CHAPTER V.

UNUTILIZED CAPACITY.

1. Introduction.
4. Lack of Demand.
5. Lack of Finance.
7. Shortage of Trained Labour.
8. Shortage of Power.
9. Shortage of Space.
Article 43:

7. Utilization of sciences and technology and training of skilled individuals as needed for the development of the economic advancement of the country.

8. Prevention of foreign domination over the economy of the country.

9. Emphasis on increasing agricultural animal husbandry and industrial production with a view to meeting the country's needs and requirements, and enabling the nation to reach a level of self-sufficiency in this regard and to free itself from all dependency.
CHAPTER V

UNUTILIZED CAPACITY

5.1 The critical problem of small scale industries in Iran is unutilized capacity in the small scale sector. In this chapter it is proposed to examine the problem of unutilized capacity in the small scale industries in Iran.

5.2 Meaning of Unutilized Capacity

In order to understand the meaning of unutilized capacity, it is first necessary to explain the concept of capacity output or maximum output. Although, this term has various shades of meaning in different contexts, what we mean by maximum output or capacity output is the rated production capacity, i.e., output potential of a small scale industrial unit for products manufactured by the unit with the existing plant and machinery which are assumed to be working in continuous operation throughout the year of 300 days. We assume a year means 300 working days, because in Iran, all industries work for 300 days only—52 days of weekly holidays and the remaining holidays are for festivals and religious celebrations. We have drawn our conclusions on the basis of the number of shifts followed by the unit at the time of the present study, also considered as factors affecting capacity output. Actual output or gross output is a term which is used to indicate selling value of all goods actually produced, in the particular small scale industrial unit during the year, irrespective of whether they are sold or not.

The actual difference between maximum production capacity or capacity output and actual output is taken to
show the excess or idle capacity in production which implies that output and employment can be increased to that extent without involving additional investment in plant and machinery on the part of the particular small scale industrial unit.

It is obvious that the concept of unutilized capacity is a relative term or a relative concept. Obviously, it is related to the working state of a small scale industrial unit, machinery and equipment installed in that particular small scale industrial unit, the personal capacity and skill of the entrepreneur of the small scale industrial unit, nature of products manufactured by unit etc. Obviously the unutilized capacity would differ from time to time or from entrepreneurs to entrepreneurs, even if the other factors remained the same.

During the study of Small Scale Industrial Units in Iran, we tried to collect information about capacity utilisation of small scale industries in Iran. We requested the entrepreneurs to express the degree of capacity utilisation as a percentage of capacity output or maximum output.

All the small scale industrial units contacted by us in Iran could not provide us with the necessary information, however, from data collected, qualitative as well as quantitative, it was observed that only 3% units were working
in full capacity whereas about 75% units had some unutilized capacity varying from 5% to 80%. It was also observed that only 10% units had actual production less than 50%, whereas 90% units had production more than 50% of the capacity output.

During our study we discussed the issue of unutilized capacity with many small scale industrialists in Iran. Although all the industrialists contacted by us did not provide us with sufficient information, it must be admitted that the qualitative and quantitative data collected by us during such discussions was adequate to throw light on this problem.

Some industrialists explained to us that they had intentionally planned in their unit, a little surplus capacity or production. According to them it was a matter of business policy. They explained to us that they would be in a position to meet the sudden increase in demand on certain urgent orders placed on them by their customers. Now, it is only possible to meet erratic increase in demand for products manufactured by the industrialists, if they have such surplus production capacity, intentionally created by them. For example, during festivals, there is an increase in demand for confectionary. It was difficult to find out the exact percentage of credit reserved by the small scale industrialists in Iran, to meet such upward increase in the flow of demand. Our estimate of such planned capacity could
reasonably be taken as about 20% production capacity.

Taking into account this planned 20% production capacity, all units working over 80% of the total production capacity should be regarded as small scale industrial units which worked at full capacity level. Even if this point of view is accepted, we must confess that on the basis of the qualitative and quantitative information collected by us from small scale industrialists in Iran about 95% units had unplanned or unwanted, unutilized production capacity.

We observed that there were no sizeable industrywise variations in small scale industries in Iran with full utilization of capacity. It would be worthwhile to note that the industry-wise variations as far as capacity wise utilization is concerned, showed that the Model class is between 50% to 70%. Capacity utilization was better in the printing press industry than the small scale industrial units in other industries.

5.3 Reasons for Unutilized Capacity

While discussing the problem of unutilized capacity with the small scale industrialists, Government officials & executives of financial banks in Iran, we requested them to assign specific reasons for the unutilized capacity. Some of the Industrialists clearly told us that they could not offer specific reasons as to why the problem of unutilized
capacity arose in the small scale industrial sector. About 30% Industrialists informed us that there was only one difficulty in increasing production at the rated capacity. About 70% Industrialists informed us that there was more than one reason for unutilized capacity found in their respective units. It was observed that lack of demand was the only difficulty for more than 50% of the industrialists who assigned only the one reason for lack of capacity utilization. Out of those, who assigned more than one reason for unuti-
lized capacity, about 55% industrialists explained to us that lack of demand was their main difficulty along with other difficulties, whereas 45% industrialists explained to us that lack of finance and few other difficulties were found to be the obstacles in increasing the production to full capacity.

The discussion with small scale industrialists in Iran revealed that the other reasons were shortage of raw materials, lack of adequate factory space and shortage of power, lack of trained labour, lack of information, etc. were other reasons.

We propose to discuss these reasons in detail in the next few pages of the present thesis.

5.4 Lack of Demand

Our talks with small scale industrialists clearly indicated that lack of demand was the most important difficulty for the industrialists in raising the actual production to the installed capacity. Factors which were responsible for lack of demand can be described as follows:

1. A few experienced small scale entrepreneurs in Iran explained to us that the main reason why lack of demand arose in the small scale industrial sector was the entrepreneurs' failure to modify products according to
change in likes, dislikes, tastes and fashions in the markets of the small scale industries. After all an industrialist cannot ignore that he has to produce finished goods which can be marketed. Since customers' requirements and needs change from time to time, it is necessary that the small scale industrialists should modify their products suitably so that the industrialists can satisfy the requirements and needs of the customers and sell the products to their entire satisfaction.

