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## A study on policy, management and constraints to production, processing and exporting of hides and skins in Bangladesh : A review based analysis

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### Abstract

In 1999-200, Bangladesh exported about 197.02 million sft. of leather and leather goods and earned about 249.93 million US dollar. The growth rate of leather export during 1981-82 to 1989-90 and 1990-91 to 1999-2000 were 3.52% and 4.88%, respectively with an average of 4.14%. It revealed that during 1990-91 to 1999-2000, the annual growth rate of leather goods and leather shoes were 22.03% and 31.17%, respectively. At present, the export consists of 60-65% crushed leather, 25-30% finished leather and 5-8% leather goods and leather shoes. Since 1947, many good proposals were made in government development plans and policies but a very few of them were materialised. Hides and skins are highly value-added resources of Bangladesh. The value additions are higher in 'crust' leather and 'finished' leather by 40-45% and 80-100%, respectively than 'wet-blue' leather. This implied that there is a great potentiality of doubling the foreign exchange earnings by value additions. But this sub-sector is beset with many problems. Those were: thickness and defects in hides and skins, slow modernisation process of tanneries, acute shortage of trained manpower, lack of Footwear Design and Development Institute and Bangladesh College of Leather technology and Leather Research Centre are not operative autonomously. To overcome those problems, establishment of 'Bangladesh Leather Development Council' is suggested.

**Keywords:** Hides & Skins, Production, Processing and Exporting

### Introduction

Hides and skins play an important role in the economy of Bangladesh. It occupied third position after ready-made garments and frozen fish and shared about 7-8% of total the export earnings. The source of supply of raw hides and skins depend on the daily slaughtering of cattle, buffalo, goat and sheep for daily consumption and slaughtering of large and small ruminant on various Muslim festivals. The rate of slaughtering or death of animals is higher in Bangladesh due to natural, religious and socio-economic reasons which increase the supply of hides and skins in the country. Moreover, during Eid-ul-Azha, the quantity of hides and skins supply is 40 times higher than the normal supply. Of the total production of hides and skins, 5% are collected from identified slaughter-houses and the rest 95% are collected from individual butchers. Of the available hides and skins, 90% is exported and the rest 10% is used for domestic purposes (Dey and Nooruddin, 1993). By exporting about 190 million square feet of leathers, Bangladesh earned about Taka 800 crore per year (DILF, 2001). About 4% of the total hides and skins in the world market is supplied by Bangladesh.

Leather is a natural by-product used as raw materials and for local industries its value addition is manifold which is not observed in other sectors. After processing of leather, the value addition

increases by 85%. The value addition will increase manifold if converting the leather into leather goods like footwear, bags, garments, travel kits etc are simultaneously done. In 1998-99 the export earning of leather industry was US\$ 168.24 million, equivalent to Tk. 8070.19 million but the share of earning from leather products was only US\$ 55.25 million. Export earning from this sector could reach a minimum of US\$ 800 million if they were transformed into leather products during the same period (Latif, A. B. M., 1999). The superior quality of leather, especially the goat skins for its fine grain and structure is in great demand in the global markets. Thus, exporting of hides and skins helps in improving the balance of payment of the country by reducing imports of livestock products.

Hides and skins as a commodity is difficult to grading. Retention of it for delivery and time for delivery is a great problem in rural Bangladesh. As the butchers are not trained properly, any wrong flaying bring loss due to decaying. The annual loss for such kinds of defects is about US\$ 13 million. Moreover, a large number of middlemen are engaged in procurement of raw hides and skins. Due to long distance between the sources of production and tannery, it took 4-6 weeks to reach the tannery. As a result, the quality of hides and skins degraded. In addition to the presence of a large number of middlemen in the process of marketing, the butchers get low prices and the tanners face high prices. For this reason, tanners face unfavourable competition in the export market.

In internal market, the largest buyers of hides and skins are shoe manufacturing industries. Besides, some cottage industries like, suitcases, travelling bags, women's bags, belts, make-up boxes, ornament boxes, hand-gloves, jackets etc. are also the buyers of leathers. Mechanized, non-mechanized and cottage industry are producing 3 million pairs of shoes in the country. Besides, there are 3 leather board-manufacturing organizations in Bangladesh. From the leftover of leather's shaving, they are preparing boards and about 350 tonnes of board is produced every year in Bangladesh (Rahman, 1992).

Recently, the price of 'crust' leather in the international markets is decreasing. The internal markets are also not running well. Considering all those facts and figures, an attempt was made to review the government development plans and policies on procurement, processing, preservation and exporting of hides and skins, types of management system involved, constraints to production, processing and exporting of hides and skins and suggest policy implications for production, processing and exporting of hides and skins in Bangladesh.

A review work on GOB 5-year development plans and policies from 1972-73 to 1997-2002 were carried out. Besides, a large number of journals, mimeographs, periodicals, reports, articles and books were reviewed.

In addition to that 100 slaughter houses were selected from 5 divisions of the country, namely Dhaka, Chittagong, Sylhet, Khulna and Rajshahi, Out of those slaughter houses, 100 middlemen (30 butchers, 30 farias, 30 primary centres and 10 aratdars) from 5 divisions taking 6 butchers, 6 farias, 6 primary centres and 2 aratdars from each division were selected randomly.

Moreover, 40 tanneries (13 large, 14 medium and 13 small) and 10 footwear industries were selected purposively from Dhaka and Chittagong division for this study.

