CONSUMPTION PATTERN OF MILK AND MILK PRODUCTS IN BANGLADESH

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ABSTRACT

In recent years, production and rural consumption of milk and milk products have decreased while import and urban consumption have increased. This paper shows that population pressure on land, increased draught use of cows and improper government food production policy are responsible for decreased production and rural consumption. Aggregate urban consumption has increased due to larger size of the urban population and faster increase in urban income. Detailed analysis of a sample of 191 households shows that milk products are more income elastic than milk. Moreover, actual consumption pattern of milk is influenced by, in addition to income, religion, age composition of family members, and ability to product milk at home. It is concluded that government food production policy should be corrected by giving "ire emphasis on foods of animal origin including milk.

I. INTRODUCTION

Milk is considered an ideal rood by the people of Bangladesh. Though reliable and adequate data are not available, there are indications that in recent years production and rural consumption of milk and milk products have decreased while import has substantially increased to meet rapidly increasing urban demand. The main objectives of this paper are (a) to briefly outline the reasons for declining production and rural consumption, (b) to analyse the pattern of consumption and to measure the effect of income on consumption of milk and milk products in a selected urban area. The implications of the results for production and import policy for milk are also indicated.

Production and rural consumption pattern are discussed in section II while urban consumption pattern is discussed in section III. Rural people consume little purchased milk products. On the other hand, urban consumers consume a lot of purchased milk products in addition to home made milk products. However, because of data limitations,

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purchased milk products have been subjected to detailed analysis only for the urban consumers.

II. PRODUCTION AND CONSUMPTION IN RURAL AREAS

Milk is considered an ideal food by the people of Bangladesh as in the other societies having adult lactose tolerence, a characteristic which is not considered normal for the species mammalia including man. However, pastoral man acquired this characteristic because of his long dependence on foods of animal origin and Bangladeshis acquired this characteristic because of their long association with migrants and invaders from pastoral societies of Central and West Asia into India.

In the traditional subsistence production framework of the Indian economy, most farming families would produce milk for their own consumption. Milk was not only liked by a majority of the people, a higher social value was attached to its consumption. This was evident in the fact that when expansion of crop cultivation was constrained by the shortage of draught power, slaughter of cattle was banned and beef-eating was made a religious taboo by the Hindus but the cow was given the status of a mother and was exempted from hard work so that milk production did not suffer (Mukherjee 1938, p. 125 ; Crotty 1980, p. 167). After the spread of Islam in the middle ages this restriction was not applicable to the Muslims yet they also did not use productive milk cows for draught.

The situation has changed in recent times and milk production has significantly decreased. For example, yearly production of milk and milk products decreased from 1010,000 tons in the early 1960s (Ali 1973) to 683,000 tons during 1972-76 (Bangladesh 1977) to 606,000 tons during 1977-80 (Bangladesh 1982). The following are the reasons :

1. Population pressure on land has drastically reduced farm size, common grazing land and the capacity of the vast majority of small farmers and landless to rear milk cow·. A survey in 1981 in three villages in Mymensingh revealed that out of a sample of 500 farm households (excluding landless) 72 percent had no milk giving cow at the time of the survey (Table 1).

2. Until the partition of India in 1947, farmers in Bangal would not use milk cows for draught; any shortage in draught bullock would be met by import from the adjoining provinces. After 1947, this natural source of supply has been lost and legal trading of cattle has not been established with India. Though some cattle are smuggled into the country, shortage of draught bullock has continued to grow and since the 1950s, an increasing number of small farmers are using milk cows for draught. About 50 percent of the adult cows a e currently used for draught (Bangladesn 1981). Farmers use milk cows for draught to meet their immediate power problem in the production of crops but

TABLE 1. AVERAGE PRODUCTION AND CONSUMPTION OF MILK IN
          SELECTED FARMS IN MYMENSINGH, 1981

Extent of milk production/ consumption	Sample	Farms	Average holding, acres	Daily milk output, Kg/day	Per caput output, Gm/day	Per caput consumption, Gm/day
	No	Percent				
No milk output	361	72.2	2.61	—	—	—
Entire output consumed	84	16.8	5.01	0.79	104	104
Part of output sold	21	4.2	2.89	4.17	164	65
Entire output sold	34	6.8	2.20	0.92	162	—
All Farms[a]	500	100.0	3.00	0.37	51[a]	27[a]

a. If landless households were taken in the sample, production and consumption
    would be very much lower.

