

Economic Development of Pakistan

Student's Learning Outcomes

After studying this chapter students will be able to:

1. Discuss Economic Development in Pakistan through decades.
2. Explain the Labour Force in Pakistan.
3. Define Major Metallic and Non-metallic Mineral Resources of Pakistan, Their Economic Values and Distribution in Pakistan.
4. Explain the importance of Agriculture, its Problems and Efforts to Modernize the Agriculture.
5. Discuss the Water Resources of Pakistan and Existing Irrigation System.
6. Discuss the Production and Distribution of Major Crops, Livestock and Fishing in Pakistan.
7. Discuss the importance of Industries, their location and Production of Cottage, Small and Large-scale Industries.
8. Discuss the importance of different Energy Resources, Production and Consumption of Different Sources of Energy in Pakistan.
9. Discuss International Trade of Pakistan (Imports and Exports) and its Impact on the Economy of Pakistan.
10. Explain the Importance of Sea ports and Dry ports of Pakistan.

Economic Development of Pakistan

Economic Development at a Glance

- According to Graham Bannock, "Economic development pertains to the ability of an economy to generate higher levels of national income persistently."
- If Gross Domestic Product (GDP) (total quantity of goods and services) continues to grow according to the target, the government will be in the position to carry out its development plans. Domestic goods and services are plentiful, inflation remain under control, circulation of money and business activities both increase. This leads to increase in employment opportunities and per capita income. As a result, people enjoy a better living standard. Style and standard of goods produced also change.
- In the case of GDP does not grow according to target, government and the people all face difficult situation, inflation rises, value of money decreases and there is no improvement in employment opportunities. There is no betterment in per capita income and living standard of the people. Debt and deficit become regular feature of the Economy. It can be said poverty and deprivation can be eliminated only through a persistent growth in GDP.

Do you know?

The Government of Pakistan established the Planning and Development Board in 1952 and the Planning Commission in 1953 to accelerate the pace of economic growth and to remove obstacles.

Economic Development in Pakistan through Decades

The economic growth that has taken place since the inception of Pakistan can be divided into the following seven decades:

- First Decade: from establishment of Pakistan to 1958
- Second Decade: from 1958 to 1968
- Third Decade: from 1968 to 1978
- Fourth Decade: from 1978 to 1988
- Fifth decade: from 1988 to 1998
- Sixth decade: from 1998 to 2008
- Seventh decade: from 2008 to 2018

First Decade: From establishment of Pakistan to 1958

- On August 15, 1947, Quaid-e-Azam Muhammad Ali Jinnah (رحمته الله عليه) took oath as first governor general of Pakistan. He started working for the construction and development of the country with courage, confidence and commitment. Unluckily, he did not live long to serve the country. He died on September 11, 1948. After Quaid-e-Azam (رحمته الله عليه), Liaqat Ali Khan controlled the reins of power in the country. Liaqat Ali Khan also departed on October 16, 1951. After him, most of the time political chaos and Economic instability ruled the country.
- Since its establishment, Pakistan faced many issues like refugee resettlement, administrative, demarcation, Kashmir issue, annexation of states, assets distribution, river water issue, distribution of military assets and other economic issues etc.
- Up to June 1953 development schemes were executed in the framework of under a six year plan called "the Colombo Plan". Main focus of this plan was on infrastructure development to create an industrialization friendly atmosphere in the country. The country shifted to development planning discipline in 1955, to speed up economic growth.
- The first five year plan was launched in 1955 with a volume of Rs. 10.80 billion. Main targets of the plan were: (i) To increase industrial and production of food crops at the rate of 9% and 7% per annum respectively. (ii) To increase the national income at the rate of 12% and per capita income 7% per annum. (iii) To provide employment to 2 million people. (iv) Repair of old roads and construction of new roads as well as enhancement of railway facilities. (v) Increase in health and education facilities (vi) To provide irrigation facilities to

1.6 million acres cultivable land.

- Due to instability in the country, the first five year plan could not complete its term. It came to end with the imposition of martial law in the country in 1958. However, the project was partially successful, as it provided a lot of guidance for future projects.
- In the first decade, the growth rate of GDP was 3.1 %, National Income 11%, Per Capita Income 3%, Agriculture sector 1.6%, industry 7.7 %, per annum. In the first decade, most of the focus was on industrial development, while agriculture sector was neglected.

Do you know?

Gross Domestic Product (GDP) is the sum of goods and services (measured at market value) produced in an economy over a period of time. A specific period usually means one year.

Second Decade: From 1958 to 1968

- The second five year plan was launched in 1960 to accelerate economic growth. Its period was from 1960 to 1965. The initial estimate of this project was Rs. 19 billion, which was later increased to Rs. 23 billion.
- Important targets of the plan were, GDP increase 42 %, increase in per capita income 12 %, increase national saving by 10 %, increase in exports 30 % and increase in food crops 21 % during the plan period. The other objectives were development of industrial sector, introducing modern methods to replace traditional methods of agriculture, Improving the means of transportation, generation of employment opportunities and increasing the productivity of large scale industries.
- During the second five year plan, GDP grew at 6%, industrial growth 8%, exports 7%, and agriculture sector 3% per annum. This project is considered very successful in the history of economic development of Pakistan. Most of the targets of this project were achieved.
- The industrial sector flourished in this decade. Special attention was also paid to agricultural development, which included import of high quality seeds, pesticides, use of modern agricultural machinery and increasing irrigation resources through installation of tubewells.
- In the same decade, the famous Indus Water Treaty between Pakistan and India was signed in 1960, which temporarily improved the water situation, but in the



Agriculture University Faisalabad

days to come, there were major negative effects on Pakistani agriculture.

- For agricultural development, Agricultural College Lyallpur (Faisalabad) was upgraded to "University of Agriculture Faisalabad ". The government also implemented agricultural reforms for economic growth. Several projects were launched to control salinity and water logging. Under these projects, drains were dug and tubewells were installed.
- During this period many development projects were started, including Mangla and Tarbela dams. These government measures provided employment to thousands of people and improved their economic condition.

Do you know?

In 1906, " Punjab Agriculture College and Research Institute" was established in Lyallpur (now Faisalabad) in the province of Punjab, which was upgraded as "University of Agriculture Faisalabad" in 1961.

- Following the remarkable success of the second five year plan, the third five year plan (1965-1970) was launched, which aimed at developing the industrial and agricultural sectors as well as increasing investment opportunities in East Pakistan. This plan also included reducing unemployment, improving residential, education and health care facilities.
- The plan has proved successful in accelerating economic activities in the country as a whole. GDP increased by 6.8% per annum, industrial growth was 9.9 % per annum. The agricultural sector grew at an annual rate of 5.1%, Exports grew at 7% per annum. About 74,000 km of roads were completed. The use of modern technology in the agricultural sector has led to a record increase in the production of important crops, especially wheat. Increased income of farmers improved their living standards.

Third Decade: From 1968 to 1978

- In the third decade, the fourth five year plan (1970-1975) began which was incomplete due to Pak-India war 1971. After the secession of East Pakistan, the country had to face immense internal, external and financial problems. Then government introduced industrial and agricultural reforms.
- Under the Indus Water Treaty, two major dams (Mangla and Tarbela) were completed, link canals were constructed, new and old barrages were completed. Thus, the irrigation situation improved. The government's policy of nationalization of industries had a negative impact on industrial development. New investment in industry halted and the dishearten industrialists began to withdraw their capital from the industries.
- Government devalued Pakistan's currency to increase exports. GDP grew at 4.8% per annum. Industrial growth was 5.5% per annum. Growth in agriculture sector was 2.4% per annum. Investment rate stood at 21.8% per annum.

Whereas, Private investment accounted for 4.8% of GDP.

Fourth Decade: From 1978 to 1988

- During the fourth decade, the fifth five year plan (1978-1983) was launched. The volume of this plan was Rs. 21.2 billion. Despite unfavourable conditions, the economic growth rate remained at 6% per annum. Industrial production increased by 9% per annum and inflation remained at only 5%. During this plan, special attention was paid to the development of rural areas. The poor and needy people were helped from the Zakat Fund.
- During the plan, Russia invaded Afghanistan, which started the arrival of Afghan refugees in Pakistan. The burden on our economy increased a lot, but Pakistan also received ample of aid from outside countries, which provided a temporary support to the country's economy. During this period, the annual growth rate in various sectors remained as follows: GDP increased at the rate of 7.8 % per annum, the rate for agriculture was 10.9 % and industry progressed at the rate of 8.1 %. Exports of the country moved up to 7.9 % of GDP. More than 12,000 km of paved roads were completed.
- Sixth five year plan was launched during 1983-88. Main objectives of the plan were generation of employment opportunities, issuing scholarships to promote science and technology, allocating more funds for the education and health sectors, ensuring the provision of basic needs of the people and setting up of Zakat Fund for deserving people.
- During this period, political instability in the country affected economic activities. GDP grew by 5.6 %, agriculture sector by 5.4 % and industry by 8.2 %. 2.4 % of GDP was spent on education sector. As a result, the literacy rate increased to 33%.



