

**REGIONAL DEMAND PROJECTION FOR DIFFERENT
COMMODITIES IN INDIA : 1970-71 AND
1975-76**

I. Introduction :

1.1 In connection with the works relating to planning for national development, studies on demand projection of consumer goods have been continued for several years at the Indian Statistical Institute (ISI).^{1,2} The Perspective Planning Division (PPD) of the Indian Planning Commission had also a significant role in these studies, particularly for final empirical projection with the use of basic data on coefficients of elasticity that are estimated mostly at the ISI from raw data of the National Sample Survey (NSS) for a number of commodities in considerable details for all-India. A good review of these studies, particularly those done at the ISI, Calcutta, has been prepared by Nikhilesh Bhattacharjee of the Institute.^{3,4} He has summarised the methods for the calculation of elasticities. The differences in certain elasticity estimates in rural and urban areas of India are also shown in a few research studies. But there have not been many studies in bringing out the regional differences in the consumption pattern and behaviour. The Planning and Regional Survey Unit of the Indian Statistical Institute, New Delhi, has however, made a preliminary exercise in this connection.⁵ In the present paper, regional expenditure elasticities are examined for 1960-61 and an attempt has been made for regional demand projections in 1970-71 and 1975-76 for certain broad commodities.

1.2 The following definition of regions will be used in this paper.

Eastern Region (ER) includes Assam, West Bengal, Bihar, Orissa, NEFA, Nagaland, Manipur, Tripura and Andamans.

Northern Region (NR) includes Jammu & Kashmir, Punjab, Uttar Pradesh, Himachal Pradesh and Delhi.

Western and Central Region (WCR) includes Rajasthan, Gujarat, Maharashtra, Madhya Pradesh, Dadra, and Nagar Haveli.

Southern Region (SR) includes Madras, Kerala, Andhra, Mysore, Pondichery, Goa, and Laccadives.

II. Regional Expenditure Elasticities :

2.1 It is well-known that consumer demand for a commodity is not only a function of consumers income, but also a function of the

relative prices of commodities and of individual consumer tastes, needs and environment. But, like other studies of the Institute, we have ignored the effects of changes in relative prices and in individual consumer tastes, etc. Again the family budget data of the NSS furnish the information of total consumption expenditure, not the income.^{6,7} Naturally, while making use of the NSS data, we had to resort to total expenditure instead of income for calculation of the elasticity of demand for a commodity. Thus the present demand projections take into account the distribution of total expenditure and the changes in population for a region.

2.2 In the present study, constant elasticity curves are fitted by regions with the 16th round data of the NSS, referring to the period 1960-61.⁸ Analytically speaking, if y_{ri} is the per capita value of consumption for the i th item in the r th region and if y_r is the per capita total consumption expenditure in the r th region, then the coefficients of elasticity are given by the constant B_{ri} :

$$B_{ri} = \frac{y_r}{y_{ri}} \left(\frac{d y_{ri}}{d y_r} \right), \text{ which, on integration, becomes}$$

$$\begin{aligned} \log y_{ri} &= A_{ri} + B_{ri} \log y_r, & \left. \right\} & (1) \\ \text{i.e., } y_{ri} &= \alpha_{ri} (y_r)^{B_{ri}}, & A_{ri} &= \log \alpha_{ri} \end{aligned}$$

The parameters of equation (1) are determined by usual *weighted least square regressions* as applied to the data of twelve different class intervals of per capita total consumption expenditure.⁹ Table (1) records the values of the parameters of equation (1) and also additional information of proportionate expenditure by items relative to total consumption expenditure. Common logarithms are used to estimate the constant parameters A_{ri} .

2.3 It should be noted here that, for the balance of the aggregate of itemwise expenditures with the corresponding total, all the coefficients of elasticity cannot be assumed to be constant. Even though we have given the estimates of constant coefficients of elasticity in table (1) for the non-food total $B_{r,10}$, the effective formula for the coefficient has been $\hat{\beta}_{r,10}$ for the purpose of demand projection where it is given by

$$\hat{\beta}_{r,10} = \frac{y_r}{y_{r,10}} \left(\frac{d y_{r,10}}{d y_r} \right) = B_{r,7} + \frac{y_r (1 - B_{r,7})}{y_r - \alpha_{r,7} (y_r)^{B_{r,7}}}$$

when the food total is designated by item number 7. Thus, here, the coefficient of elasticity for non-food total is a variable and varies with the values of total consumption expenditure y_r . We have, however, presented in table 1 the estimates of $B_{r,10}$ for the purpose

of having a comparable picture with other items of the table. The assumption of constancy of $\beta_{7,7}$ instead of $\beta_{7,10}$ seems to be more realistic as compared to the other alternative, since the non-food total is less essential item than the food total and as such the variation in the coefficient of elasticity relative to expenditure levels is likely to be more possible for non-food total. Likewise the non-food total, pulses have been a residual in foodgrains over cereals.

