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Significance and Role of Agriculture Sector in the Socio-Economic Development of Khyber Pakhtunkhwa

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Abstract

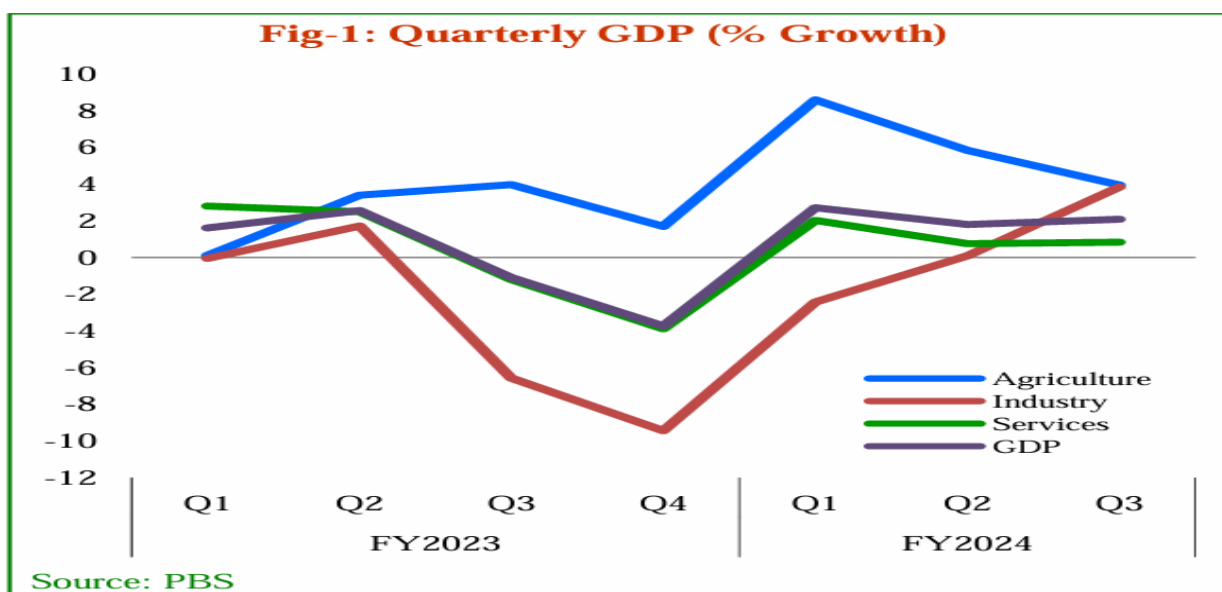
The Government of Pakistan envisions to make Pakistan self-sufficient in food availability through high yield of agriculture crops and sustained availability round the year. Quality education, applied & focused research is a fundamental requirement to attain this dream. Agriculture has remained the lifeline of Pakistan's economy since its birth. Agriculture plays a central role in economic development since it accounts for 24% of GDP and 37.4% of employment while more than half of the total population benefits directly or indirectly from agriculture. The growth of agricultural sectors acts as a fundamental force to stimulate economic progress together with employment opportunities and poverty decrease. It plays a significant role in poverty reduction by providing food security to the masses. Agriculture also provides cheap raw material to several value-added industries. However, even though Pakistan is an agrarian economy, agriculture growth and yield is low and is insufficient to fulfill the domestic demand for food for the rapidly growing population.