View of Tent Settlement of Afghan Refugees

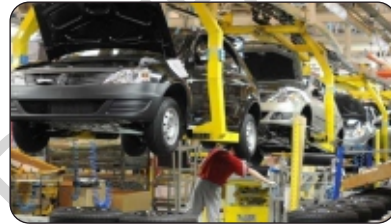
Fifth Decade: From 1988 to 1998

- The seventh five year plan was launched from 1988 to 1993. The plan prioritized self-reliance instead of external borrowing. The eighth five year plan was launched from 1993 to 1998.
- The annual growth rate during this period was as: GDP Growth 1.4 %, agriculture 6.4 %, industry 4 %, investment (Government) 6.1 % and investment (Private) 8.8 % at per annum. Per capita income moved up to 438 dollars during this period. This was the decade of industrial privatization. Poverty increased during this period because the government stopped subsidizing. Atomic explosions by

Pakistan in 1998 severely affected foreign investment in the country.

Sixth Decade: From 1998 to 2008

- During the decade foreign investment rose to 6 billion dollars, foreign exchange reserves exceeded to 17 billion dollars. The country's economy grew at an annual rate of 6.6%, per capita income almost doubled, GDP grew at rate of 6.8% per annum, agriculture and industry grew at 4.1% and 8.8% respectively per annum. Exports of Pakistan were over 17 billion dollars.
- The highlight of this decade was the increase in international aid to Pakistan. Many new industries were set up, mostly related to consumer goods, such as ACs, cars, refrigerators and electrical appliances, etc. This widened the gap between the demand and supply of electricity in the days to come. The country was hit by power and gas crisis.



Motorcar Industry In Pakistan

Seventh Decade: From 2008 to 2018

- During this period, load shedding of electricity increased. The economic growth rate did not increase as expected. People were helped through the "Benazir Income Support" Program and the "Waseela-e-Haq" programme. Although government took several measures for development and protection of women and improve the condition of farmers, but the targets of economic development were not achieved.
- During this period, the annual growth rate of Gross Domestic Product (GDP) was about 4.5%. Falling crude oil prices in the international market have brought down the prices of petroleum products several times, but its benefits could not be passed on to the common man. The energy crisis affected the industrial process, which reduced the volume of exports. Exports declined and trade deficit widened. Uncertain weather conditions also affected the agricultural sector. Many important crops, including cotton and rice production decreased.
- After the 2013 elections, the PML-N formed government at Centre. In the first year of this government, the GDP growth rate was 3.7% in 2013 that reached 5.35% in 2018. The rate of growth of agriculture increased from 2.68% in 2013 to 3.8% in 2018. The rate of industrial growth increased from 4.5% in 2013 to 5.8% in 2018. During this period, burden of internal and external debt on the country increased significantly.
- After the 2018 general elections in Pakistan, Pakistan Tehreek-e-Insaf (PTI) government was formed. This government has launched many projects to improve the economic situation of Pakistan, development in agriculture and improve living standard of the common man. These are Naya Pakistan Housing Programme, Youth Skills development Programme, Insaf Sehat Card,

Diamer Bhasha and Mohmand Dams, Ehsas Programme and plantation of 10 billion trees in the country. The government has begun negotiations with the Independent Power Producers (IPP's) to review previous agreements with focus on rates. Government sources are talking of significant relief to power consumers in case these negotiations succeed.

- To provide affordable electricity to consumers, the government has begun negotiations with Independent Power Producers (IPP's) to review previous agreements. In case of final agreement, electricity consumers are likely to get significant relief.



View of Under Construction
Diamer Bhasha Dam

Labour Force

- Labour Force or Work Force refers to persons 16 years of age or above who are eligible to earn. These include both the employed and the unemployed. They play a vital role in activating the economy. It includes all earners, all unemployed, part-time workers and salaried people. These are the people who provide goods and services to the economy.
- Government of Pakistan conducts a Labour Force Survey every year through the Bureau of Statistics to estimate the number of employed and unemployed people. The data compiled from the Labour Force Survey is used in public welfare planning at the federal level. Pakistan currently has a workforce of about 71.76 million, of which 67.25 million are employed, while the remaining 4.51 million people are unemployed.



Labour force busy in work

Do you know?

Children, housewives (who do not have a job) and the senior citizens are not part of the workforce. Women and the old people play a vital role in caring for the home and children.

Major Metallic and Non-metallic Mineral Resources, Their Economic Importance and Distribution in Pakistan

Minerals refer to underground metallic and non-metallic materials. Mineral resources play an important role in the development of any country. According to economists,

such country would be considered economically stronger, which is rich in mineral resources and production. Minerals are of the following two types:

A. Metallic Minerals

B. Non-metallic Minerals

A. Metallic Minerals

1- Iron

Iron ore production in Pakistan started in 1957. Iron ore deposits have discovered in many places, of which the reserves of Kalabagh (Mianwali district) are very large, but the quality is not good. Good quality iron ore found in Domal Nisar (Chitral) deposits, but due to transportation difficulties, it is not economically feasible. In addition, Iron ore reserves have been found in Langrial and Chalghazi (District Chaghi).

2- Copper and Gold

The importance and utility of Copper and Gold is not hidden from anyone. In Chaghi and Saindak (Balochistan) large deposits of Copper and Gold are discovered. These are the fifth largest known deposits in the world, but due to lack of infrastructure, unavailability of required machinery, limited experience and insufficient financial resources are major obstacles in extracting these minerals from the land.

3- Manganese

This metal is used in battery making, bulb making, painting and the steel industry. In Pakistan, its deposits are found in Lasbela and Chaghi District (Balochistan).

4- Bauxite

This precious metal is used to make Aluminum. Its deposits are found in Muzaffarabad and Kotli districts of Azad Kashmir, in the central areas of Kohistan-e-Namak in Punjab and in Loralai district of Balochistan.

5- Chromite

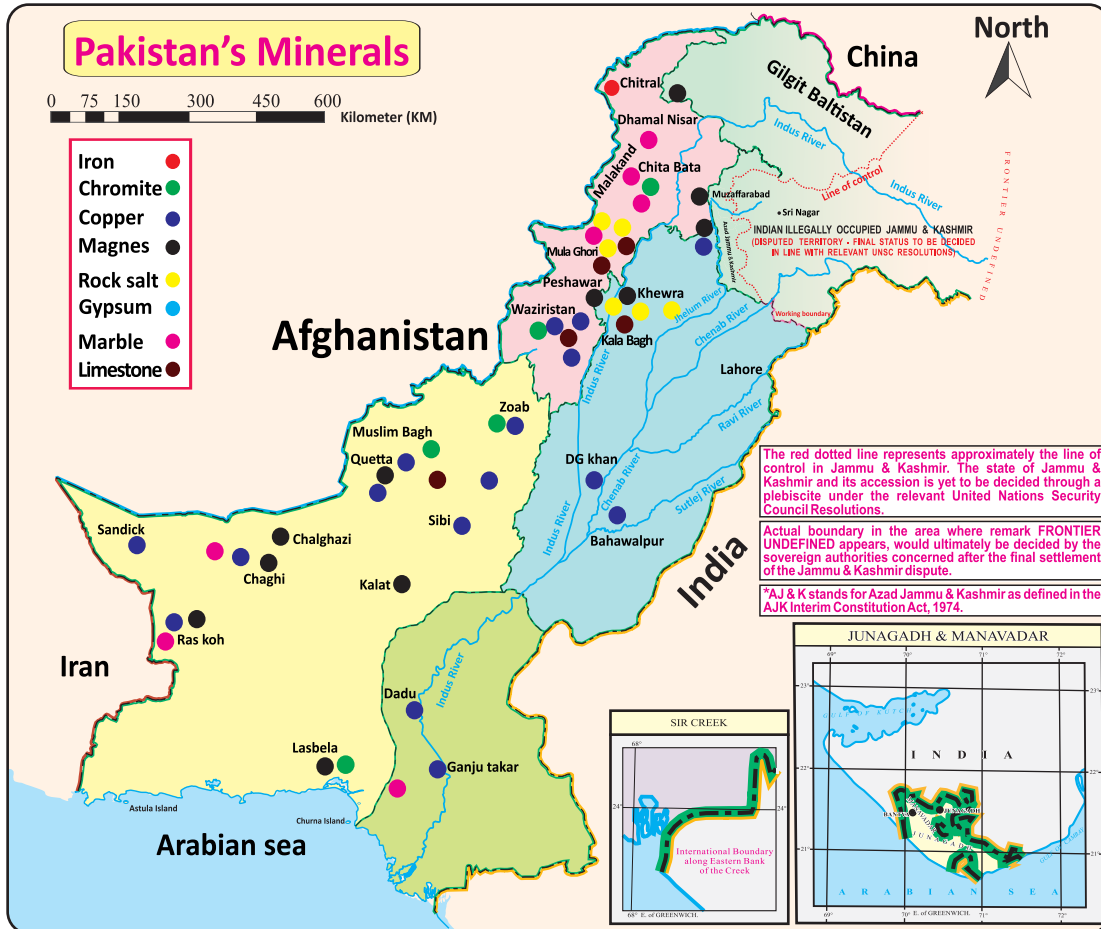
This metal is used in the stainless steel goods manufacturing and steel making industry. It is also used to make engineering tools. In Balochistan, its deposits are found in Muslim Bagh, Lasbela and Chaghi areas. Chromite deposits are also found in Malakand and Mohmand Agency in Khyber Pakhtunkhwa.

