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Recent Trends and Emerging Issues**

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Indo-Japanese Trade in Livestock Products: Recent Trends and Emerging Issues

K.Thimmappa¹ P. Nasurudeen² N. Mahesh¹ and A. Pouchepparajou³

Abstract

Since the livestock sector in the BIMSTEC countries has emerged as an important source of livelihood for a vast majority of the rural population, especially the poor. Therefore, the response of livestock sector in the emerging trade liberalization will be the greater concern in the era of free economy. The present study gives a brief account of the trade performance of BIMSTEC countries livestock sector and analyses the export performance of BIMSTEC countries livestock exports to Japan with a special reference to India. The study showed that Japan is one of the most important BIMSTEC region's trading partners, in terms of both exports and imports of livestock products. However, Bhutan, Myanmar and Bangladesh's trade with Japan was negligible. The major share of Japan's imports from BIMSTEC region originates from Thailand. Thailand is also a major destination of Japanese exports in the region. However, Japan is imposing highest listed non-trade barriers for a number of items compared with European Union. Therefore, BIMSTEC groups of countries and Japan must develop a comprehensive policy and enhance the cooperation on reducing trade and non-trade barriers with a view to facilitate the trade.

1. Introduction

India has one of the largest livestock populations in the world. India ranked first in the case of cattle and buffalo population and accounted for 56 per cent of the world's buffalo population and 16 per cent of the cattle population (Government of India, 2002). However, India is not an important trader of livestock products in the world market as it contributes less than half percent of world livestock trade. On the other hand, Japan is one of the important countries in the world, which contributes about 6 percent of world livestock trade (FAO, 2004). With the World Trade Organization regulation in place exporting per se is exposed to several challenges. During March 2001, India's EXIM policy removed all restrictions and allowed free import and export of most of the livestock products (Government of India, 2001). Now most of the developing countries (including BIMSTEC countries) have moved towards liberalizing their economy by reducing trade and non-trade barriers to trade over the past decades (IMF, 2001). Now tariffs and antidumping laws exist only as instruments of protection. Since the livestock sector in the BIMSTEC countries has emerged as an important source of livelihood for a vast majority of the rural population, especially the poor. Besides being a source of supplementary income and nutrition, the sector also provides draft power, fuel and organic manure. More importantly, the sector contributes significantly to the national economies of these countries (Singh and Pundir, 2001). Therefore, the response of livestock sector in the emerging trade liberalization will be the greater concern in the era of free economy. The present study gives a brief account of the trade performance of BIMSTEC countries livestock sector and analyses the export performance of BIMSTEC countries livestock exports to Japan with a special reference to India.

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2. Data and Methodology

The present study is based on the time series data pertaining to the period 1981 to 2003. The values of export and import are in US dollars to remove effect of changes in the exchange rate. The time series data were obtained from database of Food and Agriculture Organization of the United Nations (FAOSTAT database). Triennium averages were worked out to remove the wide variations in the export and import values to find out the shares and composition of different livestock products.

Compound growth rates were computed to examine the trends in export and imports. The growth rates were calculated separately for three periods (1981-03, 1981-91 and 1992 – 03) to know the growth performance of exports and imports.

3. Results and Discussions

3.1 Importance of Domestic Livestock Industry in Japan and BIMSTEC countries

More than 630 million Indian live in rural areas and 73 percent of them owned livestock. Small and marginal farmers account for three – quarters of these households owning livestock, raising 56 percent of the bovine (cattle and buffalo and 62 percent of the sheep population. Rural households depend on livestock for nutrition and income. The income from livestock accounts for 15-20 percent of total farm household incomes (World Bank, 1999). India ranks first in cattle and buffalo population and majority of these animals are reared under sub optimal condition. Among all livestock species in India, the bovine (cattle plus buffalo) alone accounted for about 60 per cent of the total livestock population of 485.4 million. Livestock sector also emerged as one of the major contributor to the gross domestic products. The contribution of livestock sector to India's GDP was 5.4 per cent in 2002-03 at current prices. In 2002-03, this sector contributed 84.4 million tones of milk, 41.7 billion eggs, 52.1 million kilograms of wool and 4.94 million tones of meat. Livestock sector provides regular employment to about 11 million in principle status and 8 million in subsidiary status (Government of India, 2003-04).

Livestock rearing is an integral part of the farming system in Bangladesh. Landless and small farmers, who account for 79.9 percent and 10.2 percent of all farmers, respectively, own 18.45 percent and 29.6 percent of the total cattle population and produce most of the country's milk. Landless and small farmers depend largely on livestock for their subsistence. In Bangladesh, livestock and poultry rearing are viewed as means of alleviating poverty and improving the livelihoods of landless farmers and smallholders (Saadullah, 2002).

Most farms in Bhutan are still subsistence oriented and they are practicing integrated farming systems. These farming systems always consist in a variety of both, agricultural and livestock elements. However, the composition of these different elements in the farming systems varies dramatically over the country, and even from village to village. Cattle are the most predominant livestock element in Bhutanese farming systems and are kept by the majority of the farmers, throughout Bhutan. Farmers in higher altitude areas used to migrate with their cattle during the winter to lower areas, because of the low fodder availability, during that season. Yaks are kept only in the highest altitude zones, where they form an important part of the farming systems. Poultry and pigs are not kept on a big scale but are found throughout the country, except for the highest altitude zones. Sheep are prevalent only in central Bhutan and goats mostly in the southern regions. (Wissink, 2004)

In Nepal, the livestock sector contributes about one-third of agricultural GDP and 4 percent of the country's total exports. The average livestock holding is 3–4 cattle/buffalo per household. A large number of farmers depend on livestock for their livelihood. In addition to supplying milk, meat, eggs, and hides, animals, mainly bullocks, are the major source of power for farmers. However, productivity is very low at approximately 378 and 810 kg of milk/annum per milking cow and buffalo, respectively (Joshi and Bahadur, 2002).

