

Future Demand Predictions of Consumption in Punjab



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Abstract

Expenditure on consumption by the household sector depicts, up to some extent, the level and pattern of economic development of a country. Higher demand for consumption by the household sector leads to increase in the magnitude of investment as well as employment in the economy and thus, finally, leads to a higher level of economic development in the country. In this paper, the changes in the expenditure on various food and non-food items by the household sector has been analysed and growth rates have been calculated. Based on these growth rates, future demand projections for such items have been made.

Keywords: Consumption, Expenditure, Demand.

Introduction

As quoted by Adam Smith, "Consumption is the sole end and purpose of all production." Various researchers and scholars have used household consumer expenditure as a valuable and effective tool to measure the well-being and prosperity of a nation. Consumption is that part of personal disposable income which is not being saved and is being spent on durables, semi durables and non-durables. The pattern of consumption varies from household to household, both intra-state and inter-state. Different classes of people have different patterns of consumption. Rich classes spend more on non-food items and luxuries, while the poorer classes spend more on food items and necessities. Thus, marginal propensity to consume is higher for the poor while marginal propensity to save is higher for the rich.

Punjab is one of the important agricultural states of India. The consumer expenditure in Punjab has undergone drastic changes. In the context of Punjab, scope still exists for further research about the structure and pattern of consumption and also the factors affecting it. In this study, an attempt has been made to analyse Punjab's consumption pattern and the variations in it.

Gangopadhyay and Wadhwa (2004) in their study have identified some important estimates of how households behave. An attempt has been made to derive the empirical distributions of consumption over different time periods from 1983 to 2000, to construct the proportion of expenditure on different commodities groups and finally calculate the NSS estimates of total expenditure for each of the commodity groups and compare them to what is reported in the National Account Statistics.

Sethi and Pradhan (2012), in their paper, studied the pattern of consumption expenditure on both food and non-food items and changes in it due to the changing income and occupation of the people. The income elasticity of expenditure for selected food and non-food commodities were calculated to examine the impact of income and occupation on consumption expenditure among the rural population and to analyse the factors influencing the rural consumption pattern. The study found that the level of living of the rural household has improved than before, but simultaneously the prices of goods and services had also increased.

Review of Literature

Kumar, Joshi and Mittal (2016) in their paper, discuss the possible future trends in demand of various food commodities in India. Projected demand for and supply of key commodities are assessed for the years 2020, 2025 and 2030, and the supply- demand gap is also analysed. They conclude that, in the last two decades, among the food items, the per capita consumption of cereals has declined, where as the share of vegetables, fruits, milk and milk products and meat, fish and eggs has gone up. Thus, the demand for high-value commodities has been increasing. It is also found that to meet the needs of the growing population, the nation will

have to emphasize on better technology and efficient resource utilisation for production of such commodities.

World Economic Forum Report (2019) proves that India would continue as one of the most dynamic consumer markets and would be affected by five major determinants, i.e., growth of income, dispersed urbanisation, favourable demographics, innovation and preferences of consumers. The report states that the rising income of middle and high-income groups would expand the demand for future consumption by 2030. Products which would be mid ranged will drive the economy and would constitute 80% of the increased expenditure of the middle class.

Objectives of the Study

The main objective of the work is to study the structure and pattern of consumption in Punjab and India. In this context, the detailed list of objectives is as follows:

1. To analyze the importance of various food and non-food items.
2. To assess the future demand for such food and non-food items.
3. To prescribe the policy implications.

Research Methodology and Coverage

The time period covered in our study is from 1987-88 to 2011-12, pertaining to five different rounds of National Sample Survey Office (43rd, 50th, 55th, 61st and 68th). The year 1987-88 reflects the changes in

income and consumption during post green revolution era in Punjab. The years of all other rounds, i.e., 1993-94, 1999-00, 2004-05 and 2011-12 reflect the changes that occurred due to liberalization, privatization and globalization post 1991. In all, nineteen items (food items and non-food items) have been taken from National Sample Survey data. The consumption pattern of all these items among different expenditure classes have been analyzed for the rural and urban areas of both Punjab and India. For the analysis of data, simple and compound growth rates and percentages have been used. For the observation of the consumption pattern, average and marginal propensity to consume has been used and wherever required, appropriate price adjustments have been made. Engel ratios or proportion of expenditure on each item provides the knowledge about the relative importance of every commodity among the households of Punjab and India. Growth Rates of all the food and non-food items have been calculated to assess the future demand of households for the year 2025.

Major Findings

To analyze the consumption pattern in Punjab, in comparison with India, growth rates of all the food and non-food items have been calculated for the rural and urban areas of Punjab and India. These growth rates will depict the importance and changing pattern of consumption of the commodities.