B. Non-metallic Minerals

1- Coal

It is an important source of energy that not only provides heat but also generates electricity. Pakistan has approximately 185 billion tons of Coal reserves. Its annual production is very low because of heavy cost of extracting it from the land. In Pakistan, Coal is mostly used as fuel to generate thermal power, domestic and brick kiln industry. Coal is currently being extracted from various places in Pakistan. In the area of *Kohistan-e-Namak (Salt Range)* in Punjab province, most of the Coal is obtained from the mines of Dandot, Padh and Makarwal. Hangu in Khyber Pakhtunkhwa has Coal reserves. There are Coal mines in Khost, Shark, Degari, Shireen Aab, Mach, Bolan and Harnai in Balochistan province. Coal reserves in Sindh are located at Thar, Jhampir, Sarang and Lakhra. In Azad

Kashmir coal reserves are found Kotli and Muzaffarabad districts. The largest Coal



2- Gypsum

It is a very useful and beneficial stone that is used in both industry and agriculture. In agriculture, it is used as treatment of salinity and water logging. It is also used in the chemical fertilizers, cement, paper and paints industries. Pink and white gypsum is found in Dera Ghazi Khan, Mianwali and Jhelum in Punjab province. Gypsum deposits are also found in Dadu and Sanghar (Sindh), Quetta and Sibi (Balochistan) and Kohat (Khyber Pakhtunkhwa).

3-Rock Salt

Salt is primarily used as a food additive to create taste in our food. In addition to food, it is used in the industries of soda ash, caustic soda, sodium bicarbonate, textile and leather etc. Pakistan is self sufficient in salt production. Khewra Salt mine in the "Salt range" is one of the few largest mines in the world in terms of quality and taste. Salt of this mine is also among the best quality salts due to its taste. In addition to Khewra salt mine, there are other deposits of salt in Pakistan at Kala Bagh, Warcha and Bahadurkhel

(Mianwali).

4- Marble

It is used for the decoration of houses and monuments. Most of the marble deposits are found in Swabi, Swat in Khyber Pakhtunkhwa and in the Chaghi district of Balochistan. Marble is also found in Mirpur and Muzaffarabad districts of Azad Kashmir.

5-Lime Stone

Lime Stone is mostly used in making cement. Its major reserves are in Punjab Province at the Kohistan-e-Namak (Salt Range), Pothwar Plateau, Daud Khel, Zinda Pir and Margalla Hills. Other than these areas, it is found in Peru Mughal Kot (Dera Ismail Khan), Kohat, Nowshehra, Mangoh Pir, Rohri (Sindh Province) and in the mountains of Harnai in Balochistan.

6- Sulphur

It is mostly used in the manufacture of colours and paints, chemical fertilizers, synthetic fibers and explosives. Sulphur has also been used in agriculture to overcome salinity and water logging. It is also used to prepare sulfuric acid. In Pakistan, its reserves are found in Chaghi district of Balochistan.

7-China Clay

The clay is mostly used in industry. In Pakistan, it is used in making utensils, furnace to melt steel, in refining oil and steel factories. In Pakistan, it is used in pottery and steel smelting plants, as well as in oil refineries and steel mills.

Importance of Mineral Sector

Mineral product is very important because it not only creates job opportunities in the country but also increases investment, helps local industry to flourish. Revenues of the central and the provincial governments increase. National and per capita income rises. Declining imports and increasing exports help to improve the balance of trade and boost business activities.

Importance of Agriculture, Problems and Efforts to Modernize Agriculture

- Allah Almighty has blessed Pakistan with the best fertile land, ideal canal irrigation system, snowfall in the mountains, rainfall, flowing springs, streams and rivers. Except these, it is also blessed with beautiful seasons like Summer, Winter, Spring and Autumn.
- We have no shortage of manpower. All this proves that our yield per acre should be ideal, but unfortunately this is not happened, because our yield per acre is less than that of many developing countries.
- Agriculture is an important pillar of our national economy. About 60% of our rural population is directly or indirectly involved in the agricultural sector. Nearly 37.4% of the country's workforce is engaged in agriculture. Agriculture has a significant position in the GDP with about 22.7% share. While, agriculture and its

products contribute in the country's exports about 60%.

- It is a fact that the country cannot develop without developing agriculture. If agriculture is developed, it will not only increase the national income but also the income of individuals and institutions associated with agriculture. People will have a higher standard of living, which will enable them to provide better educational, housing and recreational facilities for their children. In addition, the Agrobased Industry will flourish. More employment opportunities will be available. Investment in agriculture will increase, business activity will accelerate and increase in exports will also increase foreign exchange reserves.



View of Green Fields

Problems of Agriculture

The country's agriculture is currently facing the following problems, which are major obstacles to increasing production:

1-Shortage of Water and Inefficient Irrigation System

Unnecessary delays in the construction of new dams have aggravated the problem of water scarcity. As much water enters canals and streams from rivers, only 40% of this water is used for crops, while the rest of the water is wasted in canals, channels and uneven fields. Therefore, the desired yield is not obtained and land productivity is also affected. According to experts, if there is no adequate increase in irrigation resources and the loss of water from the irrigation system continued, so the problem of water scarcity can turn into crisis.

2-Uneven Fields

Majority of our fields are uneven in which agricultural inputs i.e. water, seeds and fertilizers etc. are wasted and yields is low. Thus, the productive capacity of the land is also gradually decreasing.

3-Costly Fertilizer, Seed and Pesticide etc

Better productivity seeds, fertilizers and pesticides are not only very expensive, but also not available to the farmers at the time of sowing the crop.

4-Inadequate Access to Global Markets

Lack of access to global markets does not provide a fair price for agricultural exports.

5- Law of Inheritance

As a result of inheritance law, the lands owned by the farmers are getting smaller day by day due to division of land. Modern technology cannot be applied on small

fields.

6-No Increase in Cultivated Land

In the last two decades, there has been no significance increase in the area under cultivation. On the other hand, the population has increased rapidly during this time. At present, the country has about 8 million hectares of cultivable land, but it cannot be cultivated because of shortage of water.

7-Illiteracy in Farmers

Farmers cannot take advantage of modern technology because they are illiterate or less educated.

8- Water Logging and Salinity Problems

Water logging and Salinity has damaged our vast areas of cultivated land. Due to lack of proper restraint, it may increase further in the coming years.

9-Insufficient Storage Facilities

A lot of production is wasted due to inadequate storage facilities.

10-Decrease in Productivity of Land due to Continuous Cultivation

Continuous cultivation of land has increased to meet the needs of a growing population. In addition, organic matter (fertilizers etc.) in the lands has also decreased, which is gradually reducing the productive capacity of the lands.

11- Lack of Soil and Water Analysis Practice among farmers

Majority of our farmers do not pay proper attention to soil and tubewell water analysis. Thus, our agricultural resources are wasted, and they cannot be fully utilized. As a result, the productive capacity of land begins to decline.

12-Lack of Coordination between Farmers and Related Departments

There is a lack of coordination between the farmers and the concerned departments.

13-Crop Diseases, Floods and other Natural Calamities

Natural calamities, crop diseases, locust invasion, earthquakes and floods, sometimes lead to a food crisis in the country.

14-Inadequate Credit Facilities

One of the major reasons for agricultural backwardness is inadequate credit facilities on time. Providing loans to farmers on time and at low interest rates can be helpful to increase production.

Modernization in Agriculture of Pakistan

The following steps are needed to make agriculture modernize in Pakistan and bring it on par with developed countries:

1. Construction of new dams to meet water scarcity and increase water storage capacity.
2. Use of modern machinery in agriculture i.e. tractors, drills and combine harvesters etc.