Animal husbandry accounted for about 13 percent of the gross value of agricultural production in Thailand. Water buffalo and cattle remained the chief draft animals for cultivation, although tractors were playing an increasing role in some areas, as in the maize-growing regions of the central plain. About 70 percent of all farms had cattle. Cattle also were slaughtered for meat once their usefulness had ended. Pigs were an important source of meat. Most farmers raised one or two, and an estimated 150,000 families were engaged in commercial pig raising. Almost all smallholders raised some chickens and ducks for eggs and meat. A considerable number of commercial operations had flocks of over 20,000. Select breeding stock was used, and modern operational practices were followed. Commercial duck farms were almost entirely Chinese operated. The poultry industry has been called as the star of the livestock sector of Thailand (FRD, 2005).

The livestock sector plays a significant role in the welfare of Sri Lanka's rural population. Dairy farming is mainly a smallholder dominated mixed farming system in Sri Lanka. The agricultural sector's contribution to the GDP was around 20 percent, while that of livestock to the agricultural gross national product was 8.0 percent (Bandara, 2002).

Livestock raising is a minor activity in Japan. Livestock is highly assisted industry through the various support programmes. Demand for beef rose in the 1980s, and farmers often shifted from dairy farming to production of high-quality (and high-cost) beef. Milk cows are numerous in Hokkaido, where 25 percent of farmers ran dairies, but milk cows are also raised in Iwate, in Tohoku, and near Tokyo and Kobe. Beef cattle are mostly concentrated in western Honshu, and on Kyushu. Hogs, the oldest domesticated animals raised for food, are found everywhere. Pork is the most popular meat (FRD, 2005).

3.2 Japan – BIMSTEC: Direction of Trade

BIMSTEC is very small market in terms of Japan's total trade. In 2003, 4.09 percent of Japan's global exports were destined toward BIMSTEC, while 3.79 percent of the former's global imports originated from BIMSTEC (Table 1). It can be noticed from Table 1 that a major share of Japan's imports from BIMSTEC region originates from Thailand. Thailand is also a major destination of Japanese exports in the region. Japan and Bangladesh were India's major export destination in Japan – BIMSTEC region during 2003. India imported 3.01 percent of its total global import from Japan (Table 2). Thailand was Myanmar's major trading partner followed by India and Japan (Table 3). In 2003, 31.48 percent of Myanmar's global exports destined toward Thailand. More than half of Nepal's export destined toward India in 2003. It can be observed that (Table 4) a major share of Nepal's import originated from India. Thailand's 14.20 percent of total global exports destined toward Japan in 2003 as shown in Table 5. Thailand also imports around one fourth of its total imports from Japan. None of the Japan – BIMSTEC countries was the major export destination to Bangladesh. However, Bangladesh's 15.14 percent and 5.86 percent of total import originated from India and Japan respectively in 2003 (Table 6). India and Japan were the Sri Lanka's major export destination in Japan – BIMSTEC region. In 2003, Sri Lanka exported 4.77 percent and 3.14 percent of total global export to India and Japan respectively (Table 7). In 2003, 16.13 percent, 6.72 percent and 2.19 percent of Sri Lanka's total import originated from India, Japan and Thailand respectively. Therefore Japan is the major trading partner in BIMSTEC region.

Table 1: Japan's Trade with BIMSTEC Countries (Million US\$)						
	Export			Import		
Country	2001	2002	2003	2001	2002	2003
India	1940 (0.48)	1869 (0.44)	2396 (0.51)	2212 (0.63)	2090 (0.62)	2174 (0.57)
Bangladesh	447 (0.11)	429 (0.10)	428 (0.09)	115 (0.03)	112 (0.03)	131 (0.03)
Bhutan	7 (0.002)	10 (0.002)	10 (0.002)	0 (0.00)	0 (0.00)	0 (0.00)
Myanmar	187 (0.05)	115 (0.30)	125 (0.03)	102 (0.03)	110 (0.03)	140 (0.04)
Nepal	22 (0.005)	17 (0.004)	13 (0.003)	11 (0.003)	6 (0.002)	7 (0.003)
Sri Lanka	269 (0.07)	285 (0.07)	375 (0.08)	203 (0.06)	165 (0.05)	193 (0.05)
Thailand	11873 (2.94)	13217 (3.17)	16043 (3.39)	10353 (2.97)	10507 (3.12)	11890 (3.10)
World	403383 (100)	416632 (100)	473911 (100)	349056 (100)	337149 (100)	383025 (100)

Note: Figures in parentheses represent share of Japan's Trade with BIMSTEC countries.
Source: IMF, Direction of Trade Year Book, Various Issues.

