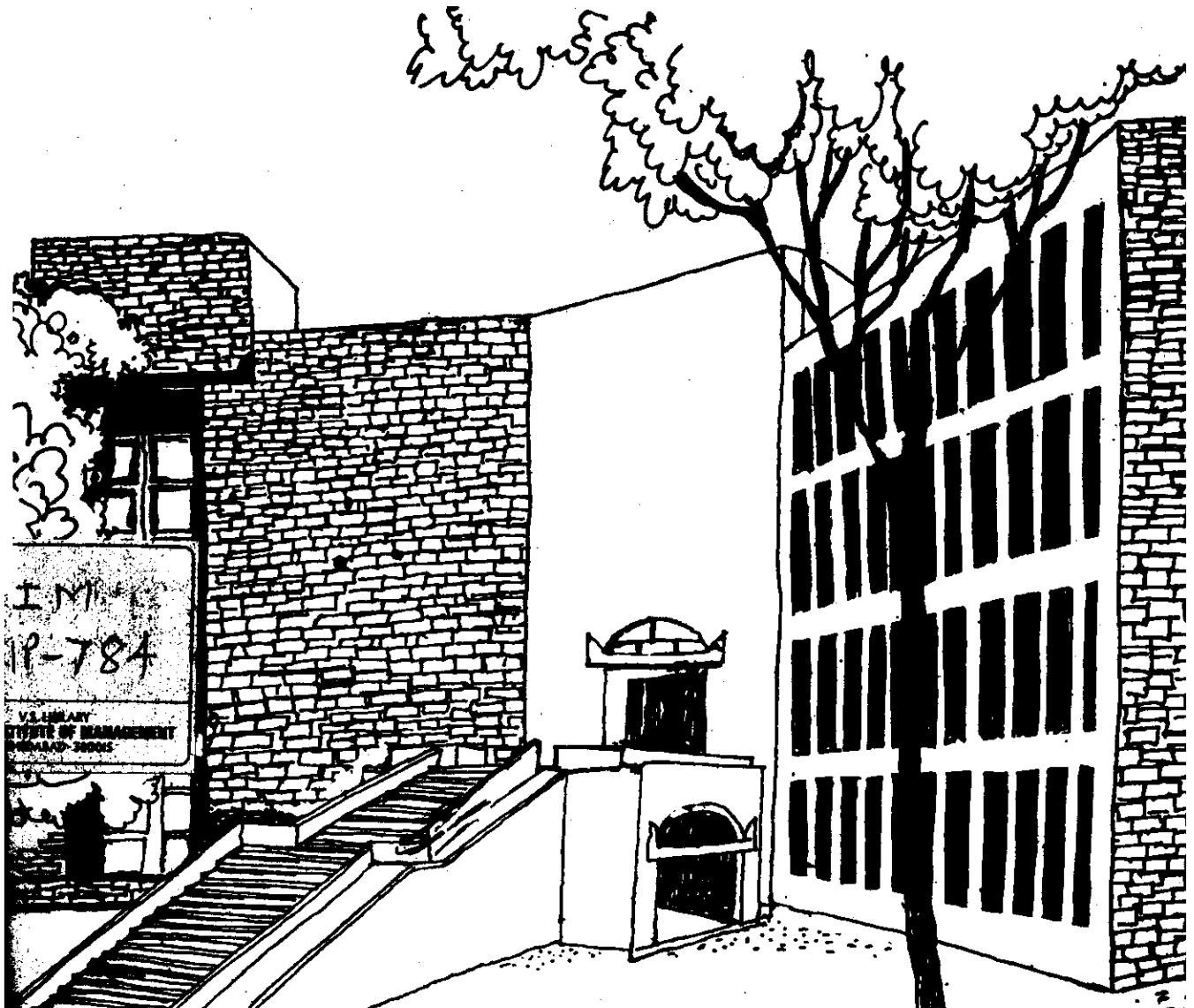




# Working Paper



STATE OF ART AND RESEARCH PRIORITIES  
IN LEATHER INDUSTRY IN INDIA

By

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## 1 Importance of Livestock Economy of India.

Although animal husbandry had developed as an ancillary activity to agriculture in the rural environment of India, with the passage of time it became an important source of augmenting income of the rural households. According to the estimates of Central Statistical Organisation (CSO), New Delhi, in 1984-85, at the current prices the output value of contribution from livestock sector was worth Rs.165 billion or 20.3% of the total contribution of Rs.812 billion from the output value of agriculture and livestock to the Gross National Product of India(1). It may however be mentioned that the value of output of livestock sector did not include contribution from drought animal power. According to an estimate, if the contribution of drought animal power is included, the contribution from the livestock sector might increase to about 30% of the total value of output from agriculture and livestock(2). Apart from the contribution of livestock sector to the Gross National Product, it is important that this sector in 1984-85, at current prices, provided materials worth Rs.218 per capita for direct and indirect consumption. Among the items of direct consumption, Milk & Milk products, Meat & Meat products and Eggs & Poultry products were important. Based on the data of 1984-85, at the

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1. National Accounts Statistics, 1984-85, Central Statistical Organisation, Govt. of India, New Delhi, 1987.

2. Acharya, R.M., Animal Husbandry and Dairying, The Economic Times, Oct 28, 1988, p 7.

The authors wish to thank Mr. S.N. Chokshi for the help rendered in preparation of this working paper.

current prices, per capita availability of these direct consumable products in money value terms was Rs.182. Among the items of indirect consumption, Hides & Skins, Wool & Hair and Dung were quite important and accounted per capita availability of Rs.36 during the same year. The details of the contribution of value from different items of livestock production are provided in Table 1.

Besides contribution of livestock products to the Gross National Product, the importance of livestock sector could also be assessed in terms of availability of the major products in physical quantitative terms. According to the Seventh Five Year Plan, among the direct consumable products, in 1979-80, about 44 kgs of milk was available per capita per year to the human population from the livestock sector. The availability of milk per capita per year increased to 51 kgs in 1983-84 and also remained stagnant in 1984-85. According to the target fixed in the Seventh Five Year Plan it is expected that per capita per year availability of milk will be around 60 kgs by the end of 1989-90. The details of availability of above referred commodities during the period 1979-80 and 1984-85 and projected figures upto the end of the Seventh Five Year Plan are provided in Table 1.

Experiences have revealed that in most developing countries, animal husbandry sector has not been given attention

TABLE 1 VALUE OF OUTPUT FROM LIVESTOCK BETWEEN 1970-71 AND 1984-85 (VALUE IN RS. LAKHS)

| Year    | Gross Domestic Product at Factor Cost | Value added From Agricultural and Allied Activities | Value of output Livestock | Value of Milk & Products | Value of Meat & Meat Products | Value of Hides & Skins | Value of Eggs & Poultry | Value of Wool & Hair | Value of Dung | Increment in Livestock | Other Products |
|---------|---------------------------------------|---|---------------------------|--------------------------|-------------------------------|------------------------|-------------------------|----------------------|---------------|------------------------|----------------|
| 1970-71 | 36,73,600                             | 20,72,950   | 3,19,724                  | 2,16,730                 | 29,426                        | 7,389                  | 21,219                  | 1,951                | 31,966        | 5,182                  | 4,903          |
| 530.0   | (687.94)                              | (388.19)  | (59.87)                   | (40.59)                  | (5.51)                        | (1.37)                 | (3.37)                  | (0.37)               | (5.99)        | (1.16)                 | (0.92)         |
| 1980-81 | 1,13,54,000                           | 55,82,200   | 9,80,621                  | 6,26,995                 | 1,06,270                      | 22,777                 | 77,035                  | 6,996                | 99,689        | 25,263                 | 15,596         |
| 6890    | (1648.0)                              | (790.59)  | (142.33)                  | (91.00)                  | (15.42)                       | (3.31)                 | (11.18)                 | (1.02)               | (14.47)       | (3.67)                 | (2.26)         |
| 1981-82 | 1,30,77,600                           | 61,25,470   | 11,53,623                 | 7,41,143                 | 1,24,265                      | 23,618                 | 93,050                  | 7,775                | 1,14,925      | 29,003                 | 19,044         |
| 7030    | (1860.17)                             | (871.33)  | (164.10)                  | (105.43)                 | (17.68)                       | (3.36)                 | (13.24)                 | (1.11)               | (16.35)       | (4.24)                 | (2.71)         |
| 1982-83 | 1,45,96,100                           | 64,69,755   | 12,73,514                 | 8,13,321                 | 1,37,740                      | 24,832                 | 1,02,910                | 8,397                | 1,25,310      | 34,416                 | 26,572         |
| 7170    | (2035.72)                             | (902.34)  | (177.62)                  | (113.43)                 | (19.21)                       | (3.46)                 | (14.35)                 | (1.17)               | (17.48)       | (4.00)                 | (3.71)         |
| 1983-84 | 1,72,70,400                           | 70,76,729   | 14,30,017                 | 9,12,503                 | 1,53,111                      | 26,410                 | 1,26,377                | 8,020                | 1,42,901      | 40,030                 | 27,041         |
| 7320    | (2359.34)                             | (1076.06)   | (196.45)                  | (124.66)                 | (20.92)                       | (3.61)                 | (17.26)                 | (1.21)               | (19.52)       | (5.47)                 | (3.00)         |
| 1984-85 | 1,90,00,000                           | 81,10,203   | 16,50,405                 | 10,53,760                | 1,74,181                      | 30,737                 | 1,46,669                | 9,473                | 1,53,905      | 47,263                 | 34,407         |
| 7500    | (2510.31)                             | (1071.00)   | (217.73)                  | (139.02)                 | (22.90)                       | (4.06)                 | (19.35)                 | (1.26)               | (20.30)       | (6.23)                 | (4.54)         |

Note: 1) Figures in paranthesis are Value in Rupees per capita based on Medial Population estimates.