Keywords: Agriculture, Live stocks, Food Security, Crops

Introduction

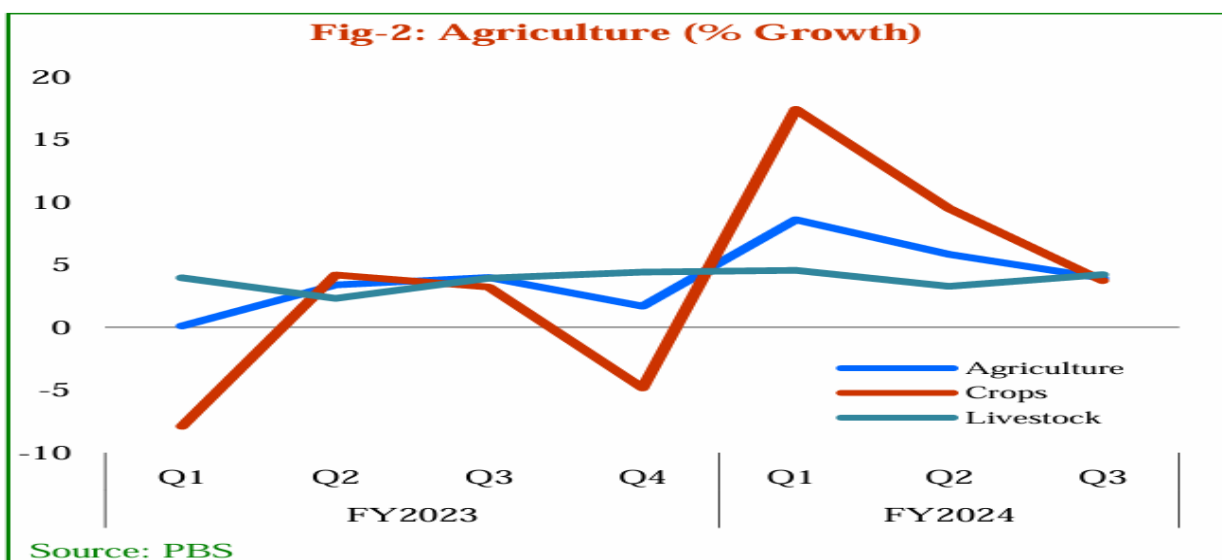
Agriculture has been the mainstay for the economy of Pakistan since its independence. It is still contributing around 24% to GDP and 37.4% to total employment. Besides providing employment to 37.4% labour force, more than 60% of the population of Pakistan living in rural areas, directly or indirectly depends upon agriculture for their livelihood. It also provides raw material to the industrial sector and significantly contributes to the country's exports. So any policy change for the agriculture sector will affect the economy and a large segment of the population in the country.

There has been increasing use of modern machinery along with high yielding varieties of seed and fertilizers. This, on one hand, has increased agriculture value-added and overall GDP growth has also squeezed the labour absorptive capacity on the other hand (especially for those illiterate or having general education). This study aims to highlight the role and significance of the agriculture sector in the socio-economic development of the province of Khyber Pakhtunkhwa (KPK).



Source: cf: Pakistan Economic Survey 2023-24

Figure 1 & 2 shows that Pakistan experienced declines in all the indicators like GDP, agriculture, industrial growth, etc. since the first quarter of FY 2024.



Source: cf: Pakistan Economic Survey 2023-24

Background of Agriculture Sector in Khyber Pakhtunkhwa (KPK)

The total population of KPK is 40.86 million (2023). Much of this population, i.e. 34 million (83%) is in rural areas while only 6 million (17%) live in urban areas. Agriculture is the mainstay of 83% of the total population of KPK thus putting tremendous pressure on land resources. The agricultural sector contributes 22.7% of the provincial GDP. This can easily attain the main stay and the biggest industry of the province, only if proper attention is given by the policy makers.



The British Rule

In 1849, the British overthrew the Sikhs and Frontier districts were made part of the Punjab. They laid down the rules concerning ownership of land, rents and payment of revenue. In the later part of the 19th century, KP saw a series of stagnation, poverty and famine. The British formed The Famine Commission which submitted its report in 1880 which recommended establishment of central and provincial agriculture departments. The central and provincial agriculture department was set up in 1884. In the same year the Agriculture Loan Act was also enacted to help the poor farmers.

Table 1: Khyber Pakhtunkhwa Agriculture Highlights year 2021-22

Indicators	Share
Provincial GDP	22.7%
Livestock share% of Provincial GDP	14.0%
Major crop share	4.4%
Fruits and vegetables share in Provincial GDP	12.0%

Source¹: Internet and official website of KP Government

- At the time of the formation of KP, less than 10% of the area was under cultivation and out of which 28% were irrigated.
- In 1932, 2.64 million acre land was under cultivation out of which 0.74 million acres were irrigated.
- At the time of independence, the total cultivated area in KP was 2.92 million acres out of which 1.04 million acres was irrigated.
- Out of 2.34 million acre cultivated land, 125,000 acres under minor crops, 2.1 food grain and 111,000 was under cash crop. Tobacco was a major cash crop. In 1968, total cultivated land rose to 2.57 million acres.
- In 1947 and 1949, the Central Department of Plant Protection and Food and Agriculture Council were established, respectively
- The agricultural growth, however, remained low in the 1950s at an average rate of 1.7 %.