Table 2: India's Trade with Japan and BIMSTEC Countries (Million US\$)						
	Export			Import		
Country	2001	2002	2003	2001	2002	2003
Japan	2011 (4.45)	1900 (3.76)	1976 (3.26)	2134 (3.59)	2056 (3.06)	2636 (3.01)
Bangladesh	1087 (2.41)	1047 (2.07)	1358 (2.21)	67 (0.11)	43 (0.06)	61 (0.07)
Bhutan	3 (0.01)	3 (0.01)	4 (0.01)	22 (0.04)	24 (0.04)	29 (0.03)
Myanmar	53 (0.12)	58 (0.11)	73 (0.12)	197 (0.33)	214 (0.32)	259 (0.30)
Nepal	158 (0.35)	172 (0.34)	217 (0.36)	262 (0.44)	285 (0.42)	345 (0.40)
Sri Lanka	547 (1.21)	756 (1.49)	957 (1.58)	79 (0.13)	188 (0.28)	227 (0.27)
Thailand	612 (1.36)	705 (1.39)	799 (1.32)	530 (0.89)	454 (0.68)	706 (0.88)
World	45144 (100)	50577 (100)	60641 (100)	59364 (100)	67210 (100)	85294 (100)

Note: Figures in parentheses represent share of India's Trade with Japan and BIMSTEC countries.
Source: IMF, Direction of Trade Year Book, Various Issues.

Table 3: Myanmar's Trade with Japan and BIMSTEC Countries (Million US\$)						
	Export			Import		
Country	2001	2002	2003	2001	2002	2003
India	179.83 (6.82)	195.16 (7.36)	247.01 (9.35)	58.14 (2.18)	63.1 (2.14)	76.49 (2.39)
Bangladesh	17.92 (0.68)	21.61 (0.81)	30.21 (1.14)	0.74 (0.03)	1.6 (0.05)	2.68 (0.08)
Bhutan	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Japan	92.78 (3.52)	100.3 (3.78)	126.89 (4.80)	205.29 (7.71)	126.87 (4.30)	136.96 (4.27)
Nepal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Sri Lanka	1.14 (0.05)	1.07 (0.04)	1.36 (0.05)	0.65 (0.02)	0.3 (0.01)	0.37 (0.01)
Thailand	735.41 (27.90)	831.19 (31.33)	831.65 (31.48)	390.54 (14.68)	355.88 (12.06)	483.39 (15.08)
World	2635.5 (100)	2652.8 (100)	2641.7 (100)	2661.2 (100)	2952.1 (100)	3204.9 (100)

Note: Figures in parentheses represent share of Myanmar's Trade with BIMSTEC countries.
Source: IMF, Direction of Trade Year Book, Various Issues.

Table 4: Nepal's Trade with Japan and BIMSTEC Countries (Million US\$)						
	Export			Import		
Country	2001	2002	2003	2001	2002	2003
India	239.34 (39.00)	259.758 (48.74)	328.76 (50.63)	173.51 (19.12)	188.31 (21.57)	228.29 (22.91)
Bangladesh	3.77 (0.61)	4.89 (0.92)	4.42 (0.68)	2.14 (0.24)	4.31 (0.49)	3.28 (0.32)
Bhutan	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Myanmar	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Japan	10.31 (1.68)	5.73 (1.08)	6.52 (1.00)	23.83 (2.63)	18.38 (2.10)	14.43 (1.45)
Sri Lanka	0.01 (0.002)	0.17 (0.03)	0.22 (0.03)	0.37 (0.04)	0.97 (0.11)	1.18 (0.12)
Thailand	0.68 (0.11)	0.32 (0.06)	1.24 (0.11)	33.03 (3.64)	24.05 (2.74)	30.57 (3.07)
World	613.7 (100)	532.9 (100)	649.4 (100)	907.7 (100)	873.2 (100)	996.6 (100)

Note: Figures in parentheses represent share of Nepal's Trade with BIMSTEC countries
Source: IMF, Direction of Trade Year Book, Various Issues.

Table 5: Thailand's Trade with Japan and BIMSTEC Countries (Million US\$)						
	Export			Import		
Country	2001	2002	2003	2001	2002	2003
Japan	9964 (15.30)	10000 (14.52)	11435 (14.20)	13881 (22.37)	14902 (23.02)	18266 (24.09)
Bangladesh	231 (0.35)	229 (0.33)	273 (0.34)	29 (0.05)	25 (0.04)	30 (0.04)
Bhutan	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Myanmar	355 (0.55)	324 (0.47)	439 (0.55)	809 (1.30)	914 (1.41)	915 (1.21)
Nepal	30 (0.05)	22 (0.03)	28 (0.03)	1 (0.002)	0 (0.00)	1 (0.001)
Sri Lanka	141 (0.22)	152 (0.22)	161 (0.20)	39 (0.06)	7 (0.01)	8 (0.01)
India	482 (0.74)	413 (0.60)	641 (0.80)	673 (1.08)	676 (1.04)	879 (1.16)
World	65112 (100)	68851 (100)	80521 (100)	62057 (100)	64721 (100)	75809 (100)
Note: Figures in parentheses represent share of Thailand's Trade with BIMSTEC countries. Source: IMF, Direction of Trade Year Book, Various Issues.						

