistan has four provinces, each province is divided into a number of districts. Union Council is the smallest political organization at the lowest level representing a population of about ten thousand people spread over 5-6 villages. In local bodies administration system farmers and labourers are represented both at the level of Union Council and District Council through electoral system. The representation of farmers and the composition of these councils is given as under:-

Composition of Union Council is as under:-

Nazim (Administrator)	1	
Naib Nazir (Assistant Administrator)	1	
General seats for Muslim Male		4
General seats for Muslim Female	2	
Farmers (Male)		2
Farmers (Female)	2	
Minority seats	1	
	Total	13

Composition of District Council:

Nazim	1
Members	99
Reserve Seat female	33
Farmers and Workers (M)	5
Minorities (M)	5
	Total:
	143

Improvement Programmes for Small Farmers

Government of Pakistan introduced a number of programmes from time to time for the improvement of small farming.

In 1967, Dr. M. Sadiq Malik while working with the Ministry of Agriculture, Government of Pakistan, conceived, planned and implemented the concept of **IRD**. The central point of this concept was that all aspects of rural life are interrelated and no lasting results can be achieved if



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individual aspects are dealt with in isolation. In order to bring economic and social change in the rural community, joint efforts by the governments, farmers and private institutions are simultaneously required.

The efficacy of the concept was practically demonstrated through “Shadab Pilot Project”. Shadab was an integration and combination of several services in a united programme to provide all the necessary assistance to the villagers as a package deal through a focal point called “MARKAZ” (Growth Centre).

Shadab Project was formally evaluated after two years and 10 % increase in productivity was witnessed. The government of Pakistan launched this programme throughout the country with full force and political commitment in 1972 and planned to establish 625 MARAKIZ. Each Markaz was designed to serve 50-60 villages in 10 Union Councils stretching over an area of about 100,000 acres. A Development Assistant (DA) was appointed in each Union Council (3-4 villages) and a Manager was located at the Markaz. DA prepared development plans of the villages under his control which were forwarded to the Manager at Markaz who worked out the inputs required for the entire projects and forwarded it to the headquarters. The Markaz not only had the pre and post harvest facilities for farmers (seeds, fertilizers, pesticides, machinery, tools, storage, marketing, agro-based industries etc) but also catered to their needs of health, education, and training, all available at a single point. Thus IRDP had created an atmosphere wherein all the departmental rivalries have been sunk, duplication of efforts avoided and wastage of resources minimized. The programme was fully supported by international agencies and The World Bank. This concept was debated and discussed threadbare in a series of seminars and discussions and was greatly acclaimed both by national and international experts.

The programme remained on ground for about 7 years and was discontinued in 1977 due to political reasons without any evaluation.

Dr. M. Sadiq Malik after retirement established Rural Development Foundation (RDF) in 1978, based on the concept of **IRDP** and with an objective to implement this concept in Pakistan through RDF.

RDF-NGO Working Model for IRDP

RDF-NGO Network has been established in all the four provinces of Pakistan and through this network the network NGOs in the field are working in the Integrated Rural Development Programme for the benefit of small farmers. Under the umbrella of these NGOs Small Farmers Unions have been established in different districts. A model of Small Farmers Union (SFU) working under Yasir Development Foundation a member of RDF NGO network in District Khanewal is given as under.

There are 660 villages of District Khanewal. One volunteer member has been nominated from each village as a member of the Union of Small Farmers under the Chairmanship of President Yasir Development Foundation. Particulars of Distt. Khanewal are given as under:-



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Small Farmers in Model District

Number of Villages 660.

Total agriculture area in acre = 2071,676

Farmers with land holding	1-3 Acres	18940
“ “ “	4-6 Acres	21656
“ “ “	7-10 Acres	17885
“ “ “	11-12 Acres	31094
“ “ “	12.5 to 25 Acres	5,034
“ “ “	More than 25 Acres	1,910
Total Number of Orchards	1,343	

The data above will show that the total number of farmers in the District are 970311 out of which 89575 i.e. (92%) are the small farmers and 7736 (8%) are the big farmers.

The following facilities have been established which through the Small Farmers Union are supplied to the Small Farmers.