Besides, 200 households who sacrificed animals were selected taking 25 from each of 8 districts to determine the large scale effect of slaughtering during Eid-ul-Azha, 2001. The selected districts were Brahmanbaria, Comilla, Kurigram, Nawabgong, Netrakona, Sherpur, Satkhira and Bhola. All the data were collected using interview schedules.

Seven sets of survey schedules were prepared for primary data collection and tested in the field of Dhaka division for finalization. After pre-testing in the field, necessary modifications and rearrangements were made and survey schedules were finally prepared.

The tabular technique using descriptive statistics such as means, standard deviations, percentages, and ratios were used for the analysis of data. Besides, Semi-logarithmic Growth Model was used to determine the growth rate of leather, leather goods and leather shoes. The survey works were started from July/2000 and ended in March /2001.

#### **Review of Government Five -Year Development Plans on Production, Procurement, Processing and exporting of Hides & Skins**

During the British rule in undivded India there was no tannery of worth mentioning in the area which is now Bangladesh. After partition from India in 1947, a number of tanneries were established gradually by the influx of dislocated tanners from India and by the non-bangalees. After the liberation war of Bangladesh in 1971, the non-bangalee-owners of the tanneries left Bangladesh and the Bangladeshi were involved in this business.

At present, there are, in all, 214 tanneries of which 65 are running and the rest are either operational only on seasonal basis or are completely locked-up. About 21 export-oriented leather footwear, 15 export-oriented leather jacket and 29 export-oriented leather goods industry are producing leather goods on commercial basis (Daily Itefaque, January 20,2001).

During the First Five Year Plan (1973-78), government policies, like establishment of new modern tanneries and modernisation of existing ones for manufacturing finished chrome leather with a capacity of processing 9 lakh pieces of cow hides and 2.5 lakh pieces of goat skins of exportable quality, creation of capacity to produce 5.4 lakh pieces of leather boots and shoes for export, training of operators and executives within the country and abroad and procurement of services of foreign technical experts, establishment of a centre for research and product development, and utilization of by-products of tanning industries were proposed for the development of public sector leather industries in the country. But at the end of the period, very little of these policies were achieved.

The year-wise earning from export of leather and leather goods is presented in Table 1. It appears from the table that total export earning from leather goods continuously increased since 1973-74, although the rate of increase differs from year to year. Export earning from footwear during this period was not stable. This was the highest in 1976-77 (US 8000 dollar) but dropped significantly in the following year.

During Two-Year Plan (1979-80), special emphasis had been given to better utilization of existing capacities and for expansion, diversification and improvement in quality hides and skins for export

market. New assistance was provided in areas where export potential was high for example, the leather complex.

**Table 1. Export of leather and leather products during the First Five Year Plan (1973-78) (Fig in '000' Dollar)**

Fiscal Year	Leather	% of growth	Footwear	% of growth	Others	% of growth	Total	% of growth
1973-74	15856	(-) 2.01	3	(-) 83.33	-	-	15859	(-)2.10
1974-75	26935	(+) 69.87	1	(-) 66.67	-	-	26936	(+)69.85
1975-76	30923	(+) 14.81	2	(+) 100.00	-	-	30925	(+)14.81
1976-77	39148	(+) 26.60	8	(+) 300.00	-	-	39156	(+)26.62
1977-78	45378	(+) 15.91	1	(-) 87.50	-	-	45379	(+)15.89

Source: Export Promotion Bureau

No special attempt was taken during this Second Five Year Plan (1980-85) period. Therefore, export of leather and leather goods indicate a mixed trend. This may be seen from Table 2. The table showed that the highest amount of leather and leather product (US\$ 85270000) was exported during 1983-84. In 1984-85, it fall to US\$ 69799000. From this period, export of different leather goods was started.

**Table 2. Export of leather and leather products during the Second Five-Year Plan(1980-85) (Fig in '000' Dollar )**

Fiscal Year	Leather	% of growth	Footwear	% of growth	Others	% of growth	Total	% of growth
1980-81	56668	(-) 16.23	9	(-) 57.14	21	-	56698	(-) 16.21
1981-82	63015	(+) 11.20	-	-	3	(-) 85.71	63018	(+) 11.15
1982-83	58456	(-) 7.23	-	-	1	(-) 66.67	58457	(-) 7.24
1983-84	85261	(+) 45.86	3	-	6	(+) 500.00	85270	(+) 45.87
1984-85	69799	(-) 18.13	-	-	-	-	69799	(-) 18.14

Source: Export Promotion Bureau, 2000

During Third Five-Year Plan (1985-90), Bangladesh was largely exporting raw hides or wet-blue leather with a little value addition. The industry had the potential to develop into a highly value adding export line and made substantial contribution to country's export earnings. Development of this industry with active private sector participation would therefore, be encouraged during the third plan period. However, the success of the industry would depend on development of overseas marketing channels. In view of this, establishment of joint ventures with those foreign private investors had emphasised during this period. Towards the end of the third five year plan (1990), government had banned exporting of 'wet-blue' leather. Merits of government policy "banning on wet- blue leather export from July 1990" is shown in Table 3. It can be seen from the table that 60%, 50% 60% and 70% of respondents said that it helped the process of BMRE, created employment opportunities, increased foreign exchange earnings and increased production of crushed and finished leather, respectively.

Export of leather and leather products during the Third Five Year Plan is presented in Table 4. It revealed from the tale that the export of leather grew by 194% between the years 1985-86 to 1989-90. But footwear and other leather goods exports did not satisfactorily grow during this period.