Table 6: Bangladesh's Trade with Japan and BIMSTEC Countries (Million US\$)						
	Export			Import		
Country	2001	2002	2003	2001	2002	2003
Japan	62 (1.08)	55.84 1.03()	51.49 (0.83)	720.71 (8.00)	594.86 (7.58)	566.7 (5.86)
Thailand	16.73 (0.29)	11.12 (0.20)	9.45 (0.15)	179.69 (1.99)	163.28 (2.08)	176.56 (1.83)
Bhutan	1.48 (0.30)	1.41 (0.30)	2.38 (0.04)	5.07 (0.06)	3.3 (0.04)	3.84 (0.04)
Myanmar	0.68 (0.01)	0.97 (0.02)	2.44 (0.04)	19.72 (0.22)	23.77 (0.30)	33.23 (0.34)
Nepal	1.95 (0.03)	3.91 (0.07)	2.98 (0.05)	4.15 (0.05)	5.38 (0.07)	4.86 (0.05)
Sri Lanka	2.02 (0.04)	1.94 (0.04)	5.8 (0.09)	7.87 (0.09)	6.79 (0.09)	9.24 (0.10)
India	60.8 (1.06)	39.33 (0.72)	55.34 (0.89)	1195.49 (13.27)	1145.83 (14.60)	1494.22 (15.45)
World	5735.6 (100)	5443.3 (100)	6229.4 (100)	9010.6 (100)	7847.8 (100)	9672.3 (100)
Note: Figures in parentheses represent share of Bangladesh's Trade with BIMSTEC countries. Source: IMF, Direction of Trade Year Book, Various Issues.						

	Export			Import		
Country	2001	2002	2003	2001	2002	2003
Japan	185.78 (3.93)	140.32 (3.00)	160.98 (3.14)	336.88 (5.88)	354.19 (5.88)	448.13 (6.72)
Bangladesh	10.08 (0.21)	10.18 (0.22)	11.17 (0.22)	2.05 (0.04)	3.89 (0.06)	5.64 (0.08)
Bhutan	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Myanmar	0.59 (0.01)	0.27 (0.01)	0.24 (0.005)	1.25 (0.02)	1.18 (0.02)	2.29 (0.03)
Nepal	0.33 (0.01)	0.88 (0.02)	1.66 (0.03)	0.01 (0.0002)	0.19 (0.003)	0.00 (0.00)
India	71.99 (1.52)	170.57 (3.62)	245.05 (4.77)	601.48 (10.50)	832.07 (13.82)	1076.16 (16.13)
Thailand	36.88 (0.78)	14.16 (0.30)	11.54 (0.22)	147.35 (2.50)	145.73 (2.44)	145.89 (2.19)
World	4722.4 (100)	4679.9 (100)	5133.3 (100)	5730.8 (5.88)	6022.8 (100)	6671.9 (100)

Note: Figures in parentheses represent share of Sri Lanka's Trade with BIMSTEC countries.
Source: IMF, Direction of Trade Year Book, Various Issues.

3.3. Trade Performance of Japan - BIMSTEC in Livestock Sector

3.3.1 Trade Performance in Dairy Products

Trade performances of BIMSTEC countries dairy products are presented in Table 8. Thailand was the largest exporter of dairy products followed by India accounted 73.17 percent and 20.28 percent respectively in total Japan - BIMSTEC countries dairy export during triennium ending 2003. Thailand and India's export share was increased where as Nepal and Japan's share declined substantially over the decades. Among the dairy products, India exported milk condensed plus dry whole and skim milk valued at US\$ 22694 thousands in triennium ending 2003. India also exported ghee worth of US\$ 5355 thousands followed by Nepal (US\$ 2273 thousands) and Thailand (US\$ 2273 thousands) in triennium ending 2003. Thailand is the major exporter of other milk products valued at US\$ 99105 thousands.

Japan's share of import in total Japan - BIMSTEC countries dairy import during triennium ending 2003 was highest accounting 59.46 percent followed by Thailand (21.33 percent), Sri Lanka (9.37 percent) and Bangladesh (5.38 percent). The other BIMSTEC countries like India, Bhutan, Myanmar and Nepal were not the major importer of dairy products.

Both the export and import growth rates of dairy products were positive and significant in overall period for Sri Lanka, Thailand and Japan. It was negative and significant for Nepal during the same period. The export growth rate of dairy products was positive and significant in overall period for India and the import growth rate was negative for the same period.

3.3.2 Trade Performance in Poultry Products

Trade performances of BIMSTEC countries poultry products are presented in Table 9. Thailand was the major exporter of poultry products accounted 95.57 percent valued at US\$ 1041904 thousands in total Japan - BIMSTEC countries poultry export during triennium ending 2003. Thailand was the major exporter of poultry meat where as India was major exporter of egg and egg products in triennium ending 2003.