Green Revolution in KP

- During 1960s the annual average growth for Pakistan was 5.9 % while in KP it was 3.8.
- A tremendous increase was noticed in forests. In 1947, it was 278.4 sq miles which rose to 362.2 sq miles. In 1952. And it rose to 1.33 million hectares (13 % of total area).

1

https://www.google.com/search?q=latest+data+about+the+agriculture+and+livestock+in+kpk&rlz=1C1CHBF_enPK1016PK1016&oq=latest+data+about+the+agriculture+and+livestock&qslcrp=EgZjaHJvbWUqBwgCECEYoAEyBggAEUYOTIHCAEQIRigATIHCAlQIRigAdlBCjI5MTQwajBqMTWoAgiwAgE&sourceid=chrome&ie=UTF-8



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Table 2: Production of Principal Crops 2010-11 & 2023-24 (Million Tons)

Item	Pakistan		KP		%age share of KP	
	2010-11	2023-24	2010-11	2023-24	2010-11	2023-24
Wheet	23.52	31.4	1.01	1.66	4.30	5.3
Rice	5.44	9.9	0.11	NA	1.95	NA
Maize	2.97	9.8	0.85	2.80	28.54	28.57
Sugarcane	54.75	87.6	4.60	7.88	8.41	8.99
Gram	0.80	2.30	0.02	NA	2.38	NA
Cotton	2.21	10.2	0.001	NA	0.00	NA
Barley	0.08	0.42	0.02	NA	20.48	NA
Tobacco	0.13	0.152	0.091	0.1094	70.00	72.0

Source: Pakistan Economic Survey 2023-24; official website of Agriculture Department, KPK; other internet sources

1970 to 1980s

In 1982, 80 % of KP population was employed in agriculture. Out of total area, only 12 % was under cultivation in 1970. Per capita cultivable land was 0.4 acres compared to 0.96 in Punjab and 2.02 in Sindh.

Current Position

Currently, the total land possessed by KP province is 10.17 million hectares out of which the cultivable area is only 2.75 million hectares which is around 27% of total land. Out of cultivable area only 1.8 million hectares or 66% is cultivated whereas 1.08 million hectare around 33% is cultivable waste. The major chunk of cultivated land is rain fed, which is 0.882 million hectares and constitute 49% of the cultivated area. Around 94% farms are now below the range of 12.5 acres, which is a subsistence farm level. The total area under the forest is 16%. The land tenure system in the KP can be classified into three categories, i.e. 58% farm area is operated by owners while 27% and 15% farms area are cultivated by owners-cum-tenants and tenants respectively².

Due to great diversity in climate and soils, KP grows over 42 crops: the major ones are wheat, rice, barley, maize, sugarcane, tobacco, rape & mustard, groundnut, pulses, vegetables and fruits. The major crops occupy nearly 90% of the total cropped area and play an important role in sustaining the living of the rural population.

Major Problems Faced by the Agriculture Sector in KP

Less attention of the policy makers and little investment in the agriculture sector coupled with associated factors; the following serious problems encounter growth and development in agriculture making the sector unprofitable for the farming community especially the small farmers, which needed an immediate policy response to ameliorate the situation in the interest of farming community as well as the provincial economy.

- Cultivable wasteland.