Use of Combine Harvester for Wheat Harvest



Use of Tractor for Crop Cultivation

3. Use of Laser Land Levelling Technology for smoothing the uneven fields.
4. Irrigation with lined channels instead of traditional channels
5. Use of economical and modern irrigation methods like sprinkler and drip irrigation.
6. Training of farmers on modern technology.
7. Sowing the crops on lines or tracks.
8. Maintain the required number of plants per acre.
9. Cultivation of profitable crops as per market demand.
10. Promotion of One Window Operation to improve the agricultural credit facility.
11. Proper use of new varieties of seeds, fertilizers and pesticides according to the instructions of experts of agriculture.
12. Where possible, irrigate the entire field with a single water channel instead of many channels in different sides.
13. Use of Tunnel Farming Technology for growing out of season fruits and vegetables.
14. Analyze the under cultivation area and tubewells water in the light of the instructions of agricultural experts

Financial measures taken by the government to increase agricultural production

- 1- Provision of laser land levelling technology to agricultural owners at subsidized rate.
- 2- Provision of subsidy to promote sprinkler irrigation and drip irrigation technology.
- 3- Launch of loan scheme for purchase of tractor.
- 4- Free supply of construction materials for lining of traditional irrigation water channels.
- 5- Provision of loans on easy terms and conditions to farmers by agricultural and commercial banks.
- 6- Supply of fertilizer at low cost to the farmers.
- 7- Support pricing of crops by the government.
- 8- Provision of good food and medicine for cattle.
- 9- Necessary training of livestock related people and provision of facilities for export of meat and other related items.

10- Launch of various schemes to increase irrigation resources, special focus on construction of Diامر Bhasha and Mohmand Dams.

11- Construction of lined ponds in hilly areas to store rainwater and stream water.

12- Launch of Prime Minister's Emergency Programme by the government to increase the income of landless farmers and rural women.

Water Resources of Pakistan and Existing Irrigation System

Pakistan's irrigation system consists of several rivers, dams, irrigation and link canals, millions of tubewells and thousands of irrigation channels. It is considered to be the largest irrigation system in the world in terms of water supply and length. Following are the main sources of irrigation in Pakistan.

1-Rainfall

2- Canals

3-Tubewells

4-Karez

1. Rainfall

Rainfall is an important and natural source of water supply. In our country, monsoon rains are more popular. Water coming down from rainfall in hilly areas and melting of glaciers gather in rivers through streams and drains and keeps the rivers flowing round the year. The water is stored by building dams on rivers. Then this water is used for irrigation and industrial purposes by digging canals from barrages.

Unlike canal areas, better yields in rainfed areas are mostly due to timely rainfall. Unfortunately, our country receives less rain than expected. In 90% of Pakistan, the average annual rainfall is less than 200 mm. Only 10% of the upper mountainous area receives an annual rainfall of 500 mm to 1000 mm. This rainfall is less than water needs of rainfed and irrigated areas of the country. Our about 5 million hectares of agricultural land contains rainfed cultivation. Tarbela, Mangla and Warsak are our major irrigation dams, which not only store millions of acres feet of water but also generate cheap hydropower.

2- Canals

There are three main types of canals according to their performance.

i-Perennial Canals

These are the irrigation canals that run throughout the year and are important source to carry river water to the fields. Main perennial canals of the country are Upper Chenab, Lower Chenab, Upper Jhelum, Lower Jhelum, Lower Bari Doab and Pakpattan canal etc. that flow all the year.

ii-Non-Perennial Canals

Non-Perennial Canals are also called six monthly canals, because water is released in them only in summer and rainy season. Bahawalpur and Qaimpur canals flowing from Islam Barrage on the Sutlej River and few canals flowing down from Kotri Barrage and all canals of Guddu Barrage are non-perennial canals (canals not flowing all the year).

iii-Flood Canals

In summer and rainy season, when the water level in the rivers rises or when the water reaches the danger mark in the rivers during severe floods, water is released in these canals to protect the barrages from damage. Many canals from the Indus and Chenab Rivers belong to this category.

3- TubeWell

It is inevitable to use ground water through tubewells to meet the shortage of canal water. Currently, there are millions of tubewells installed in the country, most of which are in Punjab province. According to official facts and figures, about 70% of our water from tubewells is not suitable for crops as this water causes waterlogging and salinity in the lands, but farmers are forced to use this water due to shortage of canal water. Farmers should realize the importance and usefulness of canal water and prevent it from being wasted. They should cooperate fully with the Agriculture Department to make better use of the scarce resources and modern methods of agriculture recommended by this department such as sprinkler, drip irrigation and laser technology should be used.

4- Karez

About two dozen countries around the world are benefitting from this system, including most countries from China to Chile. In Pakistan, the system is practised in the province of Balochistan, where due to the specific geographic conditions and severe shortage of canal water, water is brought to the fields through underground drains. These drains are called karez. This water is used for drinking as well as farming. The sources of these karez are springs flowing from the mountains which are mostly made in Pishin and Quetta districts.

Indus Water Treaty

In 1948, India withheld the flow of water of those Pakistani canals whose sources were located in India. These canals include Upper Bari Doab flowing down from Madhupur Barrage on the Ravi River and Depalpur canal flows out from the Ferozpur Barrage on Sutlej River. Pakistan raised the issue at international forums. As a result, Indus Water Treaty between Pakistan and India came into being in 1960 under the support of the world powers. Under this treaty three eastern rivers; the Sutlej, the Ravi and the Bias became the part of India. Three western rivers; the Indus, the Jhelum and the Chenab were handed over to Pakistan. Thus, Pakistan's property rights over these rivers were recognized. An irrigation network was formed in Pakistan to meet water shortage in eastern rivers, which provided financial assistance as well as necessary technical guidance to Pakistan. Following strategies were formulated to meet the water shortage in the eastern rivers:

- (i) Construction of Mangla dam on Jhelum River and Tarbela dam on Indus River and storing 5 lac acre feet of water at Chashma Barrage.

- (ii) To repair the existing barrages and construct new barrages at suitable places.
- (iii) Construction of link Canals to interlink rivers.

Our eastern rivers which are now owned by India under the Indus Water Treaty, before given to India, these three rivers were irrigating our about 8 million acres. If we did not build link canals to supply water to these rivers, the area would not only become barren, but people would also have difficulty in obtaining drinking water.

Civil works have been completed under the Indus Water Treaty. Pakistan has always been sincere in its commitment to this treaty and has never violated it, while India, being the upper reaches of our rivers, does not miss any opportunity to take advantage of our rivers.

Barrages and Canals on River Indus and its Eastern Tributaries

The details of the barrage and canals on the Indus and its eastern tributaries are given below:

1- Jinnah Barrage.

This is first barrage of Punjab province located on the Indus River. Mianwali, Bhakkar and Layyah districts are being irrigated by the Thal canal flows out from the Jinnah Barrage.

2- Chashma Barrage

Chashma Barrage is located on Indus River. From this barrage, the Chashma Right Bank Canal has been taken out to supply water to Dera Ismail Khan. While the Chashma-Jhelum Link Canal has been taken out from the left bank, which will further supply water to the Greater Thal Canal. This canal will irrigate the districts of Layyah, Bhakkar, Khushab and Jhang.

3- Tounsa Barrage

This is the last barrage of Punjab province on the Indus River. Dera Ghazi Khan Irrigation Canal, Muzaffargarh Irrigation Canal and Tounsa Panjnad Link Canal have been taken out from here. These irrigation canals supply water to Dera Ghazi Khan, Muzaffargarh and Rajanpur. The Kachhi Canal is also being drained from the same river.

4- Guddu Barrage

This is the first barrage of Sindh province on the Indus River. Water is being supplied to Naseerabad division of Balochistan province and northern areas of Sindh province by taken out four canals from here. The Rainee Canal is also being taken out from the left bank of the same barrage.

5- Sukkur Barrage

This is the biggest Barrage of Sindh. From here, seven irrigation canals have been constructed. These canals supply water to the provinces of Sindh and Balochistan. This is the largest barrage of Sindh province. From here, seven irrigation canals have been taken out which supply water to Sindh and Balochistan provinces.

6- Kotri Barrage

This is the last barrage of Sindh on the Indus River. Water has been supplied to the southern areas of Sindh province by taking out four canals from here.