Table 8: Japan and BIMSTEC Countries Trade Performance of Dairy Products (Values in thousand US dollars)							
		Export¹			Import¹		
	Country	1981-83	1991-93	2001-03	1981-83	1991-93	2001-03
Milk condensed plus dry whole and skim milk	Bangladesh	0	94	14	29347	73048	62891
	Bhutan	0	0	0	0	566	1536
	India	327	2537	22694	72267	8363	6269
	Myanmar	0	0	0	9900	13636	16141
	Nepal	0	0	1	3289	4259	1983
	Sri Lanka	0	200	525	24707	57095	110735
	Thailand	6070	4990	7181	76744	155263	190003
	Japan	762	309	577	99858	158826	79494
Ghee	Bangladesh	0	0	0	6482	1131	2099
	Bhutan	0	0	0	0	44	39
	India	1170	1251	5355	47974	2976	6539
	Myanmar	0	0	0	0	114	69
	Nepal	2996	499	2273	563	138	308
	Sri Lanka	0	0	0	0	0	0.67
	Thailand	0	27	204	483	23582	20336
	Japan	0	0	0	0	0	0
Other milk products	Bangladesh	0	0	0	3616	707	1277
	Bhutan	0	0	1	285	328	737
	India	27	34	1462	11835	263	3552
	Myanmar	0	0	0	200	3444	17505
	Nepal	3050	499	1988	61	1261	340
	Sri Lanka	137	303	327	2545	3269	4762
	Thailand	1741	10665	99105	11008	14902	52494
	Japan	259	1391	3832	150747	394748	653331
Total dairy products	Bangladesh	0 (0.00)	94 (0.41)	14 (0.01)	39445 (7.15)	74886 (8.16)	66267 (5.38)
	Bhutan	0 (0.00)	0 (0.00)	1 (0.00007)	285 (0.05)	938 (0.10)	2312 (0.19)
	India	1524 (9.21)	3822 (16.76)	29511 (20.28)	132076 (23.93)	11602 (1.26)	16360 (1.33)
	Myanmar	0 (0.00)	0 (0.00)	0 (0.00)	10100 (1.83)	17194 (1.87)	33715 (2.74)
	Nepal	6046 (36.56)	998 (4.38)	4262 (2.93)	3913 (0.71)	5658 (0.62)	2631 (0.21)
	Sri Lanka	137 (0.83)	503 (2.21)	852 (0.59)	27252 (4.94)	60364 (6.58)	115497 (9.37)
	Thailand	7811 (47.23)	15682 (68.78)	106490 (73.17)	88235 (15.21)	193747 (21.11)	262833 (21.33)
	Japan	1021 (6.17)	1700 (7.46)	4409 (3.03)	250605 (45.41)	553574 (60.30)	732825 (59.46)
	Total	16539	22799	145539	551911	917963	1232441

Table 9: Japan and BIMSTEC Countries Trade Performance of Poultry Products (Values in thousand US dollars)							
		Export¹			Import¹		
	Country	1981-83	1991-93	2001-03	1981-83	1991-93	2001-03
Poultry meat	Bangladesh	0	0	0	0	7	17
	Bhutan	0	0	0	0	30	26
	India	48	272	2512	0	0	63
	Myanmar	0	0	0	0	0	59
	Nepal	0	0	0	0	0	87
	Sri Lanka	0	7	37	424	577	1748
	Thailand	51027	433472	1032837	68	289	1106
	Japan	1550	6407	3604	162237	866995	1549368
Egg and egg products	Bangladesh	0	0	0	0	0	0
	Bhutan	0	0	3	0	240	464
	India	2526	4225	40598	23	0	481
	Myanmar	0	0	19	0	0	105
	Nepal	0	0	0	126	481	47
	Sri Lanka	11	236	518	0	38	17
	Thailand	1641	9692	9067	119	653	1384
	Japan	77	254	971	30600	41042	53775
Total Poultry Products	Bangladesh	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	7 (0.00)	17 (0.00)
	Bhutan	0 (0.00)	0 (0.00)	3 (0.0003)	0 (0.00)	270 (0.03)	490 (0.03)
	India	2574 (4.53)	4497 (0.99)	43110 (3.95)	23 (0.10)	0 (0.00)	544 (0.03)
	Myanmar	0 (0.00)	0 (0.00)	19 (0.00)	0 (0.00)	0 (0.00)	164 (0.01)
	Nepal	0 (0.00)	0 (0.00)	0 (0.00)	126 (0.07)	481 (0.05)	134 (0.01)
	Sri Lanka	11 (0.00)	243 (0.05)	555 (0.05)	424 (0.22)	615 (0.07)	1765 (0.11)
	Thailand	52668 (92.59)	443164 (97.49)	1041904 (95.57)	187 (0.10)	942 (0.10)	2490 (0.15)
	Japan	1627 (2.86)	6661 (1.47)	4575 (0.42)	192837 (99.61)	908037 (99.75)	1603143 (99.65)
	Total	56880	454565	1090166	193597	910352	1608747
		1981-91 Eighties	1992-03 Nineties	1981-03 Overall	1981-91 Eighties	1992-03 Nineties	1981-03 Overall
Growth rates of Total Poultry Products	Bangladesh	-	-	-	-	-	-
	Bhutan	-	-	-	-	2.621	-
	India	-1.92	27.53***	24.58***	-	-	-
	Myanmar	-	-	-	-	-	-
	Nepal	-	-	-	-	-	-
	Sri Lanka	37.616***	3.710	13.016***	4.717	15.767***	9.960***
	Thailand	26.01***	9.356***	16.336***	12.848***	11.554***	15.797***
	Japan	14.595***	-2.308	3.795***	19.606***	4.415***	13.333***

Notes: Figures in parentheses represent share in total poultry products trade of Japan - BIMSTEC Countries. Blank space indicates non continuous data. ¹ Average of three years, *** indicates significant at one percent level. ** indicates significant at five percent level.
Source: FAOSTAT database.

Japan was the major importer of poultry products accounted 99.65 percent valued at US\$ 1603143 thousands in total Japan - BIMSTEC countries poultry import during triennium ending 2003. Japan imported both poultry meat as well as egg products valued at US\$ 1549368 thousands and US\$ 53775 thousands respectively during the same period.

