

## **Cottage Industry:**

Hand made items prepared for market. In such industries the owner is self employed and helped by the family members only.

## **Small Scale Industry:**

In such industries items are prepared for market by the use of mechanical power with a limited number of hired labor along with the family members. If electricity is used, then the number of workers are **20** and if not used then the number of workers are **50**.

Both type of industries contribute 5 % to GDP and hold an important position in the rural setup. Most villages are self sufficient in the basic necessities of life. They have their own carpenter, Blacksmith, Potters, Craftsmen and cotton weavers. Many families depend on cottage industries for their income. There are also considered important export items and are in good demand in international markets.

### **Q.1. Explain what is meant by a small-scale or cottage industry.**

**Ans.** Small production. Traditional skills.

In homes / on the streets / not in factories. Lack of machinery.

Women workers / family workers. Self-employment. Low profits.

To meet local demand. For tourism. Local raw materials.

Low capital input. Use waste products.

## **Types of Cottage and Small-Scale Industries:**

**Carpets, Textiles, Embroidery, Jewellery, Ceramics, Woodwork, Metal-work, Sports goods and Surgical Instruments.**

### **Characteristics (Cottage and Small-scale Industries) e.g.(Carpets. Sports goods. Woodwork)**

Small-scale / Cottage industry

Craft industry

Traditional skills are used

Labor intensive

Simple machinery is used

Use local raw material

Local specialization

Possible exports

Sales to tourists

Encouraged by the government

Work done in homes / small workshops.

### **Advantages (of cottage and small-scale industries / Why is it important to encourage cottage and small-scale industries).**

1. Employment opportunities.
2. Meets the demand of the local markets.
3. Source of foreign exchange earnings.
4. Employment for women.
5. Reduce rural urban migration.

6. Makes use of industrial waste.
7. Little burden of imports.
8. Good use of local raw material.
9. Less capital and less technology is involved.

## **Problems** (Cottage and Small-scale Industries)

1. Shortage of raw material in some rural areas.
2. Lack of proper marketing.
3. Production methods and machinery are outdated.
4. Lack of standardization and quality control.
5. Lack of coordination between different industries also creates difference in price.
6. Lack of capital.
7. Less profit due to high cost of production.
8. Non availability of electricity.
9. No facility of loans.
10. Provision of technical advice and further training is limited.

## **Government Policy** (towards cottage and small-scale industries / Steps to improve the cottage and small-scale industry).

The Government is fully aware of the potential of cottage and small-scale industries for industrial development. The development of these industries is the responsibility of the Provinces and each province has set up an organization.

The following organizations have been established to develop this sector of economy.

1. Pakistan Small Industries Corporation (**PSIC**)
2. Punjab Small Industries Corporation (**PSIC**)
3. The Small Industries Development Board NWFP (**SIDB**)
4. The Directorate of Small Industries Baluchistan (**DSIB**)
5. Sindh Small-scale Industries Corporation (**SSIC**)
6. Small and Medium Enterprises Development Authority (**SMEDA**)

## **Main Functions of these Organizations:**

1. Establishment of the small Industrial Estates.
2. Providing marketing facilities.
3. Setting up of technical service centers.
4. Establishing handicraft development centers and carpet centers.
5. Providing guidance to the new comers.
6. Providing loan on easy installments through IDBP.
7. Training facilities to male and female.
8. Samples exhibition.
9. Providing marketing facilities.

**Inputs:** of (Sports goods, Carpets, Woodwork industry)  
Capital, Machinery, Raw material, Power, Labor.

## **Areas:**

1. **Sports goods:** Sialkot (Exported to USA, UK, Canada, EU).
2. **Surgical instruments:** Sialkot and Lahore (Exported to USA, UK, UAE, Germany).
3. **Embroidery:** Karachi. Hyderabad. Quetta. Multan. Bahawalpur. Lahore Peshawar.

### **Q.2. Name an example of a craft industry.**

**Ans.** Sports goods. Jewelry. Embroidery. Ceramics. Woodwork. Pottery. Metalwork.

### **Q.3. In what ways is this type of industry important to the local economy?**

**Ans.** Employment opportunities. Employment of women. Meet demand of local market. Reduces rural urban migration. Use local raw material. Uses waste material. Cheap to set up. Earns money for the local community.