**Table 3. Merits of govt. policy "Banning on wet-blue leather export from July 1990"**

Merits	% of respondents
It helped the process of BMRE of leather industry	60
Created employment opportunities	50
Increased foreign exchange earnings	60
Increased production of crushed and finished leather	70

Source: Field Survey, July 2000-March 2001

**Table 4. Export of leather and leather products during the Third Five Year Plan (1985-90) (Fig. in '000' Dollar )**

Fiscal Year	Leather	% of growth	Footwear	% of growth	Others	% of growth	Total	% of growth
1985-86	60727	(-) 13.00	-	-	3	-	60730	(-) 12.99
1986-87	134815	(+) 122.00	-	-	-	-	134815	(+) 121.99
1987-88	147170	(+) 9.16	-	-	-	-	147170	(+) 9.16
1988-89	136979	(-) 6.92	-	-	-	-	136979	(-) 6.92
1989-90	178886	(+ 30.59)	-	-	-	-	178886	(+ 30.59)

Source: Export Promotion Bureau, 2000

In order to improve the output and products of the tannery industries attention was given during Forth Five Year Plan (1991-95) on the improvement of quality of raw materials and Processing technology through improved slaughtering, flaying and curing procedures and providing incentives through marketing, quality grading and price policy for hides and skins.

The Black Bengal goats produce some of the highest quality leather in the world. Improvements in quantity & quality was proposed to be pursued through a selective breeding programme and expanded veterinary services.

In the Fourth Five Year Plan, leather and leather products industry was identified as having good investment prospects in Bangladesh like other industries. It has 3 divisions, namely, (1) Wet-blue leather, crushed & finished leather, (2) Footwere: shoe uppers initially, (3) Other leather products. Export of leather, leather goods and leather shoes during the Fourth Five Year Plan (1990-95) can be seen from Table 5. It appeared from the table that there was a positive trend in leather, leather goods and leather shoes that grew by about 50%, 1658% & 341% during this period. In the case of leather goods and leather shoes, this growth was definitely impressive.

**Table 5. Export of leather, leathers goods and leather shoes during the Fourth Five Year Plan (1990-95) (Figures in Million US Dollar)**

Fiscal Year	Leather	% of growth	Leather Goods	% of growth	Leather shoes	% of growth	Total	% of growth
1990-91	134.29	(-) 24.93	-	-	2.84	-	137.13	(-) 23.34
1991-92	144.46	(+) 7.57	0.36	-	4.14	(+) 45.77	148.96	(+) 8.63
1992-93	147.90	(+) 2.38	1.18	(+) 227.78	9.54	(+) 130.43	158.62	(+) 6.48
1993-94	168.17	(+) 13.71	4.33	(+) 266.95	14.94	(+) 56.60	187.44	(+) 18.17
1994-95	202.08	(+) 20.16	6.33	(+) 46.19	12.54	(-) 16.06	220.95	(+) 17.88

Source: Second Dhaka Leather Goods Fair'97 and Dhaka International Leather Fair 2000 and 2001

During Fifth Five Year Plan (1997-2002), considering tremendous export potentials, development of leather and leather product industry was given priority, joint ventures were encouraged in this area. Varieties of high value added leather products were made using locally manufactured crushed and finished leather. Appropriate measures were taken to encourage investments in leather and leather products as well as linkage industries to support the sub-sector through supply of various accessories.

Table 6 shows Export of leather, leathers goods and leather shoes during the Fifth Five Year Plan (1997- 2002). It can be seen from the table that the growth trend of export earning of leather and leather products remained almost static over the plan period.

**Table 6. Export of Leather, Leathers Goods and Leather Shoes during the Fifth Five Year Plan (1997-2002) (Figures in Million US Dollar)**

Fiscal Year	Leather	% of growth	Leather Goods	% of growth	Leather shoes	% of growth	Total	% of growth
1997-98	190.26	(-2.56	5.47	(+43.57	38.02	(+113.84	233.75	(+7.79
1998-99	168.25	(-11.57	4.59	(-16.09	50.65	(+33.22	223.49	(-4.39
1999-00	195.05	(+15.93	3.58	(-22.00	51.30	(+1.28	249.93	(+11.83

Source: Second Dhaka Leather Goods Fair'97 and Dhaka International Leather Fair' 00 -01.

#### **Merits and demerits of government policy "Banning of exporting of crust leather by 2001"**

**Table 7. Merits and demerits of government policy "Banning of exporting of crust leather by 2001"**

Merits	% of respondents
Benefit will get momentum but it will take time	70
It will increase production of finished leather under implementation of BMRE	75
<b>Demerits</b>	
It will reduce the production of leather and also decrease foreign exchange earning	55

Source: Field Survey, July 2000-March 2001

Merits and demerits of government policy "Banning of exporting of crust leather by 2001" is shown in Table 7. It can be observed from the table that 70% of respondents opined that benefit would get momentum. Seventy five percent of respondents said that it would increase the production of finished leather. But 55% percent respondent said that it would decrease foreign exchange earnings. However, prior to exporting of wet-blue and crust leather, a policy should be framed to proper processing of all available hides and skins in the country.

#### **Review of Government Export Policies on leather & leather product**

Export Policy (1993-95) envisaged that with the help of BMRE programme, wet-blue producing units will be converted into crushed and finished leather producer, provision of duty free import of raw hides and skins, leather product was undertaken as a crash programme product, a target of export of leather of 170 & 210 million US\$ during 1993-94 and 1994-95 fiscal year and arrangement to hold an international standard leather fair or any other exportable product fair in the country every year.