Both the export and import growth rates of poultry products were positive and significant in overall period for Sri Lanka, Thailand, Japan and India. However, the export growth rates of poultry products were higher in eighties as compared to nineties for these countries except India.

		Export¹			Import¹		
	Country	1981-83	1991-93	2001-03	1981-83	1991-93	2001-03
Total meat and meat Products	Bangladesh	6148 (4.31)	2854 (0.50)	192 (0.01)	35 (0.002)	2067 (0.03)	1683 (0.02)
	Bhutan	0 (0.00)	0 (0.00)	3 (0.0002)	0 (0.00)	87 (0.001)	73 (0.001)
	India	79430 (55.61)	101042 (17.74)	302850 (21.89)	293 (0.02)	146 (0.002)	410 (0.005)
	Myanmar	0 (0.00)	5 (0.0009)	4 (0.0003)	0 (0.00)	10 (0.0002)	3354 (0.04)
	Nepal	0 (0.00)	0.67 (0.0001)	2.67 (0.0002)	0 (0.00)	0 (0.00)	239 (0.003)
	Sri Lanka	286 (0.20)	1196 (0.21)	945 (0.068)	1335 (0.07)	1640 (0.03)	3431 (0.04)
	Thailand	51889 (36.33)	445533 (78.22)	1068877 (77.25)	872 (0.04)	5856 (0.09)	6592 (0.08)
	Japan	5085 (3.56)	18979 (0.78)	10826 (0.782)	1801737 (99.86)	6267687 (99.84)	8262349 (99.81)
	Total	142838	569609.7	1383700	1804272	6277493	8278131
		1981-91 Eighties	1992-03 Nineties	1981-03 Overall	1981-91 Eighties	1992-03 Nineties	1981-03 Overall
Growth rates of total meat and meat Products	Bangladesh	5.490	5.551	-23.853	-	-9.546	-
	Bhutan	-	-	-	-	-0.112	-
	India	-	-	-	-	-	-
	Myanmar	-	-	-	-	-	-
	Nepal	-	-	-	-	-	-
	Sri Lanka	17.274***	-0.259	8.600***	5.255	10.001***	6.923***
	Thailand	26.017***	9.399***	16.494***	18.807***	0.988	11.646***
Japan	14.596***	-4.98***	5.432***	13.640***	1.251	8.782***	

Notes: Figures in parentheses represent share in total poultry products trade of Japan - BIMSTEC Countries. Blank space indicates non continuous data. ¹ Average of three years, *** indicates significant at one percent level. ** indicates significant at five percent level.
Source: FAOSTAT database.

Table 11: Japan and BIMSTEC Countries Trade Performance of Hides and Skins² (Values in thousand US dollars)							
		Export¹			Import¹		
		1981-83	1991-93	2001-03	1981-83	1991-93	2001-03
Hides and Skins	Bangladesh	204 (1.08)	48 (0.12)	507 (0.67)	0 (0.00)	280 (0.04)	193 (0.08)
	Bhutan	0 (0.00)	77 (0.11)	73 (0.10)	0 (0.00)	0 (0.00)	0 (0.00)
	India	374 (1.38)	653 (0.96)	2271 (2.97)	1552 (0.34)	24930 (3.44)	60384 (13.80)
	Myanmar	757 (2.79)	429 (0.63)	3824 (4.99)	0 (0.00)	0 (0.00)	40 (0.01)
	Nepal	0 (0.00)	1802 (2.65)	3463 (4.52)	0 (0.00)	23 (0.0003)	0 (0.00)
	Sri Lanka	124 (0.46)	27 (0.04)	43 (0.06)	16 (0.003)	154 (0.02)	527 (0.12)
	Thailand	5708 (21.00)	1924 (2.83)	3355 (4.38)	6149 (1.33)	172627 (23.85)	173541 (39.65)
	Japan	19925 (73.30)	62964 (92.65)	63016 (82.31)	453862 (98.33)	525926 (72.65)	202871 (46.35)
	Total	27181	67959	76557	461579	723942.3	437716
		1981-91 Eighties	1992-03 Nineties	1981-03 Overall	1981-91 Eighties	1992-03 Nineties	1981-03 Overall
Growth rates of Hides and Skins	Bangladesh	-	5.07	-	-	-3.853	-
	Bhutan	-	-0.178	-	-	-	-
	India	0.051	14.266	11.214***	50.98***	6.24***	23.66***
	Myanmar	-	28.811***	-	-	-	-
	Nepal	-	2.394	-	-	-	-
	Sri Lanka	-16.824 (2.078)	-	-	-	11.461**	-
	Thailand	-4.856	3.655	-5.681***	46.803***	-0.703	21.061***
	Japan	18.337***	-2.948	5.741***	5.470***	-10.083***	-4.379***

Notes: Figures in parentheses represent share in total poultry products trade of Japan - BIMSTEC Countries. Blank space indicates non continuous data. ¹ Average of three years, *** indicates significant at one percent level. ** indicates significant at five percent level.
Source: FAOSTAT database.

3.3.3 Trade performance of Meat and Meat Products

Trade performances of BIMSTEC countries meat and meat Products are presented in Table 10. Thailand was the largest exporter of meat and meat products followed by India accounted 77. 25 percent and 21.89 percent respectively in total Japan - BIMSTEC countries of meat

and meat products export during triennium ending 2003. India's export share of meat and meat products declined where as Thailand's share increased over the decades.