III. *Distribution of Total Consumption Expenditure— Present and Postulated :*

3.1 As per the National Sample Survey (NSS) estimates of 16th round (July 1960 to June 1961), an average Indian spends about Rs. 274.44 on all items of consumption. The per capita total consumption expenditure is highest, Rs. 288.60 in the Eastern Region, while that is lowest, Rs. 253.08 in the Southern Region. The Northern Region is very similar to Eastern Region, Rs. 286.20 as against Rs. 288.60 while the position of Western and Central Region Rs. 270.60 is in the middle of Northern and Southern Regions. In respect of distribution among people of different expenditure classes, the position of Western and Central Region is somewhat better than that of Southern Region, though the regional differences in distribution can not be considered as significant. The values of Lorenz index of concentration are 0.326, 0.332, 0.337 and 0.348 for the regions, WCR, SR, NR and ER respectively. The national value is similar to that of Northern Region. Even we are familiar with the fact that index of concentration showed no significant change in values in India over last ten years, as brought out from the studies of some other workers of the Indian Statistical Institute, say, of N. S. Iyengar.² For this reason, we shall assume that there would not be any distributional change for the purpose of regional demand projection. Even though a relatively better distribution may be desirable in a developing economy, we can not expect this to happen so long as we have no deliberate means in our hand to effect the change in distribution ; at least this could not be made possible in first two Five-Year Plans. We shall be content here with a change in the absolute level, possibly without any *significant* change in the relative distribution among people of a region.

3.2 For the purpose of projection, regional share of total consumption expenditure has to be linked now with the over-all perspective of national development. Using the time series data on private consumption and national income as presented in the Mahalanobis

report,⁶ we have obtained the following elasticity equation (2) connecting consumption and income for the nation.

$$y = 0.3120 z^{0.6155} \quad (2)$$

where y is per capita total consumption expenditure in Rs. and z, per capita income in Rs. The values of y and z are in 1960-61 prices and in calculating the per capita estimates we use that population

TABLE I

Regional Coefficients of Elasticity and Percentage of Total Consumption Expenditure per Capita for different Items of Consumption in 1960-61

Items of Consumption		Region				India
		Eastern	Northern	Western & Central	Southern	
		(1)	(2)	(3)	(4)	
1. Cereals	P	40.20	30.84	32.33	37.38	35.33
	B	-4092	-4383	-3873	-4974	-4601
	A	-8601	-8904	-10198	-8600	-9656
2. Food grains	P	44.28	36.14	36.63	40.73	39.52
	B	-5202	-3802	-4291	-5187	-4796
	A	-8277	-10996	-9710	-7875	-8890
3. Milk & Milk products	P	4.45	12.33	10.31	4.36	7.86
	B	2-1509	1-7886	1-5710	2-0867	1-8173
	A	-4-3321	-2-0116	-3-4096	-4-0890	-3-1923
*4. Meat, egg & fish	P	4.62	1.26	1.00	3.00	2.84
	B	1-7415	1-3992	1-0076	1-0337	1-2414
	A	-3-2727	-2-9316	-1-7887	-1-3783	-2-1749
*5. Edible oils	P	2.09	2.47	3.01	2.47	3.73
	B	1-1857	0-9417	1-1105	0-9690	1-0761
	A	-1-0973	-1-4879	-1-7995	-1-5389	-1-7543
*6. Sugar and Gur	P	1.87	4.03	3.68	1.80	2.84
	B	1-8856	1-1834	1-3789	1-3943	1-4241
	A	-3-0111	-1-8648	-2-3951	-2-7399	-2-6298
7. All food items	P	66.89	64.36	65.63	66.65	66.16
	B	-7659	-7386	-7831	-7925	-7712
	A	-4194	-4816	-3691	-3409	-3097
8. Clothings	P ⁰	6.57	8.93	8.40	7.46	7.00
	B	1-4626	1-0847	3-0065	3-3715	1-0682
	A	-3-8565	-3-4337	-3-5853	-4-3085	-3-3037
9. Fuel and light	P	5.46	5.62	6.74	5.83	5.00
	B	-6040	-0192	-6440	-0768	-0367
	A	-2848	-2950	-2876	-4348	-3223
10. All non-food item.	P	38.81	35.64	33.85	38.65	33.84
	B	1-5001	1-3592	1-4890	1-4381	1-4637
	A	-1-7920	-1-8900	-1-7364	-1-5086	-1-7384