Export policy (1995-97) provided major incentives in this direction were as follows:

#### **Fiscal Incentives**

Fiscal incentives like, provision for bonded ware-house to facilitate duty free import of raw materials; provision for duty draw-back, if the bonded warehouse facility is not availed of; provision to sell 20% of the products in the local market on payment of duties and taxes; exemption of income tax by 50% on income arising out of export business; provision for duty free import of capital machinery by 100% export oriented industry; duty free import of samples and tax holiday.

#### **Financial Incentives**

Financial Incentives like, provision for local currency export credit at a concessional rate of interest; provision for foreign currency export credit under Export Development Fund (EDF) at a concessional rate of interest (the rate of interest applicable was London Inter Bank Rate (LIBOR+1%); retention of export earnings by the exporters in their own foreign currency accounts to the extent of 40%; provision for back to back letter of credit; facility for use of US\$ 25 million credit line for Commonwealth of Independent State (CIS) markets; banking facility for balancing, modernisation, rehabilitation and expansion (BMRE) projects; and Export Credit Guarantee Facility (ECGF).

The Export Policy (1997-2002) provided the following incentives for the development of leather and leather goods in the country:

- Leather manufacturing units would be modernized in order to enable them to produce increased quantities of finished leather out of raw hides.
- With a view to reducing cost of production, step would be taken to establish supporting industries producing necessary chemicals and other inputs within the country.
- The existing leather technology institute would be modernized so as to be used as a 'Common Facilities Centre' for the leather industries.
- Necessary credit facilities would be extended for setting up leather goods industries.
- Cluster industries comprising small units of leather goods factories would be set up with a view to generating employment.
- A 'Leather Council' would be formed.
- Industrial units having no bonded warehouse at the same time not interested to avail of duty draw back facilities would be entitled to alternative cash benefit equal to the amount of duty draw back.
- Import of raw hides including wet blue and pickled leather, should continue to be permitted and should be exempted from the prevailing customs duty (2.5%) and import license fee (2.5%) liable on the importation of raw hides for three years.
- Banks should follow a uniform policy on bank loan and rate of interest for credit to the leather sector.
- All credits should be brought under the umbrella of a single bank and exports should be effected through a designated bank.
- After careful revision of the overall situation prevailing in the leather industries, the allowable time limit for export of crushed leather had been extended up to the year 2000. Facilities for

BMRE and other transformation process should be made available to all tanning units to enable them to switch over by 2000, to processing of crushed and finished leather from wet-blue leather.

- Extension of time-limit for adjustment of export credit from 180 days to 270 days. Before that period, export credit was allowed at a concessional rate of interest for a maximum period of 180 days. A section of exporters, however, could not enjoy the benefit of such concessional credit facility due to the structural characteristics inherent in the export of certain commodities. Under such circumstances, the time-limit for repayment of export credit had been extended from 180 days to 270 days for credit to leather sector by way of relaxing the condition of submission of firm contract/L.C. and treating working capital as export credit to extend the time-limit for repayment of concessional interest from 180 to 270 days. The time limit for export credit under the export promotion fund in exceptional cases, might be extended to 270 days.
- Permission for sale of goods rejected for exportation: 20% of the rejected goods of the 100% export oriented industries including leather goods would be admissible for sale in the local market, subject to payment of usual duties and taxes.
- Declaring 80% export oriented leather industries as 100% export oriented industries. Most of the leather industries were able to export at least 80% of their products; rarely they were in a position to export 100% of their products. In order to bringing about dynamism in the leather sector, export oriented leather industry units exporting 80% of their products had been declared 100% export-oriented industries.
- Establishment of Fashion Institute  
To sustain the export of leather garments in the face of stiff global competition, a fashion institute would be established in the private sector in collaboration with export promotion bureau for improvement of quality and design and for this purpose, sought technical assistance from the World Bank.
- **Miscellaneous :**  
(a) Inclusion of leather products in the crash programme (b) Market promotion efforts for leather goods through fielding exposure-cum-marketing missions. (c) Organising leather fair in Bangladesh. (d) Inclusion of leather goods in the UNDP/ITC/EPB export development and promotion project. (e) Recently government has declared 10 percent cash incentive to the exporters of leather goods including footwear.

#### **Review of Industrial Policies on development of leather industries**

Footwear and finished leather goods were in the list of free sectors in Industrial Policy (1982), where no formal permission of the Government was required to set up industries.

Realising the importance in national economy, Ministry of Industries, Government of Bangladesh prepared a leather policy in Industrial Policy (1992) for rapid expansion and development of leather industries. The objectives of the policy were to:

- Increase the availability and quality of raw hides and skins;
- Increase value addition through development in processing of the basic raw materials;
- Increase the technical efficiency of personnel, management and marketing;
- Encourage the local production of tannery chemicals;
- Control the pollution problems associated with the industries;

- Take measures for export of leather products instead of leathers for maximum value addition; and
- Increase the export of finished leather and its products through financial, structural and tax related facilities.

During Industrial Policy (1996) the following steps were taken :

- Finished leather, export oriented leather products and scrap leather were included under priority list of industries.
- Sanction of tannery (for wet-blue) was discouraged due to over capacity or under utilization of capacity.
- Leather goods for export only and chemicals for tanneries was listed for foreign investment.