Japan was the single largest importer of meat and meat products accounted around 99.80 percent in total Japan - BIMSTEC countries meat and meat products import. Both the export and import growth rates of meat and meat products were positive and significant in overall period for Sri Lanka, Thailand, Japan and India. However, the export growth rates were negative in nineties as compared to eighties for Sri Lanka and Japan.

3.3.4 Trade Performance of Hides and Skins

Trade performances of BIMSTEC countries hides and skins are presented in Table 11. Japan was the major exporter of hides and skins accounted 82.31 percent valued at US\$ 63016 thousands in total Japan - BIMSTEC countries hides and skins during triennium ending 2003. Thailand's export share declined from 21 percent in triennium ending 1983 to 4.38 percent in triennium ending 2003.

Japan and Thailand were the larger importer of hides and skins followed by India accounted 46.35 percent, 39.65 percent and 13.80 percent respectively in total Japan - BIMSTEC countries of hides and skins import during triennium ending 2003. It was observed that Japan's Import shares declined where as Thailand's share increased over the decades.

The export growth rates of hides and skins were positive and significant in overall period for Japan and India. It was negative for Thailand. Import growth was negative and significant for Japan during overall period.

3.4 Composition of India's Livestock Export with Japan

The Tables 12 and 13 show India's livestock export destination and composition of India's livestock export with Japan. India exports buffalo meat to 102 countries. Malaysia, Philippines, U.A.E, Egypt, Jordan and Angola are the major importers. India exported US 167.85 thousand dollars worth of buffalo meat to Japan accounted 0.05 per cent of India's total buffalo exports during triennium ending 2003. The major countries to which sheep and goat meats were exported are U.A.E, Oman, Qatar, Malaysia and Saudi Arabia. India exported only 0.30 per cent of its total sheep and goat meat to Japan. The poultry products were exported to Japan (17.01 per cent), U.A.E (15.53 per cent), Oman (15.16 per cent), Belgium (8.54 per cent), Germany (5.79 per cent) and Denmark (5.43 per cent) in 2003. Japan imported US\$ 2.8 million worth of poultry products in triennium ending 2003. Hence it is one of the major importers of India's poultry products. Bangladesh, Germany, U.S.A, U.A.E, Nepal and Yemen are major export destination for dairy products. Japan is not the major export destination as it accounted 0.57 per cent of India's total dairy products. Animal caseins were exported mainly to U.S.A (79.98 per cent), Germany (10.40 per cent), Portugal (3.19 per cent), Spain (1.25 per cent), France (1.17 per cent) and Italy (0.86 per cent) in 2003. Countries share in the total exports of animal casein fluctuates from year to year. For instance, Portugal was the major importer in 2001 where as U.S.A. was the major buyer during 2003. India exported processed meat mainly to Malaysia, China, Hong Kong, U.A.E, Bahrain, and Seychelles in 2003. Japan is also one of the major importers of India's processed meat and accounted 12.79 per cent of India's total processed meat during triennium ending 2003. However, according to Table 12 the major buyers of Indian livestock products are developing nations.

Table 12: Shares of Major Countries in the Exports of Livestock Products from India							
(Percent)							
Buffalo meat				Sheep/goat meat			
Countries	2001	2002	2003	Countries	2001	2002	2003
Malaysia	26.79	30.45	28.64	U.A.E	50.53	81.47	66.98
Philippines	14.56	17.94	14.30	Oman	8.47	9.99	14.01
U.A.E	14.07	8.71	9.20	Qatar	1.35	2.87	11.07
Egypt	20.92	9.82	7.62	Malaysia	-	-	2.99
Jordan	4.06	6.10	6.07	Saudi Arabia	34.72	0.41	0.53
Angola	1.85	4.83	5.45	Jordan	0	0.36	0.41
Poultry Products				Dairy Products			
Japan	10.08	18.71	17.01	Bangladesh	37.94	27.77	27.60
U.A.E	18.29	16.44	15.53	Germany	8.99	6.29	20.52
Oman	11.09	12.88	15.16	United States	2.00	2.65	12.59
Belgium	5.49	6.23	8.54	U.A.E	10.03	17.73	8.07
Germany	2.53	3.20	5.79	Nepal	0.89	1.16	4.39
Denmark	0.53	2.63	5.43	Yemen	2.29	2.65	3.29
Processed meat				Animal caseins			
Malaysia	-	-	41.06	United States	-	6.41	79.98
China	-	-	20.07	Germany	10.28	31.05	10.40
Hong Kong	-	-	16.36	Portugal	45.21	22.51	3.19
U.A.E	27.56	3.44	8.30	Spain	13.84	7.01	1.25
Bahrain	-	1.22	4.57	France	5.29	2.90	1.17
Seychelles	34.49	27.25	3.40	Italy	7.21	6.00	0.86
Source: Agricultural and Processed Food Products Export Development Authority (APEDA), www.apeda.com.							

Table 13: Composition of India's Livestock Trade with Japan*			
(Values in thousand US dollar)			
Products	Position	Composition (%)	Values
Dairy	22	0.53	79.77
Poultry	1	8.96	2774.25
Processed meat	3	12.79	46.77
Buffalo meat	48	0.05	167.82
Sheep/goat meat	17	0.30	16.05
Animal caseins	11	0.57	30.57
Note: * triennium averages ending 2003			
Source: FAOSTAT database.			