P = per cent of per capita total consumption expenditure.

B = coefficient of elasticity as referred to in equation (1).

A = constant parameter of equation (1).

⁰Data on P and B relate to year 1957-58; assuming no change in values of P and B in 1960-61, the estimate of A have been adjusted for 1960-61.

which is applicable at the end point of the year. The strategy of national development as outlined in the Fourth Plan memorandum¹ is that the national income will rise from Rs. 141.4 abja (billion) in 1960-61 to Rs. 250 abja in 1970-71 and Rs. 340 abja in 1975-76. The estimates of population as presented by the expert committee on population under the chairmanship of Ashoka Mitra, Planning Commission are as follows:

TABLE 2
Estimated Population in Million Numbers

Region	1961	1971	1976
Eastern Region	118.5	146.2	166.0
Northern Region	101.0	130.1	146.8
Western & Central Region	112.8	146.5	165.9
Southern Region	111.2	138.6	151.3
India	489.1	559.4	630.0

Using equation (2), we can now derive the increase in national total consumption expenditure between 1970-71 and 1960-61 and also between 1975-76 and 1960-61. When these incremental values are added to the official² estimates, national private consumption rises from Rs. 118.4 abja in 1960-61 to Rs. 186.4 abja in 1970-71 and to Rs. 237.1 abja in 1975-76. When the incremental values are added to the NSS estimates, it rises from Rs. 120.5 abja in 1960-61 to Rs. 188.5 abja in 1970-71 and to Rs. 239.2 abja in 1975-76. We, however, use the NSS estimates for our purpose. Thus we have the national per capita consumption expenditure for 1970-71 and 1975-76.

3.3 In conformity to the general aim of reducing the regional disparities in the level of living, here we view that the ratio of regional per capita consumption expenditure to national per capita consumption expenditure is unity for all regions in 1980-81 and such ratios for any region will be changing in a linear fashion together with certain population constraints between 1960-61 and 1980-81. As a result of this, we can now determine the per capita consumption expenditure by regions for, 1970-71 and 1975-76 according to following logic.

$$\text{Let } L_{tr} = \frac{P_{tr}}{P_t} \text{ where}$$

P_{tr} = population of r th region in t th year,

P_t = population of India in t th year.

Also let $M_{tr} = \frac{y_{tr}}{y_t}$, where

y_{tr} = per capita consumption expenditure for r th region in t th year,

y_t = per capita consumption expenditure for India in t th year.

We have obviously, $\sum_r L_{tr} = 1$ and $\sum_r M_{tr} L_{tr} = 1$.

By assumption, we have $M_{Tr} = 1$ for any r , where T is a terminal year, here $T=20$ with terminal year as 1980-81 starting with the base year, 1960-61. Now for any intermediate year t between O and T , we propose to put

$$M_{tr} = \frac{N_{tr}}{\sum_r N_{tr} L_{tr}}, \text{ where}$$

$N_{tr} = M_{Or} + \left(\frac{t}{T}\right) (M_{Tr} - M_{Or})$, so that we have the identity

$\sum_r M_{tr} L_{tr} = 1$, satisfied. For $t=10$ and 15 , we get the estimates of M_{tr} for 1970-71 and 1975-76. Finally we can deduce the following table (8) on postulated pattern of per capita consumption expenditure by region.

TABLE 8
Per capita Total Consumption Expenditure in Rs.