Our observation is that most of the products manufactured by small scale industries have a limited period market. The life cycle of a product is a vital point.

The small scale industries cannot afford to ignore that their products are popular in the market for a certain given period only and the small scale industrialists should be ready to plan production in such a way that periodical modifications in their products are sufficient to suit the changed market demands. In a few cases modification in the products of the small scale industries would involve further capital outlay for additional machinery and equipment necessary to be bought for installation. But we cannot ignore that if the industrialist wants to retain his hold over the market he will have to incur the capital outlay, necessary to modify his products according to changes in demand for the products.
Industrialists of some units which are ancillary to the large scale industries will have to be watchful about the possibility of changes in production of manufacturers to whom they are supplying the goods, e.g. small workshops in the engineering industries supply spare parts for machinery and equipment for the finished products of large units in Yazd, Isfahan, Tehran, Mashad etc. Similarly, many small workshops manufacturing chemical items supply their products to textile mills in Isfahan, Yazd, Kashan etc. Many mechanical workshops supply products to large engineering units in Tehran, Tabriz, Arak etc.

Executives in Banks contacted by us and the experts also clearly told us that the preparation of a product acceptable to the market at a certain point of time is not sufficient. The producer will have to devote adequate attention to the product development to suit the changing market conditions for survival and development. If the industrialists do not have such product development, they would find their products diminishing in their capacity to satisfy customers. Total demand may increase or decrease and yet the small scale industries would find idle capacity for lack of demand in the market. One Executive in a bank, cautioned, that if the small scale industries did not incorporate suitable modifications in their products, they would lead to a gradual extinction.
It must be admitted that lack of demand for the products of a certain small scale industrial unit might be a reflection on the capacity of the industry to effect suitable modifications in its finished products as per the changes in customers needs and requirements. When this point was explained to the small scale industrialists in Iran, most of them appreciated the point, but we could not collect sufficient data to gauge unutilized capacity due to this reason.

2. Some industrialists explained to us that their products were of a type that were bound to have seasonal fluctuations in demand. Their products showed lower level during certain seasons and so the production capacity remained unutilized during a certain period to a certain extent. One industrialist however drew our attention to the fact that the above point is offset partially by work during peak periods, though such overwork was not adequate to compensate lack of demand due to seasonal variations. One example can be quoted to explain this point. It was observed that printing presses in Iran had more activity in the 1st half of the year. The reason was that the Text books and rapid reading books were to enter the market in the month of October every year.

Confectionary items have more sale at the time of Nowroz that is New Year in the month of March. Then, again, in the months which are considered auspicious for marriages
there is a heavy demand for confectionary. Wool and leather industries have peak sales in winter.

Soap manufacturers contacted by us explained that demand for soaps was low during the months of January to March, whereas, their peak sales of soaps were in the October December period.

It is obvious that it is easier to increase production capacity during periods of expanding demand, but it is extremely difficult to decrease production during periods of decreasing demand.

One industrialist explained to us that one alternative to the partial idleness of material and equipment would be to switch over to some other line of production which could be produced with the help of existing machinery and equipment installed in the unit. But, many industrialists opined that such alternatives were not frequently found.

3. It was found that this phenomena of excess capacity due to lack of demand was more in the relatively newer small scale industrial units in Iran.

When we discussed this point with the small scale industrialists, they said that every unit has to be established firmly in the market in the initial period and win the confidence of customers. Due to this new small scale
industrial units found it difficult to reach the maximum production capacity as compared to old established small scale industrial units.

4. One entrepreneur explained to us that he could collect more orders and run his small scale industrial unit to full capacity but he was not prepared to do so. He explained to us that increase in production meant increase in his income, and he had to pay higher income tax. So according to him increase in production was accompanied by payment of income tax in the higher slab of taxation. He complained to us that part of the increased income left after payment of taxes was not an adequate reward for the efforts which he was required to make in bringing orders and increasing the production to full capacity.

Some of the other manufacturers, however did not agree with this point of view. One executive in a bank explained to us that every industrial unit must grow more and more and the industrialist should increase his production capacity from time to time. According to this executive, growth production was inevitable.

5. One small scale industrialist explained to us that the real reason for unutilized capacity was the tendency of small scale industrial units to sell a part of the goods without invoices and earn unaccounted money. In the opinion of this industrialist, the real gap between
production capacity and actual production was not as wide as it appeared on the paper. He informed us that in most of the cases the actual production was more than the figure of production which was shown in books of accounts. This part of the production was sold without invoices.

When this point was raised with Government officials and other executives in Iran, they agreed that there was some truth in the matter. They, however, told us that it was impossible to have a reasonably accurate estimate of the unutilized production capacity due to the tendency of small scale industries to sell goods without invoices and earn unaccounted money.

6. One small scale industrialist explained to us that the products manufactured by him were manufactured by large scale manufacturers also. He said, that textile manufactured in Yazd & Isfahan was manufactured by small industries as well as large. One wooden furniture manufacturer in Tehran complained to us that large scale steel manufacturers in Tehran have taken away a part of the demand for wooden furniture manufactured by him.

One small printing press owner informed us that he was facing competition from the large printing press in Tehran and that this large press had installed comparatively modern machinery.
7. One manufacturer informed us that he had purchased new machinery and equipment and he was finding it difficult to dispose off old and obsolete machinery. In the old days labour turnover was very high in small scale industries. The new workers found it difficult to achieve skill in the initial stages but recently trade units have been established in small scale industries also and this tendency has been reduced to some extent but idle capacity will have to be attributed to this factor to some extent.

We interviewed some of the officials in Iran and were told that the unutilized capacity in the small scale industrial sector was mainly due to lack of demand, which was the result of lack of planning in this sector. The discussions with executives revealed to us that the data of the existing capacity and assessment of present and future demands were not available with any small scale industrialist or with the Government department or with any trade association. So the opinion of the executives was that there was duplication of investment in the small scale industrial sector. The duplication of investment was mainly in the case of having special purpose machinery installed in the small scale industries.