3.5 BIMSTEC Countries Livestock Trade: Emerging Issues

BIMSTEC countries livestock trade with Japan is a matter of concern because Japan is one of the developed nation, which imposes stringent quality control standard to the imported products. What are the issues that acts as barriers to export of products to Japan? It requires in depth analysis. However, the following paragraphs outline some of the factors, which seem to have affected the trade relations between Japan and BIMSTEC countries.

Issues relating to animal welfare and environmental pollution by livestock processing units have been of increasing concern in developing countries. Sanitary and Phyto-Sanitary (SPS) measures and Technical Barriers to Trade (TBT) have a large impact on growth in meat exports, particularly from developing countries. Animal diseases outbreaks have lead countries to impose import bans and stricter sanitary requirements as labeling and animal traceability schemes.

Japan is imposing highest listed non-trade barriers (NTB's) for a number of items compared with European Union. UNCTAD has identified around 36 categories of hard core NTB's, which Japan is imposing on its imported goods. Also, a significant number of Japanese imports are subject to multiple types of NTB's. For example, a study by Mehta (2005) showed that 45.90 per cent of India's exports to Japan face these hardcore NTB's. The comparative figure for the world is 39.5 per cent. The same study also examined that the most prolifically applied NTB's by Japan on imports from India are product characteristic requirements, to protect human health - 62 per cent of national tariff lines are frequented by this NTB's by this Japan alone. Then come authorization (15 per cent), labeling requirements (8 per cent), quota (7 per cent), non-automatic license (1 per cent), and state monopoly (1%).

In livestock sector, BIMSTEC countries export to Japan may be limited by lack of good hygienic practices (Mehta, 2005). In most of the export-oriented enterprises of BIMSTEC countries, slaughterhouses are old, unhygienic, over crowded and lack essential services. Un sophisticated slaughtering practices contribute to the poor meat quality and low recovery of various by – products such as hides and skins, tallow, blood, viscera and organs. Moreover, poor enforcement of hygienic standards constrains these countries export competitiveness (World Bank, 1999).

3.6 Conclusions

Japan is one of the most important BIMSTEC region's trading partners, in terms of both exports and imports. However, Bhutan, Myanmar and Bangladesh's trade with Japan was negligible. The major share of Japan's imports from BIMSTEC region originates from Thailand. Thailand is also a major destination of Japanese exports in the region.

Thailand and India were the major exporters and Japan was the largest importer of dairy and meat products in total Japan - BIMSTEC countries dairy and meat products trade. In poultry products trade, Thailand was the largest exporter and Japan was the single largest importer of poultry products in total Japan - BIMSTEC countries poultry trade. Japan was the major exporter of hides and skins in total Japan - BIMSTEC countries export of hides and skins. Japan and Thailand were the larger importer of hides and skins in total Japan - BIMSTEC countries import of hides and skins.

However, BIMSTEC countries export to Japan may be limited by lack of good hygienic practices and food-processing industries needs technological upgradation. Food processing industries also needs to be motivated for adoption of food safety and quality assurance mechanisms such as Total Quality Management (TQM) including Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practices (GMP), Good Hygienic Practices (GHP) and Codex Standards to prepare them to face the global competition in international trade. Sanitary and Phyto- Sanitary (SPS) measures and Technical Barriers to Trade (TBT) have a large impact on growth in livestock exports of BIMSTEC groups of countries to Japan as it is imposing highest listed non-trade barriers (NTB's) for a number of items compared with European Union. Therefore, BIMSTEC groups of countries and Japan must develop a comprehensive policy and enhance the cooperation on reducing trade and non-trade barriers with a view to facilitate the trade.

Notes

Policy Reforms in Indian Livestock Trade

In July 1991, India allowed private investment in dairy sector. This attracted considerable private investment in to the dairy processing industry. The import and export of dairy products were regulated through Agricultural and Processed Food Products Export Development Authority (APEDA) and National Dairy Development Board in nineties. During March 2001, government's new EXIM policy removed all restrictions and allowed free import and export of most of the dairy products. Now tariffs and antidumping laws exist only as instruments of protection. Therefore, the response of livestock sector in the emerging trade liberalization will be the greater concern in the era of free trade regime.

In order to compete in the global market, productivity is the key growth. India has no option but to raise the productivity of livestock through research in breeding, feeding and management (Government of India, 2002). Research in livestock sector has not received the support it deserves, even though the livestock sector plays an important role in the Indian economy (Mishra, 1995). Except for the few operated by private, most slaughterhouses practice unsophisticated slaughtering practices (World Bank, 1999). To boost the export, Free Trade Zones (FTZ) and Export Processing Zones (EPZ) have been set up with all infrastructures. Also, setting up of 100 per cent Export Oriented Units (EOU) is encouraged in other areas. They may import free of duty all types of goods. Capital goods, including spares upto 20 per cent of the cost insurance freight (CIF) value of the capital goods may be imported at a concessional rate of customs duty subject to certain export obligations. Further, Ministry of Food Processing Industries is operating several plan schemes for the development of processed food sector in the country during the Tenth Plan (2002-2007). For instance, the outlay of Rs. 980 million have been allocated for technology up gradation/establishment/modernization of food processing industries scheme, which focuses on different segments of food processing industry covering all segments like fruits and vegetables, milk products, meat, poultry and fishery etc. To upgrade the quality standards, Rs. 900 million has been allotted to quality assurance, codex standards and research and development scheme (Government of India, 2002-03).

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