Region	1960-61	1970-71	1975-76
Eastern Region	288.00	343.48	384.00
Northern Region	286.20	344.04	383.76
Western & Central Region	270.00	334.44	378.36
Southern Region	253.08	323.76	372.24
India	274.44	336.08	370.80

IV. Regional Demand Projection for 1970-71 and 1975-76:

4.1 Having known the values of per capita total consumption expenditure y_{tr} by regions for $t, 0, 10$ and 15 i.e. for 1960-61, 1970-71 and 1975-76, we have determined the incremental value of itemwise consumption between 1970-71 and 1960-61 and also between 1975-76 and 1960-61,

$$\Delta_1 (y_{it}) = \alpha_{it} (y_{tr}^{Brt} - y_{tr}^{Brt})$$

and then the per capita expenditure for i th item of consumption in r th region for t th year.

$$y_{it} = y_{or} + \Delta_1 (y_{it}).$$

The values of the parameters, $A_{it} = \log_{10} a_{it}$ and B_{it} , used are available in table (1). Thus we can determine the estimates of per capita expenditure by items of consumption for different regions and also for India as aggregated from regional estimates. These data together with the population estimates of table 2 are sufficient to prepare table 4 which shows the total regional demands by items of consumption for 1970-71 and 1975-76 as indices relative to the base 1960-61. This table has finally been used to have the projections of final demand for 1970-71 and 1975-76, after having known the actual demands of 1960-61 by regions.

TABLE 4

Index of Total Regional Demand by Items of Consumption for 1970-71 and 1975-76

Base 1960-61 = 100

Items	Region				India
	Eastern	Northern	Western & Central	Southern	
1970-71					
1. Cereals	141.70	189.33	141.80	136.68	140.82
2. foodgrains	142.36	187.71	142.78	140.43	140.89
3. milk & milk products	174.55	171.16	176.46	185.00	173.36
4. meat, egg & fish	164.70	162.20	160.64	158.40	161.98
5. edible oils	157.48	151.92	164.28	155.01	157.79
6. sugar and gur	166.92	157.40	170.57	168.09	165.00
7. all food items	148.72	147.28	154.17	150.33	150.12
8. clothing	168.87	170.73	185.55	168.14	177.17
9. fuel and light	144.42	144.80	150.80	146.81	147.22
10. all non-food items	165.15	166.02	173.28	170.96	168.77
11. total consumption expdt.	154.20	158.93	160.52	157.15	156.43
12. population	128.81	128.05	129.88	122.84	127.40
1975-76					
1. cereals	170.12	165.24	168.81	166.28	167.61
2. foodgrains	171.53	162.26	170.02	167.73	166.28
3. milk & milk products	229.21	280.40	240.15	264.78	229.31
4. meat, egg and fish	218.73	207.10	209.00	204.00	211.67
5. edible oils	208.14	191.02	211.96	199.83	202.68
6. sugar and gur	221.01	201.68	223.08	223.57	212.36
7. all food items	183.88	180.54	192.78	184.65	*185.94
8. clothing	216.61	280.68	261.12	272.12	245.16
9. fuel and light	175.07	174.69	184.81	179.30	179.62
10. all non-food items	217.11	217.59	281.86	227.41	223.80
11. total consumpt. expdt.	194.01	198.75	205.68	200.12	196.56
12. population	146.30	144.49	147.07	138.06	148.43

4.2 In order to estimate the final demand by regions for 1960-61, we made use of the proportionate expenditure of different items of consumption by regions as estimated from the NSS data over the quantity estimates of different items for the nation as are available in different papers of the Perspective Planning Division.^{10,11,12} For cereals and foodgrains the value proportions have been corrected for quantity proportions, as there has been substantial regional differences in the consumption habits of different cereals or foodgrains for which prices are different.

4.3 The final demands of 1970-71 and 1975-76 by regions are estimated by multiplying the 1960-61 estimates with the indices of growth as obtained in table 4. The elasticity coefficients of the group of meat, egg, fish; the group of sugar, gur and the group of vanaspati, vegetable oils are not separately available and the same group-indices of table 4 have been used for the projection of these intra-group substitutable item. The intermediate demands etc., are all taken from PPD papers for the nation and corresponding regional estimates are obtained by making use of the pattern of regional input of intermediate goods or regional production.^{13,14} Thus the national estimates of seed, food, stock, and wastage have been split up into regional estimates by production pattern of foodgrains in the base year. National figure for intermediate uses of oil has been split up into regional figures by the regional proportions of intermediate inputs of oilseeds while the national export of oil is split up by the regional proportion of production of oilseeds. The national estimates of requirements of sugarcane other than the final demand are split up into regional figures by the regional proportion of production. Regional breakdowns of intermediate uses and export for cotton have been obtained by making use of regional proportions of cotton inputs for production. Details of projection for commodities: foodgrains, milk, meat, eggs, fish, edible oils, sugarcane and cotton are presented in table 5.