### **Q.4. Name a city in Pakistan where sports goods are manufactured.**

**Ans.** Sialkot or Lahore.

### **Q.5. Name two machines that may be used in a craft industry**

**Ans.** Sewing machine, drill, sawing machine, generator.

### **Q.6. How may the presence of the sports industry in this area**

- A Increase employment opportunities?**
- B Improve the local infrastructure?**

#### **Ans. A. Increase employment opportunities?**

Labor intensive  
Growth of administrative jobs  
Growth of transport jobs  
Dry port  
Export processing zones  
Growth of tertiary industries

#### **B. Improve the local infrastructure?**

Power / electricity supply  
Roads / Railway  
Better water supply  
Telecommunication  
Dry port

### **Q.7. With reference to rural and urban areas in Pakistan, Describe and account for the main features of cottage and small-scale industries.**

**Ans.** Mostly industries in rural areas. Small unit. Owner is self-employed and helped by the family members. Traditional methods are used. Simple machinery is used. Less power used. Small investment. e.g. Sports goods, Carpet.

**Q.8. Explain why cottage and small-scale industries are important to both rural and urban areas and also to the country of Pakistan.**

**Ans.** Employment opportunities.  
Increase rural income.  
Improve standard of living.  
Check rural urban migration.  
Some products exported to abroad and earn foreign exchange.  
Better use of local raw material.  
Jobs for women.  
Meets the local demand.  
Increase per capita income.

**Q.9. What is the main raw material used in the production of food balls and cricket bat?**

**Ans.** Foot Balls:- Leather / plastic.  
Cricket Bat:- Wood.

**Q.10. Which city in the northern Punjab is a centre of sports goods manufacturing?**

**Ans.** Sialkot / Lahore.

**Q.11. Why have small-scale industries such as sports goods developed in this area?**

**Ans.** Easy to set up, no expensive machinery, low capital input.  
Labor. Locals skills, increase employment opportunities.  
New materials available. Air port at Sialkot. Better road and railway.  
Power supply. Punjab is the most industrialized province.  
Supply tourists. Dry port at Sialkot / Lahore.

**Q.12. Why is a large proportion of the production of this industry exported?**

**Ans.** To make capital / improve trade balance. To earn foreign exchange.  
Demand from abroad. Popularity of sports in the world. Competitive price.  
Good reputation of Pakistan. Less need in Pakistan / greater need abroad.

**Q.13. How can Pakistan maintain and increase its exports of sports goods?**

**Ans.** Improve quality.  
More export processing zones.  
More dry ports.  
Modernization / machines to replace hand work.  
Training.  
Innovation / new products.  
Regular supply.  
More factories / government incentives.  
Better roads / airports / telecommunication.  
Advertising.  
Do deals with companies. e.g. Adidas

**Q.14. Explain the importance of mechanization to the craft industry and other small-scale industries of Pakistan.**

**Ans.** Faster. Larger production. Lower labor cost / cheaper.  
Standardized products. Can replace child labor.  
New skills learned. Unemployment. Loss of traditional skills.

**Q.15. Explain the advantages and disadvantages of expanding the sports goods industry in Pakistan.**

**Ans. Advantages**

Enhances traditional skills, uses local raw materials / saves import of raw materials  
Increase employment, work for women, increases family incomes / GDP  
More exports / trade.

**Disadvantages**

Shortage of raw materials, Lack of skilled labour  
cost of importing raw materials / machinery e.g. rubber / thread / leather  
(Trade hindered by) child labour issues, (Trade hindered by) quality issues.

**Q.16. To what extent can the development of cottage and small-scale industries improve family incomes in Pakistan?**

**Ans. IN FAVOUR**

Employment for women, local demand, International demand  
Reduces migration, local raw materials, can use waste materials e.g. rubber, rope  
Low set-up costs / investment.

**BUT**

Poor quality, child labour, lack of infrastructure.