Source : Jabbar and Green 1983, p. 56.

the long run consequence is to reduce fertility and milk production of these cows (for
empirical evidence see, Jabbar and Green 1983).

   3. During the last two decades, the main objective of food production policy of
the government has been to achieve self-sufficiency in food grains, the main source of
calorie. Expansion of seed-fertilizer technology has been adopted as the strategy to
achieve this goal. Less emphasis has been given on production of foods of animal origin
because demand for such foods being income elastic were expected to grow slowly in a
situation of widespread poverty and slow growth in income. Although self-sufficiency
in foodgrain has not yet been achieved, expansion of the seed-fertilizer technology
has seriously affected animal feed supply resulting in decreased production of livestock
products including milk (Jabbar and Green 1983.)

   Declining production has led to reduced consumption in the rural areas. Nutri-
tion surveys have shown that between 1962-64 and 1975-76, average consumption of
foods of animal origin including milk has decreased by 23.3 percent while consumption
of cereals and vegetables has decreased by only 2.5 percent each (DU 1977). The effect
of declining production on consumption has been more severe on landless and small hold-

ings. For example, the 1973-74 rural household expenditure survey shows daily per caput milk consumption of 29 gm but two thirds of the sample representing low income earners consumed less than the average (Bangladesh 1977).

The production consumption balance of the previous subsistence economy has been broken by many factors. For example, draught use of cows by small farmers and consequent loss or reduction in milk output means they are sacrificing milk for cereals production and they may not have adequate income to buy back milk. In fact, many small farmers sell their meagre amount of milk for cash to buy subsistence needs (Table 1). Commercialization is generally considered a vehicle for increased income and level of living of the subsistence farmers but in Bangladesh increased commercialization of commodities like milk represent more of a desperate economic situation than of prosperity. It seems that the vast majority of rural people who once lived on 'milk and rice' (*Dudhe Vate*) will have to wait until the economy has developed enough to give them adequate income to buy and consume milk again.

III. CONSUMPTION IN URBAN AREAS

Declining production has led to reduced consumption in the rural areas but aggregate consumption in the urban areas has rapidly increased over the years because of the following reasons : (a) the number of urban population has substantially increased, (b) average income in the urban areas has increased at a faster rate than rural income, so the economic demand for milk has increased rapidly, (c) urbanization and economic upliftment has created an increasing and stable demand for various milk products, e.g. sweets, ghee, butter, yoghurt, (d) there is an increasing tendency among urban women to avoid breast feed their babies and to depend on cow milk, mostly processed baby food.

The increasing urban demand has been met by larger flow of milk from rural to urban areas and by increased import. Previously low social value was attached to selling milk, so few farmers other than some special categories of people would sell milk. The norm of the society has changed, and it has been shown earlier that many small and medium farmers now sell milk for cash to meet other needs. Moreover, a special programme has been launched in the 1960s through the establishment of the Eastern Milk Producers' Cooperative (Milk Vita) to promote production and sales of milk by farmers in the country's milkshed area (parts of Dhaka, Tangail, Pabna and Faridpur districts) with a view to meet the needs of milk and milk products in the Dhaka city.

However, supply from domestic sources has failed to keep pace with the rapidly increasing urban demand, so yearly import of milk and milk products has increased from about 2000 tons in 1960-61 to about 7,000 tons in 1968-69 (Ali 1973) to over 30,000 tons

in recent years. Most of the import is in tne form of full or half cream milk powder and baby food, so the fluid equivalent of the import is much larger, accounting for 25-30 percent of domestic production of fluild milk.

Factors Influencing Consumption Pattern

It may be reasonably assumed that urban demand for milk and milk producrs will continue to increase rapidly but domestic production is unlikely to improve in the near future, so import has to be increased rapidly. However, projection of production and import requirement is likely to be facilitated by knowledge of present pattern of urban consumption, particularly the effect of income on consumption. Some data in this respact has been generated by a survey conducted during January-April 1984 in Mymensirgh town including the Bangladesh Agricultural University Campus. A total of 191 purposively selected families were surveyed. The objective was to take a reasonable number of families from various income levels and professions to permit meaningful analysis rather than try to take a representative sample of the population in tne study area. As such, income group specific results are more meaningful than the overall sample averages.