When small scale industries received many orders they hoped that there would be sufficient demand in future also for the products manufactured by them. With this hope
they purchased the requisite machinery and installed the same in the unit. So that they could increase production as per the increase in demand. The discussions with the small scale industrialists revealed that there was no scientific study of the existence of multi purpose machinery installed before the plant and machinery was purchased and installed by the small scale industrialists. If the machinery was of multipurpose type, they could have diversified products whenever possible. But in case of special purpose machinery, the problem of unutilized capacity was bound to be caused when pattern of demand changed.

We discussed this problem with the small scale industrialists. We asked the small scale industrialists to explain to us the ways of reducing the unutilized capacity.

One small scale industrialist said that if the small scale industries considered the nature of machinery and possibility of diversification of products before they purchased the machinery, they would be in a position to reduce the unutilized capacity due to lack of demand to some extent. This was mainly true in case of special purpose machinery.

One executive contacted by us, expressed his opinion that the small scale industrialists should purchase multi purpose machinery only. The job work requiring the special purpose machinery should be given to the outsiders
on sub contract basis. If the small scale industrialists got demand for the products manufactured by using special purpose machinery for a long time and if the survey of the small scale industries indicated that the demand was likely to be there for a long time, then only should the small scale industrialists purchase special purpose machinery.

The discussion with some small scale industrialists in Teheran revealed that the large scale industrial units in Iran also were partially responsible for the problem of lack of demand to some extent. They gave orders for the spare parts and components to the small scale industries for some time. Then, again, they gave orders to the other small scale industries who had installed special purpose machinery of a similar type. The reason was that the other small scale industries had offered better terms for the products to be purchased by the large scale industrial units. It was explained to us that sometimes large scale industrialists diverted the demand for products from one small scale industry to another, due to personal contacts of the executives of the large scale units. Such attitude of the large units was stated to be mainly responsible for the difficulties of small scale industries in increasing production to the installed capacity.

When we had a discussion with government officials regarding these problems, we were informed that the
government departments were thinking of collecting some basic data regarding the existing special purpose machinery available in the small scale industrial sector and in the large scale industrial unit. In Iran, they wanted to publish this data periodically, so that the small scale industrial units could hire out the machinery from other units in their spare time, thus obliterating duplication of investment in the special purpose machinery in different units. Small scale industries could hire the machinery of the others as far as possible. This would ultimately save financial resources of the small scale industries to a great extent. This would also increase employment (per unit Riyals invested in the machinery) in the small scale sector. It must be admitted that this suggestion will be of much help in increasing production of the small scale sector in Iran, to the installed capacity.

We suggest that the local chambers of commerce in Teheran, Isfahan, Yazd etc., should also collect this type of data and publish it periodically.

We wanted to collect data about the methods followed by the small scale industries in forecasting the products manufactured by them. When we asked some of the small scale industrialists in Teheran and Yazd regarding the methods followed by them, it was revealed to us that there were no scientific methods followed by them. Many of them
were not aware about the modern methods of forecasting demands. Now the cross cut analysis method is followed in developed countries. The cross cut analysis is a method of forecasting demand wherein the study of the cause and effect relationship facilitates the framing of forecast on a sound and rational basis. The relative strength of different forces acting on the demand are studied in this method. Statistical data is also collected about the cause and effect relationship of the different factors which effect demand for products manufactured by the small scale industrialist. If necessary, proper weights are added to these factors, then the demand forecasts are made for the products manufactured by small scale industries. This method is mainly concerned with the analysis of current conditions in relation to their probable future tendencies.

It is obvious that business conditions change from time to time and place to place. The result is that relative strength of the old and new factors and their combinations also change from time to time and from place to place. The method of cross cut analysis of forecast demand is a good solution to this problem.

When we asked small scale industrialists in Teheran, Yazd and Isfahan, whether they were aware of modern methods of cross cut analysis of forecast demand, followed in western countries, they informed us that they were unaware of this method.
We discussed with them the possibilities of introducing crosscut analysis. We asked them for information regarding the methods followed by them in forecasting demand. One industrialist in Yazd stated that he was in business for the last 35 years. According to him, business conditions had some trends and variations which were generally periodical. The industrialists stated that they could not show changes in business conditions graphs. The reason cited by him was that fluctuation and variations in business conditions were not symmetrical in time. So in his opinion, even graphs of trade cycles were not realistic, they were irregular. The industrialist was of the firm opinion that a shrewd businessman could identify changes in business conditions by certain symptoms and signs which accompany variation in business conditions.

To explain his point further, the industrialist stated that there was a fall in speculation substantially, whenever pessimistic conditions were expected to follow. In such circumstances, the businessman should be cautious in making purchases of raw material or stocking the finished products. Production and turnover should be increased even at reduced rates so that minimum stocks of raw material and finished products are kept in the inventory of the businessman.

Similarly, the industrialist stated that whenever
there was rise in speculation activities and there was fall in money rate, the market had a bright future. In such circumstances, the businessman should stock the raw material and the finished products and should increase the production to maximum capacity, because these conditions are likely to bring big orders.

About 10 industrialists contacted by us in Yazd, Isfahan and Teheran, told us that they were noting the trends in the past sales. According to them, if monthwise figures of sales during the past few years were noted down, some rough idea could be conceived about future conditions in the market. It was found out that most of the small scale industrialists tried to forecast the demand in the market on the basis of past sales and opinions of experienced industrialists.

We suggest that in normal times this method could be quite successful and forecast of future sales could be as expected by them in normal times. But this method would not be useful for the small scale industrialists, when business conditions were changing. The conditions in Iran are such that market is slowly turning into a buyers market from sellers market. The competition in the market is growing slowly. Many new small scale industrial units have purchased modern machinery and equipment and they have also started to have new attitudes of management. So the small
scale industrialists should acquaint themselves with the cross cut analysis method to study the cause and effect relationship of different current business factors. If the small scale industrialists relies preferably on statistics or in the relative strength of the different market forces, such as changes in real price, life of the products, installment buying, standard of living of the customers, number of scrap products, stock of old goods with distributors and dealers, then his forecast would be more practical. We suggest that small scale industries should acquaint themselves with the modern method of cross cut analysis, especially, when they aspire to export their products to the world market.
REASONS FOR UNUTILIZED CAPACITY

LACK OF DEMAND

- Lack of customer confidence in new SSI
- Deliberate avoidance of demand because:
  - Improper judgement of
  - Customers tastes & fashions
  - Suitable modifications

- Increased production means higher slab of I.Tax
- Life of the product and product development

- Effect of L.S.Ind. such as:

- Cancellation of orders placed with SSI in favour of others offering more attractive terms
- Diversion of orders to some particular ancillary units

- Lack of demand is a fallacy because:

- Goods sold without invoices
- Their competition

- Seasonal consumptions
- Improper machinery and management

- Purchase of spl. purpose instead of multipurpose machinery
- Incorrect & uneconomical handling of machinery
In Iran the nationalized commercial banks provide finance to the small scale industries with interest from 6% to 12%. They provide finance for the purchase of machinery and equipment and provide working capital also.