² Pakistan Economic Survey 2023-24; official website of Agriculture Department, KPK; other internet sources



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- Fragmented and un-economical land holdings.
- In-efficient Utilization of Water Resources.
- Low Quality Seed
- High Cost and low quality of Fertilizers and Pesticides.
- Weak coordination amongst various tiers of the department.
- Inadequate Technical Capacity in the Agriculture Sector.
- Lack of Agriculture/Livestock Marketing Infrastructure.
- Absence of Gender mainstreaming.
- Absence of rural agro-based processing units.
- Low productivity of livestock.
- Weak organizational trends amongst farming community.
- Burden of multiple taxes on farming community.
- Absence of an enabling environment for private sector investment

Livestock

Livestock plays an important role in the economy of our country and contributes 14.63% share to the GDP and 62.68% to the Agriculture GDP. It provides job opportunities to majority of the rural population. It provides milk and meat for daily consumption to the over-increasing human population, rural transport, yard-manure for soil fertilization, raw materials for industrial products and hides, skins and wool for earning foreign exchange. It is also responsible for supplying 16% of the total household energy in the form of dung. It also provides employment opportunities to the passive rural women and increases the family income.

Role of Livestock in the National Economy

- Livestock sector contributes 62.68% to Agriculture sector GDP and about 14.63% to national GDP.
- Provides milk and meat for daily consumption to the increasing human population
- Convert crop residues, and agro-industrial wastes and by-products into valuable edible products.
- Provides industrial raw materials e.g. wool, hides & skins and sources for agro-based food industry.
- It is also responsible for supplying 16% of the total household energy in the form of dung.
- Provides draught power for cropping and rural transport.
- Provides field yard manure for soil fertilization.
- 30-35 million rural population is engaged in livestock raising, having household holdings of 2-3 cattle/ buffalo and 5-6 sheep/ goat per family which help them to drive 30-40% of their income from livestock.
- Another important benefit of livestock is the best utilization of the passive women labor force, which makes more than 50% of the national population.

Livestock farming in KP is also a dominant occupation of the farming community with more than 15 million animal heads and about 22 million poultry birds habituating the province. However, this occupation is mostly to supplement family



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nutritional and cash requirement. The capitalist trend in this sector is still lacking, resulting in weak & non-descriptive breeds with low level of milk and meat productivity.

Table 3: Species-wise Livestock Population (millions)

Species	Pakistan	KP	KP share %
	2021-22	2021-22	2021-22
Cattle	53.4	5.97	11.2
Buffaloes	43.7	1.93	4.4
Goats	82.5	9.60	11.6
Sheep	31.9	3.36	10.5
Poultry	172.5	27.70	1.6
TOTAL:	384	48.56	12.64

Source: Ministry of National Food Security & Research's Yearbook 2021-22

Table 4: Nutritional Status of Children Under Five Years of Age by Region (Percentage)

Malnutrition	Punjab	Sindh	KP	KP-NMD	Balochistan	AJK	GB	ICT	National
Stunted	36.4	45.5	40.0	48.3	46.6	39.3	46.6	32.6	40.2
Wasted	15.3	23.3	15.0	23.1	18.9	16.1	9.4	12.1	17.7
Underweight	23.5	41.3	23.1	33.7	31.0	21.9	21.3	19.2	28.9
Overweight	9.9	5.2	12.9	18.6	16.7	13.4	12.2	5.8	9.5

Source: National Nutrition Survey, 2018

Due to low productivity in the agriculture and livestock in Pakistan in general and in KP in particular, a significant portion of population and especially children are suffering from malnutrition and food insecurity. The data given in table 4 reveals an alarming situation for policy makers.

Agriculture Policy KP 2005 and A Ten-Year Perspective (2015-2025)

- In view of the continues neglect of the agriculture sector in the past and realizing its importance for future growth, the vision of the agriculture policy with a ten-year prospect (2015-2025) is to see a prosperous and food secure rural population with exportable surpluses to generate employment and income opportunities in the province to achieve food security/self sufficiency by
 - Building local skills and tradition
 - Involving all stakeholders to serve the farmer
 - Creating a “fit for purpose” public support system
 - Building human resources
 - Factoring in climate change and disasters
 - Enhancing sector productivity and competitiveness
 - Commodities and commodity chains
 - Technology Generation and Dissemination
 - Trade, Taxes and Pricing



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- Promoting other forms of rural income generation
- Quality control, certification and traceability
- Poverty reduction
- Integration & Improvement of services delivery system
- Capitalizing on the comparative advantage
- Strengthening public private partnership
- Participation of farming community in decision making
- Conservation of water resources
- Providing relief in tax regime
- Gender Mainstreaming.