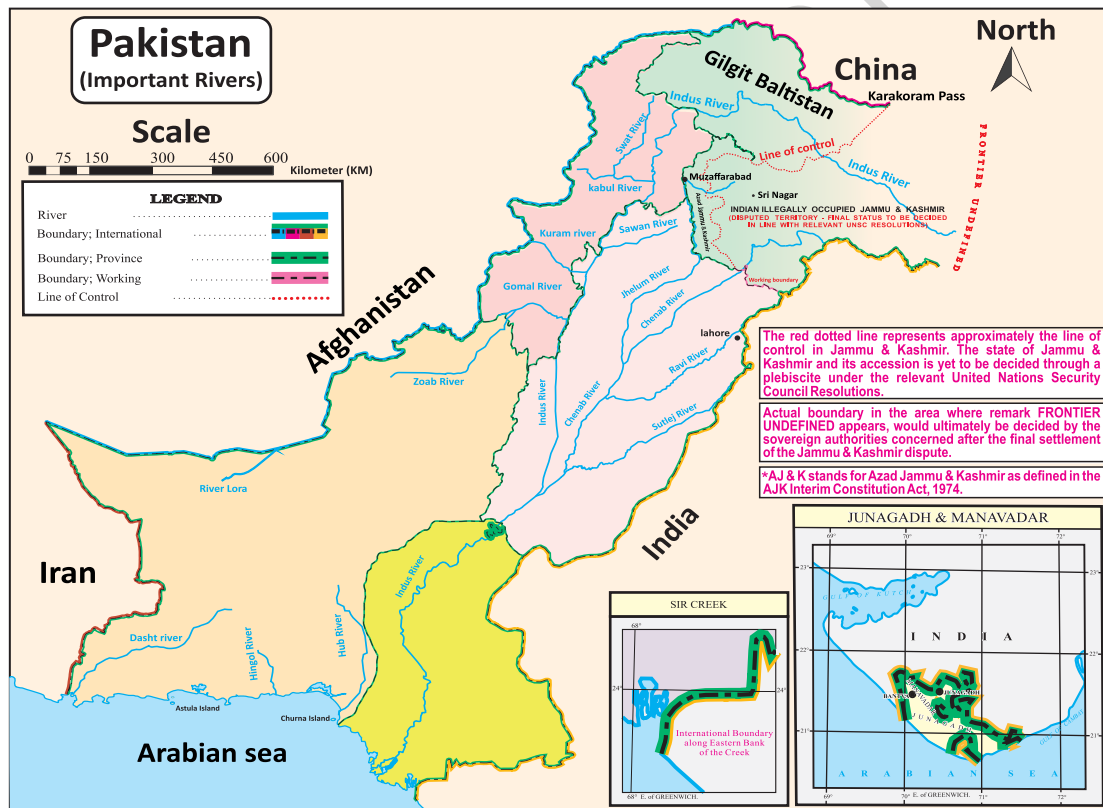
Dam, Barrages and Canals on River Jhelum

1-Mangla Dam

Water has been supplied to Gujrat and Mandi Bahauddin districts by taking out Upper Jhelum Canal from Mangla dam. The canal also serves as a link to the Khanki Barrage.

2-Rasul Barrage

Lower Jhelum canal is being dug from here to supply water to Mandi Bahauddin, Sargodha, Khushab and Chiniot districts. The Rasool Qadirabad Link Canal has also been taken out.



Barrages and Canals on River Chenab

1-Marala Barrage

This is the first barrage to be built on the Chenab River. From here the Upper Chenab Canal supplies water to the northern and central districts of Punjab Province. Famous Bambanwala Ravi Bedian Depalpur Link Canal is branch canal of the Upper Chenab. The Marala Ravi Link Canal is also part of this barrage. The Upper Chenab also connects the Chenab River with the Ravi River.

2-Khanki Barrage

From here, Lower Chenab Canal has been taken out to irrigate central areas of Punjab.

3- Qadirabad Barrage

This barrage is located on the River Chenab. It connects the rivers through the link canals.

It connects the Jhelum River with the Chenab through the Rasool Qadirabad Link Canal. It connects the Chenab River with the Ravi through Qadirabad Balloki link canal.



Barrages and Canals on Combined River Chenab and Jhelum

Trimmu Barrage

The Chenab River and Jhelum join at the point of the Trimmu (Jhang district). From here, three canals Rangpur, Haveli Link and Trimmu Sidhnai Link Canal have been taken out which supply water to Jhang district. These canals also serve to connect the Trimmu Barrage with the Sidhnai Barrage.

Do you know?

Five rivers namely Sutlej, Beas, Ravi, Chenab and Jhelum merge at Panjnad (Muzaffargarh district) and take the form of Panjnad. Panjnad Canal and Abbasia Canal have been taken out from Panjnad Barrage. These canals irrigate Southern Punjab. Panjnad joins the Indus River at Kot Mithan (Rajanpur district).

Barrages and Canals on River Ravi

1- Balloki Barrage

From here, the areas of Central and South Punjab are being irrigated by the Lower Bari Doab, while water is being supplied to Kasur district through two link canals, Balloki Sulemanki links 1 and 2. These link canals are connected to the Sulemanki Barrage.

2-Sidhnai Barrage

Two canals are taken out from this Barrage. (i) Sidhnai Canal (ii) Sidhnai Mailsi Bahawal Link canal. These canals supply water to Southern Punjab.

Barrages and Canals on River Sutlej

1- Sulemanki Barrage

From here, three canals; Pakpattan, Fordwah and Sadiqia canals have been taken out to supply water to Central and South Punjab. The Islam Link Canal has also been taken out from Pakpattan Canal, which connects Sulemanki Barrage with Islam Barrage.

2-Islam Barrage

From here, two canals; Bahawal and Qaimpur canals have been taken out. Both canals irrigate the areas of South Punjab.

Do you know?

Warsak Dam is built on the Kabul River. The Pehur High Level Canal has taken out from the Indus River, which supplies water to Khyber Pakhtunkhwa. The Ghazi Barotha Hydropower Project has a generating capacity of 1450 MW.

Dam, Barrages and Canals of Khyber Pakhtunkhwa

Swat, Chitral, Kabul, Kurram, Kunhar, Haro, Gomal, Tochi, Panjkora, Kunar, Bara and Tank Zam are the important rivers of Khyber Pakhtunkhwa.

1-Warsak Dam

This dam is built on the Kabul River near Peshawar in Khyber Pakhtunkhwa province. Besides generating electricity, it provides water for irrigation.

2-Khanpur Dam

Khanpur Dam is a water reservoir. It is located on the Haro River at Khanpur (Haripur district) in Khyber Pakhtunkhwa Province. It is about 40 km away from Islamabad. This dam supplies drinking water to Rawalpindi and Islamabad. It also irrigates some areas of Khyber Pakhtunkhwa and Punjab. Canals taken out from this dam irrigate the districts of Peshawar, Kohat and Nowshera.

3-Tanda and Changhoz Dam

Tanda is a small dam located on Lake Tanda in Kohat district in Khyber Pakhtunkhwa Province. Changhoz dam is a rain fed dam at village Latambar (Karak district) in Khyber Pakhtunkhwa Province. Both dams meet local irrigation needs. It may be recalled that due to the filling of mud and sand in the Baran Dam on the Kurram River, the outlets have also been closed and work is underway to restore them.

Dam, Barrages and Canals of Balochistan

Gomal, Dasht, Zhob, Hub, Ketch and Hangul are main rivers of Balochistan.

1-Hub Dam

Hub Dam is a reservoir. It is located on the Hub River, 56 km from Karachi, on the border of Sindh and Balochistan. This dam is not only a reservoir, but also a recreational spot. A canal has taken out from this dam which further divides into two parts, one canal supplies water to Lasbela district of Balochistan province, while the other supplies water to Karachi.

2-Mirani Dam

Mirani Dam is located in Kech District of Balochistan, 43 km west of Turbat. This dam is built on the site of Mirani Goram on the Dasht River, which irrigates thousands of acres land.

Dam, Rivers and Canals of Gilgit Baltistan

Gilgit Baltistan is the land of rivers, streams, springs and the world's largest glaciers. The Indus River first enters Gilgit-Baltistan. Shiwak, Shigar, Gilgit, Astor, Hunza and Haspar etc. are the major rivers of Gilgit Baltistan. Satpara Dam is very important in Gilgit Baltistan. To irrigate the fields, there is a system of canals and water channels which are connected to rivers and streams.

Production, Distribution of Major Crops, livestock and Fisheries in Pakistan

Major Crops of Pakistan

Wheat, Sugarcane, rice, Cotton and Maize are our main crops. Pakistan's economy, exports and foreign exchange depend mostly on these crops.

1-Wheat

Wheat is most important food crop of Pakistan. It is cultivated in all the provinces and regions of the country. The annual production of wheat in Pakistan is about 25 million tons. Larger proportion of wheat is grown in Punjab and Sindh respectively. Multan, Khanewal, Sahiwal, Vehari, Faisalabad, Toba Tek Singh, Sargodha, Muzaffargarh, Jhang, Bahawalpur and Dera Ghazi Khan in Punjab Province, Sukkur, Hyderabad, Nawabshah and Khairpur in Sindh Province. In Khyber Pakhtunkhwa, Dera Ismail Khan, Peshawar, Bannu, Charsadda and Mardan, while in Balochistan Province, Nasirabad, Khuzdar, Loralai and Kalat are important areas of wheat production in Pakistan.