The export oriented leather industry has been declared by the Government as "Thrust Sector". This declaration was made for the purpose of targeting special incentives and supportive measures. The Government has proposed a host of policy facilities/ incentives in the industrial policy (1999). Noteworthy among those were:

### Policies

- Raise industrial productivity and move progressively to higher value added products through skill and technology upgradation.
- Develop indigenous technology and expand production based on domestic raw materials.
- Give priority of allocation of plots in Bangladesh Small and Cottage Industries Corporation (BSCIC) industrial estates for foreign investment in "Thrust Sectors", particularly in small industrial units.

### Incentives

- Duty free import of capital machineries and spare parts up to 10 percent of the value of such capital machinery would continue.
- Existing facilities for bonded warehouse and back to back letter of credit would continue.
- To ensure backward linkage, export oriented industries using indigenous raw materials would be given facilities and benefits at prescribed rates.
- The export-oriented industries which were identified by the government as "Thrust Sector" would be provided special facilities and venture capital support.
- 100 percent export oriented industry outside Export Processing Zone (EPZ) would be allowed to sell 20 percent of their products in domestic market on payment of applicable duties and taxes.
- Support schemes based on highly selective or targeted measures geared to promote new technology to accelerate import replacement and/or export expansion would be put in place for potential activities within the "Thrust Sectors".

### Review of Investment Policies on Leather & Leather goods

Bangladesh is traditionally known for jute and tea exports. Recently, world wide attention has been drawn for ready-made garments and leather exports. An indicative list of private sector investment

opportunities in leather were (i) Leather finishing (ii) Footwear including shoe upper, sole etc. (iii) Leather goods, such as gloves, bags, jackets etc and (iv) Chemicals for tanneries.

There is already a substantial domestic leather industry, mostly export oriented. The leather industry included some ready-made garments, although that aspect was confined mainly to a small export-trade in "Italian-made" garments for the US market. Footwear was more important in terms of value added, accounting for just over US\$ 4 million export in FY 1992-93. The figure raised to US\$ 22.77 million in FY 1996-97. This was the fast growing sector for leather products. Presently, Bangladesh produces between 2 to 3 percent of the world's leather market. Most of the production was domestic livestock-based which was estimated as comprising 1.8 percent of the world's cattle stock and 3.7 percent of the goat stock. The hides and skins (average annual output is 150 million sft.) had a good international reputation. Foreign direct investment in this sector along with the production of tanning chemicals appeared to be highly rewarding.

Having the basic raw materials for leather goods, as well as, for the production of leather shoe, a large pool of low cost and trainable labour force together with tariff concession facility to major importing countries under Generalised System of Preference (GSP) coverage, Bangladesh has the potential to become a major off-shore location for leather and leather products manufacturing with low-cost and high quality.

Under Investment Policy (2000-2001), the financial institutions of the country had been playing a vital role to materialise the leather policy of the government by funding project loan, working capital, ECC loan, special loan for purchasing Qurbani of hides and skins and BMRE. Moreover, the entrepreneurs were enjoying different credit facilities from the bank like LIM, PC, L/C to perform their production and export. A 7- member committee was formed headed by Mr. Khondker Ibrahim Khaled, a Deputy Governor of Bangladesh Bank to review overall situation of the leather sector and the committee submitted its report on 15 December, 1999 to the finance ministry. The committee prescribed some suggestions. According to those suggestions, the leather sector has been divided into three classes. Number one class included those whose debt repayment is regular. The second class category repaid their loans during the last five years regularly but after that period has become bank loan defaulter due to lower international market demand and other reasons. The third class category was those whose debts were not possible to regularise. The committee suggested to give loans to the first and second class category and not to the third class category.

A good number of steps had so far been taken by the government for implementation of that committee's report. The financial institutions had also taken various pragmatic steps, such as paying credit at lower rate of interest, making repayment arrangement of loan by easy installment, rescheduling loans by a very small amount of down payment, etc.

Recently, Government relaxed their policy of payment of loan in leather sector. Only paying 2.5% of down payment, one could reschedule his loan. The down payment was 10% before this change. In addition, bankrupt law has been used to realise the third class loans.

### Review of Livestock Policies on Production of hides and skins

Livestock Policy (1992) emphasised the following issues:

1. Ensuring the use of livestock by-product such as, hides and skins to build up small/medium industry or export oriented large industry.
2. Arrangement of a breed conservation programme for internationally recognized skins of Black Bengal goats.

Livestock Policy in Fourth Five Year Plan (1990-95) recognized the Black Bengal goats that produce some of the highest quality leather in the world market. Improvement in its quantity and quality was suggested through a selective breeding programme and expanded veterinary care. The Plan was mainly concerned with the production of livestock and poultry. Hides and skins being an important sub-sector of the livestock sector did not receive any separate allocation for development.

### Scenario of Leather Industry

#### a. Crushed and Finished Leather

The domestic consumption of leather was about 15%-20% and the rest 80%-85% of leather was available for processing for export. Of the 214 recognised tannery units in Bangladesh an approximately 30 units are well equipped for processing crust and finished leather (Alam, M.F, 2001). Due to the shortage of technically qualified workers, a small number of tanneries are engaged in the production of finished leather. Government obtained a credit of Tk. 320 million from Asian Development Bank in 1988-89 to finance development of crust and finished leather processing for export and provided fund to 25 tanneries for BMRE (Ahmed, K.A., 2001).