Table 1: Urban India Growth Rates (in per cent)

| S. No. | Commodity | 1987-1993 | 1993-1999 | 1999-2012 | 1987-2012 |
|--------|--------------------------------|-----------|-----------|-------------|-----------|
| 1 | Cereals | 0.059694 | 0.328942 | -2.11532524 | -1.05546 |
| 2 | Grams | 2.081602 | -4.97111 | 2.62203397 | 0.644362 |
| 3 | Cereal Substitutes | 0.351506 | 0 | 0 | 0 |
| 4 | Pulses and products | -0.84571 | 1.346466 | -0.29049749 | -0.03553 |
| 5 | Milk & milk Products | 1.398581 | 0.431073 | 1.03271992 | 1.016411 |
| 6 | Edible Oil | -2.16879 | -3.08715 | 1.42156339 | -0.56592 |
| 7 | Meat, Eggs, Fish | 0.181435 | 1.173622 | 3.92537298 | 2.452171 |
| 8 | Vegetables | 1.59698 | 1.457255 | 1.88743853 | 1.786378 |
| 9 | Fruits | 1.951107 | 0.863688 | 5.49620278 | 3.661696 |
| 10 | Sugar | 1.187429 | -3.69656 | -0.81931042 | -1.08622 |
| 11 | Salt | -5.93228 | 6.051763 | -0.63693674 | -0.40524 |
| 12 | Spices | -0.6439 | 3.806165 | 3.94515435 | 2.909796 |
| 13 | Beverages | 2.08961 | 0.357539 | 5.48258468 | 3.559306 |
| 14 | Pan, Tobacco & Intoxicants | -0.92681 | -0.99156 | 1.40594321 | 0.274715 |
| 15 | Fuel & Light | 0.691749 | 5.294595 | 1.54744645 | 2.320433 |
| 16 | Clothing | -3.19102 | 7.020631 | 1.7554608 | 1.844962 |
| 17 | Footwear | -1.73826 | 6.83246 | 1.45107618 | 2.014274 |
| 18 | Miscellaneous Goods & Services | 3.648836 | 4.812365 | 4.08353114 | 4.33007 |
| 19 | Durable Goods | -3.10595 | 3.937005 | 5.78794985 | 3.276878 |

Note: The growth rates of various items have been calculated by taking the per capita monthly average of expenditure on each item at five different time periods from the NSS reports. These values were made comparable by taking the year 1999-2000 as the base year.

Table 2: Rural Punjab Growth Rates (in per cent)

| S. No. | Commodity | 1987-1993 | 1993-1999 | 1999-2012 | 1987-2012 |
|--------|----------------------|-----------|-----------|-----------|-----------|
| 1 | Cereals | -0.77869 | 0.95411 | -2.14359 | -1.12539 |
| 2 | Grams | 5.636866 | 6.428458 | 0.122762 | 3.040257 |
| 3 | Cereal Substitutes | 0 | 0 | 0 | 0 |
| 4 | Pulses and products | 1.522893 | 0.69855 | -1.09136 | -0.04251 |
| 5 | Milk & milk Products | 1.71872 | -0.94654 | 1.411948 | 0.952229 |
| 6 | Edible Oil | -2.39928 | -3.6158 | 2.664829 | -0.10322 |
| 7 | Meat, Eggs, Fish | 4.365968 | 0.883673 | 0.347281 | 1.487017 |
| 8 | Vegetables | 2.61835 | 0.818596 | 3.435679 | 2.715946 |

| | | | | | |
|----|--------------------------------|----------|----------|----------|----------|
| 9 | Fruits | 0.177378 | 1.242792 | 5.67006 | 3.396876 |
| 10 | Sugar | -1.04562 | -2.34413 | -0.68221 | -1.2191 |
| 11 | Salt | 1.959116 | 6.395213 | -0.2966 | 1.891576 |
| 12 | Spices | -2.37628 | 9.561148 | 1.180743 | 2.344455 |
| 13 | Beverages | -12.4457 | 11.77852 | 6.541669 | 2.935531 |
| 14 | Pan, Tobacco & Intoxicants | 2.720824 | 0 | 3.64691 | 2.645753 |
| 15 | Fuel & Light | 1.034845 | 6.352077 | 2.73803 | 3.313888 |
| 16 | Clothing | -4.91028 | 7.061685 | 2.078944 | 1.573949 |
| 17 | Footwear | -3.66611 | -0.14674 | 1.245451 | -0.29956 |
| 18 | Miscellaneous Goods & Services | 1.114286 | 5.080185 | 4.65502 | 4.060691 |
| 19 | Durable Goods | -1.43843 | -6.69179 | 9.190487 | 2.704695 |

Note: The growth rates of various items have been calculated by taking the per capita monthly average of expenditure on each item at five different time periods from the NSS reports. These values were made comparable by taking the year 1999-2000 as the base year.