View of Wheat Field

2- Rice

Rice is the second most important food crop in Pakistan. In addition to food

needs, it is also an important source of foreign exchange. In 2019-20 the area under cultivation was around 3 million hectares that gave an output of more than 7.4 million tons. The production per hectare was less than 2450 kg, which is less than most of the developed countries in the world.

In Pakistan larger portion of rice is grown in Gujranwala, Hafizabad, Sheikhupura, Sialkot, Narowal, Kasur, Lahore and Okara districts of Punjab province. In Sindh province, rice is grown in Sukkur, Larkana, Guddu and Kotri Barrage areas. In addition to Dera Ismail Khan, Peshawar and Kurram Agency in Khyber Pakhtunkhwa, rice is also grown in the Nasirabad area of Balochistan.



Rice Crop

3- Cotton

In 2019-20, the area under cotton cultivation in Pakistan was 2.527 million hectares. The production was estimated at 92 lakh bales. In Pakistan, cotton is grown in the irrigated areas of Punjab and Sindh. It is cultivated on a very small area in Khyber Pakhtunkhwa and Balochistan.



Cotton Fields Crop

The Central and South regions of Punjab Province are famous for cotton crop. The districts of Hyderabad, Badin, Sukkur, Thatta, Nawabshah, Nowshero Feroze, Ghotki and Tharparkar in Sindh play an important role in cotton production. In Khyber Pakhtunkhwa, cotton is grown in Bannu and Dera Ismail Khan, while in Balochistan, cotton is grown in the cultivated areas of Jaffarabad, Nasirabad and Kalat divisions.

Our production per hectare is about 700 kg, while China and India have 1700 kg and 1200 kg respectively. Increase in our average output is need of the hour. Pakistan earns billions of rupees from export of cotton and its products every year.

4-Sugarcane

Sugarcane is an important cash crop of Pakistan. It is used to make white sugar and Jaggery (gur) and shakkar. In Pakistan, total output of sugarcane is about 71 million tones and average per hectare yield is about 61 thousand Kg. It is much less than most of the developing countries of the world. Apart from the irrigated areas of Punjab and Sindh, it is cultivated in Dera Ismail Khan, Peshawar, Mardan and Charsadda in Khyber Pakhtunkhwa.



Sugarcane Crop

At present the total production of sugarcane is less than the demand. That's why we have to import sugar.

5-Maize

Maize is an important Kharif crop. It is used for food purposes and as fodder for animals. It is mostly cultivated in the foothills of Kohistan, the plains of Peshawar and Mardan. In Punjab, it is cultivated in Pakpattan, Sahiwal, Vehari, Faisalabad, Toba Tek Singh, Sargodha, Muzaffargarh, Jhang, Bahawalpur, Dera Ghazi Khan and Okara areas. The total average annual production of maize in Pakistan is about 6 million tons. It is also used to make corn oil, custard powder, popcorn and jelly.



Maize Crop Field

Livestock

Livestock is a sector of our agriculture that plays a major role in the national economy. This is the sector that supports farmers, non-farmers, landowners and landless people in difficult times. This sector is especially popular in rural areas and is an important source of income for the rural people. Government is taking a number of steps to increase livestock, including import of breeder animals, mobile service, training of concerned persons, reduction in customs duty on livestock, dairy related imports and obtaining loans at low markup from banks for this sector.



Sahiwal Breed Cow



Goats of Rajanpur

Poultry

This is an important livestock support sector. There has been a lot of progress in this sector over the last few years. About 1.5 million people are employed in this sector. The growing prices of chicken meat have helped control the prices of mutton and beef. The government has formulated a four-year programme for the development of this



Poultry Farm

sector, under which about Rs. 33 crore will be spent on it. Government is providing loans on easy terms for the development of the poultry sector. Under this facility, loans can be obtained for daily expenses of poultry farms (broilers, layers and hatcheries), for purchase of various poultry machinery and equipment and for expansion and construction of existing farms.

Fisheries

The majority of people living on the shores of the sea or on the banks of the rivers are engaged in fishing. Fishing is an artificial way of breeding fish. Pakistan is earning a lot of foreign exchange from fish exports. In addition, farmers are now setting up fish farms to raise and sell fish on a commercial basis. In this way, they are making more profit than conventional agriculture. They are playing an important role in increasing meat production in the country. Fisheries play a vital role in increasing Pakistan's national income and meeting the food shortages. This reduces the pressure on mutton, beef and poultry. In the year 2019-20, the annual fish production in Pakistan was estimated at more than 7 lac metric tons. Fish is very important in the human food, as it is an important source of protein.



Fish Farm

Importance of Industries, Their Location and Production of Cottage, Small and Large-scale Industries

Industrial development is closely linked to economic development, because economic development is not possible without industrial development. Industrial development is an economic and social process that not only improves our technical standards, but also has a direct impact on our habits, lifestyle and environment. We can get the following benefits from industrial development:

- 1- Country becomes economically stable, increase in national and per capita income.
- 2- Agricultural sector develops and exports of the country increase.
- 3- Employment opportunities increase and the living standards of the people improve.
- 4- The country's foreign exchange reserves increase and the balance of payments improves.
- 5- Domestic and foreign investment increases and technical skills are developed.

Cottage Industry

Cottage industry refers to an industry that is run by household members with very little investment and cooperation and involves only human labour. If it is necessary to use the machine, it is done on a limited scale. The craftsman not only buys the raw

materials required for this industry, but also markets his own product. Some of the examples are sewing clothes in houses, making khes and daryan (mats), poultry and carpet weaving etc. Gold and silver work, wood work, pottery making, stone work, toy making, block printing and embroidery are also fall into the category of cottage industry. Even in the present age of modern industry, cottage industry is not only alive, but is moving from the countryside to the cities or towns, where appreciators value this art more. Foreign tourists in particular are more interested in domestic handicrafts.



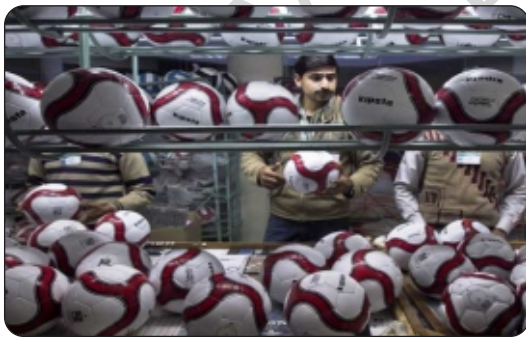
Block Printing



Knitting of Khes

Small Industry

This refers to an industry that does not require heavy machinery. Small scale industries include Poultry farming, Dairy farming, Fish farming, Power looms, manufacturing of sports goods and flour machines and rice threshing machines.



Making of Sports Goods

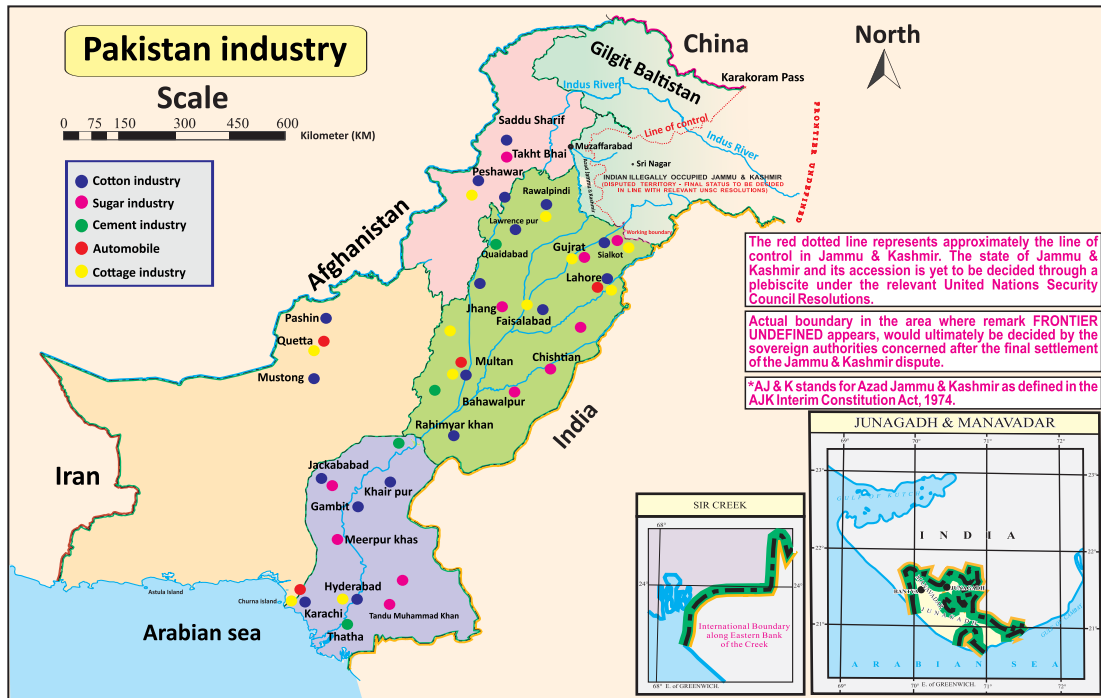


Poultry Farm

Problems of the Small Industry

The key issues of this industry are as under:

- 1- People are less educated or illiterate, due to which they cannot use modern technology.
- 2- Lack of innovation and quality in goods as per the market demand.