#### b. Leather Goods

Presently, there are about 50 leather goods manufacturing units in the country. Some of these firms made remarkable progress and are capable of making quality leather items like wallets, key rings, belts, lady's handbags, upholstery and brief cases etc. for overseas markets. One of the reputed firms was now in a position to bring out 200 designs of bags worth acceptable to the overseas consumers. Quality leather jacket was also produced by certain firms catering to the need of the developed countries. Some of the firms adopted a professional outlook and brought about appreciable changes with regards to the infra-structural facilities, workers skills, organising efficient production system and setting up of a quality standard of their products (Alam, A.K.M.N., 2001).

#### Leather Shoes

There were, in all, 15 export-oriented shoe manufacturing units located mostly in and around Dhaka City. There were more than 2000 shoe making units, mostly servicing the domestic demand of the country (Alam, M.F., 2001). During the last decade, Government of Bangladesh allocated Tk. 33 crores for modernization of the College of Leather Technology and Tk. 8 core for the Savar Leather Institute. An academy for development of leather products and footwear industries was taken up by Bangladesh Finished Leather, Leather Goods and Footwear Exporters' Association (BFLLFEA) by spending Tk. 85.00 million of Italian Government grant (Bhuiyan, M.A.S., 2001).

An average of 250 tons of raw hides and skins were being processed daily which subsequently created more than 21,000 cubic metre tannery effluent causing irreparable damage to the environment by pollution (Alam, M. F., 2001). UNIDO was agreed to set-up one Central Effluent Treatment Plant at Hazaribagh for the overall environment management. But no tangible progress was made so far.

### Management System of Hides and Skins

Review revealed that the management system of hides and skins are completely managed by the market intermediaries. No government or non-government organisation is involved with the management system of hides and skins in Bangladesh.

Hides and skins are mainly managed by the market intermediaries at the grass-root level. Generally, *bepari* purchases the materials at green stage and occasionally at salted stage from *muchis*, *farias* and butchers at village hat or at their homes. *Beparis* at upazilla and district levels, purchase materials at green or cured stage from the butchers at slaughter houses and markets. They sell green materials directly to traders or cure them at homes for future sales at the time of favorable market condition. Traders at upazilla and district levels, purchase the raw materials at their own shops and from the market. Generally, traders consign their two weeks' collection to the aratders at the central markets. Aratders receive hides and skins from the traders (suppliers). Some aratders also deal in hides and skins in their own accounts. They purchase the materials either from their clients (suppliers) or from different markets through their staff.

Moreover, we all are aware of the fact that a great percentage of animals are slaughtered in the villages and village markets. The villagers and butchers, because of their ignorance, make damage to the hides and skins both at the time of flaying and treating the flayed hides and skins with inadequate salt. Moreover, time it takes in between the time of slaughtering the animals and the beginning of processing them in the tanneries, cause great damage to the quality of the hides and skins. A study conducted by Dey and Nooruddin (1992a), reported that defects were recorded in 6046 (99.3%) out of 4087 leathers made from cattle hides. Ante-mortem, post-mortem and industrial defects were recorded in 4351 (71.5%), 5005 (82.2%) and 3499 (57.5%) leathers made from cattle hides, respectively. Ante-mortem defects caused by biological agents, physical agents and uncertain etiology were recorded in 1054 (71.3%), 2899 (47.6%), and 1765 (29.0%) leathers, respectively made from cattle hides. The defects were commonly caused by stephanofilariasis (10.4%), tick bite (15.1%), warts (1.8%), yokemark (11.8%), goad mark (5.6%), whiplash (5.8%), rubmark (8.7%), hipbone mark (2.6%), scratches (16.0%), scar (28.7%), flay cuts (48.8%), score (9.1%), gouzes (4.0%), hairslip (15.8%), salt prick (30.1%), salt pits (8.0%), off pattern (2.5%), grain break due to knife (23.0%), grain break (others) (4.6%), dragmark (2.6%), salt (5.7%), chrome stain (5.7%), industrial cuts (4.4%), fold mark (18.8%), iron stain (26.6%) and chemical damage (7.9%), grain break due to heat (2.3%), grain peeling (1.3%) and meat balls (1.6%). Most of the defects were moderately severe.

In another study, Dey and Nooruddin (1992b) examined the magnitude of economic losses due to various leather defects based on primary and secondary data in Bangladesh. The primary data included grading and recording of the size of 13,156 crust leathers (e.g. leathers made from cattle hides 6,087; buffalo hides 2,027; goat skins 2,522; sheep skins 2,520). A large proportion of leathers was found to be down graded and rejected by the defects in leathers made from cattle hides (98.9%), buffalo hides

(100.0%), goat skins (92.0%) and sheep skins (94.0%). An annual (1990-91) economic loss of US\$ 220.95 million (Taka 818.0 crores approximately; 55.2%) was estimated to be associated with various leather defects. Major components of these losses (in million US\$) were: 194.45 (88.01%) for leathers made from cattle hides, 1.88 (0.85%) for buffalo hides, 24.09 (10.90%) for goat skins and 0.52 (0.21%) for sheep skins. A large number of different types of defects were found to be associated with down grading and rejection of leathers. Therefore, control of leather defects is essential for the purpose of value addition and improvement in the national economy. Prior to implementation of a control program of leather defects in national level further research on the strategies for control of leather defects is suggested.