Agricultural Machinery

At District Headquarter Khanewal there are 12 Tractors, 4 Thrashers, 9 Rotavators, 2 Reepers, 5 Scrapers, 2 Laser Land Leveler, 12 Levelling Blade, 6 Rager. This equipment is made available to the small farmers at a slightly subsidized rate but can meet the requirement of only a few thousand people.

Distribution of Fertilizer

The Farmers Union issued two bags of DAP and two bags of urea per acre for cotton and three bags of DAP and three bags of urea per acre in wheat season. In the last season of 2009-2010 the following quantity of fertilizers was issued:

DAP 288000 bags)	Wheat Seasons
Urea 290000 bags)	
DAP 242000 bags)	Cotton Season
Urea 285000 bags)	
N.P. 78000)	

The fertilizer facility was arranged by the Chairman Small Farmers Union (SFU) by arranging bank loan through which the fertilizer was procured from the factory at controlled rate. The total number of beneficiaries in USF in the District were 12000.



Pesticides and Certified Seed

At present total area cultivated by the members of Union of Small Farmers (USF) is about 80 thousand acres for which the pesticides and seeds are either already procured by the members or through the USF from the suppliers companies.

Financial Management

All members of USF are issued cards showing their particulars and entitlement of different articles such as, fertilizer, seed, chemical etc., based on the size of their land holding. A stock register is also maintained to record the issue of stocks to the members. At the beginning of each sowing season all the agricultural inputs are supplied to the members and the amount is recovered at the time of harvest. However a post-dated cheque is obtained from each member at the time of issue of agricultural inputs. 90% recovery is made after harvest of each crop and 10% who fail to pay at that time are deferred for six months. This programme is being run by USF on a loan of Rs. 9200000/- obtained by the Chairman of USF from a Bank at interest rate of 17% to which 3% service charges are added so that all the agricultural inputs received by a USF member for one crop are paid back after harvest of the crop with 10% mark up on ½ yearly basis.

Initiatives Supporting Small Farmers

Small farmers are the backbone of agriculture in the country and if the socio-economic conditions of the small farmers are improved these will result into improvement of the economy of the country. Realizing the role of small farmers in the community and its importance for the economy to the country, the Government has introduced a number of programmes from time to time for the redressal of these problems which are briefly mentioned below:

Fertilizer:

Almost the entire available soil in the country is nutrient deficient. Domestic Production of fertilizer in the country in 2007-08 was 2.08 million tons which was less by 2.2 percent. The deficiency was made good by import of fertilizer.

Improved Seed:

During 2007-08 about 231.67 thousand tones of improved seed of various varieties was distributed. There are four public sector organizations, 600 National seed Companies, 4 multinational companies dealing with improved seed varieties, hybrids of maiz, sunflower, eamalli, fodders and forages and vegetables. Government is managing the seed quality control services through 30 seed testing laboratories.



Agricultural Credit:

Agricultural credit provides financial resources to the farming community particularly for purchase of primary inputs like fertilizer, seed, pesticides, machinery, equipments etc. Government has allocated 200 billion for agricultural credit disbursement for the year 2007-08 and 250 billion for the year 2008-2009 which is higher than by 25 percent over the preceeding year. The credit was disbursed through Zarai Taraqiati Bank Ltd., (ZTBL), Commercial Banks, Punjab Provincial Co-operative Bank as Production and Development Loans, Small Farmers One Window Operation, Revolving Finance Schemes for raising Livestock, Crop Maximization and New initiatives.

Challenges and recommendations

The following measures will help in meeting successfully the challenges to the Small Farmers:

Organizing Small Farmers Union at grass root level and to impart awareness for better socio-political position in the community.

Ensure easy and timely supply of improved agricultural inputs at pre-harvest time.

Provide easy access to credit facilities at low interest rate.

Supply of improved varieties of seeds to Small Farmers.

Introduce agricultural technology for increased productivity.

Facilitate maximization of crops

Promote use of marginal lands

Empowerment of farming Women through micro credit introducing microenterprize, sheep, goat, cattle raising for increased income generation.

Increased availability of storage facilities at village level.

Introduction of water conservation and best practices of irrigation.

Improved practices of marketing and provision of infrastructure.