



Consumption Pattern in Karnataka with Reference to High Value Agriculture Commodities

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ABSTRACT

The present study analyzed the consumption pattern of the households in rural and urban Karnataka based on the secondary data obtained from various rounds of NSSO. There was a significant difference in the consumption expenditure between rural and urban areas. The MPCE on all food items and non-food items showed an increasing trend in both rural and urban areas. The percentage change in expenditure on total food item was higher in urban areas in comparison with rural areas, whereas in total HVAC, the percentage change was higher in rural areas in comparison with urban counterparts. . The share of HVAC found to be increasing over the years in rural Karnataka, while the reverse trend observed in urban area. In rural areas, the high percentage change in the consumption of HVAC's were contributed by the increased consumption of egg, fish & meat, followed by fruits & nuts, vegetables, milk and milk products.

Key words: Consumption pattern, MPCE, Food and non-food items, HVAC, Rural –Urban areas.

I. INTRODUCTION

Economic development is normally accompanied by improvements in a country's food supply and the gradual elimination of dietary deficiencies, thus improving overall nutritional status of country's population (Dass, 2004). Food consumption is a dynamic process and is greatly influenced by size and composition of household, number of working people, prices of food items, educational level, geographical, cultural and climatic conditions in the region, etc. Per capita income and food consumption are the indicators of human development but food consumption is a better indicator of human welfare. India's faster economic growth over 1990's has raised per capita income (expenditure) and has significantly impacted its food consumption patterns by causing a change in the structure of food consumption patterns observed earlier during pre-reforms period (Kiran Mor and Sethia, 2015)

Now a days the relative importance of traditional food grain and starchy staple food are decreasing, while that of high value agricultural commodity is increasing. Several studies have shown dietary diversification of Indians towards the high-value food commodities such as milk, meat, fruits, fish, processed food products, etc. and away from the traditional cereals-dominated food basket (Gulati *et al.*, 2005; Birthal *et al.*, 2007; Sharma and Jain, 2011). Diversification of agriculture out of staples towards high value food commodities was also considered as an important pathway to boost agricultural growth. Rising per capita income, growing urbanization and unfolding globalization are causing a significant shift in the food basket towards high-value food commodities (Jabir Ali, 2006; Birthal and Joshi, 2006; Kearney, 2010). Lack of a standard definition of High Value Agriculture Commodities (HVAC) has made researchers to adopt their own definitions based on their research emphasis. Generally, high value agriculture commodity is having high economic

value per calorie or food having high protein content generally occupying the place of normal starchy food. For the present study, HVAC includes milk and milk products, egg, fish and meat, vegetables and fruits and nuts.

Food consumption policies not only ensuring food security for all, but also achieve the consumption of adequate quantities of safe and quality foods that together make up a healthy diet. Any policy recommendation to that effect will have implications for all components in the food chain. Therefore, it is useful to examine the trends in food consumption patterns at national, state and district level.

II. METHODOLOGY

The data were collected from various rounds of National Sample Survey Organization (NSSO) publications. The study used the household unit level consumption data for the round numbers 50th, 55th, 61th, 66th and 68th of the NSSO data pertaining to 1993-94, 1999-2000, 2004-05, 2009-10 and 2011-12 respectively. These rounds provide household data in terms of quantity and value of commodities by expenditure groups, rural-urban locations and by states.

III. RESULTS

The changes in monthly per capita consumption expenditure in rural and urban Karnataka are given in Table 1. The average monthly per capita consumption expenditure (MPCE) in 2011-12 stood at Rs.1561 in rural areas and Rs.3025 in urban areas. Among the food items, expenditure on cereal and cereal substitute was higher in rural areas while expenditure on beverages was higher in urban areas. In between 1993-94 to 2011-12, there has been an increase in total MPCE in both rural and urban areas. The change is more predominant in urban areas than rural. The percentage change in per capita total expenditure in rural and urban area was 478.15 and 613.44 per cent. The more variation in MPCE was observed in non-food expenditure in both rural and urban areas. In total food items, the percentage change in consumption of HVAC was higher in both rural (530.61%) and urban (486.25%) areas. Among the food items, egg, fish and meat registered the highest increase (844.44%) in expenditure, followed by beverages (825%), salt and spices (712.50%), fruits and nuts (644.44%) and vegetable (530.77%) in rural households. The expenditure on cereals and cereal substitutes were increased by 146.77 per cent. Among urban consumers, the highest increase in MPCE was observed in beverages (842.86%), followed by fruits and nuts (785.71%), salt and spices (744.44%), egg, fish and meat (685.71%). The cereal and cereal substitutes expenditure increased by only 170.00 per cent.