Source: 1) National Accounts Statistics, Jan. 1987, (1970-71 - 1984-85)  
Central Statistical Organisation, Department of Statistics,  
Ministry of Planning, Govt. of India

2) FAO Production Yearbook, Vol. 40, 1986, P 26, Table 3.

TABLE 2 : AVAILABILITY OF MILK, AND WOOL IN INDIA DURING 1979-80 TO 1984-85.

| Commo-<br>dities | Unit        | 1979-80 | 1983-84 | 1984-85 | 1989-90<br>(Projected) |
|------------------|-------------|---------|---------|---------|------------------------|
| Milk             | M. Tonnes   | 30.30   | 37.00   | 38.00   | 51.00                  |
|                  | Kg./year    | 44.02   | 50.55   | 50.13   | 60.43                  |
| Wool             | M. Kgs.     | 33.50   | 36.50   | 39.00   | 43.00                  |
|                  | Grames/year | 49      | 51      | 52      | 51                     |

Source : Seventh Five Year Plan 1985-90, Vol.II, Government of India, Planning Commission, New Delhi, Oct. 1985, p 30.

by the planners and administrators as it deserved. In India also, as against the the contribution of livestock sector in money value to the Gross National Product (Rs.165 billions), in the Seventh Five Year Plan, capital outlay for the animal husbandry and dairy development was only Rs.214.34 crores per year. Thus the capital outlay in the Seventh Five Year Plan period was only 1.30 per cent every year of the total value of output contributed from Animal Husbandry to the Gross National Product (Table 1). Also the outlay in the Seventh Five Year Plan on Research & Education for agriculture and allied programmes (including livestock), constituted only Rs.705 crores or 6.67% of the total outlay of Rs.10574 crores.

TABLE 3 : PROPORTION OF PER YEAR CAPITAL OUTLAY ON AGRICULTURE & ALLIED ACTIVITIES & ANIMAL HUSBANDRY, AND DEVELOPMENT IN 1984-85.

| Particulars   | Amount<br>(Rs. in lakhs) |
|---|--------------------------|
| 1. Contribution from Agriculture & Livestock to the Gross National Product                          | 81,18,203                |
| 2. Capital outlay in Seventh Five Year Plan period for Agriculture, Livestock and allied activities | 10,57,363                |
| a) Estimated outlay per year  | 2,11,473                 |
| b) Proportion of Capital outlay per year to the contribution from Agriculture and Livestock         | 2.60%                    |
| 3. Contribution for Livestock to the Gross National Product   | 16,50,405                |
| 4. Capital outlay in the Seventh Five Year plan for Animal Husbandry & Dairy Development            | 1,07,168                 |
| a) Capital outlay per year  | 21,434                   |
| b) Proportion of Capital outlay per year to the contribution from Livestock                         | 1.30%                    |

Source: 1. Seventh Five Year Plan 1985-90, Vol.II, Govt. of India Planning Commission, New Delhi, Oct. 1985, P 48.

2. National Accounts Statistics, Jan 1987 (1970-71, 1984-85), Central Statistical Organization, Department of Statistics, Ministry of Planning, Govt. of India.

Therefore, the outlay of Rs.141 crores per year during the Seventh Five Year Plan period on Research & Education for the combined activity of Agriculture & Animal Husbandry Sector is a small fraction or 0.17% of the total contribution of the livestock and allied activities to the Gross National Product.

It seems that if animal husbandry sector is to be given impetus in the developmental activities of India it is imperative to provide higher allocations for the research and education activities, and in reasonable proportion of the contribution of animal husbandry sector to the Gross National Product.

2 : Policies and Programmes for the Development of Animal Husbandry Sector.

A) Cattle & Buffaloes

According to the reports of the Royal Commission on Agriculture, Cattle was considered primarily as a source of traction power for the agricultural operations and development of Dairying was considered as one of the subsidiary activity for future promotional activities. For the improvements in the milk yields, the animal husbandry wing of the Board of Agriculture & Animal Husbandry in India considered various measures. As a consequence, among the various programmes, improvement in the inferior indigenous cattle was recommended for increasing the milk production. In 1949, Goseva Sangh, Wardha, proposed development of cattle wealth for dual purposes so that they may be used both for cultivation and for providing milk.

In the planned economic era for the cattle development at the village level, Key Village Scheme was formulated and implemented. Gaushala development scheme was another activity to undertake animal husbandry development plans. Another scheme was introduced in 1963 by the Indian Council of Agricultural Research (ICAR) for evolving new breed of dairy cattle which was later



merged with the comprehensive project introduced with the help of United Nations Development Programmes (UNDP), PL480, Government of India and Food and Agriculture Organization (FAO). In the Third Five Year Plan, on the basis of evaluation of earlier cattle development programme, an area development approach for cattle development was formulated which was popularly known as Intensive Cattle Development Project (ICDP). In the Fourth Five Year Plan, milk breeds of cattle and buffaloes were identified and six large cattle breeding farms were set up in different parts of the country. With a view to intensify cross-breeding work in the ICDP and key village blocks, frozen semen stations were also set up with the help of Danish Government.

In the fifth five year plan period, dairying was provided special status for Social & Economic transformation in rural environment. Subsequently, aggressive cross-breeding programme was aimed at by allowing imports of frozen semen, breeding bulls and foundation female stock of exotic breeds.

In the sixth five year plan dairying became once again integral part of the Animal Husbandry development policies. This was supported by establishment of 500 key village blocks and 122 cattle development projects. Cross-breeding activity of cattle with exotic breed was promoted through frozen semen stations. Besides above, 14,849 Veterinary hospitals were established by the end of sixth plan period. To have diagnosis of the cattle diseases, regional laboratories were established and to provide veterinary services to the farmers at their door steps, 19286 veterinary first aid centres were established by the end of the

Sixth Five Year Plan. Due to erratic monsoon conditions, fodder shortage particularly during the summer season was felt, central fodder seed production farm was developed to produce 1600 quintals of fodder seeds every year.

In the seventh five year plan to accelerate the growth of Animal Husbandry Sector, aforesaid programme of cross-breeding of cattle with the exotic breed and strengthening of infrastructure facilities were planned. Some of the achievements and targets by the end of the seventh five year plan are provided in Table 4.

#### B) Sheep & Goat

Recapitulating the historical background, sheep development programme was initiated by East India Company on a limited scale to provide quality wool to the woollen mills in the United Kingdom. Report by the Royal Commission on Agriculture however mentioned that cross-breeding programme in the sheep breeding could not be undertaken earlier due to lack of an organisational set-up. With the Constitution of the Indian Council of Agricultural Research (ICAR) a comprehensive sheep development programme was initiated in 1952. During the First Five Year Plan period regional centres were established to make trials of cross-breeding on indigenous sheep. Also, sheep breeding farms were strengthened in subsequent five year plan periods both in public and private sector. An adhoc committee on sheep breeding policy in 1970 had recommended cross-breeding in the northern temperate zones for the improvement of fine wool.

Table 4 : ACHIEVEMENTS AND TARGETS BY THE END OF THE SEVENTH FIVE YEAR PLAN FOR DIFFERENT ITEMS OF ANIMAL HUSBANDRY AND DAIRYING

| Item   | Unit         | 1979-80 | 1983-84 | 1984-85 | Target for the seventh five year plan 1989-90 |
|--|--------------|---------|---------|---------|---|
| i) Intensive Cattle Development Project (ICDP)                 | Nos.         | 110     | 118     | 112     | 115   |
| ii) Insemination with exotic bull semen per annum              | Million Nos. | 4.55    | 7.38    | 8.38    | 12.75   |
| iii) Frozen Semen Stations                                     | Nos.         | 28      | 44      | 48      | 62  |
| iv) Crossbred female cows                                      | Million Nos. | NA      | 3.87    | 4.14    | 8.00  |
| v) Intensive sheep Development projects                        | Nos.         | 21      | 26      | 28      | 38  |
| vi) Intensive Egg and Poultry Production cum marketing centres | Nos.         | 100     | 111     | 111     | 129   |
| vii) Veterinary hospitals and dispensaries                     | Nos.         | 12,017  | 14,123  | 14,849  | 19,452  |
| viii) Liquid Milk Plants                                       | Nos.         | 142     | 155     | 166     | 207   |

Source : The Seventy Five Year Plan, 1985-90, Vol. II, Government of India, Planning Commission, New Delhi, October 1985, Table 1.18 and 1.20, P.30-31

In the Fourth Five Year Plan period, the Indian Council of Agricultural Research sponsored an All India Coordinated research project on sheep breeding. However, the main emphasis of the project was to study breeding combinations, level of exotic inheritance, heterosis in production, traits and problems

involved in inter-breeding of cross-breeds for new breeds(3).

In order to make the sheep breeding programme a success, effective health coverage was provided to check communicable diseases. For the purpose of controlling diseases irradiated vaccine was developed by the Indian Veterinary Research Institute. For the multiplication and distribution of breeding material, the Central Sheep Breeding Farm was engaged in supplying rams to various State Sheep Breeding Farms so that there is upgradation in the qualitative aspects of sheep and wool. To provide incentives to the sheep breeders, State level marketing federations were established to undertake sheep and wool developmental activities. During the seventh five year plan also the above programmes of sheep and wool development continued and emphasis was laid to restrict the import of fine wool.

However, it seems that in terms of development of Goat resources, very little work was undertaken to improve the breeds and meet the requirements of meat for the growing population. By the end of the sixth five year plan there were 2800 municipal slaughter houses in the country and most of them lack basic amenities in the availability of hygenic meat.

