6 CONSTRAINTS AND POLICY INTERVENTION

Despite substantial increase in production and consumption of meat, meat processing industry remains small as hardly one percent of the total meat produced in the country undergoes commercial processing. A number of economic, socio-cultural and policy related factors are responsible for the constricted growth of the meat industry (Ali, et al., 2004). This chapter discusses a whole range of constraints operating on the different stages of the meat supply chain.

6.1 Constraints to Meat Industry

6.1.1 Production constraints

India has a huge livestock population of different species that can be gainfully utilized for meat production. Nevertheless meat productivity in India is low and has been stagnating for quite some time. The feed and fodder shortage is the most important yield limiting factors (Singh and Majumdar, 1992; World Bank, 1999). Animals are often fed on crop residues. The area under green fodder is hardly about 4 percent of the gross cropped area (GCA). The livestock is mainly reared by the small landholders who do not have much agricultural land to grow fodder and they largely depend on common grazing land for green fodder. Common grazing lands have been deteriorating quantitatively as well qualitatively due to excess pressure of livestock population and distributive
Diseases constrain realization of the potential production. A number of badly diseases like FMD, Brucellosis, Black Quarter etc are prevalent in India causing considerable loss to livestock production. Although animal health infrastructure in India has expanded considerably, delivery of services is still poor.

Slaughter rates of large ruminants are much below the potential off-take rate. These animals are reared mainly for milk. It is only old, fragile and unproductive animals that are used for meat production. Buffalo males are slaughtered at a very young age resulting into a waste of potential production. Cattle is considered to be sacred and its slaughtering is banned in most of the Indian states.

Market infrastructure for live animals is poor and unorganized. There are a number of intermediaries acting between the producers and slaughterhouses/processors. The price realization by producers is low. Slaughterhouses are often located in the urban areas far from the point of production, and the transportation cost of live animals is thus high. The meat processing industry has not taken much initiative to strengthen backward linkages with the farmers/producers and largely depends on the intermediaries for its requirement of raw materials.

6.1.2 Consumption constraints

Although per capita meat consumption in India has increased, its level remains low because of economic and socio-cultural factors. Although about 60
percent of the Indian population is non-vegetarian, meat does not comprise a regular food item of its diet. It is consumed on certain occasions like festivals and ceremonies. The irregular consumption is because of high prices of meat, which an average consumer cannot afford. Further rural consumers are restricted by lack of local availability of meat as most of the slaughtering takes place in urban areas. Socio-cultural factors are also responsible for the low level of meat consumption. The Hindus do not consume beef and the Muslims do not consume pork because of religious sentiments.

6.1.3 Processing constraints

Most of the processed meat products are meant for exports. The domestic consumption of processed meat is constrained by high prices and consumer preference for fresh meat.

The industry also faces challenges from social organizations and NGOs demanding for ban on animal slaughter.

One of the major constraints to meat processing industry is its excessive dependence on market intermediaries for live animals. This leads to irregular supply of animals for slaughter. Animals are transported from distant markets, causing weight lose and hence low meat yield.

The poor sanitary and phyto-sanitary conditions are also considered to be one of the major constrains in realizing the export potential. The quality standard for production of meat and meat products set by the Government of India is not so comprehensive as to bring the quality at par with international standards. As these standards vary with countries, it imposes a lot of constraints in strengthening the meat export from India.
6.2 Policy Support/Intervention

Agriculture including livestock is a state subject and production and processing policies vary from state to state. Nevertheless the Central Government intervenes through various support programmes and regulations. Generally local slaughterhouses are controlled and managed by local authorities. The government provides different kinds of support for better and hygienic conditions of slaughterhouses. Since the initiation of economic reforms programme the central government has taken some initiatives to support the meat industry. APEDA provides support for modernization of slaughterhouses to improve the quality of meat production but this assistance is limited to a few export based slaughterhouses only.

6.2.1 Regulation & Control

The following two regulations directly related with meat industry needs better implementation and revision to make meat industry viable in India:

6.2.1.1 The Meat Food Product Order, 1973

The Essential Commodities Act, 1955 is the principal act, which controls the production, supply and distribution, trade and commerce of a large number of agricultural commodities. The Act is now covered by the liberalized trade agreements and in respect of which non-tariff barriers have been removed for all agricultural commodities over time. Under the Essential Commodities Act, the Meat Food Product Order, 1973 has been introduced and came into force with effect from July 15, 1975 to control the meat production and supply. This is the first order issued by the Government of India containing definitions, constitution of meat products advisory committee, licensing and control of meat manufacturing. The Agricultural Marketing Advisor to the Government of India is the licensing authority, which grants license for production, packing,
repacking, relabelling meat products for sale. As per the order meat manufacturers have been classified into three categories (Table 11).