The distribution of the sample families, their average size and monthly income are shown in Table 2. The sample families spent, on average, Taka 39.41 per caput per month

TABLE 2. DISTRIBUTION OF SAMPLE FAMILIES, THEIR AVERAGE SIZE AND MONTHLY INCOME

Monthly family income, Tk.	Sample families		Persons per family	Monthly incom (Taka)	
	No.	%		Per family	Per caput
Upto 1000	35	18.3	4.94	744	151
1001-1500	34	17.8	5.65	1221	216
1501-2000	23	12.0	5.75	1780	308
2001-2500	32	16.8	5.66	2290	405
2501-3000	29	15.2	6.62	2774	419
3001-3500	14	7.3	5.93	3207	541
3501-4000	11	5.8	5.91	3739	633
4001 & above	13	6.8	6.31	5282	837
All	191	100.0	3.76	2193	581

Source : Survey in Mymensingh town, 1984.

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on milk and milk products (Table 3). Per caput income of the highest income group was 7.5 times higher compared to the lowest income group but per caput expenditure on milk and milk products of the highest income group was 5.5. times higher. Of the total expenditure, 69.3 percent was on milk,13.8 percent on sweets,10.3 percent on ghee and butter oil, 5 percent on yoghurt and 1.5 percent on butter. The proportion of expenditure on milk generally decreased and that on milk products increased at higher income levels.

Members of the sample families consumed 3.91 kg milk per caput per month which is equivalent to 130 gm per caput per day. They also consumed 0.23 kg sweets, 0.078 kg ghee and butter oil, 0.121 kg yoghurt and 0.019 kg butter per adult unit per month

TABLE 3. PER CAPUT MONTHLY EXPENDITURE ON MILK AND MILK PRODUCTS, AND ITS DISTRIBUTION

Monthly household income, Tk.	Per caput monthly expenditure (Taka)	Distribution of expenditure on individual items				
		Milk[b]	Sweets	Ghee & butter oil	Yoghurt	Butter
Upto 1000	9.93	78.6	8.6	6.5	6.5	—
1001-1500	20.70	76.4	9.4	6.6	7.2	0.4
1501-2000	38.75	72.6	14.6	9.1	3.7	—
2001-2500	45.23	68.7	15.8	9.4	4.7	1.6
2501-3000	47.73	72.3	10.2	10.1	5.5	1.5
3001-3500	53.12	73.5	9.8	11.7	4.1	0.9
3501-4000	74.11	66.5	17.7	9.4	2.2	4.2
4001+	73.22	54.5	19.5	16.4	7.2	2.5
All	39.41[a]	69.3	13.8	10.3	5.0	1.5

a. This average would be lower if a proportionate representative sample were taken from each income group (see text).

b. Part of the milk has been processed at home into various milk products. This is not shown, i.e. milk products mentioned in this report are those purchased from the market.

Source : Survey in Mymensingh town, 1984

(Table 4). Inequality between higher and lower income groups is greater in the consumption of milk produts than in the case of milk.

All the families having average monthly income above Taka 2500 consumed milk but some families in the lower income groups did not consume milk (Table 5). In case of milk products, non-consuming families were found in all income groups but in general, proportion of consuming families increased at higher income levels.

TABLE 4. AVERAGE MONTHLY CONSUMPTION OF MILK AND MILK
              PRODUCTS AT VARIOUS INCOME LEVELS

Monthly family income, Taka	Per caput[a] monthly consumption (kg)				
	Milk	Sweets	Ghee & Butter oil	Yoghurt	Butter
Upto 1000	1.15	0.057	0.015	0.064	—
1001-1500	2.41	0.089	0.019	0.092	0.003
1501-2000	3.69	0.274	0.060	0.096	—
2001-2500	4.34	0.322	0.099	0.138	0.020
2501-3000	4.80	0.240	0.125	0.149	0.019
3001-3500	5.73	0.269	0.145	0.136	0.018
3501-4000	6.84	0.595	0.128	0.064	0.086
4001+	6.29	0.616	0.221	0.278	0.053
All	3.91	0.253	0.078	0.121	0.019

a. In case of milk, per member in the family ; in case of milk products, per adult unit
    estimated by assuming two persons below 12 years as equivalent to one adult unit.
    This has been done because children do not consume milk products to the same extent
    as they consume milk.

Source : Survey in Mymensingh town, 1984.