### 3 Livestock Resources in India

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Since Hides and Skins have been derived from various species of Livestock population, it would be desirable to have a

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3. National commission on Agriculture, 1976, Part VIII, Animal Husbandry, Govt. of India, New Delhi, p.193.

comprehensive review of the potential source of supply of hides and skins. The trends in the Livestock population has been studied separately for Cattle, Buffalo, Sheep and Goat during the Planned economic era.

According to the 1982 Indian Livestock Census, there were 194 million Cattle, 70 million Buffalo, 95 million Goat, & 48 million sheep in India. According to the production year book of FAO, 1982, the share of India was 16 percent in world's cattle population, 57 percent in Buffalo, 20 percent in Goat population. Apart from share of sheep in the World stock, India occupied sixth position. It appears that in the planned economic era the availability of Livestock per thousand of human population showed decline in the quinquennial Livestock Census carried out in India during 1951 and 1961. The species wise trend in the availability of livestock per thousand, is shown in Table 5.

Table 5 : AVAILABILITY OF LIVESTOCK POPULATION PER THOUSAND HUMAN POPULATION BETWEEN 1951 & 1982

| Species | 1951 | 1961 | 1972 | 1982 |
|---------|------|------|------|------|
| Cattle  | 430  | 400  | 326  | 278  |
| Buffalo | 120  | 117  | 106  | 100  |
| Goat    | 131  | 139  | 124  | 136  |
| Sheep   | 108  | 92   | 74   | 69   |

It may be observed that there was a steady decline in the availability of different species of Livestock for every

thousand population. For example, as against 430 cattle per thousand human population available in 1951, in 1982 only 278 cattle were available. The steep decline was also observed in availability of sheep from 108 in 1951 to 69 in 1982. Availability of Buffalo declined marginally from 120 in 1951 to 100 in 1982, but it seems that availability of Goat has almost remained near to stagnant position. Based on above, perhaps it may be said that animal stock in the country is not in proportion to the human population. In some of the most developed countries of both Europe and America, it was observed that animal per thousand human population were quite high as compared to India. For instance, availability of animals per thousand human population was as high as 2089 cattle in Argentina. Similarly, buffalo population which was found in South East Asian countries was as high as 403 per thousand human population in Vietnam. In case of sheep animal per thousand human population was as high as 2300 in New Zealand. Goat population was found only in Asian & African countries. As against 136 goats per thousand human population in India, Somalia had as high as 3264 goats per thousand human population(4). Thus it may be said that India is not over populated in terms of both Bovine & Ovine animal population and attempts must be made to arrest the declining trend of different species of animals. Also it is imperative that in the developmental plans relationship between animal stock and human population must be recognised to reduce the pressure on the land resources.

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4 FAO Production year book 1982., Rome, 1987.

#### 4 Trends in Livestock Population:

As already referred to in the previous section that the trend in the heads of livestock in different periods in assessed from the quinquennial livestock Census. It was revealing that cattle species in the livestock population increased by 39 million during 31 years from 1951 to 1982. The projections available for the year 2002 indicate that there will be another increase of about 24 million cattle species by that time. In case of buffalo, as against the increase of 26 million between 1951 and 1982, the expected increase by the year 2002 will be about 30 million heads. Among the ovine animals, sheep population showed an increase of about 11 million between 1951 and 1982 and might increase by another 7 million by the year 2002. Among the two groups of Bovine and Ovine animals, the highest increase of 48 million heads was in case of Goats and it was projected to increase by another 49 million by the year 2002. Thus the annual growth rate between 1951 and 1982 was 0.82 for cattle, 1.96 for Buffalo, 0.76 for sheep and 3.32 for Goat. On the basis of the above projections it appears that the supply of hides & skins as a raw materials for the leather industry in 2000 AD will be relatively higher from the species of buffalo among the bovine animals and from Goats among the ovine animals. This is supported from the fact that the share of buffalo species is likely to increase to 31.4 per cent in 2002 AD as compared to 26.4 per cent in 1982. Similarly among the ovine animal species, Goat had relatively higher potential in supply

of skins to the leather industry as the share in 2002 AD will be 72.29 per cent as compared to 66.4 per cent in 1982. (Table 6).

##### 5 Regional Distribution of Livestock Population.

Among the different states in India, first five states of Madhya Pradesh, Uttar Pradesh, Bihar, Maharashtra and West Bengal accounted for 101.08 million cattle heads or 52 per cent of the total cattle population in India. In case of Buffalo species the first five states of Uttar Pradesh, Andhra Pradesh, Madhya Pradesh, Rajasthan and Punjab had 69.75 million buffalo heads or 59.46 per cent of the total buffalo population in the country. The goat population was concentrated in first five states of Rajasthan, Bihar, West Bengal, Uttar Pradesh, and Madhya Pradesh. These states accounted 95.31 million Goat heads or 58.6% of the country as a whole. Similarly, about 70 per cent of the total sheep population (33.54 million heads) was concentrated in the first five states of Rajasthan, Andhra Pradesh, Tamil Nadu, Karnataka and Maharashtra. Thus in the Bovine population, Uttar Pradesh and Madhya Pradesh were quite important in terms of the livestock population and both accounted for 28 per cent of the total Bovine population in India. In case of Goat population also these two states viz. Uttar Pradesh and Madhya Pradesh accounted for 18 per cent of the total goat population in India. Rajasthan and Bihar having goat population of about 27.70 million heads accounted for 29.06 per cent of the total Goat population in India. In sheep population, Rajasthan had the highest number of heads and accounted for about 40 per cent of



Table 1.6

Livestock Population of India Between 1951 and 1982 and Projection for 2002

(Figures of Numbers in Million heads)

| Species      | Population according to Livestock Census |                    |                    |                    |                    |                    |                    | Annual Growth Rate between 1951 & 1982 | Projections |        |        | Composition of Livestock Population based on |                    |
|--------------|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--|-------------|--------|--------|--|--------------------|
|              | 1951                                     | 1956               | 1961               | 1966               | 1972               | 1977               | 1982               |  | 1985        | 2000*  | 2002*  | 1982 census                                  | Projection in 2002 |
| Cattle       | 155.24<br>(100.00)                       | 158.67<br>(102.21) | 175.10<br>(113.89) | 176.10<br>(113.49) | 178.86<br>(115.95) | 188.00<br>(125.25) | 194.40             | 8.82                                   | 179.99      | 167.79 | 218.90 | 73.58  | 68.60              |
| Buffaloes    | 43.40<br>(100.00)                        | 44.82<br>(103.27)  | 51.21<br>(118.00)  | 52.96<br>(122.03)  | 57.94<br>(133.50)  | 62.00<br>(142.86)  | 69.80<br>(160.83)  | 1.96                                   | 63.72       | 56.81  | 100.20 | 26.42  | 31.40              |
| Total Bovine | 198.64<br>(100.00)                       | 203.49<br>(102.44) | 226.77<br>(114.16) | 229.14<br>(115.35) | 236.80<br>(119.21) | 242.00<br>(121.83) | 264.20<br>(133.00) | 1.86                                   | 243.71      | 224.60 | 319.10 | 100.00                                       | 100.00             |
| Sheep        | 38.96<br>(100.00)                        | 39.25<br>(100.74)  | 40.22<br>(103.23)  | 42.01<br>(107.83)  | 48.39<br>(124.14)  | 48.98<br>(125.68)  | 48.18<br>(123.46)  | 0.76                                   | NA          | NA     | 55.40  | 33.54  | 27.7               |
| Goat         | 47.00<br>(100.00)                        | 55.00<br>(117.02)  | 60.00<br>(127.66)  | 64.00<br>(136.17)  | 75.40<br>(160.43)  | 95.30<br>(202.77)  | NA                 |  | NA          | 144.50 |        |  |                    |
| Total Ovine  | 85.96<br>(100.00)                        | 94.25<br>(109.64)  | 101.02<br>(117.52) | 106.61<br>(124.02) | 128.39<br>(149.36) | 116.30<br>(135.30) | 143.40<br>(166.82) |  | NA          | NA     | 199.90 |  |                    |

Sources: \* Based on Estimates of National Commission of Agricultural \*\* Based on Estimating of CIRI, Madras

- 1) National Commission on Agriculture, 1976, Part VIII, Animal Husbandry, Govt. of India, New Delhi, P.108-109, P.212
- 2) Report of All India Survey on Raw Hides and Skins, Central Leather Research Institute, Madras, 1987, P.37

total sheep population in the country. Thus Rajasthan state alone accounted for about 20 per cent of the total Ovine animal population. It may also be observed that the states of Madhya Pradesh, Uttar Pradesh and Rajasthan accounted for 127.19 million bovine and ovine animal heads or 31.21 per cent of the total bovine and ovine population (Table 7). This phenomenon has implications in terms of future policy for the development of animal husbandry programmes and providing strong raw material base for the leather industry.