4.4 The table 5 gives the regional demand pattern in 1960-61, 1970-71 and 1975-76. These demand pattern should have to be kept in view for any production planning and resultant trade pattern. In the present paper, however, we do not have the scope to examine the production pattern for 1970-71 and 1975-76. We can, however, compare the domestic production of 1960-61 with corresponding consumption.¹⁵ The domestic production of foodgrains was about 79.7 million tonnes as against 81.6 million tonnes of consumption. The net import was thus of the order of 2 million tones. The Northern and Western and Central Regions had surplus production—the production of 21.4

million tonnes as against the consumption of 20.2 million tonnes in the Northern Region and the production of 23.2 million tonnes as

TABLE 5
Region Demand of Different Commodities in India for 1960-61, 1970-71 and 1975-76

Items	Eastern Region			Northern Region		
	60-61	70-71	75-76	60-61	70-71	75-76
(0)	(1)	(2)	(3)	(4)	(5)	(6)
<i>Foodgrains (million tonnes)</i>						
1. human conspt. : cereals	10.64	28.58	28.81	14.84	19.68	23.70
2. human conspt. : pulses	2.48	8.57	4.40	8.19	4.16	4.74
3. human conspt. : food grains	10.07	27.15	32.71	17.58	24.14	28.44
4. feed, seed, stock, wastage	3.40	5.28	8.80	2.68	5.90	0.40
5. total foodgrains	21.47	52.48	41.10	20.21	30.04	37.84
<i>Milk, meat, egg, fish</i>						
6. milk (million tonnes)	8.45	6.02	8.25	8.47	14.50	19.32
7. meat (thousand tonnes)	247	407	540	60	97	124
8. egg. (million number)	909	1408	1988	220	357	458
9. fish (thousand tonnes)	483	712	945	104	160	215
<i>Edible oils (thousand tonnes)</i>						
10. final demand : vanaspati	104	104	211	76	115	145
11. final demand : vegetable oils	321	505	652	286	359	451
12. intermediate uses	29	50	88	76	155	218
13. exports	2	4	7	14	23	46
14. total oil requirement	466	783	958	402	652	860
<i>Sugarcane (million tonnes)</i>						
15. final demand : sugar	.45	.75	.99	.86	1.85	1.74
16. final demand : gur	.74	1.23	1.04	1.40	2.21	2.82
17. final demand sugar & gur	1.19	1.98	2.68	2.26	3.56	4.56
18. sugarcane equivalent	12	30	26	28	36	46
19. other requirement of cane	2	1	3	18	11	15
20. total requirement of cane	14	21	29	36	47	61
<i>Cotton (million bales)</i>						
21. demand of cloth (million meters)	1896	2288	3024	1684	2375	3334
22. cotton equivit. million bales	1.02	1.07	2.21	1.28	2.10	2.88
23. intermediate uses, export (million bales)	.04	.08	.13	.16	.28	.60
24. total demand of cotton (million bales)	1.06	1.75	2.38	1.40	2.38	3.28

against the consumption of 21.5 million tonnes in the Western & Central Region. The consumption of other two regions falls short of production—the consumption of 21.5 million tonnes as against the production of 19.1 million tonnes in the Eastern Region and the consumption of 18.4 million tonnes as against the production of 16.0 million tonnes in the Southern Region. The production of oilseeds was respectively 2658 thousand tonnes, 2112 thousand tonnes, 1508 thousand tonnes and 242 thousand tonnes in Western and Central Region, Southern Region, Northern Region and Eastern Region.