TABLE 5. PROPORTION OF FAMILIES CONSUMING MILK AND MILK PRODUCTS ACCORDING TO INCOME GROUP

Income group, Tk.	Products						
	Milk	Sweets	Yoghurt	Butter	Ghee only	Butter oil only	Both ghee & butter oi
	— — Percent families in each income group consuming—						
Upto 1000	83	31	23	—	14	14	—
1001-1500	97	53	38	3	23	12	9
1501-2000	91	78	45	—	26	17	17
2001-2500	97	88	53	22	16	34	13
2501-3000	100	76	52	14	38	28	10
3001-3500	100	93	36	14	29	21	21
3501-4000	100	91	36	55	36	18	27
4001+	100	92	69	38	43	23	15
All	94	69	42	13	26	21	11

Source : Survey in Mymensingh town, 1984

Mymensingh is one of the cities where the Hindu community constitute a significant portion of the population and it is well known that they have special preference for milk and milk products As mentioned earlier, a proportionate representative sample was not taken, but 35 Hindu families were included in the sample. An analysis of the consumption pattern of Hindu and Muslim families revealed that per caput consumption of milk, butter oil and butter were higher for the Muslims while per caput consumption of sweets, ghee and yoghurt were higher for the Hindus (Table 6). But at lower income levels the Hindus consumed more milk than the Muslims while at higher income levels the Muslims consumed more sweets and yoghurt than tre Hindus.

TABL 6. MONTHLY CONSUMPTION OF MILK AND MILK PRODUCTS ACCORDING TO INCOME AND RELIGION

Item/ religion	Income Groups								
	Upto 1000	1001–1500	1501–2000	2001–2500	2501–3000	3001–3500	3501–4000	4001+	All

——Monthly consumption per caput (kg)——

Milk

Hindu	1.17	2.71	4.43	2.63	5.34	5.76	—	6.07	3.37
Muslim	1.18	2.37	3.50	4.89	4.72	5.21	7.36	6.33	4.04

Sweets

Hindu	0.07	0.17	0.81	0.27	0.38	0.71	—	0.43	0.34
Muslim	0.03	0.07	0.13	0.34	0.21	0.16	0.55	0.66	0.23

Yoghurt

Hindu	0.08	0.14	0.19	0.17	0.22	—	—	0.24	0.15
Muslim	0.04	0.08	0.08	0.12	0.13	0.15	0.06	0.28	0.11

Butter

Hindu	—	—	—	—	—	—	—	—	—
Muslim	—	0.001	—	0.013	0.011	0.011	0.044	0.034	0.012

Ghee

Hindu	0.009	0.018	0.049	0.021	0.088	0.019	—	0.062	0.036
Muslim	—	0.012	—	0.023	0.023	0.049	0.055	0.099	0.027

Butter Oil

Hindu	0.001	0.016	0.021	0.020	—	0.080	—	—	0.015
Muslim	0.016	0.011	0.055	0.096	0.105	0.097	0.081	0.166	0.066

— None/not applicable.

Source : Survey in Mymensingh town, 1984.

There are three other aspects with respect to milk consumption pattern. First, 20.9 percent of the families repoted rearing milk cows but 11.5 percent had cows ir-milk at the time of the survey (Table 7). At lower income levels, families having cow in-milk

TABLE 7. PER CAPUT CONSUMPTION OF MILK ACCORDING TO INCOME
GROUP AND SOURCE OF MILK

Income group, Tk.	% families owning milch cows	% families having cow in-milk	Per caput monthly production, kg	Per caput total monthly consumption (kg)	
				Having cow in-milk	Not having cow in-milk
Upto 1000	28.6	11.4	3.24	2.22	1.04
1001-1500	26.5	11.8	9.57	3.49	2.29
1501-2000	21.7	17.4	7.56	6.40	3.23
2001-2500	12.5	—	—	—	4.34
2501-3300	20.7	17.2	6.24	4.24	4.96
3001-3500	14.3	14.3	7.01	4.04	5.58
3501-4000	9.1	—	—	—	7.36
4001 & above	23.1	23.1	6.58	5.79	6.52
All	20.9	11.5	6.67	4.43	3.82

Source :   Survey in Mymensingh town, 1984.

sold a portion of their milk output yet they consumed more milk than those not having
cow in-milk. At higher income levels, families not having cow in-milk consumed more
milk than those having cow in-milk but consumption level of the latter group would be
higher if they did not sell a part of their output. Secondly, powder milk and baby
food constituted 37.8 percent of the total milk consumed by the sample families
(Table 8). Higher income groups generally consumed more powder milk than lower
income groups but share of powder milk in total milk consumption did not consis-
tantly increase throughout the income range. The share of powdr milk was higher for

those income groups which included a higher proportion of Hindu families and/or a lower proportion of families having cow in-milk. Eighty percent of fluid milk was purchased and the extent of purchase depended mainly on whether there was cow in-milk at home.