## 6 Policies and Programmes for the Development of Raw Material base for the Leather Industry

### A: Developments in Leather Industry

Essentially leather making was a cottage industry in both the rural and semi-urban areas in India. This traditional and age old industry still have some deep-grained socio-cultural prejudices, traditions and use of indigenous technology in the processing sector. Recapitulating the historical background, it may be pointed out that leather making found reference in the year 1862. Muhmamdien middle men use to undertake the work of collecting hides and skins in the hinterland of the country and dispatched them to Calcutta. Various references in the District Gazetteer of Bengal indicated that Calcutta was the major centre of trading activity in view of the advantages it had on account of availability of skilled manpower in the leather manufacturing and port facilities for the export to different destinations in Europe. In 1904, 15 out of many English Firms showed their

Table 7 : LIVESTOCK POPULATION IN DIFFERENT STATES OF INDIA  
IN 1982

(Figures in Million)

| Sr. No. | STATES & TERRITORIES | CATTLE          |      | BUFFALO         |      | GOAT            |      | SHEEP           |      |
|---------|----------------------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|
|         |                      | Popu-<br>lation | Rank | Popu-<br>lation | Rank | Popu-<br>lation | Rank | Popu-<br>lation | Rank |
| 1.      | Andhra Pradesh       | 13.12           | 7    | 8.72            | 2    | 5.53            | 7    | 7.51            | 2    |
| 2.      | Assam                | 9.99            | 11   | 0.77            | 14   | 2.03            | 12   | 0.10            | 16   |
| 3.      | Bihar                | 16.36           | 3    | 4.62            | 6    | 12.30           | 2    | 1.34            | 10   |
| 4.      | Gujarat              | 6.93            | 12   | 4.44            | 7    | 3.27            | 11   | 2.36            | 6    |
| 5.      | Haryana              | 2.34            | 15   | 3.37            | 10   | 0.61            | 17   | 0.76            | 14   |
| 6.      | Himachal Pradesh     | 2.17            | 17   | 0.62            | 15   | 1.06            | 14   | 1.09            | 12   |
| 7.      | Jammu and Kashmir    | 2.31            | 16   | 0.55            | 16   | 0.95            | 15   | 1.86            | 9    |
| 8.      | Karnataka            | 10.72           | 9    | 3.61            | 9    | 4.45            | 10   | 4.61            | 4    |
| 9.      | Kerala               | 3.10            | 14   | 0.41            | 17   | 2.00            | 13   | 0.01            | 19   |
| 10.     | Madhya Pradesh       | 26.98           | 1    | 6.41            | 3    | 7.58            | 5    | 0.96            | 13   |
| 11.     | Maharashtra          | 16.04           | 4    | 3.96            | 8    | 7.58            | 6    | 2.56            | 5    |
| 12.     | Manipur              | 0.32            | 20   | 0.06            | 18   | 0.02            | 22   | Neg.            | 21   |
| 13.     | Meghalaya            | 0.55            | 19   | 0.03            | 19   | 0.19            | 19   | 0.03            | 17   |
| 14.     | Nagaland             | 0.15            | 22   | 0.01            | 21   | 0.06            | 21   | Neg.            | 22   |
| 15.     | Orissa               | 12.93           | 8    | 1.33            | 12   | 4.93            | 9    | 1.99            | 8    |
| 16.     | Punjab               | 3.52            | 13   | 4.65            | 5    | 0.92            | 16   | 0.52            | 15   |
| 17.     | Rajasthan            | 13.47           | 6    | 6.03            | 4    | 15.40           | 1    | 13.39           | 1    |
| 18.     | Sikkim               | 0.17            | 21   | Neg.            | 22   | 0.10            | 20   | 0.01            | 18   |
| 19.     | Tamilnadu            | 10.25           | 10   | 3.21            | 11   | 5.11            | 8    | 5.47            | 3    |
| 20.     | Tripura              | 0.68            | 18   | 0.02            | 20   | 0.34            | 18   | Neg.            | 20   |
| 21.     | Uttar Pradesh        | 26.05           | 2    | 15.66           | 1    | 9.69            | 4    | 2.33            | 7    |
| 22.     | West Bengal          | 15.65           | 5    | 0.99            | 13   | 10.92           | 3    | 1.20            | 11   |
| 23.     | Union Territories    | 0.59            |      | 0.28            |      | 0.27            |      | 0.04            |      |
| Total   |                      | 194.39          |      | 69.75           |      | 95.31           |      | 48.14           |      |

Source : Report of All India Survey on Raw Hides and Skins  
Central Leather Research Institute, Madras, November,  
1987 Table 2.2, pg. 38-39

interest in the export of hides and skins(5). Consequently these  
15 English companies established Tanneries in Bengal for chrome  
tanning. Thus Bengal had a access to the finest material of Goat  
and Sheep for the tanning purposes(6). Various references

5. Evidence of Dr. Sir Nilratan Sircar before the Indian Industrial Commission quoted from the report of Mr. J.W. Booths "Trade relations of British Empire" pg 326
6. Ibid pg 329.

available before the Indian Industrial Commission indicated that from 1910 and onwards, Germans and Americans also patronized the Indian Leather Industry. With the outbreak of war in 1914, there was a decline to the exports of Leather to the United Kingdom and Germans virtually held the monopoly in the trade of raw hides. In 1945 the activity of the German firms in India involved in the Leather trade became quite hectic and in Calcutta these firms employed German nationals in the upcountry slaughter houses so that they can procure quality hides and skins. Since the war in 1945 had adverse effect on the export trade, opportunities were utilized by the tanners in Madras to buy the material and export to other countries. In another development, the then Government of India, through Indian Munition Board for the British War office monopolized the exports of Raw hides and skins. In the process, tanning industry in the country developed and Maihar Research Tannery undertook systematic research to test the suitability of different tanning materials. The above historical development indicated that leather industry in India was developed on account of the interest of the foreign importers who had realized the quality of the available raw hides and skins in India. Also, the tanning industry prospered due to the war conditions prevailing in Europe.

B: Development, Policies and Programmes in Leather Industry in Planned Economic Era.

During the planned Economic Era, two pronged strategy was adopted in the developmental exercises for the country. First related to the increase in the foreign exchange earnings

and second through savings in foreign exchange by imports substitution. In the process, vigorous efforts were made to develop production base and promote exports of non-traditional items like coffee, oil cakes, fish and fish preparations, woolens, and leather and leather manufacturers. With this in view, in early 70's it was considered appropriate to limit progressively exports of semi-processed leather to provide succor to production of high value finished leather and leather manufacturers to augment export earnings of this industry. The Government of India appointed Dr. Seetharamaih Committee to look into the various aspects of Leather industry and from 1973-74 onwards initiated the following measures.

- a) Quantitative restrictions were placed on exports of tanned leather from April 1973
- b) All processors of semi-processed leathers were allowed without having any license to manufacture finished leather and utilize full capacity.
- c) In the import policy, against the exports EI Tanned and chrome tanned hides and skins, import replenishment was allowed by import of machinery and equipment for balancing, expansion of the processing capacity and modernization of the existing plants and machineries. Similarly, imports of selected chemicals and Dyes for the use in leather processing were also allowed against these licenses. Therefore, the basic hypothesis underlying in the above measures was to develop adequate infra-structure in the country to encourage finished leather and to provide incentives for the exports.

#### C: Institutional Support for the Development of Leather Industry

Based on recommendations of various working groups in the Planning Commission and experts in the state governments, the

following institutions were set up to promote activities related to the development of leather industry.

(a) Leather Development Councils:

Initially, in the union Ministry of Industries, a Development Wing was dealing with all aspects of leather industry. The first attempt to develop leather industry was made through formation of a panel for the leather goods industry in December 1958. Later, the panel was converted into a Development Council for leather and leather goods. On this pattern various state governments also organized Leather Development Councils to study the problems of leather industry with particular reference to availability of raw material in quality and quantity, utilization of the capacity of the manufacturing units, exploring the possibilities of modernization, devising export policies and creation of domestic marketing and distribution arrangements.

(b) The Central Small Industries Organization:

In each state Small Industries Service Institutes were set up to disseminate information relating to technical know-how, servicing, hire purchase credit for the machinery, consultancy services and organizing modal training centres. Small Industries Service Institutes also organized training courses for Industrial and Management personnel, and conducting techno-economic surveys on various aspects of leather industry. This organization also set up Central Footwear Training Centre at Madras and the Precision Shoe Last Factory at Agra to provide help to the leather industry.

(c) Khadi and Village Industries Commission (KVIC):

KVIC was made responsible to undertake activities of Planning, Organization and Programming to develop industries in the villages. Leather was one of the such activity. In developing leather industry following approach was followed :

- i) Establishing Flaying and Caracasses recovery centres in the rural areas.
- ii) Establishment of model tanneries to disseminate technical knowledge
- iii) Organizing of training-cum-production centres at the selected village locations
- iv) Promotion of Cooperative endeavour to promote tanning of raw hides and skins and footwear manufacturing.
- v) Opening of the depots of the marketing of Leather manufactured products.

According to the available data, by the end of 1979-80, KVIC had established 7073 tanning units, 165 flaying centres, 32,384 footwear and leather goods units, and 257 marketing centres. For the various schemes undertaken by KVIC in the year 1979-80, Rs. 305.10 lakhs was disbursed in the form of grant and loan(7).

(d) State Leather Development Corporations:

With an objective to provide help to the entrepreneurs in Leather Industry, state governments also set-up state Leather established in the states of Tamil nadu, Andhra Pradesh, Uttar

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7 Statistical statements to Annual Report, Khadi and Village Industries Commission, Bombay 1979-80, pp 81-83.

Development Corporations. Such corporations have already been Pradesh, Madhya Pradesh, Bihar and West Bengal. The primary objective of these corporations was to promote cottage footwear industries in their respective states by assisting entrepreneurs in providing designs, technical know-how, acquiring loans for fixed and working capital, marketing of the products and undertaking research activities.

(e) Training and Research:

Government of India established four National Level Institutes for undertaking research and training facilities. They are i) Central Leather Research Institute, Madras, ii) Central Footwear Training Centre, Madras iii) College of Leather Technology, Calcutta and iv) Institute of Leather Technology, Madras. The primary objective of these institutes was to

- (i) Conduct both basic and applied research
- (ii) Develop Technical know-how
- (iii) To disseminate knowledge and
- (iv) To provide Technical and Managerial Training to the Personnel

Apart from above, to train technicians, there are institutes at Jullundhar, Gwalior, Kanpur, Agra, Bombay and Madras and offering Diploma and Certificates in the leather technology. For the training in flaying and tanning, Government of India also conduct training courses in Uttar Pradesh and Andhra Pradesh.