**Q.17. Explain how a better road network increase the development of small-scale and craft industries of Pakistan.**

**Ans.** More remote areas can be connected e.g. Swat, Easy access to raw materials  
Greater access to training, Greater access to export markets  
Increases tourist market, Faster / safer trade.

**Q.18. To what extent can small scale and cottage industries be sustainable? Explain your**

**answer.**

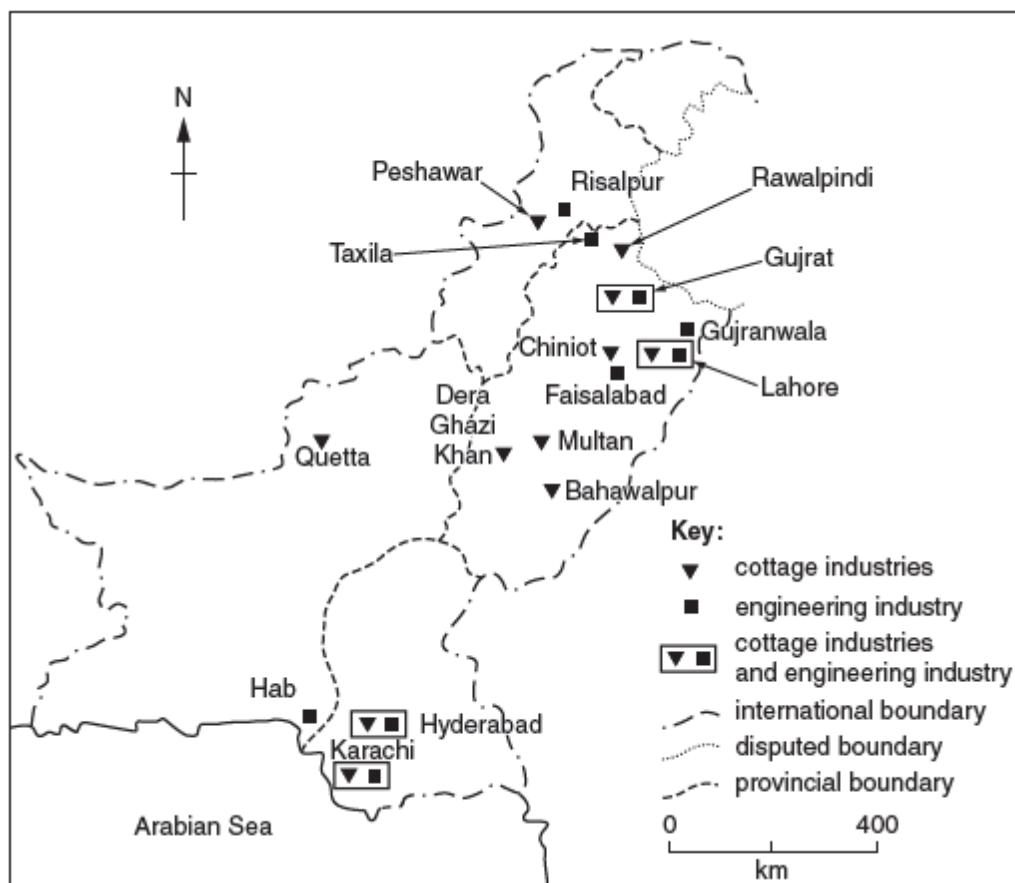
**Ans. Possibilities**

Can be done in the home (so low set up costs)  
Local raw materials / re-used waste materials (therefore cheap / less need to borrow money)  
Simple technology (so less need for electricity / power supply)  
Small scale causing less damage to environment  
Traditional skills / does not demand education (people can support themselves when other work not available / possible), Government support / schemes / loans  
Use of machinery  
Use of electricity (allowing work after dark)  
Provision of other named infrastructure  
Training / education.

**Problems**

Small output / low earnings  
Low profits (therefore difficult to escape poverty)  
Need for 'middle man' which reduces profits  
Poor quality products (so lack of demand / low value)  
Use of child labour (restricting markets / sales)  
Lack of education / telecommunications (which limits marketing skills / limit marketing ability).

Study **Fig. 1** which shows the distribution in Pakistan of selected cottage industries and the engineering industry.