Item number	Western and Central Region			Southern Region			India		
	60-61	70-71	75-76	60-61	70-71	75-76	60-61	70-71	75-76
(0)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<i>Foodgrains</i>									
1.	15.09	22.01	26.01	14.63	20.44	24.38	61.60	86.61	103.25
2.	2.01	3.95	4.88	1.77	2.50	3.18	10.00	14.27	17.20
3.	18.60	26.56	31.70	16.40	23.03	27.51	71.60	100.88	120.45
4.	2.01	6.41	10.18	2.01	4.41	7.03	10.00	22.00	35.00
5.	21.51	32.07	41.97	18.41	27.44	34.54	81.00	122.88	135.45
<i>Milk, meat, egg, fish</i>									
6.	7.58	13.38	18.20	2.00	5.38	7.68	22.40	30.28	53.65
7.	84	135	176	165	201	337	556	900	1177
8.	309	496	646	610	990	1245	2048	3317	4335
9.	747	236	307	200	459	592	973	1376	2059
<i>Edible oils</i>									
10.	97	159	206	73	114	145	350	552	707
11.	301	494	638	227	354	451	1085	1712	2192
12.	222	454	641	70	162	328	406	850	1170
13.	26	40	52	20	33	65	62	100	200
14.	646	1147	1567	309	663	880	1008	3194	4269
<i>Sugarcane</i>									
15.	.82	1.40	1.84	.87	.82	.88	2.50	4.12	5.40
16.	1.35	2.30	3.04	.61	1.08	1.88	4.10	6.77	8.88
17.	2.17	3.70	4.88	.98	1.65	2.21	6.60	10.80	14.28
18.	21	37	40	10	10	22	66	109	143
19.	3	3	4	4	8	4	22	18	26
20.	24	40	53	14	10	26	88	127	169
<i>Cotton</i>									
21.	1720	3161	4461	1867	2573	3720	6167	10928	15119
22.	1.25	2.38	3.28	1.00	1.88	2.72	4.50	7.08	11.04
23.	.54	.98	1.42	.26	.46	.68	1.00	1.80	2.60
24.	1.70	3.81	4.70	1.20	2.84	3.88	5.50	9.78	13.64

The consumption of oil is more than the production of oilseeds in the Eastern Region and naturally considerable amount of oilseeds or oil were imported into this region in 1960-61. The production of sugarcane was reported to be 104 million tonnes out of which 88 million tonnes were reported to be available for consumption. The Northern Region is the major producing area of sugarcane—about 61 per cent of total national production came from this region in 1960-61. The Southern Region produces about 17 per cent, other two regions produce of the order of 10 to 12 per cent in each. Naturally almost every region imports sugar from the Northern Region. The import of cotton for the nation was of the order of 1 million bales while the production was 5.4 million bales. About two thirds of national production of cotton were from the Western and Central Region and also about 55 per cent of national textile production came from this region. The southern region produced about a quarter of cotton textile goods of the nation, but the production of cotton as such was less here, about 17 per cent. The Northern Region produced about 15 or 16 per cent of both cotton and cotton textile goods of the national totals. The Eastern Region was almost entirely dependent on imported cotton textile goods from other regions. The Northern Region had also an excess consumption over the production.

V. Summary and Conclusion :

5.1 An attempt has been made here to obtain the regional pattern of consumption in 1960-61 and the demand projection for 1970-71 and 1975-76 for certain commodities by four broad regions of India. These estimates are presented in table 5. The demand projection takes into account the distribution of total consumption expenditure and the changes in population only and ignores the effects of changes in relative prices and in individual consumers tastes, needs, and environment. The elasticity of demand of a commodity with reference to total expenditure is treated as constant and computed from the data of National Sample Survey, conducted in 1960-61. The projection by regions through elasticity equations are for final demand and the difference between total and final demands is accepted as what has been estimated by the Perspective Planning Division for the nation and the regional breakdowns of such estimates are obtained by the regional pattern of intermediate consumption and of production.

5.2 Changes in the population are accepted as given by the Planning Commission. The temporal changes in per capita total expenditure as obtained through equation (2), are in conformity to the aims and objective of the Planning Commission at the national level.

With the aim of reducing the regional disparities in per capita level of total consumption expenditure, the regional estimates have been obtained showing the temporal changes in the total consumption pattern, which have finally been used to have commodity-wise projection. One should possibly be interested to know now what should be the capital investment and income pattern by regions to have the postulated consumption pattern effective in a region. We do not attempt to answer this question here, as we need more regional data on capital-output ratios and on regional propensity to consume in order to make an attempt for such an answer. For a proper regional production and trade planning this question cannot, however, be ignored. For a national level production planning, the regional demand estimates do help, at least tentatively, in visualising the regional trade pattern since the per capita level of total consumption do not vary very widely for such broad regions, whereas there are distinct regional differences in the consumption habit of particular commodities.

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