(f) Leather Export Promotion Council:-

Government of India established in 1956 Leather Export Promotion Council at Madras. The primary concern of the council was to provide link between manufacturer and importers of leather goods. The Council also was involved in Export Promotion, Market Surveys and Trade Fairs in India and Abroad. In view of diversification in the leather products a Specialised Sports Goods Export Promotion Council was also established to attend to the problems of Sports Goods Exporters.

7. Supply outlook of Hides & Skins in India:

As already observed in the previous section, India had a strong supply resources in number of livestock. It may be relevant to point out that in 1986 India had about 20 percent of the total Bovine population of the world. Similarly, of the total sheep population in the world about 5% were available while about 20% of the Goat population was available in India.

In view of the above it was expected that in terms of availability of Hides and Skins India would also have an important place on the world map. But in 1986 India's share in the world production of Cattle hides was about 13%. Similarly, India's share in the world production of sheep skins and Goat skins was only 3% and 19% respectively. Thus only in case of Goat skins it had a comparative strength in terms of production of skins over China.

Based on the estimates of FAO, Rome, the production of hides from Bovine animals in physical quantity increased from 5.72 lakhs tonnes in 1961-65 (average) to 8.31 lakhs tonnes in 1986. The production of sheep skins increased from 27,000 tonnes to 38,000 tonnes in the same above period. Between the period 1961 and 1986, the production of Goat Skins increased from 57,000 tonnes to 76,000 tonnes.

In the intervening periods the Annual Growth Rate showed sharp variations. In respect of cattle hides annual growth rate was 2.32% between 1961 and 1971, and declined to 1.15% between 1971 and 81. In the later period of 1981-86 again there was a marginal decline and the annual growth rate was 1.12 percent.

If the above prevailing situation in India is compared with the global situation, two distinct feature emerge. First, during the period 1961-86, the annual growth rate of the world production (1.11%) of Bovine hides showed a decline and was less than the annual growth rate of 1.80% that of India. Similar situation was observed in case of Sheep Skin production and as against annual growth rate of 1.55% in India, for the world the annual growth rate was 1.29%. Secondly, despite the fact India had significantly large Goat population, the annual growth rate of Goat Skin production was 1.32 as against 2.10% for the world as a whole (Table 8).

Table 8 : TRENDS IN THE PRODUCTION OF HIDES AND SKINS IN THE WORLD, INDIA, AND SOME SELECTED COUNTRIES.

|                |             | Production of Hides and Skins During |           |                      |           |           |           |           |           | (Production in Tonnes)     |         |         |         |
|----------------|-------------|--------------------------------------|-----------|----------------------|-----------|-----------|-----------|-----------|-----------|----------------------------|---------|---------|---------|
| Animal Species | Countries   |                                      |           |                      |           |           |           |           |           | Annual Growth Rate between |         |         |         |
|                |             | 1961-655<br>(Average)                | 1971      | 1979-81<br>(Average) | 1982      | 1983      | 1984      | 1985      | 1986      | 1961-71                    | 1971-81 | 1981-86 | 1961-86 |
| Cattle Hides   | World       | 51,62,175                            | 58,97,779 | 62,18,373            | 62,66,061 | 62,45,754 | 63,99,948 | 64,89,937 | 65,94,234 | 1.42                       | 0.54    | 1.21    | 1.11    |
|                | India       | 5,72,900                             | 7,06,000  | 7,06,999             | 8,10,000  | 8,10,000  | 8,17,000  | 8,23,000  | 8,31,100  | 2.32                       | 1.15    | 1.12    | 1.00    |
|                | U S A       | 9,61,204                             | 10,32,676 | 9,69,610             | 10,20,864 | 10,43,525 | 10,72,903 | 10,41,240 | 10,67,559 | 0.74                       | -0.61   | 2.02    | 0.04    |
|                | Argentina   | 3,20,584                             | 2,06,710  | 4,37,060             | 3,73,830  | 3,35,964  | 3,60,897  | 4,14,000  | 4,14,000  | -1.06                      | 5.24    | -1.06   | 1.17    |
|                | Brazil      | 2,41,383                             | 3,21,750  | 2,84,133             | 3,00,000  | 3,22,000  | 3,10,000  | 3,20,000  | 3,15,000  | 5.33                       | -1.17   | 5.43    | 1.22    |
|                | China       | 3,14,733                             | 3,29,739  | 02,585               | 03,024    | 94,250    | 1,06,500  | 1,29,150  | 1,44,000  | 0.40                       | -7.50   | 14.07   | -2.17   |
| Sheep Skins    | World       | 9,14,065                             | 10,40,116 | 11,01,322            | 11,40,573 | 11,95,431 | 11,75,903 | 11,99,217 | 12,09,202 | 1.38                       | 0.59    | 1.96    | 1.29    |
|                | India       | 27,310                               | 32,400    | 36,660               | 37,000    | 37,000    | 37,440    | 37,620    | 37,890    | 1.06                       | 1.32    | 0.67    | 1.55    |
|                | Australia   | 04,503                               | 1,30,850  | 1,40,553             | 1,41,000  | 1,49,910  | 1,27,393  | 1,40,106  | 1,61,047  | 5.49                       | 1.35    | 1.60    | 3.62    |
|                | New Zealand | 02,310                               | 1,14,000  | 1,09,667             | 1,16,000  | 1,35,687  | 1,29,799  | 1,42,035  | 1,15,000  | 3.85                       | -0.30   | 0.97    | 1.59    |
| Goat Skins     | World       | 2,65,063                             | 2,91,990  | 3,59,065             | 3,60,767  | 3,70,493  | 3,00,034  | 3,96,072  | 4,05,196  | 0.90                       | 2.30    | 2.57    | 2.10    |
|                | India       | 57,236                               | 64,800    | 72,000               | 72,900    | 72,900    | 73,440    | 75,600    | 76,162    | 1.32                       | 1.12    | 1.14    | 1.32    |
|                | China       | 40,276                               | 51,700    | 42,579               | 49,620    | 56,560    | 62,163    | 63,536    | 66,234    | 0.73                       | -1.70   | 11.11   | 1.49    |
|                | Nigeria     | 15,179                               | 16,090    | 19,933               | 20,760    | 21,140    | 21,160    | 21,100    | 21,303    | 1.13                       | 1.00    | 1.45    | 1.63    |

Source : FAO Production Year Book, 1972, 1984, 1985, 1986.  
Food and Agriculture Organization of the United Nations, Rome.

Among the different countries in the world while USA, Brazil, Argentina and China are the major producers of Hides, Australia and New Zealand were the major producers of Sheep Skins. For goat skins major producers were China and Nigeria. The Estimated Annual Growth Rate of Hides from the Bovine animals during 1981-86 showed that it was 0.04% for USA, 1.17% for Argentina and 1.22% for Brazil. Strikingly, the annual growth rate were negative in case of China and production declined at the rate of 2.17% per annum. Thus, in terms of production of hides India had an edge over some of the important producers of Hides in the World.

In case of Sheep Skins the annual growth rate of availability between 1961 and 1981 was highest for Australia (3.62%) and the growth rate of 1.59% in New Zealand was also higher than the growth rate of 1.55% of India and 1.29% for the world as a whole. However, it appears that in terms of availability of sheep skins highest annual growth rate was between 1961-71 as compared with 1971-81 and 1981-86. In fact, annual growth rate in the availability of sheep skins sharply declined from 5.49% during 1961-71 to 1.35% during 1971-81 in Australia. Similarly in case of another major producer of sheep skin, New Zealand's annual growth rate declined from 3.85% in 1961-71 to -0.38% in 1971-81. A similar picture of decline in the annual growth rate was also observed in case of India.

As already referred best quality goat skins are available in India, but the annual growth rate between 1961 and 1986 was

were 1.32% as compared with 2.10% for the world as a whole. In fact, during the 80's China's production of goats skin showed remarkable rise of 11.11% between 1981-86 as compared with less than 1.00% in two decades of 1961-71 and 1971-81.

Thus declining annual growth rate of Hides as well as skins in India and continued lower share in the total availability of the world warranted serious attention of all those concerned with the leather industry. As already mentioned earlier lower allocations of funds for the developmental activities and research during planning periods were probably be responsible for the above adverse situation in the availability of hides & skins during the period between 1961 and 1986.

Closely linked with the availability in physical quantity as well as rate of growth, it is imperative also to examine the sources of availability. The availability of hides and skins could primarily be from two sources viz. organized slaughter houses or through collection of fallen animals. Due to the paucity of the data on the number of fallen animals during the year, we have tried to examine the animals slaughtered to arrive at the indication of the sources of supply. The data in terms of trends in the slaughter of animal species is shown in Table 9.