Table 6.1: Categories of meat manufacturers and license fee

<table>
<thead>
<tr>
<th>Category</th>
<th>Details of manufacturers</th>
<th>License fee (Annual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category “A”</td>
<td>Manufacturer who makes meat food products exclusively from meat of animal(s) slaughtered and dressed in his factory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. If the quantity of meat products manufactured is more than 150 tonnes per annum.</td>
<td>Rs. 5000</td>
</tr>
<tr>
<td></td>
<td>2. If the quantity of meat products manufactured is less than 150 tonnes per annum.</td>
<td>Rs. 2500</td>
</tr>
<tr>
<td>Category “B”</td>
<td>Manufacturer who makes meat food products exclusively from meat of animal(s) slaughtered and dressed in a recognized slaughter house and whose factory is situated in close proximity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. If the quantity of meat products manufactured is more than 150 tonnes per annum.</td>
<td>Rs. 2500</td>
</tr>
<tr>
<td></td>
<td>2. If the quantity of meat products manufactured is less than 150 tonnes per annum.</td>
<td>Rs. 1000</td>
</tr>
<tr>
<td>Category “C”</td>
<td>Manufacturer who makes meat food products exclusively from poultry and/or pig meat at places where authorised slaughter houses do not exist and the total quantity manufactured is less than 30 tonnes per annum.</td>
<td>Rs. 1000</td>
</tr>
</tbody>
</table>

Source: The Gazette of India (various issues)

The meat production in the country is regulated by this Act and every licensee has to comply with the provisions and guidelines laid down in different schedules. The licensing authority or any officer from the Directorate of Marketing and Inspection, authorized by the Agricultural Marketing Advisor on his behalf, may check to secure the compliance of the order. The order also describes the detail of sanitary and hygienic condition in slaughterhouses, ante and post mortem inspection and humane slaughter of animals. To control and maintain the quality of meat food products, the quality norms with permissible limits related with poisonous metals, preservatives, insecticides, sequestering and buffering agents and mono-sodium glutamate, have been laid down in the order.
6.2.1.2 Export of Raw Meat (Frozen/Chilled) (Quality Control and Inspection) Rules, 1992

This rule has been incorporated under the Export (Quality Control and Inspection) Act, 1963 to check and maintain the quality standard of meat exported to other countries. The rule includes definitions, detail of layout and management of slaughterhouses, sampling methods for quality checking, quality specification of different species of meat, storage and procedure of inspection and certification. The central government recognizes the Directorate of Animal Husbandry of all state governments, as an agency for the inspection of meat quality prior to export. The export of raw meat is not possible without a mark or seal recognized by the Central Government on the packages or containers, indicating that it conforms to the standard specifications defined under the rules and are export worthy.

The schedule-I of the Rule states that all abattoir/slaughterhouses shall have the basic essential facilities like resting place for animals before slaughtering, adequate facilities for ante-mortem inspection, carrying out humane slaughter, facilities for washing the carcasses, hanging carcasses and edible offals, handling by-products, disposal of waste, separate wards for diseased animals and adequate water supply. It shall also have reception area, lairages, slaughter halls, ancillary accommodation and refrigerated rooms.

The Rules describes the detail of sample size and method of selection in schedule-II. Each type of meat produced for export shall be kept in separate lots. Samples shall be tested from each lot ascertaining the conformity of material with the requirement laid down in schedule-II to VII. Table 12 shows the number of cartons to be selected for inspection randomly from specified lot and the minimum sample weight per carton shall be 50 gms. The sample from the
carcasses or quarters shall be taken from back muscle, shoulders, eye muscle, hind quarters and back and care shall be taken for inspection. Minimum weight per sample/ carcass shall be 100 gms.