Management of Hides and Skins by tannery is classified as large industry to process hides and skins with the installed production capacity of 5.0-9.00 million sft. and above per annum, medium industry with the installed production capacity of 3.00-5.0 million sft. per annum and small industry with the installed production capacity of 1.00-3.00 million sft per annum. It revealed that some of the large firms acquired latest industrial technology for leather finishing but could not be able to make use of them due to skilled and experienced finishing technologists and shortage of working capital. In the case of all firms, there is an acute shortage of qualified and trained personnel in the country. The production is run by traditional tanners, having little or no knowledge in crust and finished leather processing technologies yielding low quality outputs. On the other hand, exporters being new and have no marketing experience, facing difficulties in selling of products, resulting in low level of capacity utilization.

It was further observed that political unrest in the country affects the production of tanneries. Procurement of raw materials and supply of processed goods were also affected. The large firm was affected more in comparison to small one. Low demand of processed products arose out of this uncertain condition which in turn caused low utilization of the firms' capacity.

Management of Hides and Skins by Footwear and Leather Goods Industry in Bangladesh fall into 4 categories viz, (a) Mechanized finished (b) Mechanized crust, (c) Semi-mechanized crust and (d) Non-mechanized. There are wide inter-firm variations in technology levels, ranging from primitive to highly sophisticated one.

The leather goods industry in Bangladesh is in the early stage of development. Production of leather goods is mainly for domestic consumption and tourist trade. They produced a wide range of leather goods such as ladies bags, waist belts, hand gloves, travel bags, suitcases, key cases, wallets and purses, watch straps, cigarette cases, passport covers, portfolio bags etc. The annual output leather goods of mechanized sector and semi-mechanized sector is about 5.1 million pieces and that of the small and cottage sector 1.1 million pieces.

Besides, management of hides and skins during Eid-ul-Azha is a serious problem since most of the Muslims at a time sacrifice animals. During Eid-ul-Azha, about 40 per cent of the total annual supply of those hides and skins is coming from sacrificing animals although they are available all over the country throughout the year. The quality of those hides and skin are very good as the sacrificed animals were to be freed from all sorts of defects for religious reason.

During Eid-ul-Azha, it is observed that proper management of hides and skins could not be followed. Curing and salting could not be done properly, in many cases, it was absent. Storage facilities was not appropriate. Lack of timeliness in transportation system was also responsible for the deteriorating of raw hides and skins. Railway as a means of transport, where iron hooks are used for holding sacks by the coolies during loading and unloading damage the quality of raw hides and skin. In the case of transportation by truck, rain fall on it often create putrefaction. No cooling system and fan were available in *aratdar*'s store room.

After processing the hides and skins in the tanneries, it is difficult to store the excess supplies due to inadequate storage facilities. This particularly creates a problem for the processors. For all these reasons, there is a depressed price of hides and skins in Bangladesh.

#### Exporting of Leather and Leather Goods from Bangladesh

Traditionally leather and leather products including footwear is regarded as one of the major sectors of country's export. A significant amount of foreign exchange is earned annually through exporting leather and leather products abroad (Table 8 &9).

Exporting of Leather (million sft.) during 1981-82 to 1999-2000 is shown in Table 8. It can be seen from the table that exporting of leather is gradually increasing over time from 87.28 in 1981-82 to 197.02 million sft. in 1999-2000.

**Table 8. Export of leather during 1981-82 to 1999-2000 (Figure in Million sft.)**

Fiscal year	Quantity	Fiscal year	Quantity
1981-82	87.28	1990-91	101.36
1982-83	93.89	1991-92	119.55
1983-84	102.91	1992-93	138.63
1984-85	81.75	1993-94	157.43
1985-86	72.61	1994-95	161.66
1986-87	137.46	1995-96	155.81
1987-88	118.21	1996-97	128.61
1988-89	66.34	1997-98	127.69
1989-90	157.22	1998-99	186.93
		1999-2000	197.02

Source: Export Promotion Bureau and Dhaka International Leather Fair 2000 and 2001

Although Bangladesh's entry to the global trade is observed late as regards to leather, leather goods and shoes, yet the performance of the leather sector is noticeable and regarding shoes, it is impressive. This sector is potential in view of its easily available quality raw materials.

Bangladesh processes different kinds of leather goods for export. Table 9 shows that export of leather footwear has been increasing since 1990-91. In 1999-2000 fiscal year, this sector earned 51.30 million US dollar. But in the case of leather goods, the earning varied from year to year. The highest amount of leather goods (6.96 million US \$) was exported in the year 1995-96. It fall to 3.81 million US dollar in 1996-97. In 1999-2000 it was only 3.58 million US dollar.

**Table 9. Export of leather goods and leather shoes during 1990-91 to 1999-2000  
(Figures in Million US Dollar)**

Fiscal Year	Leather Goods	Leather Shoes	Total
1990-91	-	2.84	2.84
1991-92	0.36	4.14	4.50
1992-93	1.18	9.54	10.72
1993-94	4.33	14.94	19.27
1994-95	6.33	12.54	18.87
1995-96	6.96	19.13	26.09
1996-97	3.81	17.78	21.59
1997-98	5.47	38.02	43.49
1998-99	4.59	50.65	55.24
1999-2000	3.58	51.30	54.88

Source: Second Dhaka Leather Goods Fair, 1997 and Dhaka International Leather Fair(DILF), 2000 and 2001

Annual growth rate of leather is presented in Table 10. It appears from Table 10 that the overall growth rate of leather export is 4.14%. During 1981-82 to 1989-90, and 1990-91 to 1999-2000 periods the growth rates were 3.52% and 4.88% respectively. In 1999-2000 fiscal year, the export of leather was 197.02 mn. sft. It is 125.78 times higher than 1981-82 fiscal year. It seemed that the growth rate of leather during last decade is increasing compared to the previous ones.