It may be relevant to point out that in 1986 about 245 million cattle population was slaughtered in the world which constituted on 17.00 percent of the total population of the world. Similarly, in 1986 alone about 426 million sheeps and about 185 million goats were slaughtered in the organized

Table 9: TRENDS IN THE SLAUGHTER OF ANIMAL SPECIES FOR THE AVAILABILITY OF HIDES & SKINS IN INDIA, WORLD, AND SOME SELECTED COUNTRIES

(Figures in '000 heads)

| Category             | Countries | 1961-65 (Average) |                     |                                   | 1971             |                     |                                   | 1979-81 (Average) |                     |                                   | 1982             |                     |                                   |
|----------------------|-----------|-------------------|---------------------|-----------------------------------|------------------|---------------------|-----------------------------------|-------------------|---------------------|-----------------------------------|------------------|---------------------|-----------------------------------|
|                      |           | Total Population  | Animals Slaughtered | Percentage of Animals Slaughtered | Total Population | Animals Slaughtered | Percentage of Animals Slaughtered | Total Population  | Animals Slaughtered | Percentage of Animals Slaughtered | Total Population | Animals Slaughtered | Percentage of Animals Slaughtered |
| World                | World     | 11,31,056         | 1,94,027            | 17.21                             | 12,60,804        | 2,17,167            | 17.11                             | 13,43,753         | 2,30,209            | 17.14                             | 13,81,617        | 2,30,406            | 16.68                             |
|                      | India     | 2,27,599          | 1,511               | Neg                               | 2,31,100         | 1,630               | Neg                               | 2,52,503          | 2,633               | 1.04                              | 2,46,610         | 1,940               | Neg                               |
|                      | U.S.A.    | 1,03,785          | 36,969              | 35.62                             | 1,14,578         | 39,718              | 34.66                             | 1,12,152          | 37,293              | 33.25                             | 1,15,604         | 39,264              | 33.96                             |
|                      | Argentina | 43,096            | 10,686              | 24.80                             | 49,786           | 9,557               | 19.20                             | 55,652            | 14,569              | 26.18                             | 52,717           | 12,461              | 23.64                             |
|                      | Brazil    | 70,647            | 7,312               | 9.38                              | 97,864           | 9,750               | 9.96                              | 1,17,149          | 9,859               | 8.42                              | 1,23,400         | 11,659              | 9.44                              |
|                      | China     | 89,579            | 12,012              | 13.41                             | 92,835           | 11,605              | 12.59                             | 70,836            | 3,149               | 4.45                              | 73,978           | 3,168               | 4.28                              |
| Developing Countries | World     | 9,92,376          | 3,40,504            | 34.31                             | 10,65,100        | 3,86,005            | 36.25                             | 10,94,427         | 3,83,940            | 35.08                             | 11,33,239        | 4,02,545            | 35.52                             |
|                      | India     | 40,036            | 12,020              | 30.02                             | 42,000           | 12,350              | 29.41                             | 44,987            | 12,750              | 28.34                             | 40,750           | 14,670              | 36.00                             |
|                      | Australia | 1,60,924          | 33,696              | 20.94                             | 1,77,000         | 52,340              | 29.44                             | 1,34,871          | 29,711              | 22.03                             | 1,37,976         | 28,200              | 20.44                             |
|                      | N Zealand | 50,536            | 29,054              | 57.49                             | 50,913           | 37,723              | 74.28                             | 67,393            | 37,021              | 54.93                             | 70,301           | 41,136              | 58.51                             |
| Developed Countries  | World     | 3,71,568          | 1,17,345            | 31.59                             | 3,95,000         | 1,27,130            | 32.19                             | 4,66,529          | 1,61,358            | 34.59                             | 4,66,824         | 1,67,924            | 35.97                             |
|                      | India     | 62,334            | 26,976              | 43.28                             | 60,000           | 28,500              | 47.50                             | 82,000            | 30,250              | 36.89                             | 70,920           | 33,140              | 46.74                             |
|                      | China     | 53,740            | 16,115              | 29.99                             | 57,600           | 17,295              | 29.98                             | 70,456            | 18,511              | 26.28                             | 78,441           | 23,624              | 30.12                             |
|                      | Nigeria   | 21,141            | 7,589               | 35.90                             | 23,700           | 8,441               | 35.62                             | 24,567            | 9,967               | 40.57                             | 25,600           | 10,300              | 40.55                             |

Source: FAO Production Yearbook, 1972, 1984, 1985, 1986.

Table .9 Continued...

| al<br>ies | Countries | 1983                     |                             |   | 1984                     |                             |   | 1985                     |                             |   | 1986                     |                             |   |
|-----------|-----------|--------------------------|-----------------------------|---|--------------------------|-----------------------------|---|--------------------------|-----------------------------|---|--------------------------|-----------------------------|---|
|           |           | Total<br>Popula-<br>tion | Animals<br>Slaugh-<br>tered | Percent-<br>age of<br>Animals<br>Slaugh-<br>tered | Total<br>Popula-<br>tion | Animals<br>Slaugh-<br>tered | Percent-<br>of Ani-<br>mals<br>Slaugh-<br>tered | Total<br>Popula-<br>tion | Animals<br>Slaugh-<br>tered | Percent-<br>age of<br>animals<br>Slaugh-<br>tered | Total<br>Popula-<br>tion | Animals<br>Slaugh-<br>tered | Percent-<br>age of<br>Animals<br>Slaugh-<br>tered |
| le        | World     | 13,87,452                | 2,31,396                    | 16.68   | 13,91,808                | 2,37,203                    | 17.05   | 13,99,754                | 2,39,828                    | 17.13   | 14,18,162                | 2,44,897                    | 17.37   |
|           | India     | 2,46,358                 | 1,968                       | Neg   | 2,67,518                 | 2,938                       | 1.09  | 2,71,488                 | 2,988                       | 1.10  | 2,75,818                 | 3,188                       | 1.16  |
|           | U S A     | 1,15,881                 | 48,136                      | 34.98   | 1,13,788                 | 41,269                      | 36.38   | 1,89,749                 | 48,848                      | 36.49   | 1,85,468                 | 41,868                      | 38.93   |
|           | Argentina | 53,937                   | 11,199                      | 28.76   | 54,594                   | 12,297                      | 22.52   | 54,888                   | 13,788                      | 25.37   | 53,888                   | 13,888                      | 26.84   |
|           | Brazil    | 1,24,888                 | 11,573                      | 9.27  | 1,28,459                 | 18,181                      | 7.93  | 1,27,241                 | 18,651                      | 8.37  | 1,29,768                 | 18,588                      | 8.89  |
|           | China     | 75,385                   | 3,623                       | 4.81  | 78,218                   | 4,182                       | 5.24  | 82,268                   | 4,974                       | 6.85  | 86,963                   | 5,544                       | 6.38  |
| p         | World     | 11,24,745                | 4,16,178                    | 37.88   | 11,38,537                | 4,16,318                    | 36.82   | 11,38,318                | 4,22,796                    | 37.41   | 11,45,698                | 4,25,713                    | 37.18   |
|           | India     | 48,828                   | 14,788                      | 36.81   | 51,138                   | 15,828                      | 29.38   | 52,778                   | 15,788                      | 29.75   | 54,468                   | 16,348                      | 38.88   |
|           | Australia | 1,33,237                 | 29,982                      | 22.58   | 1,39,242                 | 25,479                      | 18.38   | 1,49,747                 | 28,821                      | 18.71   | 1,55,561                 | 32,289                      | 28.71   |
|           | N Zealand | 78,263                   | 45,229                      | 64.37   | 69,739                   | 43,686                      | 62.53   | 67,854                   | 58,461                      | 74.37   | 71,646                   | 41,288                      | 57.51   |
|           | World     | 4,66,756                 | 1,69,758                    | 36.37   | 4,81,779                 | 1,78,312                    | 37.81   | 4,84,755                 | 1,81,471                    | 37.44   | 4,92,192                 | 1,85,438                    | 37.61   |
|           | India     | 79,858                   | 33,548                      | 42.88   | 99,438                   | 34,638                      | 34.83   | 99,498                   | 35,818                      | 35.99   | 1,82,878                 | 37,838                      | 36.88   |
|           | China     | 75,397                   | 24,593                      | 32.62   | 63,487                   | 27,825                      | 42.62   | 63,427                   | 27,623                      | 43.55   | 61,981                   | 28,796                      | 46.51   |
|           | Nigeria   | 26,888                   | 18,578                      | 48.65   | 26,888                   | 18,588                      | 48.69   | 26,888                   | 18,558                      | 48.58   | 26,328                   | 18,692                      | 48.61   |

slaughter houses. The proportion of sheep and goats slaughtered formed only 37.16% and 37.6% of the total goat population respectively.

FAO data reveals that in India only 3.2 million cattle were slaughtered in the organized sector in 1986 which was just 1.16% of the total available livestock. In 1986 in the organized sector 16.3 million sheep and 37.00 million goats were slaughtered. The proportion of sheep and goats slaughtered formed 30 and 36 percent respectively of the total availability. It was interesting to find that slaughter of cattle was as high as 39% in USA and 26% in Argentina of the total cattle population in these countries. In China and Brazil also slaughtering of cattle was quite prominent. But, it seems that religious taboos were responsible for the low proportion of slaughtering of cattle in India. In case of both sheep and goats slaughtering in the organized sector in New Zealand was quite high as compared to India.

Over the period between 1961 to 1981, animals slaughtered were less than one percent of the total cattle population and only it was between 1984 and 1986 that slaughtering of cattle had gone beyond one percent of the total animal population. In case of sheep population annual slaughtering ranged between 28% to 36% during the period 1961 to 1986. In case of slaughtering of goats there was a marginal decline between the period 1961 to 1981 and increased from 1982 onwards.



availability of Hides and Skins for the Leather Industry. It may perhaps be said that the production of Hides & Skins in India was mostly from the fallen animals. Similarly, the availability of more than 50% of sheeps and goat skins was from the unauthorised slaughtering and fallen animals. The higher proportion of slaughtered animals in some of the countries referred above indicated that both hides and skins were available in these countries from the organized sector. Therefore, in terms of the quality consideration, the prominent countries referred above may have an edge over the availability of Hides and Skins in India.

#### 8. Need for Research

The discussions in the previous sections revealed that traditionally India had a very strong base for the supply of raw materials. This was on account of significance of the contribution of animal husbandry sector to the gross national product and availability of different types of animal species in India. Since animal husbandry had developed as a ancillary to the agriculture activity, leather making became a cottage industry in the rural settings. However, leather making was converted into an unorganized industry with the back-up of demand from developed countries of Europe and America to meet the growing demand of both civil and military personnel engaged in wars. Indeed it was pity that despite significant contribution of animal husbandry sector to Gross National Product, allocation of financial resources for the development were very meagre during the planning periods which could also provide succour to the development of the leather industry.