A question arises whether finance provided by banks is adequately for small scale industries. When this question was asked to the small scale industrialists, almost 50% of them stated that they got adequate finance from banks, and 50% said that they were not getting sufficient finance from banks and had excess capacity due to lack of finance.

Obviously when a small scale industrialist complains that they have difficulties in securing finance, what they mean is, lack of working capital mainly to support inventories of raw material and finished products and for extending credit to their customers who purchase finished products from them. So lack of finance is a hurdle in increasing production to the installed capacity.

Some entrepreneurs informed us that they were not getting sufficient funds from banks to keep their units in continuous operation throughout the year. Some of the small scale industrialists had over-dosed fixed capital and they were not getting sufficient working capital. Some entrepreneurs were required to give credit to their customers and
they were not able to realize the amount shown as sundry debtors in their books of account. This was a difficulty. This affected their capacity to purchase adequate raw material which in turn affected production also.

We wanted to analyse the working capital needs of the small scale industries. We intended to have a careful estimate of the working capital actually invested in the respective small scale industrial units along with an estimate of additional requirements so that the small scale industrialists could increase production to the maximum production capacity.

When we asked the small scale industrialists, whether they could supply this data most of them clearly told us that they would not be in a position to give us that data. The industrialists were apparently reluctant to give information about their financial positions. Besides, it is obvious that additional requirements for raw material and funds for storing finished products and for giving credit to customers would vary from industry to industry, from time to time and place to place. The system of production, nature of products, demand for products, system of marketing and system of payment would also affect additional requirements of raw materials and finished products. So we had no alternative but to give up the attempt to collect sufficient data regarding existing financial resources and additional working capital required.
to increase production, to full production capacity.

Some industrialists were causing confusion regarding the working capital required for complete and efficient utilization of the present installed capacity on one hand and additional requirements for expansion of capacity of production on the other.

In any case, we were of the opinion that while granting loans to small scale industries, banks should give priority to working capital requirements of small scale units rather than additional requirements of capital for expansion of production capacity.

It must be admitted that almost 50% small scale industries units contacted by us were under-financed. The degree of under finance was different from unit to unit and from place to place. If additional working capital was made available to them they would have been able to have better capacity utilization in these units.

In this connection, we cannot avoid the temptation of explaining one of our pertinent observations. We observed that many industrialists complained about lack of finance and emphatically stated that they were not getting sufficient working capital to increase production to the installed production capacity, but our observation of the working of these units and discussions with executives of commercial banks clearly revealed that lack of finance was not the main
difficulty in many cases. Our impression was that if the particular small scale industrialist could improve his organisation and management especially in financial matters it could have reached better capacity utilization and profits would have increased even with the same financial resources available to them. In other words our observation is that the main difficulty was not getting additional financial capital from banks. The real difficulty was how to improve their organisation and management. Even if banks would grant additional working capital to small scale Industrialists it would not have solved their problems. They would have continued to complain that lack of finance was their difficulty and that they needed more funds to increase production to production capacity. So it is obvious that what they need is not additional working capital. What they need is to be shown how they could insure optimum utilization of demand which was available to them.

We must confess that we could not collect adequate quantitative data to show how much additional working capital was needed by them and how much working capital was mentioned by the entrepreneurs themselves.

The necessity of changes in organization and management of the small scale industries units were different from unit to unit, place to place and time to time.
LACK OF FINANCE

Inadequate finance from banks causing

Lack of Working Capital & thus inability to:

- Purchase required raw material
- Supply customers on credit
- Store finished products
- Expand production capacity

Lack of finance is a fallacy and arises due to

- Lack of financial discipline
- Inefficient management and organization of existing funds
When we discussed with the small entrepreneurs, this need for improvement in organization and management of small scale industries what we found was that most of them did not realize the gravity of the problem. What we observed was that some of the small scale industrialists might have understood the necessity of change for improvement in the organization and management of the respective units rather than getting additional funds for meeting their so-called working capital needs. Though they had realized this they were not prepared to admit it. What we observed was that the stronger the personality of the small scale industrialist the more difficult it was to convince him about the necessity of improvement in financial organization of respective units. We cannot avoid the temptation of mentioning clearly, that what they needed was more financial discipline in their units rather than their financial requirements for working capital.

It is a grave problem and the government of Iran should give attention to this problem as early as possible. There is great scope for improvement in the organization of the small scale industrial units contacted by us. We must mention this is the case of almost 95% small scale industrialists in Iran. If government of Iran starts some courses, may be short term, for small scale industrialists to educate themselves regarding financial organization, we are of the opinion that it would lead to better capacity utilization in
the small scale sector as a whole. This could also give more profits to the entrepreneurs in small scale sectors in Iran.

5.6 SHORTAGE OF RAW MATERIALS

About 50% of the small scale industrialists contacted, complained to us that they were not getting sufficient raw materials on time and at reasonable prices. At present, this situation is mainly due to war between Iran and Iraq. Though Iran has many minerals, due to the present war between Iran and Iraq, the production of basic raw materials has been affected. We contacted many small scale units in the textile industry, the leather industry, wooden industry, printing press industry, chemical industry, engineering industry, plastic products industry, earthenware industry, non-metallic mineral products industry and electrical industry. Almost all units contacted by us complained that getting sufficient raw materials was one of their greatest problems. They stated that great hardships were being experienced by small scale industrial units due to shortage of raw materials. Though Iran is importing necessary raw materials from Japan, India and North Korea, it is facing grave problems in supplying sufficient raw materials to the small scale industries.