**Fig.1**

**Q.19. Give an example of a cottage industry.**

**Ans.** One of: furniture / pottery / woodwork / metalwork / jewellery / hand woven rugs/carpets/shawls / handicrafts / embroidery/sewing / hand-made leather goods/shoes / candles.

**Q.20. Compare the distribution of cottage industries and engineering as shown in Fig 1.**

**Ans. Similar**

Both in all four provinces / spread throughout provinces

Both concentrated in Punjab

Both present in Karachi/Hyderabad/Lahore/Gujrat

Both have two locations in Sindh/one location in Balochistan/one in KPK / equal in number in S/B/KPK

**Different**

Cottage has more locations in Punjab/use of stats to exemplify e.g. cottage 7 locations in Punjab whereas engineering 5 locations

Cottage present only in

Quetta/Peshawar/Rawalpindi/Chiniot/Multan/DGK/Bahawalpur/S Punjab

Engineering present only in Hab/Faisalabad/Gujranwala/Taxila/Risalpur

Engineering more clustered / cottage more spread out.

**Q.21.** Read the following two views about possibilities for industrial development in Pakistan.

**A**

It is better for Pakistan to promote large-scale industries which provide more goods for domestic use and for other industries.

**B**

It is better for Pakistan to promote small-scale and cottage industries in rural areas.

Which view do you agree with more? Give reasons to support your answer and refer to places or examples you have studied.

**Ans. Large scale**

**For**

Reduces need for expensive imports of finished goods (e.g. vehicles)

Export potential

Fulfils domestic demand (e.g. galvanised steel in construction)

Greater contribution to GDP

Encourages private sector to invest (e.g. Pindi Bhattian)

New industries would encourage large scale employment.

**Against**

Expensive to set up (foreign investment/loans/debt)

May require expensive imports of raw materials (e.g. coking coal/iron ore for steel industry)

Changes of government/political instability (large projects may be delayed/cancelled)

Employs relatively fewer people (approx. 20% industrial workforce/very few women)

Noise/air/ water pollution

Causes deforestation (which destroys habitats)(loss of scenic beauty).

**Small scale and cottage**

**For**

Important source of income in rural areas

Money is re-invested locally

High demand (both domestic and exports / 30% manufacturing exports by value)

Employment possibilities (employs approx. 80% industrial workforce)

Conducted in homes (women can work)

Reduces rural to urban migration

Recycles industrial waste (e.g. of cotton/steel industries)

Small input requirement/uses local raw materials (e.g. leather/wood)(promotes primary industries)(limited need for imports)

Low cost.

**Against**

Only small (5%) contribution to GDP

Limited profit/wholesalers take most of the profit

Limited ability to expand

High production costs (since no economies of scale)

Lack of electricity in rural areas.

# **Brick Kiln Industry**

A kiln in which raw bricks are baked or burned. It is an important small-scale industry of Pakistan, it provides employment to people in rural areas where agriculture is not enough to sustain all the people. It is generally situated in desolate places away from the main cities and towns. There are 6000 (estimated) brick kiln in Pakistan, its share in GDP is approximately 1.5 %. In kilns the working days are hardly 240 – 260 in a year. On rainy days there is no work. Bricks used in construction Industry, Lining of canals, making of Sewerage Drains, Solling, Dams and Barrages. Traditional techniques are being used to make the bricks using coal and some undesirable fuel. They rely on intensive labour consists of males, women and children.

In this modern world and computer age, the labour lives like slaves. The socio-economic conditions are inhuman. They have no right of education, health, recreation or security. They get a very small amount to make 1000 katcha bricks. In the preparation of 1000 katcha bricks, the whole family, i.e. women, children are involved but wages are given to a single person only. There are different kinds of workers at the kilns. These are:

**Patheras:** who make the unbaked bricks after mixing with water and clay.

**Bharaiwala:** who load the unbaked bricks on donkeys and carry them to the kiln area.

**Jalaiwala:** who feed coal into the furnace.

**Nakasiwala:** who remove the baked bricks from the kiln.

The Patheras are the main brick makers. Their work is to excavate the clay, make the mixture, make lumps of clay, and mould these into bricks in a metal mould. Excavation and mixing are done by men. Women do this job when the male workers in the family are either too old or too young, or unwell or for any reason unable to do this work all alone. Women and children make the clay-lumps and the brick-moulding. After being moulded the bricks are left to dry, and then piled into groups of ten (called tuttoos) and groups of twenty (called ghoris). This facilities counting, because the workers are largely illiterate and cannot count in high numbers, so they simply count the group.