**Table 10. Annual growth rate of leather**

Year	X	R	R <sup>2</sup>	t-value
1981-82 to 1999-2000	4.14	0.75	0.56	4.6067
1981-82 to 1989-90	3.52	0.33	0.11	0.9366
1990-91 to 1999-2000	4.88	0.72	0.52	2.93

Note: Growth rates are calculated by fitting Semi-logarithmic trend lines

Annual growth rate of leather goods and leather shoes is shown in Table 16. It can be seen from the table that the growth rates of leather goods during 1991-92 to 1999-2000 and leather shoes during 1990-91 to 1999-2000 are 22.03% and 31.17%, respectively.

**Table 11. Annual growth rate of leather goods and leather shoes**

Items	X	R	R <sup>2</sup>	t-value
Leathers Goods(1991-92 to 1999-2000)	22.03	0.62	0.39	2.14
Leathers Shoes(1990-91 to 1999-2000)	31.17	0.97	0.99	10.43
Total	31.43	0.95	0.90	8.50

Note: Growth rates are calculated fitting in semi-logarithmic trend lines

### Constraints to Production, Processing and exporting of Hides and Skins

This sub-sector is beset with many problems. The thickness is the main problem. Its thickness is below international standard. Another severe problem is defects in hides and skins. Due to this defects, an amount of Taka 818.00 crore is lost every year. Just by controlling the defects in hides and skins, the country could also double the export earnings. The tanneries should be modernised, but the progress of BMRE project is very slow. Moreover, there is an acute shortage of trained manpower in this sub-sector. A Footwear Design and Development Institute is yet to be established. Bangladesh College of Leather technology and Leather Research Centre should be operated autonomously to increase the number of skilled manpower.

### Conclusions, Recommendations and

All the plans and policies discussed above were no doubt impressive, but a very few of them were effective. Therefore, Government policy makers, planners and development partners should come forward to extend their sincere cooperation and policy support for eliminating those problems and, thereby exporting of leather and leather goods could be a viable source of foreign exchange earnings which in turn would play a vital role to overcome the problems of low income, poverty alleviation, unemployment, foreign exchange scarcity and unfavourable balance of payment situation of the country. It is hoped that with the introduction of appropriate policy support, the country would be able to double the export earnings and the "Brown Revolution" could be materialised.

Recommendations of this study are grouped into short-term and long-term depending on the nature of priority as follows:

#### Short-term recommendations

- A comprehensive leather policy should be framed to remove all obstacles in production, procurement, processing, exporting and expansion of industries.
- A constructive livestock policy for controlling the post-mortem, ante-mortem and industrial defects in hides and skins should be formulated by using the principles of Veterinary Epidemiology, Preventive Veterinary Medicine and Cross-breeding programme and expanded veterinary services and care.
- Modernise slaughter houses in all district towns and popularise massive education programme through mass media.
- A 'Special transportation system' need to be introduced for transportation of hides and skins only for better procurement, processing and preservation of hides and skins.
- A 'Special Bank' should be designated for credit facilities and follow a uniform policy on bank loan and rate of interest for credit. Export should be promoted through that designated bank.
- Establish "Bangladesh Leather Development Council" for linkage of (a) extension services to the industries, quality control of raw materials and exportable products, advisory services to the Government and co-ordination between concerned Ministries/agencies with production, processing, manufacturing and exporting of hides and skins, governing leather research and educational institutes, (b) supervising modernisation of the tanneries and leather industries and (c) making liaison of all sorts of leather development activities. The Leather Research Centre and the Bangladesh College of Leather Technology should be brought under the control of this Council.

- Bangladesh College of Leather Technology and Common Finishing Facility Centre should be made autonomous like other autonomous organisations.
- Provision for bonded warehouse to facilitate duty free import of raw materials such as raw hides and skins, pickled, wet-blue, crust and finished leather, accessories components and chemicals should be provided. If it is not possible, provision for duty draw back should be facilitated.
- Establish a Footwear Design and Development Institute without further delay.

### Long-term recommendations

- Provisions and facilities for proper processing of all raw hides and skins into finished leather should be accomplished prior to exporting of wet-blue, crust leather and finished leather.
- Establish a new tannery estate like EPZ with central effluent treatment plant and modernize tannery facilities.
- Provision for recruitment of sufficient skilled manpower should be made to improve the performance of leather research centre and Bangladesh college of leather technology.
- Establish supporting industries for producing necessary chemicals and other accessories /components within the country.
- Research infra-structural facilities, laboratory, equipment and machineries should be made available for leather research centre and Bangladesh college of leather technology.
- Banking facility for balancing, modernisation, rehabilitation and expansion (BMRE) of projects of hides and skins industries should be given top priority.
- Industrial policy should be strengthened to establish new industry & utilization of industrial by-products (left-over of leather shavings).

### Future Research

- Determine the effect of breed, feed and management system on the improvement of quality of hides and skins of cattle, buffalo, goat and sheep.
- Development of low-cost technologies for controlling of defects of hides and skins at ante-mortem, post-mortem and industrial level.
- Development of low-cost technologies for pre-tanning, curing and storing of raw hides and skins at middle-men levels (butchers, *beparis*, traders and *aratdars*).
- Determine and detect the qualitative damages of hides and skins and thereby, loss incurred.

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