Realizing the export potential of leather in the international market British government in India and Planners and Administrators during the period of planned economic era of free India, policies of development veered around increase in the exports. The establishment of LDC, SLDCS and an expansion of leather developmental activity by KVIG was undertaken with a view to promoting leather manufacturing activity for the export promotion. Similarly, the establishment of Leather Export Councils was done with a view to diversify and expand exports in the developed and other underdeveloped countries. Various policy announcements prior and after 1973 were to increase the quantum of exports of leather products from India without systematically promoting and strengthening supply base of hides and skins.

In the policy directives also institutional developments did not provide the requisite support to the qualitative aspects of raw hides and skins and various functionaries involved in the supply base of the raw materials for the leather manufacturing. The availability of low grades of hides and skins and rejections constituting in large proportion bear testimony. Similarly experience has shown that the market of hides & skins fluctuated sharply according to the demand and supply, season and changes in the buyers behaviour. Collection and marketing mechanism of raw hides and skins was not well organized and developed in regulating price, quality, size and weight. Added to above there were problems in the collection, preservation, storage and transportation of raw hides and skins

from both unorganized slaughter houses and of fallen animals in the area of supply. With the change in the attitudes of workers there were problems in the availability of workers to engage them in the job of recovery of hides and skins from both fallen animals and slaughter houses. Local population engaged in such jobs were exploited by the market functionaries both within and outside the village to provide workers uneconomic return(8).

Similarly, in leather manufacturing sector which is spread over both in unorganized and organized spheres, there were problems associated with under-utilization of the manufacturing capacity, indigenous technology in manufacturing, diseconomies in the scale of manufacturing activity, low qualitative standards in the product manufacturing, unorganized product marketing mechanism, low returns to the capital employed etc. Presumably due to some of the above factors, by the end of 1986 there were only 523 Tanneries, 15 Footwear manufacturing units and 40 leather garments manufacturing units in the organized sector spread over through out the country. Also, regional specialisation was observed in the manufacturing activity. For instance, large number of tanneries were in operation and processing of raw hides and skins in and around metropolitan areas of Madras and

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8. There are however, attempts by some Voluntary Organisations involved in the rural development activities to undertake collection and processing of hides on scientific lines with improved technology. See for instance T.K. Moulik and D. Purshottam, Vaijnath Leather Complex, Changing Village, Vol.5, No.4, July-August, 1983.

Calcutta, footwear manufacturing in Agra and Kanpur and leather goods manufacturing was spread over through out the country. It was important that wherever manufacturing activity in the leather industry was concentrated, the availability of the raw material resources was far away from the places of their locations. Thus in the industry both vertical and horizontal integration was not developed on a regional basis. Logically therefore the above situations raises following few important questions:-

- i) What has been the policy framework of the state governments towards development of Trade and Industry based on hides and skins with a special reference to providing infrastructure facilities, introduction of improved technology, expansion of manufacturing capacity and improvements in trade practises
- ii) What are the distinguishing characteristics of existing supply base of the raw hides and skins, market functionaries involved in the trade and trade practises in the collection of raw hides and skins.
- iii) What is the contribution of organized sector in leather and leather manufacturing in terms of their scale of operations, utilization of the installed capacity of manufacturing products and trading, and forming of distribution channels in Domestic and International marketing.
- iv) What are the trends, composition and direction of export trade in leather and leather manufacturers of India since new export policy framework was initiated during 1973, and what impact it has made on the export performance and streamlining the export procedures and practices, and finally.
- v) What is the proportionate share of primary rural and urban artisans involved in the collection and marketing of hides and skins in the total value added products meant for exports and what are the ways and means to sustain their long term interests. This is all the more necessary in view of new work culture followed in the rural and urban areas and possible risks and uncertainties involved in the business.

9: Review of Literature :

Survey of literature on the above questions however, revealed that there is no comprehensive study integrating above aspects. A historical perspective revealed that the problems of leather industry were focused in the reports of Indian Industrial Commission, Indian Fiscal Commission and evidences before the Royal Commission on Agriculture in the pre-independence era. In the planned economic era, very serious attempt was made to highlight the problems of increasing availability of raw hides and skins and development of total livestock enterprise in the reports of National Commission on Agriculture (1973). However, it is important to mention that in all above studies, discussions have been channalised primarily towards finding export potentialities and pointing out weaknesses of quality in the leather goods manufacturing.

After independence, Government of India introduced two new centrally sponsored institutions to assist entrepreneurs in leather industry. But export promotion councils located at Madras and Kanpur primarily devoted their attention on the export promotion of manufactured products. Similarly Central Leather Research Institute at Madras concentrated efforts on improving the technology, conducting techno-economic surveys and to some extent assisting entrepreneurs in the technology transfer and preparation of feasibility studies.

Besides above institutionalized contributions,

individuals also devoted their attention on the problems of the exports and studying the potentialities. For example Singh (1964) studied the stagnation and sluggishness in India's earning between 1951 and 1960(9). Deb (1976) studied the problems of India's exports commoditywise and concluded that factors responsible for the slow rates of growth of India's exports are

(i) inadequate export surpluses, incompetitive prices, absence of proper and adequate export incentives and assistance, transportation and shipping problems, inadequate marketing efforts etc(10). Similarly Chatterjee, Biswas and Ghose (1980), in a study under MOT programme concluded that with the growth in affluence, the market of leather and leather manufacturers would continue to rise high, offering tremendous scope for medium to high and leather goods besides finished leather(11). Batra also studied the leather export possibilities and concluded that there is an enormous field in foreign markets for Indian Leather garments and exports of consumer products like leather of cows can not be stopped up unless an aggressive marketing drive is launched(12). Kumar (1981) studied the export trade of India's and standards and skills in the

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9. Singh Man Mohan, India's Export Trend and Prospects for Self Sustained Growth, 1964. Himalaya Book House, New Delhi.
  10. Deb, Katipada, Export Strategy in India, S. Chand & Co. New Delhi, 1976.
  11. Chatterjee, et al, A Study of Indian Leather Goods Manufacturers under MOT Programme, Foreign Trade Bulletin, Vol.XI No.2, August 1980.
  12. Batra, Dr. V.P. Export Prospects of Indian Leather, Capital Annual Vol.XXXIX No.7, June 21, 1981 PP 813-14.

manufacture of leather and leather goods. He further pointed out that if India has to conform to the world styles and fashions, She can made headway in creating world market for leather and leather goods(13). Sharma (1982) studied the growth and prospects of India's leather industry and concluded that in order to harness the vast potential offered in the leather and ancillary industries in the state, certain essential aspects will need to be attended to and these relate to improving infrastructural facility, development of entrepreneurs' skills by making sustained efforts, providing finance for modernization and setting up new leather industry etc(14).

From the above, it may be observed that studies were mainly centred around export trade and very little attempt was made to detail the status of various sectors of leather industry viz., collection/supply, marketing, processing/manufacturing, export performance and impact of government policy frame-work for the overall development of leather industry. It need not be over-emphasized that such a study would provide valuable guideline in the decision making process of the policy makers and administrators for the future. The present attempt of the study is only in the above direction.

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13. Kumar, Sharad, Export Trade of Indian Leather, Capital 1981, PP 103-105.

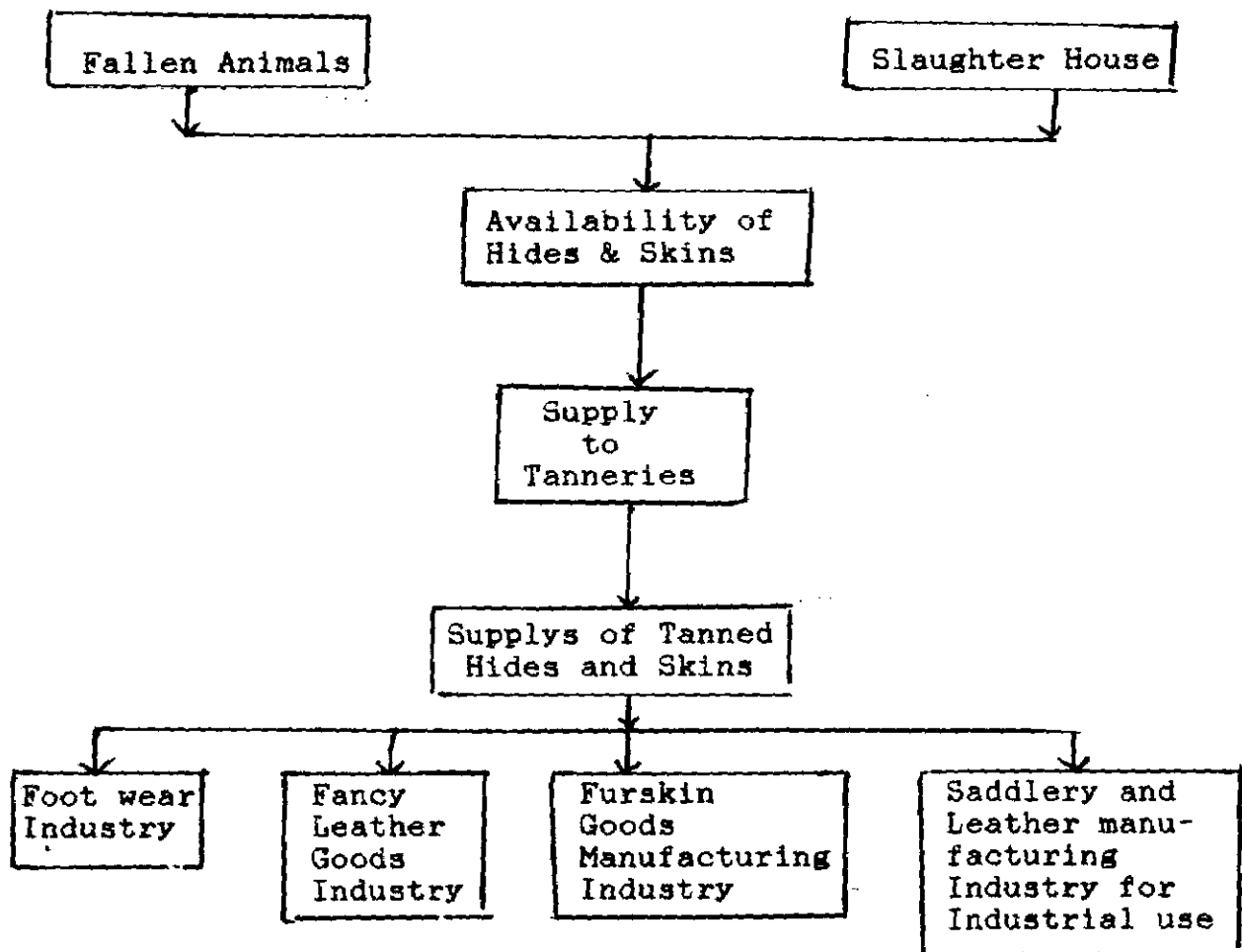
14. Sharma A.P. Growth & Prospects of India's Leather Industry, East European Trade, 1982, PP 3, 78.