The overall implementation of the policies/development programmes has been tasked to a provincial level through the following attached department, each having separate functions and organizational setup.

- Agriculture Extension Department
- Agriculture Research System
- Agricultural Engineering Cell
- Soil Conservation Department
- On-Farm Water Management Department
- Livestock and Dairy Development Department (including Veterinary Research Institute).
- Crop Reporting Services
- Fisheries Department &
- Cooperative Department

Conclusion and Recommendations

The economy of Khyber Pakhtunkhwa is agrarian in nature where 83% of the total population is rural, with agriculture as their major source of livelihoods. Agriculture contributes 22.7% to the provincial GDP and provides employment to 44 % of the labor force. However, 31 % of the provincial population continues to be food insecure with a high rate of malnourishment. Policy makers have failed to provide any stable infrastructure and require skilled human capital which could enable this sector to work on a commercial and competitive basis. Poverty incidence and trends in KP reflecting 44% of rural population living below poverty line show disappointing results of recent economic growth, declining job opportunities and a range of natural resource problems.

The perceived causes of these high poverty levels included a variety of factors such as low level of agricultural yields and livestock productivity due to use of obsolete technology, drought and geographic isolation. The development challenges for the KP, therefore demand achieving sustainable economic growth particularly in rural areas through the development of agriculture and livestock sectors along with exploiting other opportunities. With special reference to the agriculture sector, the areas of grave concern for KP are rainfed cultivated land, cultivable wasteland, fragmented and un-economic land holdings, weak coordination amongst various tiers of the agriculture department, weak organizational trends amongst farming community, in-efficient utilization of water resources, non-availability of good quality seed, high cost of fertilizers and pesticides. Lack of access to agricultural marketing infrastructure, lack of gender mainstreaming, absence of rural based agricultural processing units, lack of health & management coverage for animals



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have also accelerated the low productivity of the agriculture sector in KP thus leading to mass poverty and malnutrition.

Based on the analysis the following recommendations are suggested:

- Agriculture in Pakistan generally and in KP particularly is working on traditional basis, needs to be **commercialized and made more competitive** by facilitating modernized packing, storing and food processing, for perishable items like fruits, vegetables, livestock and meat products.
- Better **water conservation** and utilization can enhance agricultural productivity.
- Making investments in agro-based and small-scale industries will create commercial farming opportunities while generating rural KP employment options.
- Agricultural lands exceeding millions of acres remain unplanted since irrigation and necessary agricultural resources are absent while inadequate finances and machinery demand immediate attention from policymakers. To generate an **exportable surplus** of agricultural production/channel to earn foreign exchange and to improve the living condition of small-scale farmers.
- **Strengthening of agriculture research and development** activities in the province by emphasizing agro-based professional education, on the job training and updated guidelines and information to the farmers so that the agriculture sector of KP can be made more commercial and competitive like Punjab and Sindh provinces.
- **Coordination** of all the departments linked with Agriculture development.
- Addressing the **allied departments** like livestock, poultry, horticulture, etc. as a strategy to enhance living and employment conditions to a widened segment of the population by way of providing micro loans, basic managerial guidance and training.
- **Marketing** is the main part of the mandate to be discussed as it concerned with the production process. The following innovations are to be kept in mind for dealing with as included in the mandate.
 1. Market Information system (MIS).
 2. Market Research (post-harvest losses)
 3. Establishment of regulated market
 4. Market legislation
 5. Storage for food, fruit, and vegetables crops etc.
 6. Supply and demand situation
 7. Rural markets
 8. Supply of inputs for marketing
 9. Provision of soft loans
- **Facilitating role of extension for all inputs**, provision of seed, fertilizers, pesticides, etc.
- **Organizing of the Farmers** Working with existing farmers groups and organization and if necessary, establishing permanent farmers groups or organization and facilitating input supply.
- And the last but not least, the establishment of rural support and farm services centres, Feedback and Monitoring & Evaluation.



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