One industrialist in the engineering industry remarked that small scale industry would continue to have
a common difficulty until the iron and steel industries in Iran completed the expansion programme and provided adequate supplies of iron and steel to the small scale sector in Iran. The present war between Iran and Iraq has greatly affected the expansion of Iron and Steel Industry. Meanwhile, the government of Iran has taken alternative steps as temporary measures to provide sufficient raw materials to the small scale sector. The government gives allotment quotas to the small scale industries in Iran. This is the position in respect of almost all imported raw materials and indigenous raw materials.

The large scale industrial units could get raw materials easily in bulk from the indigenous manufacturers or from large import houses that import necessary raw materials from Japan, India and other countries. Items like brass and copper strips, circle sheets, rods and tubes, C,F,sheets, C.A.plates etc. are mainly imported from abroad. Before war between Iran and Iraq, these items were imported from Western countries like West Germany, England and other western countries. Due to the shortage of raw material in Iran because of war and because of stoppage of supplies of raw material from U.S.A. and western countries, the Iran-government imports some part of its needs from friendly countries like India. The problem is that many raw materials are in short supply. Some industrialists complained to us that they were required to purchase these items in black market.

The small scale industries who depended on imported
raw materials complained to us that the actual utilization of rated production capacity was dependent on availability of imported raw materials as per the availability of imported raw materials.

One Engineering Industrialist complained that alloy and tool steel, stainless steel and ingot steel were in short supply and they were required to purchase these items in black market. They also informed that there was great delay in getting these supplies from Ahwaz and Isfahan etc. They stated that the quality of indigenous steel was inferior in comparison with imported steel.

On the basis of our discussions with the small scale industrial units and government officials we suggest that there should be a centralized machinery at government level for distribution of scarce raw materials.

This centralized machinery should collect the information regarding requirements of raw materials of small scale industry on the basis of production, planning by various entrepreneurs and raw materials should be available to the small scale industries accordingly. This would lead to more production in the small scale sector.

On the basis of the collected information, about raw material shortage in the small scale sector, we can state that steel, brass, copper, plastic items, non-ferrous
metal parts, glass, titanium and aluminium parts, are items in short supply. Small scale industries should be encouraged to use available items in place of items in short supply so that gravity of the short supply of raw materials could be reduced. For example stoves can be manufactured with copper instead of aluminium. Plastic parts could be used instead of non-ferrous metal parts. Iran has ample petroleum and plastic parts can be manufactured by importing plastic raw materials based on export of petroleum. Glass and titanium could be used instead of metal. Iran is importing raw materials for detergent from abroad but due to the war between Iran and Iraq and the ban on imports, the country is facing difficulties. So the government should encourage and expand its petro-chemical industries.

Consumers would gradually get accustomed to the use of plastic instead of metal parts. When they are convinced about the quality of the final products, they will continue to use these items based on plastic parts.

Talks with small scale industrialists revealed that use of plastic items in place of metal would bring down the cost of production. Though, Iran has already got some plastic manufacturing companies, it should expand these. Sham plastic company's plastic goods and synthetic leather are very famous. But the capacity of Iranian plastic goods manufac-
turing industries is limited. There are 97 plastic goods manufacturing workshops in Iran. But, there is great scope for increase in production capacity. So we suggest, that the government of Iran should give more licences for establishment of new units in the plastic industry to increase plastic production. Increase in plastic production would gradually reduce shortage of steel, brass and copper to some extent.

We believe that the government of Iran should encourage production of sponge iron to meet the present shortage of iron and steel in Iran. We also suggest that government of Iran should encourage the use of iron and steel scrap. This would reduce steel shortage to some extent. Similarly, units in the Electric arc furnaces could produce steel items from the billets and rerollable scrap.

Discussions with small scale industrialists revealed that there was shortage of basic chemicals to a great extent in Iran. Most of the basic chemicals are imported in Iran so we have to accept that capacity utilization of the small scale industrial units in Iran is mainly based on availability of imports licences for importing basic chemicals. Iran has many mines which supply basic materials for manufacture of grade aluminium, zinc and antimony. But the indigenous production is not sufficient and small scale industrial units in Iran are required to import them.
The government of Iran has already taken up a large mining programme. The projects have been started for the mining sector during the recent years and they include geological and minerological surveys, exploitation and processing. Geological and cartographic surveys will be carried out over an area of 700,000 sq. kilometers, so far unsurveyed. Maps will be prepared on a scale of one to 250,000, 100,000, and 50,000.

Basic minerological surveys will be carried out on at least 25% of the country's surface (400,000 sq. kms) on a priority basis and in two stages. Primary surveys will be undertaken in the first phase and more detailed surveys in areas where there are indications of substantial deposits in the second phase. Priority will be given to prospecting for minerals required by domestic industry such as phosphate, bauxite, potassium, uranium and zinc.

We also suggest that proven mines of copper, iron, coal, lead, zinc and chromite ore etc. should be more and more exploited and raw materials should be processed into a form useable by the small scale industrial sector.

The most important of these mines are:

1. Copper mines at Sar-cheshmeh, Miduk, Chahar Gonbad, Abbasabad, Aliabad, Darreh Zarashk.
2. Iron Mines at Chaghart, Chander Malun, Tangah Zagh, ColGouhar.
3. Coal Mines at Kerman, the Alborz mountains, Shahrud.
4. Refractory clay deposits and other steel mill materials.
5. Chromite mines.

During the Shah's regime, these mines were exploited by foreign powers, (especially U.S.A. and other western countries) and ores were being exported. Fortunately, after the revolution, the Islamic government prevented the exploitation of these mines by them. The present Islamic government has to use these raw materials for the small scale industries of Iran.

We know the total fixed investment in the mining sector during the fifth plan 73-78 has come to 66.3 billion rials, well over three times the amount invested during the fourth plan 68-72. Of the total 61.8 billion, about 94% has come from the public sector and the remaining amount from the private sector.

The largest share of 60.3 billion rials has gone to extraction and exploitation. Another 5 billion rials have been devoted to surveys and prospecting and 1 billion rials to technical assistance to the private sector.
Investment in these programmes according to the figures mentioned above were during the Shah's regime which benefits only the few people close to the Shah's community and U.S.A. But the Islamic Government of Iran has tried to use these mines for domestic consumption of small scale industries and medium and large scale industries.