In rural areas, the percentage share of food in total MPCE has fallen from 61.85 per cent in 1993-1994 to 51.31 per cent in 2011-12 where as in urban areas the share decreased from 55.90 per cent to 40.07 per cent (Table 2). In contrast, the share of non-food expenditure has increased significantly both in rural and urban areas and the increase was much faster in urban Karnataka. The 68th Round of NSSO data for the year 2011-12 shows that cereals continue to remain the most important food source in the state, contributing 9.80 and 6.25 per cent of food expenditure in rural and urban areas. In rural areas, next to cereals, the share of beverages found to be higher with 9.48 per cent, followed by egg, fish and meat with 5.45 per cent, vegetables 5.25 per cent, milk and milk products 4.80 per cent, fruits & nuts 4.29 per cent. The share of sugar with 1.47 per cent found to be lowest among all food items. In urban areas, the share of beverages with 10.91 per cent found to be higher followed by cereals 6.25 per cent, milk and milk products with 4.36 per cent, fruits and nuts with 4.10 per cent. The lowest share in food expenditure was found in sugar with 0.79 per cent.

In rural areas, the share of cereal and cereal substitutes had declined from 22.96 per cent in 1993-94 to 9.80 per cent in 2011-12 whereas the share of HVAC had increased from 18.15 to 19.80 per cent. In urban areas, the share of cereal and cereal substitutes had decreased from 16.51 per cent in 1993-94 to 6.25 per cent 2011-12. Similarly, the share of HVAC had decreased from 18.87 per cent to 15.50 per cent. After cereals, the consumption expenditure on milk and milk products is rising over the years in the state. In contrast, the expenditure share of milk and milk products in total

consumption expenditure decreased from 6.67 to 4.80 per cent in 1993-94 to 2011-12 while in urban areas the share decreased at faster rate from 8.25 per cent to 4.36 per cent. The consumption expenditure on egg, fish and meat showed a significant increase in both rural and urban areas. In rural areas, the share of egg, fish and meat in total consumption expenditure increased from 3.33 per cent in 1993-94 to 5.45 per cent in 2011-12 while in urban areas, the share increased marginally from 3.30 to 3.64 per cent. In rural areas, the share of vegetables in total consumption expenditure increased from 4.81 per cent in 1993-94 to 5.25 per cent in 2011-12, whereas in urban areas the expenditure share decreased from 4.25 per cent to 3.37 per cent. In rural areas, the percentage share of fruits and nuts in total consumption expenditure increased from 3.33 per cent in 1993-94 to 4.29 per cent in 2011-12 while in urban areas, the share increased from 3.30 per cent to 4.10 per cent.

IV. DISCUSSION

The expenditure on all food and non-food items was witnessing an increasing trend over the years in both rural and urban areas. The expenditure on cereals found to be higher among food items in rural areas across all study periods. It indicates the significant importance of the commodity in the budget share of rural people. The expenditure on beverages has been increasing over the years in urban areas and in last two NSSO rounds, the expenditure towards this item exceeds that of cereals. In urban areas, most of the households have reached the optimum level of consumption of cereals, but the expenditure towards beverages including processed and packed food are increasing due to the changes in taste and preference and need for convenience. The results are in line with the findings of Sharma and Jain (2011) and Swamy *et al.* (2012). The percentage change in consumption expenditure in 2011-12 over 1993-94 was higher in urban areas than rural counterpart due to much higher expenditure on non-food items. The percentage change in total food items was found to be higher in urban areas (411.39%) in comparison with rural areas (379.64%), but the percentage change in total HVAC's were found to be higher in rural areas (530.61%) than urban areas (486.25%). This is attributed to the fact that, through public distribution system (PDS), the villagers are getting staples at subsidized rates resulted in savings from expenditure on staples. These savings is diverted towards purchase of HVAC including egg, fish and meat, vegetables, fruits and nuts. In addition, rising income, increased market availability of different fruits and vegetables, health consciousness and changes in taste and preferences have also contributed towards the consumption of HVAC in rural areas (Ruel, Minot and Smith, 2005). Among high value products, the percentage change in expenditure on milk and milk products was higher in rural areas than urban areas. The income earned by the rural people was too low to meet the calorie requirement of the households, but with increasing standard of living, they spend more on HVAC. The percentage change in expenditure on vegetables, fruits and nuts was higher in urban areas than rural areas, because of the easy accessibility and increase in income.

In urban and rural Karnataka, the expenditure share on food items found to be decreasing, whereas the share of non-food items showing an increasing trend. These findings are in similar line with trends observed by Upadhyay and Pathania (2013) with NSSO data. The share of HVAC found to be increasing over the years in rural Karnataka, while the reverse trend observed in urban area. The expenditure share on egg, fish and meat, vegetables, fruits and nuts showed an increasing trend from 1993-94 to 2011-12, whereas the share of milk and milk product declined from 6.67 to 4.80 per cent during the same periods in rural areas. In urban areas, the share of egg, fish & meat, and fruits & nuts showing an increasing trends, whereas the share of milk and milk products and vegetables are showing decreasing expenditure share during the same time periods due to rising food prices and changes in taste and preferences. The contributing factor is that the preference to egg, fish, meat, fruits and nuts over milk and milk products has resulted in declining share of expenditure on milk and milk products. (Table 2)

V. SUMMARY AND POLICY

From this study, we concluded that MPCE is increasing over the years in both rural and urban areas. Eventhough the percentage change in the consumption of total food items were found to be higher in urban areas, the percentage change in the consumption of HVAC's were found to be higher in rural areas. In rural areas, the high percentage change in the consumption of HVAC's were contributed by the increased consumption of egg, fish & meat, followed by fruits & nuts, vegetables, milk and milk products. In total MPCE, the share of HVAC found to be increasing over the years in rural Karnataka, while the reverse trend observed in urban area. This indicates that rural consumers spend higher expenditure share on HVAC in comparison with urban consumers therefore, availability of HVAC at an affordable price drives away the malnutrition problem in rural areas. Increase in consumption of HVAC in both rural and urban areas is considered as one of the major reasons for high food inflation. Therefore, special attention has to be given to maintain the balance between demand for and supply of HVAC in the country.