**Natural Inputs:** Wood, Saw dust, Coal, Clay, Water, Sand.

**Human Inputs:** Capital, Machinery, Labour.

**Process:**  
Clay mixed with water  
Make lumps of clay  
Placed in moulds  
Dried (in sun)  
Baked (in kiln).

## **Effects (On Environment of Brick Kiln Industry)**

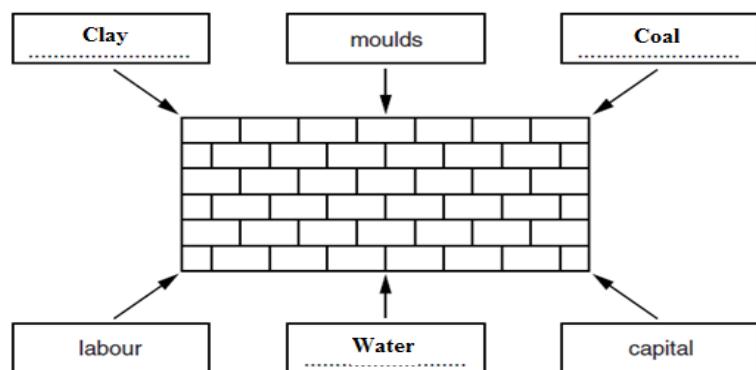
The heavy smoke particles containing CO<sub>2</sub>, SO<sub>2</sub>, smoke, dust, nitrogen oxide and other harmful gases lead to air pollution and further leading to environmental hazards such as acid rain, global warming and ozone depletion. Acid rain and Ozone depletion results into health hazards and diseases such as skin cancer, eye diseases, Asthama, deafness (from noise). The trees are cut down in order to obtain wood required to burn bricks. This results in heavy deforestation and it makes the soil infertile. Agricultural land is reducing in the areas near brick kiln fields. The waste is being dumped into rivers and it has lead to water pollution with many marine species in danger.

## **Solution**

Measures to ask brick kiln owners to convert to natural gas from traditional methods, thus reducing large scale deforestation. The chimney of these Kilns should be high so that it reduces the degree of pollution, and reduces the vulnerability of harmful diseases such as asthma and Lung Cancer. People should use masks while working in Brick Kilns to avoid inhaling dangerous chemicals. Clean and efficient coal technologies should be used where coal is pre-treated for complete combustion. Smoke should be filtered before it leaves the chimneys.

**Q.1. Write the names of three other physical inputs in the empty boxes on Fig.1.**

**Ans.** Clay, Coal and Water shown on **Fig.1**.



**Fig.1**

**Q.2. Name two types of air pollution that might be produced by a brickworks.**

**Ans.** Carbon dioxide / carbon monoxide, nitrogen oxides, sulphur dioxide, smoke, smell, dust / ash.

**Photograph A of brick kiln.**



**Photograph A**

**Q.3. Study Photograph A, which shows a brickworks. Describe the main features of the brickworks shown in the photograph.**

**Ans.** Furnace / kilns  
Chimneys  
Black smoke / pollution  
Air intakes below ground  
Hard / flat working area, Piles of finished bricks  
Pattern of small hummocks, Pucca road  
Electricity pylon / telephone poles / lines  
Moulds, Underground entrance.

**Q.4. With reference to photograph A describe the effects of the pollution created by this brickworks on people and the environment in the local area.**

**Ans.** People  
Respiratory diseases e.g. Asthma  
Skin irritations, eye diseases, unsightly views  
Irritability / deafness (from noise)

Environment  
Quarries / holes / depressions  
(Spoil) heaps, Vegetation / crops covered in dust / ash  
Land degraded / bare / deformed.

## Other Photographs of Brick Kiln