We understand from the small scale industrialists contacted by us that antimony, ammonia, sulphate, polyethylene, urea, are imported in Iran, and are in great shortage. The government of Iran should co-ordinate the needs of small scale industry in Iran and sufficient imports should be allowed, and necessary imports should be permitted until Iran is self sufficient and capable of satisfying its own raw material needs. However, excessive imports should not be indulged in, as this may encourage the people to slacken their efforts in producing their own raw material requirements. We are importing nearly 65% of raw material and 58% of machinery and spare parts1.

Many small scale industrialists in Yazd and Tehran complained to us that the prices of raw materials were increasing from time to time. They remarked that it was necessary to have relative stability in the prices of raw materials so that Iran could have steady growth of small scale industrial units. Due to the war between Iran and

1 Source: Kayhan Jan. 8, 1982.
Iraq. Railway wagons and trucks have been diverted to the war areas for the movement of war goods. Since a portion of the raw materials in Iran were moved by railway wagons, mostly from Khoramshar, the small scale industrialist complained that they were finding it difficult to get adequate raw materials due to the lack of railway network in other parts. When the small scale industrialists tried to move raw materials by road, they found it difficult to get adequate trucks. Due to war, petrol and tyres were in short supply. Besides, Khoramshahr, the main port of Iran, is captured by Iraq and imports of basic raw materials is affected, of course, but this is a temporary phase and we hope to win Khoramshahr in the near future, so that difficulties are minimized.

Iran's main railway lines extend from Bandar Khomeni to Bandar Turkaman and from Julfa to Tehran. These railway lines do not benefit the economy of Iran as a whole, as they are limited to some areas only. Since Iran's network of railways is not active in all parts of the country, Industrialists are forced to depend on roads for transportation of their raw materials. These roads are not asphalted and so do not facilitate transportation. The cheapest mode of transport is the railway, but unfortunately, Industrialists in Iran cannot avail themselves of its benefits.

It is necessary to make references to the war, even though wars are not usual or everyday happenings. We
must, however, be prepared for such occurrences. Had there been a network of railways throughout the country, the current problem of transport of raw materials would not have arisen. Therefore, we must learn from our present experiences during the war between Iran and Iraq that it is not a good policy to be dependent on only one or two ports and their connecting railway systems. Measures should be taken as early as possible to flood Iran with a network of railway lines and activate all available ports.

Some industrialists complained about pilferage. When we suggested to the small scale industrialists that they could insure their goods against pilferage, they complained that insurance was very costly. Since rates of insurance premium were very high, the small scale industrialists suggested that the government of Iran should give special low rates for small scale industries in Iran. Besides, the entrepreneurs argued that transportation should bear responsibility for shortages of raw material during transit and relieve the small scale industrial units from the heavy burden of shortage of raw material during transit.

Some small scale industrialists complained that there was irregularity and delay in supply of raw material. They remarked that due to this irregularity and delay, they were not able to have a definite time schedule of production. This had affected production planning. They also found it
difficult to quote definite prices to the customers because during the time lag between placement of order and actual delivery of goods to the customers, the prices of raw materials had increased.

We feel the shortage of raw material is a psychological problem to some extent, because, there is shortage, the whole salers, retailers and small scale industrialists stock raw material as much as possible. Many small scale industrialists felt that government of Iran was not sufficiently alive to the problem of shortage of raw material. So they were panicky and tried to hoard raw materials as much as possible. This aggravated shortage of raw material further.

We suggest that the government should control the supply of raw material to the small scale industries. If judicious and timely distribution of raw materials is ensured, this would overcome the psychology of shortages. This would give greater confidence in the minds of the small scale industrialists. This would also solve the problem of shortage to a great extent.
SHORTAGE OF RAW MATERIALS

- Insufficient indigenous production due to:
  - Improper exploitation
- Inadequate transport facilities
- Present dependence on imported raw materials

- Intimacy delivery
- Lack of finance leads to:
  - Inability to buy raw materials in bulk
  - Inability to buy raw materials

- Illegitimacy
- Unreasonable prices

- Costly psychological problem leading to:
  - Hoarding of raw materials
We also recommend that the government of Iran and trade associations like chambers of commerce should collect information about the requirements of raw materials in their regions and should estimate the magnitude of shortages, e.g., shortages of steel, non-ferrous metals, basic chemicals and other raw materials in short supply. This information may be published every six months, then entrepreneurs would be dissuaded from hoarding of raw material. The shortage would be reduced to some extent by this method.

We also suggest that the government of Iran may establish a Raw Material Bank, having branches at the places where there is concentration of small scale industries i.e., Tehran, Isfahan, Tabriz, Yazd, etc. The Bank would serve the needs of small units in respect of both imported raw materials and indigenous raw materials. This raw materials bank could work as follows:

Whenever a particular small scale industrialist obtained actual users licence, he need not wait until the material meant for him actually arrived at the town where he was working. He could withdraw the quota allotted to him as per the import licence from the Raw Material Bank. He should then replenish the stock of raw material with the Raw Material Bank on receipt of his actual consignment. Similarly, Raw Material Bank could maintain buffer stocks of imported and indigenous raw materials and serve the small scale sec-
tor by allowing them to draw whenever possible on the basis of their undertaking to replenish the same on receipt of the quote from the producers and import houses. In other words, there should be distribution of raw materials on Iran basis.

Establishment of Raw Materials Banks of this type and efficient working of its branches at different centres would go a long way in increasing the capacity utilization of the small scale industrial units in Iran.

5.7 Shortage of Trained Labour

About 50% small scale industrialists complained to us that they were finding it extremely difficult to get the required labour before the revolution in 1979 in Iran. A number of Americans and Englishmen were working in different capacities in the Industrial Sector. Even skilled labourers came from U.S.A., U.K., and Germany. After the revolution, the Government of Iran has placed strict restrictions on the employment of Americans and western labourers in the Industrial Sector. Most of the Americans have gone back. Now some Japanese and Indian labourers are available but it is extremely difficult to get persons with adequate skills.

The small scale industrialists also complained to us that the indigenous workers were given the job after the necessary training was given to them, there has to be high
labour training work in the small scale sector due to the non-availability of indigenous labour of adequate skill. Small scale industrialists were bound to compete for getting the necessary skill. They have to pay high wages to persons so that they are prepared to leave their earlier job and join them.