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Table 1. Changes in Monthly Per Capita Consumption Expenditure (MPCE) on Food and Non-food Items in Karnataka.

(Rs.)

Sl. No	Food and non-food items	50 th (1993-94)	55 th (1999-00)	61 th (2004-05)	66 th (2009-10)	68 th (2011-12)	% change in consumption expenditure in 2011-12 over 1993-94
RURAL							
1	Cereal & cereal substitutes	62	104	85	128	153	146.77
2	Pulse & pulse products	12	23	18	38	49	308.33
3	Milk & milk products	18	34	34	61	75	316.67
4	Edible oil	10	17	23	37	54	440.00
5	Egg, fish & meat	9	18	18	55	85	844.44
6	Vegetables	13	24	23	62	82	530.77
7	Fruits & nuts	9	16	17	40	67	644.44
8	Sugar	10	12	14	21	23	130.00
9	Salt & spices	8	16	14	38	65	712.50
10	Beverages, etc.	16	32	36	97	148	825.00
	Total food items	167	296	282	577	801	379.64
	Total non-food items	103	205	225	444	760	637.86
	Total HVAC	49	92	92	218	309	530.61
	Total consumption expenditure	270	501	507	1021	1561	478.15
URBAN							
1	Cereal & cereal substitutes	70	118	115	185	189	170.00
2	Pulse & their products	15	28	23	51	59	293.33
3	Milk & milk products	35	62	65	98	132	277.14
4	Edible oil	16	24	30	46	66	312.50
5	Egg, fish & meat	14	30	30	76	110	685.71
6	Vegetables	18	32	32	83	102	466.67
7	Fruits & nuts	14	24	27	66	124	785.71
8	Sugar	11	14	15	25	24	118.18
9	Salt & spices	9	19	16	45	76	744.44
10	Beverages, etc.	35	70	91	190	330	842.86
	Total food items	237	421	444	865	1212	411.39
	Total non-food items	187	489	587	1184	1813	869.52
	Total HVAC	80	148	155	324	469	486.25
	Total consumption expenditure	424	910	1031	2049	3025	613.44

Source: NSS Report No.402, 457, 508, 538 and 555.

**Table 2. Percentage Share of Food and Non-food Items in Total Monthly Per Capita Consumption Expenditure
(MPCE) in Karnataka**

(%)

Sl. No	Food and non-food items	50'th (1993-94)	55'th (1999-00)	61'th (2004-05)	66'th (2009-10)	68'th (2011-12)
Rural						
1	Cereal & cereal	22.96	20.76	16.77	12.54	9.80
2	Pulse & pulse	4.44	4.59	3.55	3.72	3.14
3	Milk & milk	6.67	6.79	6.71	5.97	4.80
4	Edible oil	3.70	3.39	4.54	3.62	3.46
5	Egg, fish & meat	3.33	3.59	3.55	5.39	5.45
6	Vegetables	4.81	4.79	4.54	6.07	5.25
7	Fruits & nuts	3.33	3.19	3.35	3.92	4.29
8	Sugar	3.70	2.40	2.76	2.06	1.47
9	Salt & spices	2.96	3.19	2.76	3.72	4.16
10	Beverages, etc.	5.93	6.39	7.10	9.50	9.48
	Total food items	61.85	59.08	55.62	56.51	51.31
	Total non-food	38.15	40.92	44.38	43.49	48.69
	Total HVAC	18.15	18.36	18.15	21.35	19.80
Urban						
1	Cereal & cereal	16.51	12.97	11.15	9.03	6.25
2	Pulse & pulse	3.54	3.08	2.23	2.49	1.95
3	Milk & milk	8.25	6.81	6.30	4.78	4.36
4	Edible oil	3.77	2.64	2.91	2.24	2.18
5	Egg, fish & meat	3.30	3.30	2.91	3.71	3.64
6	Vegetables	4.25	3.52	3.10	4.05	3.37
7	Fruits & nuts	3.30	2.64	2.62	3.22	4.10
8	Sugar	2.59	1.54	1.45	1.22	0.79
9	Salt & spices	2.12	2.09	1.55	2.20	2.51
10	Beverages, etc.	8.25	7.69	8.83	9.27	10.91
	Total food items	55.90	46.26	43.06	42.22	40.07
	Total non-food	44.10	53.74	56.94	57.78	59.93
	Total HVAC	18.87	16.26	15.03	15.81	15.50

Source: computed from NSS Report No.402, 457, 508, 538 and 555