Table 6.2: Minimum number of cartons to be selected from each lot

<table>
<thead>
<tr>
<th>No. of cartons in the lot</th>
<th>No. of cartons to be selected in routine inspection</th>
<th>No. of cartons to be selected in re-inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 100</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>101 to 200</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>201 to 500</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>501 to 800</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>801 to 1200</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>1201 to 3200</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>3201 to 8000</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>8001 and above</td>
<td>12</td>
<td>24</td>
</tr>
</tbody>
</table>

Source: The Gazette of India (various issues)

As per guidelines of the Rule, two samples shall be drawn one for analytical laboratory and other sample shall be sealed by the inspecting officer and deposited for safe custody in the meat plant under proper refrigeration. The sample shall be examined by the inspecting officer for checking conformity with prescribed standards which includes - internal temperature of meat, free from ragged edges, off-colour, flabby or watery nature, pieces of bones, hair, excessive connective tissues, blood clots, excessive trimmings, excessive fat, greasy, fungus, bad odour, souring, freezer burn, parasitic cysts, firmness etc.

The inspection of raw meat intended for export conforming to the specifications recognized by the Central Government shall be carried out. A meat exporter shall submit an application for inspection in the prescribed proforma, giving particulars of consignment to the nearest office of agency for quality control not less than five days before the anticipated date of dispatch. A
Veterinary Health Certificate is issued by the agency declaring the raw meat (chilled/ frozen) as fit for human consumption and export worthy. If the agency is not satisfied with quality standard of meat, it shall, within a period of five days, refuse to issue such certificate and communicate such refusal to the exporters along with the reasons thereof.

The agency shall also have the right to reassess the quality of consignment in storage, transit or at the ports and at any stage if it is found not conforming to the standard, the certificate originally issued shall be withdrawn. The validity of inspection certificate shall be five days for chilled meat and ninety days for frozen meat. If the consignment is not shipped within the period of validity of certificate, the exporter shall be permitted to present the consignment for revalidation. In such cases, the validity shall be extended for a further period of three days for chilled meat and thirty days for frozen meat.

Table 6.3: Specification for transportation of meat

<table>
<thead>
<tr>
<th>Type of meat</th>
<th>Specification for transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh</td>
<td>Vehicles fully covered with impervious flooring and side walls in case of transport over distance exceeding 100 kms, suitable arrangement shall be made to maintain a temperature not exceeding 6°C</td>
</tr>
<tr>
<td>Chilled</td>
<td>Transported in refrigerated/ insulated vans, in case of transport over distance exceeding 100 kms, suitable arrangement shall be made to maintain a temperature not exceeding 6°C</td>
</tr>
<tr>
<td>Frozen</td>
<td>Transported in refrigerated/insulated vans. The temperature of the carcass meat shall not go above minus 8°C</td>
</tr>
</tbody>
</table>

Source: The Gazette of India (various issues)

The inspection fee shall be paid to the exporters/ processors to the agency as under:-
1. For export under consignment wise, a fee at the rate of 0.4 percent of the F.O.B. value, subject to a minimum of Rs. 50 per consignment.

2. For export under the in-process quality control system, a fee at of 0.2 percent of the F.O.B. value, subject to a minimum of Rs. 50 per consignment.

3. For export under the self-certification system, a fee at the rate of 0.1 percent of the F.O.B. value, subject to a minimum of Rs. Two Thousand Five Hundred Only and maximum of Rs. One Lakh Only in a year.

To maintain the quality meat for export, the Rule has also provided the proper guidelines for handling the carcass during transportation. The specification of transport requirement has been given in table 13.

### 6.2.1.3 Other Regulations for Slaughter and Disposal

Some other rules for slaughtering of animals and proper disposal of slaughterhouse waste may be listed as follows:

- No pregnant animal may be slaughtered. The meat animal must be certified healthy and free from disease by a municipal veterinarian before being slaughtered for meat. No cattle under the age of 16 may be killed.

- No animal may be slaughtered except at a municipal or registered slaughterhouse (state municipal acts, e.g., Section 415 of the Delhi Municipal Corporation Act, 1957).

- In localities where a municipal slaughterhouse exists, such as Idgah (in Delhi) or Deonar (in Mumbai), it is illegal for animals to be killed anywhere else (state municipal acts, e.g., Section 407 of the Delhi Municipal Corporation Act).
Under a notification dated 31st August 1978 by the Ministry of Civil Aviation, it is illegal to slaughter or to deposit slaughterhouse waste within a radius of 10 km from an airport.

Under the Water Pollution Act, it is illegal for slaughterhouse waste to be deposited into any water resource.