The small scale industrialists complained to us that whenever new workers were employed by them, some sort of training was necessary to be given for some time for handling the jobs available in small scale industries. Some time lag was involved in the adequate production standard. This time lag was responsible for less production in relation to the production capacity of the small scale industrial units.

Though man power was available in Iran, the small scale industrialists complained that the available workers were untrained for the specific jobs. In different industrial units given in time lag, the production was less.

We suggest that the government of Iran must establish vocational training Institutes at different centres where there are small scale industries. Even the University in Iran could take the lead and start short term and long term courses to train the labourers adequately to handle the
Lack of agencies giving adequate loans for purchasing plant and construction of building

High rentals demanded

Lack of industrial estates

Lack of own funds to finance purchase and construction of building
SHORTAGE OF TRAINED LABOUR

Lack of Vocational Training

Unavailability of skilled labour

High wages of skilled labour

Lack of adequate no. of Training Centres giving training to existing & potential workers

Competition to acquire skilled labour

Economy of the country was in the hands of foreigners

Therefore skilled & semi skilled labour was from abroad
SHORTAGE OF POWER

- No issue of larger power licences
  - Very high power rates

- Lack of government subsidies to small scale industries in use of power
  - In general, power shortage in the country

- No proper network supplying electricity to all parts of the country
jobs in the small scale industries sector. If such basic vocational training is given to the labourers for jobs in the small scale industries sector, the time lag of training involved in small scale sectors would be reduced and the productivity of the small scale industrial unit would increase. This training would increase the utilization capacity in the small scale sector in Iran.

Such training in the organized procedures by which labourers can acquire knowledge and skill for a definite purpose, would be beneficial. It is this act of increasing the knowledge and skill of the worker in doing of specific jobs, that creates efficiency in the small scale sector as a whole.

In the small scale sector, many jobs have assumed and highly technological character and under automation we require highly skilled operatives. Therefore, training to the workers appears to be necessary. Increase in skill and efficiency usually results in increase in both the quality and quantity of output. A trained worker gives increased performance. Machinery and materials are also carefully handled and they are more economically used. So training would help to increase productivity in the small scale sector in Iran. Many small scale industries have started automation in their units. So, the workers will have to learn the use of the new type of equipment. They will
have to adjust themselves to major changes in the job content.

Training and Work Relationship: Technological changes bring about changes in the work situation rapidly. So when an automatic machine is introduced, the entrepreneur will have to face the problem of training of the employees, similarly, employees have a better sincerity and greater opportunity for advantage within or without the present organization. This is possible only for trained employees.

In order to get the advantages of training, it is necessary to have training as a planned affair. So, it should be well administered and accepted as a never ending process, right up to the retirement of employees. So, it is recommended that small scale industrialists take up the responsibility of continuous training and retraining of workers under the present situation. If the government of Iran, with the help of the university, starts training centres at the places where small scale industries are concentrated, it would help in increasing the productivity of the small scale sector. It would also lead to the versatility and adaptability of workers. We suggest that instead of on the job training to the workers, vestibule schools are started in the centres of small scale industrial units.

A vestibule school is a factory started by the government or by Training Associations to give training to
the workers. This Model Factory includes major machinery which is likely to be installed in small scale industrial units, the workers will be given opportunities to work on the machinery in these Model Factories i.e. vestibule training centres, under the guidance of experienced and skilled supervisors. This is the most effective way of training workers, so we suggest that such Model Factories should be started at Tehran or other industrialized cities, where workers working in small scale industries can be given the opportunities of taking training and working on the machines under the expert guidance of capable supervisors.

5.8 Shortage of Power

The small scale industries complained to us that the under production was due to the shortage of Electricity in Iran. They stated that the Electricity Board in Iran was not issuing larger power licences to the small scale industries situated in the centres.

There is an insufficiency of large dams generating electricity, therefore, there is a shortage of power. Maximum use of energy resources is not made and electricity rates are also very high. Simultaneously, with the economic development of Iran, the country's electrical industry must also grow. In this way it will be possible to meet energy requirements of the agricultural, industrial,
commercial and domestic consumers as well. Growth of the electrical industry will greatly improve transport facilities, enabling Iran to start the use of electric trains. Earlier, when we discussed the shortage of raw materials, we mentioned one of the reasons for this problem was the lack of adequate transport. However, the use of the electric trains would lessen this difficulty and ensure quicker delivery of raw materials from ports and raw material centres to industrial sites.

The government should increase the generation of hydro-electric, gas, diesel and thermal power. There is an abundancy of gas and diesel power in the country, hence, the government should make optimum use of these sources. It is necessary to take action with regard to overall efficiency of the electricity sector with a view to improving existing utilization facilities and consider the possibilities of nuclear-energy. Facilities for distribution of electricity to rural and backward areas, where small scale industries are situated, should be expanded. It is imperative to improve the organization and management of the electrical industry as a whole and effect training of the personnel employed at all levels. Other steps that should be taken by the government for the general improvement of the electrical industry are as follows:
The allocation of more funds by government towards manufacture of electricity by using oil and gases.

Power generation facilities should be established concentrated close to oil refineries, pipelines and natural gas fields in order to reduce atmospheric pollution in urban and industrial districts. This will also lower fuel cost for power generation by consumption of heavy fuel oils and natural gas in power-stations and will reduce transportation cost of carrying fuel from oil fields to the electricity centres.

The load factor should be increased by supplying the needs of industrial and rural consumers to ensure regular and reliable supply of electricity of the type required by different consumers. Thus, the various categories of small scale industries are charged as little as possible, on the basis of cost price plus reasonable profit margin. We hope that the skilled craftsmen should be supplied electricity at subsidised rates by the government of Iran.

Experiments should be made to discover whether it would be convenient and economical to produce and distribute electricity from the tidal waves of the sea in the coastal areas of Iran. Recently, India has begun the production of electricity from tidal waves in Saurashtra (Gujarat State). It is understood that such production of electricity is economical there. Help and assistance can
be sought from India and other countries who have successfully produced electricity in this manner.