- 3- Competition with large scale industry and difficulties in accessing markets.
- 4- Difficulties in accessing electricity, gas and other energy resources.
- 5- Difficulty in getting loan from bank and getting technical facilities from abroad.
- 6- Not being able to market the goods or products properly.

The Small Industries Corporation has been set up to address the problems of small and medium enterprises. It aims to remove the obstacles in obtaining loans and other problems of small and domestic industries. There is a need to encourage and raise the standard of small scale industry for the economic development of the country.

Large Scale Industries

Large scale manufacturing industries include textile, pharmaceutical, cement, cigarette, air conditioner, buses, cars, petroleum and related products manufacturing industry, automobile, fertilizer manufacturing industry, mobile phone, motorcycle manufacturing industry, television, sugar industry and cooking oil industry etc.

Textile is our largest industry and the backbone of our economy. The textile sector provides 46% of the manufacturing share and also employs 38% of the workforce. Government should pay special attention to large scale industry because it has less fluctuation than agriculture. In the past, industries have been facing difficulties due to shortage of electricity and gas and Corona (COVID-19), but now due to improvement in power supply, the process of rehabilitation of industries has started. Industries will gradually start operating at their full potential. This process will reduce unemployment and increase the country's economic growth.

The development of the defense industry plays an important role in strengthening the country's defense. This industry accelerates economic activity and thousands of people get jobs. Reducing imports of defense equipment saves foreign exchange and the country's foreign exchange increases. In this way, the exchange rate of the domestic currency improves.



Sugar Mill



Cement Plant

Pakistan's defense industry is very old and important. It manufactures arms, ammunition and other defense equipment to meet national needs. It includes Heavy Mechanical Complex Texla, Pakistan Ordnance Factories Wah Cantt and Heavy Industries Texla.

Importance, Production and Consumption of different Sources of Energy in Pakistan

Energy serves as a key element for economic development. A developing country with a very high population growth rate needs to strike a balance between its energy resources and its national needs otherwise the country may face many problems. There are four types of energy resources:

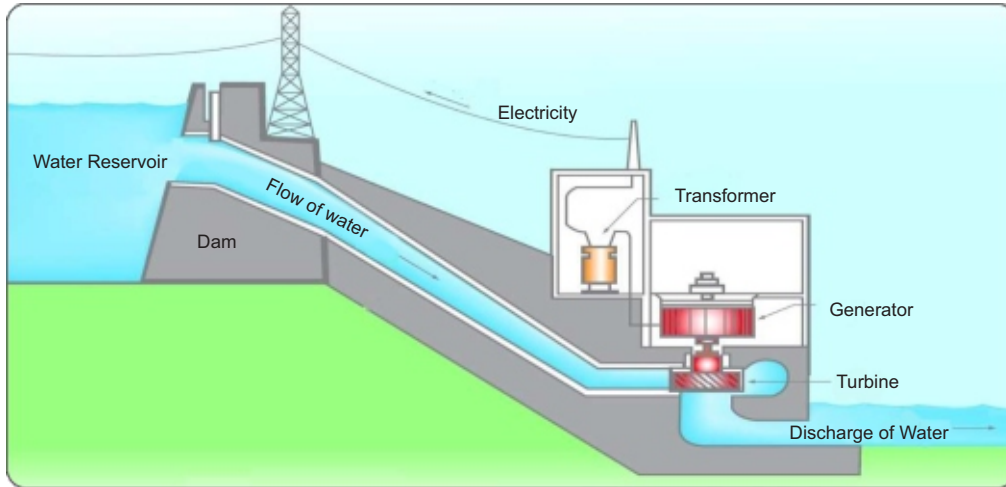
- 1- Electricity 2- Gas 3- Mineral Oil 4- Coal

1- Electricity

Electricity is an important source of energy that meets industrial and domestic needs. Electricity generation (percentage) from different sources can be viewed in the following table.

Hydro electricity	24%
Thermal Power	61%
Nuclear Power	12%
Other Sources (Solar, Air)	3%
Total	100%

Electricity supply situation in Pakistan has improved a lot. Government has paid full attention to reopening the closed industry, which has started reviving the industry. At present, the power sector is facing the following problems:



Method of Getting Electricity from Dam

- Electricity is not being generated as per the production capacity of the installed power plant. Much of the generated electricity is being wasted due to outdated, faulty and old transmission systems.
- Hydro electricity is dependent on water which increases and decreases due to shortage of water in dams. As a result, dams are generating far less hydropower than their capacity due to severe water shortages.
- Expensive electricity is being produced due to the high cost of furnace oil.
- In the past decade due to heavy investment in the country, the number of industrial units increased significantly but power generation could not be increased in comparison.
- Over time, the use of electricity in society is increasing more rapidly, but in comparison, the production of electricity is not increasing at the same rate.
- Government buys electricity from Independent Power Producers (IPP'S), which is more expensive than hydropower. Government has to bear more costs.
- Government has given the importance of the issue, successful negotiations have been held with these autonomous bodies, which have yielded positive results.
- Line Losses, infrastructure defects and theft of electricity also cause a lot of power loss.

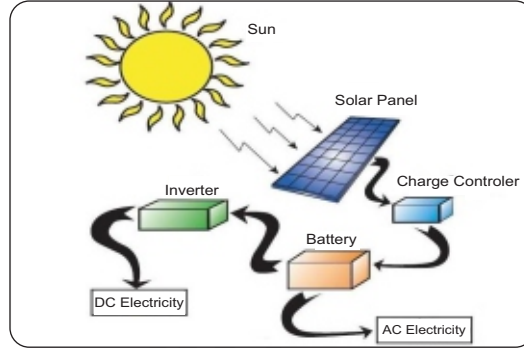
Suggestions to Solve Electricity Problem

- Along with hydropower, other sources, especially coal should also be used to generate electricity, as we have about 185 billion tons. According to some experts, up to 50,000 megawatts of electricity can be generated annually from these reserves. It can meet our industrial and domestic needs for the next 500

years. In addition, we can earn a lot of foreign exchange by exporting surplus electricity to neighbouring countries.



Wind Mill



Method of Getting Solar Energy

- Apart from coal, wind and solar energy are also being generated. Government is also fully active in generating electricity from these sources. In the current era, there is a need to increase the capacity of these sources of electricity.
- Electricity generation can also be increased by using biogas and biofuels. 5,000 megawatts of electricity can be generated by using urban and agricultural waste.
- Electricity situation can be improved by banning air conditioners in offices at certain times.
- The use of all types of bulbs and tube lights for domestic and commercial should be banned and replaced with cheap energy savers and LED bulbs to save electricity.
- Electricity situation can be improved by strictly adhering to the schedule for weddings and other celebrations.
- Electricity loss can be reduced by launching "Save Electricity" campaign on electronic and print media.

2-Gas

Natural gas is a clean, environment friendly and efficient source of energy. The largest gas reserves in Pakistan were discovered in 1952 at Sui (Balochistan). However, gas reserves are discovered in the country from time to time. Gas reserves have been found in lower Sindh, in areas of Balochistan, Pothwar and Kohistan Namak areas. Gas reserves found at Sui, Mari and Qadirpur are also very important.

According to an estimate, the average daily production of natural gas in Pakistan is more than four billion cubic feet. More than 1/3 of the country's energy needs are being met by this gas. Natural gas is a very cheap and clean source of energy which is the best alternative to coal and mineral oil. In addition to this natural gas is used in processing fertilizer, recyclable plastics, rayon and many other industries. A larger proportion of gas is used for power generation and domestic burning, while more than one-third of gas is consumed in the fertilizer and other industries.

The government is forced to resort to load shedding due to the rapidly growing trend in gas demand.

According to the Ministry of Petroleum, the demand for gas is constantly increasing. Shale gas reserves need to be made usable to reduce gas imports. If supply situation of gas does not improve and it is not used wisely, we could face a major gas crisis like electricity. So, realizing the seriousness of the issue, the government is considering a number of proposals that could improve the situation. At the same time, the public must be careful in their use of gas.

Do you know?

The Oil and Gas Development Company Limited (OGDCL) was established in 1961 to explore for oil and gas in Pakistan.