No person can, in any public place or public street, carry meat exposed to public view (state municipal acts, e.g., Section 397 of the Delhi Municipal Act).

Under the ISI, animals must be rested for 24 hours, given abundant water and rendered unconscious before slaughtering.

All licensed butcher shops are required to follow the ISI code of health and hygiene standards.

The butcher shop must have a proper waste disposal facility. Blood cannot be sent down public drains.

6.2.2 Export Promotion

Trade reforms have relaxed most of the restrictions on the export of livestock products. Exports of non-breedable or culled buffaloes, sheep and goats were subjected to quantitative restrictions and minimum export prices. These restrictions continued during the initial phase of liberalization and were removed only in 1994 (NCAER, 1996). The export of buffalo meat was free from any restrictions since the 1980s. Sheep and goat meat exports were restricted by quotas and minimum export prices (MEPs).

The quantitative restrictions on meat and meat products have already been removed with effect from April 1, 2000. Various promotional schemes are
introduced in terms of fiscal incentives, technical support, modernisation of slaughterhouses and establishment of special economic zones. For instance, firms classified as export-oriented units (EOUs) and those within export processing zones (EPZs) may import, duty free, any goods including capital goods required for manufacturing, production or processing activities, provided that the goods are not prohibited under the negative lists of imports. In the case of animal husbandry and poultry, the EPZ unit or EOU may sell up to 50 percent of production domestically (World Bank, 1999).

The Agricultural and Processed Food Products Export Development Authority (APEDA) also provides subsidies to the exporters, growers, trade associations and government agencies to pursue export promotion and market development activities, strengthen market intelligence and information channels, improve export quality, develop infrastructure and human resource capacity, and modernise meat processing facilities (World Bank 1999).

The policy of trade liberalization seems to have provided impetus to meat and meat products export, which have registered remarkable growth during the 90s. Liberalization offers both opportunities and challenges to the meat processing industry. For instance, the recent lifting of import restrictions on dairy and poultry meat may adversely affect producers if it is not coupled with structural changes in the processing and marketing sectors to reduce marketing costs and margins (World Bank, 1999). Some of the export promotional measures are listed as follows:

- Wide ranging fiscal policy changes have been introduced progressively. Excise & Import duty rates have been reduced substantially. Many processed food items are totally exempt from excise duty.
• Custom duty rates have been substantially reduced on plant & equipments, as well as on raw materials and intermediates, especially for export production.

• Corporate taxes have been reduced and there is a shift towards market related interest rates. There are tax incentives for new manufacturing units for certain years, except for industries like: beer, wine, aerated water using flavouring concentrates, confectionery & chocolates etc.

• Indian currency (rupee) is now fully convertible on current account and convertibility on capital account with unified exchange rate mechanism is foreseen in coming years.

• Repatriation of profits is freely permitted in many industries except for some, where there is an additional requirement of balancing the dividend payments through export earnings.

• Food processing industry is one of the thrust areas identified for exports. Free trade zones (FTZ) and export processing zones (EPZ) have been set up with all infrastructure. Also, setting up of 100% Export oriented units (EOU) is encouraged in other areas. They may import free of duty all types of goods, including capital foods.

• Capital goods, including spares upto 20% of the CIF value of the Capital goods may be imported at a concessional rate of Customs duty subject to certain export obligations under the EPCG scheme. Export linked duty free imports are also allowed.

• Units in EPZ/FTZ and 100% Export oriented units can retain 50% of foreign exchange receipts in foreign currency accounts.

• 50% of the production of EPZ/FTZ and 100% EOU units is saleable in domestic tariff area.
6.2.3 Upgradation and Modernization of Slaughterhouse

A number of initiatives have been taken by central government, state governments and other public and private agencies for modernization and upgradation of slaughterhouses. Considering the importance of meat industry in the economy, a Centrally Sponsored Scheme titled "Assistance to States for improvement/modernization of abattoirs/establishment of carcass utilization centres and primary hide flaying units" has been implemented in the Ninth Plan period. Under Modernization of Slaughterhouses, financial assistance is given to State Governments on a 50:50 basis for implementation of the Scheme. Under the component "Modernization of Carcass Utilization Centres", 100% central assistance is being provided for buildings, plants and machinery and effluent treatment and 50% for water, electricity and land development etc. for establishing carcass utilization centres.