In the year 1978, the electricity generation was limited to 19.9 million megawatts and this was 47% more than the previous year. The ministry of power supplied 17.4 million megawatts (87.6%) and private sectors supplied 2.5 million megawatts (12.4%). The supply of electricity by the ministry was 10.4% more than in the year 1977, but the private sectors supplied 23% less. This was due to workers strikes during the revolution and also because of the increased supply of power by the ministry of Power owing to the policy of replacing private sectors by the government. During 1978, the categories of electricity generated by the ministry of Power was as follows:

- 36.3% by Thermal Electric (Steam-generation)
- 35.9% by Hydro-electric (Water-generation)
- 22.6% by Gas (Gas-generation)
- 5.2% by Diesel (Diesel-Generation)

In 1978, consumption of electricity generated by the ministry of power was almost 8.3% more than in 1977 i.e. from 13.1 million megawatts in 1977, it increased to 14.1 million megawatts in 1978. In 1978, the consumption of the industrial sector was 41.2%, however, this was 1.3% less than in 1977.

---

1 Bank Markazi Iran, Annual Report of Balance Sheet Year 1978, P. No. 25.
Of the total consumption of electricity generated by the ministry of power, commercial and domestic sectors consumed 24.2% and 26.8% respectively and the increase since 1977 was 18.4 and 17.3 respectively.

Before the revolution Iran's economy was largely in the hands of foreign nations, whose projects were beneficial to themselves rather than Iran. Hence, during the time of the Revolution, the government cancelled or delayed many of these projects. Thus, due to these reasons, there has been a decrease in capital investment. Other difficulties, such as strikes, caused further difficulties e.g. in 1978, capital formation for the generation of electricity was 72.9 billion Rials, while in 1977, it was 131.2 billion Rials, this means, a decrease of 44.4%, and a decrease of 47.1% and 16.4% in transmission and distribution respectively and a 50.5% decrease for research and studies.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Ministry of Power</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Water</td>
<td>11,165</td>
<td>12,778</td>
<td>14,211</td>
<td>15,755</td>
<td>17,386</td>
<td>10.9</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>(3,421)</td>
<td>(3,445)</td>
<td>(3,976)</td>
<td>(4,213)</td>
<td>(6,249)</td>
<td>5.8</td>
<td>48.3</td>
</tr>
<tr>
<td>2. Steam</td>
<td>(6,545)</td>
<td>(7,785)</td>
<td>(8,455)</td>
<td>(8,203)</td>
<td>(6,316)</td>
<td>-3.0</td>
<td>-23.0</td>
</tr>
<tr>
<td>3. Gas</td>
<td>(688)</td>
<td>(955)</td>
<td>(1,122)</td>
<td>(2,558)</td>
<td>(3,928)</td>
<td>127.9</td>
<td>53.6</td>
</tr>
<tr>
<td>4. Diesel</td>
<td>(511)</td>
<td>(593)</td>
<td>(658)</td>
<td>(781)</td>
<td>(893)</td>
<td>19.9</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>B. Private Sector</strong></td>
<td>(2,840)</td>
<td>(2,922)</td>
<td>3,024</td>
<td>3,200</td>
<td>2,461</td>
<td>5.8</td>
<td>-23.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14,005</td>
<td>15,700</td>
<td>17,235</td>
<td>18,955</td>
<td>19,847</td>
<td>10.0</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Source: Ministry of Power, Bank Markazi Iran.  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>267</td>
<td>330</td>
<td>363</td>
<td>426</td>
<td>441</td>
<td>17.4</td>
<td>3.5</td>
<td>3.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Industrial</td>
<td>5,001</td>
<td>5,287</td>
<td>5,575</td>
<td>5,897</td>
<td>5,821</td>
<td>5.8</td>
<td>-1.3</td>
<td>45.1</td>
<td>41.2</td>
</tr>
<tr>
<td>Commercial</td>
<td>1,757</td>
<td>2,191</td>
<td>2,639</td>
<td>2,888</td>
<td>3,420</td>
<td>9.4</td>
<td>18.4</td>
<td>22.1</td>
<td>24.2</td>
</tr>
<tr>
<td>Domestic</td>
<td>1,620</td>
<td>2,034</td>
<td>2,620</td>
<td>3,238</td>
<td>3,797</td>
<td>23.6</td>
<td>17.3</td>
<td>24.8</td>
<td>26.8</td>
</tr>
<tr>
<td>Other</td>
<td>507</td>
<td>600</td>
<td>537</td>
<td>617</td>
<td>666</td>
<td>14.9</td>
<td>7.9</td>
<td>4.7</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9,152</td>
<td>10,446</td>
<td>11,734</td>
<td>13,066</td>
<td>14,145</td>
<td>11.4</td>
<td>8.3</td>
<td>100.00</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Ministry of Power, Bank Markazi Iran,
Fixed Capital formation from development credits

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Generation</td>
<td>131.2</td>
<td>72.9</td>
<td>- 44.4%</td>
</tr>
<tr>
<td>2. Transmission</td>
<td></td>
<td></td>
<td>- 47.1%</td>
</tr>
<tr>
<td>3. Distribution</td>
<td></td>
<td></td>
<td>- 16.4%</td>
</tr>
<tr>
<td>4. Studies &amp; Research</td>
<td></td>
<td></td>
<td>- 50.5%</td>
</tr>
</tbody>
</table>

Source: Ministry of Power
Bank Markazi Iran
Annual Report & Balance Sheet
Page No. 29.
We suggest that government may include programmes for increase in the Electricity power in Iran. Unless electricity power is made available to the small scale industries, they can only produce a sufficient quantity of goods in relation to the rated capacity. Availability of electricity is basic necessity for the developing of the small scale sector. It is necessary for the government of Iran to pay adequate attention to this urgent problem.

5.9 Shortage of Space

About 25 percent small scale industries complained to us that their space was not adequate in relation to the production capacity and their expansion programme. They stated that it was extremely difficult to get sufficient space at reasonable rates at the centres of small scale industries sector. They also complained that the available space was not sufficient to store the raw materials required by them and the finished product produced by them. If the production is to be increased to the rated production capacity it is necessary that additional space is made available to them.

We suggest that the government of Iran should start some industrial estates, where factories of different sizes are established and are made available on rental basis to small scale industrialists at reasonable rates. If this is done, it will do much towards increasing the production of the small scale sector in Iran.