3-Mineral oil

Mineral oil is a great source of energy. In Pakistan, mineral oil was discovered in 1968. Lower Sindh, Kohistan Namak, Pothwar and the foothills of Mount Suleiman are important areas for mineral oil production. Demand for mineral oil is increasing rapidly day by day. Pakistan's annual consumption of mineral oil is about 20 million tons, of which 8 million tons are imported each year, while the rest is met by domestic production. So, oil has to be imported to cover the gap between supply and demand, on which a lot of foreign exchange has to be spent. Now it is necessary for Pakistan to increase production of "Ethanol" in addition to mineral oil. The main reason for the increase in demand for petroleum products is the generation of electricity from furnace oil, which is increasing rapidly day by day. About 40% of the country's energy needs are met by mineral oil.

4-Coal

Globally, the prices of petrol and its products are on the rise tendency. This trend has forced the world to look for other sources of energy. Coal is one of them. About 28% of the world's energy needs are currently met by coal. Pakistan has vast reserves of coal, but very little it is being used. Many projects are currently underway to utilize the Thar coal reserves, but these projects need to be further expanded.

International Trade of Pakistan (Imports and Exports) and its Impact on the Economy

The region in which Pakistan is located is very important for international trade. Pakistan is located at an important and strategic position in respect of sea, air and land routes of the world. China is located in its Northeast and India in the East, which have a big share in future trade. In its north are Russia and the Central Asian states, while to the northwest is the Muslim world, which is rich in oil. Russia needs Pakistan for access to hot waters. Trade of the Muslim world with South Asia and Australia is possible only through Pakistan, because Pakistan is in the middle of these countries. Easy access to China, Central Asia and the Middle East is possible only through Pakistan, as the port of Karachi

is an important hub for business activities.

Do you know?

In the current era of development, no country can survive without international trade. Some goods have to be imported from other countries and some goods have to be sold to other countries, which are called imports and exports respectively.

Major Imports of Pakistan

Pakistan's major imports include petroleum products, machinery, electronics, medicines, cars, refrigerators, air conditioners, tea, cooking oil and powdered milk. About 30% of Pakistan's imports come from six countries, including the United States, the United Kingdom, Japan, Germany, Saudi Arabia and the United Arab Emirates. The main reason for the growing trend in Pakistan's imports is the weakness of technology. Due to weak technology, we cannot make machinery, electronics and cars ourselves. We have to import these goods at the expense of valuable foreign exchange, which is a huge burden on the country's economy.

Major Exports of Pakistan

Pakistan's major exports include textile products, rice, vegetables, fruit, cement, surgery equipment, sports equipment, ready-made garments, leather products, jewellery and chemicals etc. Major portion of Pakistan's exports is directed to five countries. These include the United States, United Arab Emirates, Germany, United Kingdom, and Hong Kong.

In order to increase exports, there is an urgent need to not only find new markets, but also to improve the quality, packaging and grading of goods. Improve the energy situation to open closed industrial units. Manufacture better products by using high technology that can compete in the international market.

Trade Deficit

If a country's exports are low and imports are high, that country will run a trade deficit. If this deficit increases every year, it will be a moment of concern for such a country. The majority of developing countries are in deficit, because they sell their goods cheaply and buy the necessities expensive. Pakistan is also one of the countries that suffer from trade imbalances. Our trade deficit is very high. The main reasons for the widening trade deficit are:

- Excessive decline in exports compared to domestic imports.
- Export prices lower than import prices.
- The depreciation of the national currency against the US dollar.
- The effects of COVID-19 on the world and especially on developing countries.

Measures to Reduce Trade Deficit

The following steps need to be taken to reduce the trade deficit:

- Reducing imports and keeping the Pakistani rupee stable.

- Increasing exports and export manufactured goods instead of raw materials.
- Explore new markets, and focus on better quality, grading and packing.
- Supply of energy continuously on low prices.
- Efforts should be made to increase the volume of trade, and export nontraditional goods.

Importance of Sea Ports and Dry Ports of Pakistan

Pakistan's major ports include Karachi, Port Qasim and Gwadar. Their importance is described below:

- 1- Pakistan has become a hub at the international level from a trade point of view, as these ports are very important for trade activities.
- 2- Equipment that is difficult to export and import from other sources has become easier due to ports.
- 3- Ports play an important role in increasing trade activities.
- 4- Ports are a source of increase in the country's foreign exchange reserves.
- 5- Ports increase employment opportunities.
- 6- Ports increase trade links with the outside world.
- 7- Ports are a source of increase in national finances.
- 8- Ports increase investment opportunities.

Karachi Port

It is the most important and oldest port in Pakistan, dating back more than 150 years. In 1852, the Karachi Municipality formally founded it. Initially its scope was limited, which increased over time. Karachi Port is considered one of the most important ports in the world, with unloading and unloading facilities. Modern International Container Terminals have also been built, equipped with giant container cranes. Government intends to expand it further.

Muhammad Bin Qasim Port

It is the second largest port in Pakistan to be built near Pakistan Steel Mills, to facilitate the needs of Steel Mills. Special terminals for iron ore and coal have been constructed at Bin Qasim port for the purpose of Steel Mills. Iron ore and coal imported from abroad for Steel Mills are unloaded here. The Bin Qasim port meets 40% of the country's shipping needs. The terminal has the capacity to unload 70 tons of coal and 70 tons of iron ore per hour. Container and Oil Terminal as well as many other facilities are available here.

Gwadar Port

Gwadar Port is a deep-sea port on the Arabian Sea in the city of Gwadar, Balochistan. This important port was inaugurated on March 20, 2007. The port is an easy sea route for East and Central Asian states. Trade of fertilizer, wheat and coal and other commodities has started through this port. It is hoped that the completion of the



Gwadar Port

projects under the China-Pakistan Economic Corridor (CPEC) in the near future will make the port of Gwadar a global hub. It will improve Pakistan's economic situation.

Do you know?

The Gwadar port area was bought by Pakistan from Oman in 1958 in 300,000 dollars.

Dry Ports of Pakistan

In addition to the seaports, many dry ports have also been set up in Pakistan. Dry Ports are functioning at Lahore, Karachi, Sialkot, Peshawar, Multan, Quetta, Swat, Sambarial, Faisalabad and Quetta. These dry ports increase employment. Dry ports help in reducing pressure on the ports. Delivery and transportation of goods becomes easy through dry ports. Transportation costs decrease and business activity increases.



Multan Dry Port

Exercise

1- Tick the correct answer from the four answers given against each question:

(i) Head Islam has been constructed on:

- | | |
|------------------------|-------------------------|
| (a) On the Indus River | (b) On the River Chenab |
| (c) On the River Ravi | (d) On the River Sutlej |

(ii) Karachi port was founded in:

- | | |
|-------------|-------------|
| (a) In 1832 | (b) In 1842 |
| (c) In 1852 | (d) In 1862 |

(iii) To speed up economic growth which plan was started in 1960:

- | | |
|------------------------------------|------------------------------------|
| (a) 2 nd five year plan | (b) 3 rd five year plan |
| (c) 4 th five year plan | (d) 5 th five year plan |

(iv) Vast Salt Deposits are found in:

- | | |
|-----------------------|----------------|
| (a) In Kharan | (b) In Saindak |
| (c) In Kohistan Namak | (d) Langrial |

(v) Which of these is efficient and modern method of watering;

- | |
|---|
| (a) Irrigation from conventional channels |
| (b) Irrigation from lined up channels (Pakka Khala) |
| (c) Sowing crop on ridges |

(d) Irrigation from sprinkler and Drip

2- Give short answers to the following questions:

- (i) Define economic development.
- (ii) What is the main reason for the decrease of foreign investment in Pakistan?
- (iii) What is meant by manpower? Who are included in manpower?
- (iv) What is meant by defense industry?
- (v) Write names of five link canals.

3- Answer the following questions in detail:

- (i) Give a brief description of economic growth in the seventh decade from 2008 to 2018.
- (ii) Describe the dams, barrages and canals on the Indus River.
- (iii) What are the important minerals of Pakistan? Explain.
- (iv) Discuss the problems faced by agriculture? Give suggestions to solve these problems.
- (v) What are the positive effects of increase in crop yields on the economy?
- (vi) Discuss the main reasons of trade deficit of Pakistan? How the country can get rid of the Problem?
- (vii) How can poverty be decreased by promoting small industries?
- (viii) Suggest ways to increase energy resources in the country?
- (ix) Why Pakistan's ports and dry ports are necessary for international trade?

Activity for the Students

- Write a paragraph on the importance of Dam with the help of your teacher.
- Go to a grocery store in your vicinity and make a list of ten "made in Pakistan" and ten imported items, share this list with other students, and discuss these with them.

Instructions for teachers

- Organize a study cum recreation tour of an industry, and show the students production process.
- Explain and discuss with students the energy resources and their importance in Pakistan.