Thirdly, 52 percent of the members of the sample families consumed some amount of milk and the proportion of members consuming milk increased with income level. At higher income levels, all the children and a reasonably high proportion of

TABLE 8. MONTHLY PER CAPUT CONSUMPTION OF FULID AND POWDER MILK ACCORDING TO INCOME GROUP

Income group, Tk.	Fluid milk (kg)	Powder[a] milk (kg)	Total milk (kg)	% of total milk as powder	% of fluid milk purchased	% of all milk purchased
Upto 1000	1.04	0.11	1.15	10.6	79.1	81.0
1001-1500	1.85	0.57	2.42	3).8	81.0	85.6
1501-2000	2.85	0.83	3.68	29.2	64.7	76.2
2001-2500	3.16	1.18	4.34	37.4	100.0	100.0
2501-3000	3.04	1.76	4.80	58.3	70.0	81.2
3001-3500	4.03	1.29	5.32	32.0	83.0	87.2
3501-4000	4.22	3.15	7.37	74.6	100.0	100.0
4001 & above	5.36	0.92	6.28	17.1	64.4	70.9
All	2.83	1.07	3.90	37.8	79-9	85.4

a. Figures in liquid equivalent.

Source : Survey in Mymensingh Town, 1984.

consumed milk while at lower income levels fewer children and adults consumed milk (Table 9). Share of powder milk in total milk consumption, and proportion of babies and children at various income levels consuming milk probably indicate that breast feeding is less practiced at higher income levels. However, it is quite possible that some breast fed babies at higher income levels are given cow milk as supplement while at lower income levels breast fed babies may not get such supplement, so reported as not consuming cow milk.

TABLE 9. PROPORTION OF FAMILY MEMBERS CONSUMING MILK ACCORDING TO INCOME AND AGE OF MEMBERS

Income group, Tk.	Age Group (years)					Per caput consumption (kg)	Consumption per consuming member (kg)
	Under 1	1-4.9	5-9.9	10+	Total		
—% members in each group consuming milk—							
Upto 1000	71	37	30	26	29	1.15	3.92
1001-1500	100	96	71	37	51	2.41	4.65
1501-2000	50	85	63	49	55	3.69	6.80
2001-2500	86	92	68	38	40	4.34	9.02
2501-3001	100	100	83	50	58	4.80	8.31
3001-3500	100	100	89	54	62	5.73	9.33
3501-4000	100	100	100	54	62	6.84	10.85
4001+	na	100	87	68	73	6.29	8.59
All	83	83	68	41	52	3.91	7.50

na Not applicable.

Source : Survey in Mymensingh town, 1984.

Income Elasticities for Milk and Milk Products

Various functional forms may be employed to measure income elasticities. Using U.S. consumer panel data, Purcell and Raunikar (1967) estimated quantity-income elasticities and found logarithmic form to be more appropriate for commodities exhibilting nearly constant elasticities at different income levels. Using expenditure survey data from rural Bangladesh, Islam (1966) estimated expenditure-income and quantity-income elasticities and found that for most commodities logarithmic form gave better fit when all households including non-consumers were taken while simple linear form gave better fit when only consuming households were taken. Chowdhury (1982) estimated expenditure-income elasticities for various commodities using expenditure survey data employing log-linear function but found low R^2 for milk and milk products.

It has been sown above that in addition to income factors such as religion, age composition of family members, ability to produce milk at home also influenced the pattern of consumption of milk and milk products in the sample families. Therefore, instead of a logarithmic function, quantity-income relationships for milk and milk products have been estimated by least square technique from a linear function of the form :

$$Y = A + BX + U$$

where,   Y is per caput consumption,

       X is per caput income,

       U is a random variable incorporating all the variables other than income. It may be mentioned that most of these variables cannot be easily quantified in the form suitable for inclusion in a linear functon.