10 Areas of Concern for Research

a) Inter Independence of various sectors:

The inter-dependence of various sectors of the leather economy is shown in the following diagram:

Diagram Structure of the Leather Industry



Based on the above structure of the leather industry, following sub-systems and sub-sectors therein could be envisaged.



| <u>Sub-Systems</u>                   | <u>Sub-Sectors</u>  |
|--------------------------------------|---|
| a) Raw material supply sub-system    | i) Availability of animals for providing hides and skins.<br>ii) Migratory character of animals<br>iii) Slaughter houses<br>iv) Import of raw hides and skins<br>v) Government Policy   |
| b) Raw material marketing sub-system | i) Location of terminal markets<br>ii) Market functionaries<br>iii) Marketing functions and practices<br>iv) Structure of Marketing<br>v) Government Policy   |
| c) Technological sub-system          | i) Rural and Urban Artisans<br>ii) Technology of curing, and Tanning<br>iii) Footwear manufacturing<br>iv) Leather Garments manufacturing<br>v) Role of Leather Development Corporations and Research Institutions<br>vi) Role of Government Policy |
| d) Finished Product                  | i) Role of Manufacturers and Marketing agencies in domestic and international marketing<br>ii) Trends in domestic sales<br>iii) Trends in international marketing<br>iv) Role of Export Promotion Corporations                                      |

## v) Government Policy

The specific areas of concern for the study may be as follows:

- i) To examine the government policy framework in the area of study development trade of different sectors of the leather economy in different regions of the country;
- ii) To identify structural characteristics of the slaughters houses engaged in the supply of basic raw material of hides and skins;
- iii) To understand the marketing practices, behaviour and economics of marketing agencies involved in the trading of hides and skins with special reference to procedures, quality, period of disposal, form of disposals, agency of disposal and place of disposals;
- iv) To study the existing problems of technology and economics of processing activities involving curing, tanning, manufacturing of footwears and leather goods and garments and value addition in different product manufacturing;
- v) To examine the proceducers and practices, trends, compositions and direction of export trade of leather and leather manufacturers and study the impact of recent export promotion incentives on the export performance; finally
- vi) To suggest ways and means to develop different sectors of the leather economy with futuristic optimism and sustain the interest of different sectors of the leather economy.

With a view to examining the state of art in above sub-systems, the scope of the study may be restricted. In raw material supply sub-system emphasis may be provided only on studying the role of slaughter houses and flaying centres in providing hides and skins. In view of the significant market imperfections, in the selected regions of the study both primary and secondary markets should be studied in detail. Similarly in the technological sub-system, the stress was made required to be

on identifying problem areas in the existing technology in the product manufacturing and to study the role of state level Agencies in promoting entrepreneurship and assisting them in marketing their products. Since Government policy was to promote exports of leather manufactured products, various aspects of both domestic and international marketing are covered in the study.

c) Regional Concentration

For the purposes of this indepth study, the selection of the region may be done in such a way that most important regions of existing and potential supply of raw hides and skins are covered. As observed earlier, in terms of number of different animal species, five states were identified in descending order of their numbers in each animal species of Cattle, Buffalo, Sheep and Goats. It was observed that Madhya Pradesh ranked first in the number of animals having potential of supply of hides from Cattle animal and ranked third in the Buffalo population. In respect of potential of availability of hides from Buffalo, Uttar Pradesh ranked first in the Buffalo population and ranked second in the number of Cattle population. Thus Uttar Pradesh had 15.79 per cent of total cattle and Buffalo population of India and had the highest potential for the supply of hides. Similarly Madhya Pradesh had 12.64 per cent of total cattle and Buffalo population of India and was second highest in the potential supply of hides (Table 10).

Table 10: NUMBER OF DIFFERENT SPECIES OF ANIMALS AND THEIR SHARE TO THE TOTAL POPULATION FOR THE FIRST FIVE RANKED STATES IN INDIA.

(Figures in Million)

| Cattle          |                   |                                       | Buffaloes      |                   |                                       | Sheep          |                   |                                       | Goat           |                   |                                       |
|-----------------|-------------------|---------------------------------------|----------------|-------------------|---------------------------------------|----------------|-------------------|---------------------------------------|----------------|-------------------|---------------------------------------|
| States          | Animal Population | Percentage to total Animal Population | States         | Animal Population | Percentage to total Animal Population | States         | Animal Population | Percentage to total Animal Population | States         | Animal Population | Percentage to total Animal Population |
| Madhya Pradesh  | 26.98             | 13.88                                 | Uttar Pradesh  | 15.66             | 22.45                                 | Rajasthan      | 13.39             | 27.81                                 | Rajasthan      | 15.48             | 16.16                                 |
| Uttar Pradesh   | 26.85             | 13.48                                 | Andhra Pradesh | 8.72              | 12.58                                 | Andhra Pradesh | 7.51              | 15.68                                 | Bihar          | 12.38             | 12.98                                 |
| Bihar           | 16.36             | 8.42                                  | Madhya Pradesh | 6.41              | 9.19                                  | Tamil Nadu     | 5.47              | 11.36                                 | W. Bengal      | 18.92             | 11.46                                 |
| Maharashtra     | 16.84             | 8.25                                  | Rajasthan      | 6.83              | 8.65                                  | Karnataka      | 4.61              | 9.58                                  | Uttar Pradesh  | 9.69              | 18.17                                 |
| W Bengal        | 15.65             | 8.85                                  | Punjab         | 4.65              | 6.67                                  | Maharashtra    | 2.56              | 5.32                                  | Madhya Pradesh | 7.58              | 7.95                                  |
| Sub Total       | 181.88            | 52.88                                 |                | 41.47             | 59.46                                 |                | 33.54             | 69.67                                 |                | 55.89             | 58.64                                 |
| All India Total | 194.39            | 100.00                                |                | 69.75             | 100.00                                |                | 48.14             | 100.00                                |                | 95.31             | 100.00                                |

Source: Derived from Table 1.7

Therefore, in terms of supply of hides, based on the animal population the states of Madhya Pradesh and Uttar Pradesh may be the obvious choice of region for the indepth study. Also Uttar Pradesh and Madhya Pradesh had 10 and 8 percent respectively of the total good population of India.

In respect of availability of skins from Sheep and Goat animals, Rajasthan state ranked first in the population of both the animal species. It had 27.0 per cent of the total sheep population in India and 16 per cent of Goat population. Andhra Pradesh state was second in the rank in terms of Sheep animal population and had 15.60 per cent of the total sheep population in the country. Since Andhra Pradesh also had 12.50 per cent of the total Buffalo population in the country it had potential of both hides and skins from about 16 million animal heads. Since in Rajasthan there was so far no major trading and manufacturing activity related to raw hides and skins and leather manufacturing, for the purposes of the study this state may not be considered for the selection. Therefore, Andhra Pradesh was should be selected for the indepth study in the Southern region of the country.

Based on available current information processing of hides and skins was concentrated in Tamil Nadu, West Bengal and Uttar Pradesh in order of importance. As already referred earlier about 500 Tanneries for processing of raw hides and skins were established in the organized sector of Tamil Nadu. Therefore it would be desirable to select this state for

the study. Thus, concentration of the indepth study should be in the states of Uttar Pradesh, Madhya Pradesh, Andhra Pradesh and Tamil Nadu.

Also in each selected state two organizations namely, State Leather Development Corporation and States Khadi and Village Industries Commission could be studied to assess their performances in creating infra-structure facilities, developmental programmes, promotion of manufacturing activity, and overall financial performance related to leather industry. To understand trade practises, assembly markets of hides and skins should be selected in Madhya Pradesh and Uttar Pradesh and Traders and merchants specifically be contacted to understand the various processes in handling hides and skins, trade pattern and market trends. Slaughter houses located in the Urban and Rural areas of above were another important source of availability of hides and skins. Therefore detailed structured questionnaire should administered on the executive of the slaughter house to ascertain information on various aspects of infra-structure facilities, administration and supervision, system of slaughter, disposal of products and by-products etc.

In the processing and product manufacturing sector data could be collected from Tanneries and Footwear manufacturing units located in Tamil Nadu and Uttar Pradesh respectively. The understanding should be developed on organizations involved in manufacturing of leather products particularly in respect of mix of activity, organizational efficiency, capital structure,

procurement of raw material, production processes and efficiency,  
cost of production and returns.

procurement of raw material, production processes  
cost of production and returns.



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