Assuming U to have a normal distribution with zero mean and constant variance, the above equation has been estimated as $y = a + bx$. Then income elasticity has been derived in the usual manner by the procedure :

$$e = \frac{dy}{dx} \cdot \frac{\bar{x}}{y} = b \frac{\bar{x}}{y}$$

where,   e is income elasticity for a commodity,

       b is the estimated regression coefficient,

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$\bar{y}$ is the average quantity consumed by the sample families,

$\bar{x}$ is the average income of the sample consumers.

When elasticity is measured for a particular income group, $\bar{y}$ and $\bar{x}$ refer to the averages for that group.

Estimated regressions for milk and milk products are shown in Table 10. Only consuming families were considered for estimation. The high values of R^2 for butter and butter oil indicate that income was the most important factor influencing the level of consumption of these commodities. The lower values of R^2 for the other commodities also appear to be reasonable because non-income factors were earlier found to influence their level of consumption.

TABLE 10. ESTIMATED REGRESSIONS SHOWING QUANTITY-INCOME RELATIONSHIPS FOR MILK AND MILK PRODUCTS

Commodity	No. of consuming families	Estimated equations	R^2
Milk	181	$y = 2.4371 + .004873\ X$ $(.000526)$	.57
Sweets	132	$y = .0754 + .000583\ X$ $(.000062)$	.40
Yoghurt	81	$y = -.1915 + .000191\ X$ $(.000067)$	.09
Butter oil	62	$y = -.1506 + .000611\ X$ $(.000042)$	.78
Ghee	71	$y = -.0253 + .000097\ X$ $(.000020)$	.26
Butter	25	$y = -.108 + .000360\ X$ $(.000024)$	.90

Figures in the parentheses are standard errors. All the coefficients are significant at less than 5 percent level.

Estimated income elasticities for different products at various income levels are shown in Table 11. Butter and butter oil appear to be vary highly income elastic while sweets and ghee are also highly income elastic. Elasticity at various income levels appear to be quite variable for all the commodities but the variability has no definite pattern most probably because of influence of non-income factors on consumption levels.

TABLE 11. INCOME ELASTICITIES FOR MILK AND MILK PRODUCTS BY LVEL OF INCOME

Income group (Tk.)	Products					
	Milk	Sweets	Butter	Ghee	Butter oil	Yoghurt
Upto 1000	.5144	.5668	n.a	.5976	1.5824	.1630
1001-1500	.3996	.8946	1.0224	.6519	2.3747	.2040
1501-2000	.3454	.5933	n.a	1.2938	1.1114	.3109
2001-2500	.4223	.7287	1.7211	.5242	1.6769	.3283
2501-3000	.3070	.8458	1.2240	.6046	1.2180	.3149
3001-3500	.4300	1.0315	1.8342	.6581	1.6418	.3163
3501-4000	.4212	.6658	1.4628	.7762	2.4394	.6935
4001 & above	.6060	.8245	2.4682	.6116	1.6908	.4456
All	.4328	.7941	1.7059	.6606	1.7676	.3289

n.a = Not applicable.

IV. CONCLUSIONS

Milk and milk products are preferred food items for the people of Bangladesh. But in recent years declining domestic production and increasing import have contributed to widen the rural-urban gap in the consumption of these commodities. Production-consumption balance of the subsistence economy has been broken. Few farm households can now afford to rear milk cows, many of those having cows use them for draft thus milk production is reduced. Moreovr, the meagre milk output is sold for cash to buy other necessities. On the otherhand, urban income has been growing faster than rural income, so demand for milk and milk products have been rapidly increasing. This demand is being met by increased flow of milk from the rural areas and also by increasing import. A survey of 500 households in three villages in Mymensingh in 1981 revealed that per

caput daily consumption of milk averaged 29 gm while a survey of 191 households in Mymensingh town in 1984 revealed that per caput daily consumption of milk averaged 130 gm. The urban households also consumed a large amount of purchased milk products such as sweets, yoghurt, ghee, butter oil and buttr.

In addition to income, religion, age composition of family members ability to produce milk at home influenced the pattern of urban consumption of milk and milk products. Estimated income elasticities show that milk products are more income elastic than fluid milk.

The present food production policy gives inadequate emphasis on milk production in relation to its demand, so import is rapidly increasing. The growing process of urbanization and economic upliftment demands that more emphasis should be given on the production of foods of animal origin including milk.

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