Table 3: Urban Punjab Growth Rates (in per cent)

| S. No. | Commodity | 1987-1993 | 1993-1999 | 1999-2012 | 1987-2012 |
|--------|--------------------------------|-----------|-----------|-----------|-----------|
| 1 | Cereals | -0.072 | 0.366544 | -1.22705 | -0.59354 |
| 2 | Grams | 11.46806 | -0.16461 | 1.317106 | 3.439619 |
| 3 | Cereal Substitutes | -100 | 0 | 0 | 0 |
| 4 | Pulses and products | 3.331916 | 0.48764 | -0.93588 | 0.432626 |
| 5 | Milk & milk Products | 0.924526 | -0.14295 | 1.603016 | 1.061314 |
| 6 | Edible Oil | 2.045378 | -5.68436 | 2.044322 | 0.139379 |
| 7 | Meat, Eggs, Fish | 10.63415 | 3.280988 | 0.226755 | 3.516652 |
| 8 | Vegetables | 6.779782 | -1.03115 | 2.954097 | 3.001969 |
| 9 | Fruits | 12.43076 | -0.94041 | 4.212446 | 5.051404 |
| 10 | Sugar | -3.10958 | -3.7394 | -1.23206 | -2.38512 |
| 11 | Salt | 2.96312 | 3.288859 | -0.34648 | 1.360166 |
| 12 | Spices | -0.80527 | 1.331583 | 4.550016 | 2.571234 |
| 13 | Beverages | 3.960183 | 1.623676 | 4.335817 | 3.740958 |
| 14 | Pan, Tobacco & Intoxicants | 4.031006 | -1.38396 | 1.585348 | 1.502737 |
| 15 | Fuel & Light | 4.29924 | 4.515445 | 3.054849 | 3.859001 |
| 16 | Clothing | -5.71576 | 12.07446 | 1.191417 | 2.040505 |
| 17 | Footwear | -1.11434 | 3.015609 | -0.60375 | 0.134678 |
| 18 | Miscellaneous Goods & Services | 10.58337 | 2.482117 | 4.130581 | 5.46444 |
| 19 | Durable Goods | -5.17538 | 0.052363 | 7.90398 | 2.844815 |

Note: The growth rates of various items have been calculated by taking the per capita monthly average of expenditure on each item at five different time periods from the NSS reports. These values were made comparable by taking the year 1999-2000 as the base year.

Table 4: Rural India Growth Rates (in per cent)

| S. No. | Commodity | 1987-1993 | 1993-1999 | 1999-2012 | 1987-2012 |
|--------|--------------------------------|-----------|-----------|-----------|-----------|
| 1 | Cereals | -1.28835 | 0.56153 | -3.22839 | -1.94264 |
| 2 | Grams | -4.78569 | -2.82354 | 3.085045 | -0.29579 |
| 3 | Cereal Substitutes | 15.06923 | 0 | 0 | 0 |
| 4 | Pulses and products | -0.69544 | 2.059595 | -0.13836 | 0.260544 |
| 5 | Milk & milk Products | 1.581303 | 0.685808 | 1.679665 | 1.47615 |
| 6 | Edible Oil | -3.83098 | -0.85488 | 2.355874 | 0.070112 |
| 7 | Meat, Eggs, Fish | 0.567429 | 1.943007 | 5.275762 | 3.466139 |
| 8 | Vegetables | 2.513977 | 2.395738 | 2.908337 | 2.804066 |
| 9 | Fruits | 1.230667 | 1.848369 | 6.357896 | 4.187788 |
| 10 | Sugar | 1.161097 | -2.11084 | -0.46484 | -0.4959 |
| 11 | Salt | 1.380071 | 6.194531 | 0.209072 | 1.97765 |
| 12 | Spices | -1.52639 | 3.96216 | 4.301731 | 2.90979 |
| 13 | Beverages | 2.415712 | 0.816072 | 7.463283 | 4.810948 |
| 14 | Pan, Tobacco & Intoxicants | -0.08547 | 0.436071 | 3.230374 | 1.825994 |
| 15 | Fuel & Light | 0.667902 | 2.421945 | 2.821122 | 2.297639 |
| 16 | Clothing | -3.51944 | 6.253075 | 1.31835 | 1.338948 |
| 17 | Footwear | -1.56814 | 5.840485 | 1.740044 | 1.97765 |
| 18 | Miscellaneous Goods & Services | 3.096866 | 4.208739 | 4.07164 | 4.034117 |
| 19 | Durable Goods | -4.32635 | 1.287761 | 6.748588 | 2.789831 |

Note: The growth rates of various items have been calculated by taking the per capita monthly average of expenditure on each item at five different time periods from the NSS reports. These values were made comparable by

taking the year 1999-2000 as the base year.

These growth rates depict the growth of consumption from 1987 to 1993, 1993 to 1999, 1999 to 2012 and in the entire period 1987 to 2012 in rural and urban areas of Punjab and India. It is clear from table 2 that in the period 1987 to 1993, food items like cereals, edible oil, sugar, spices and beverages had a negative growth rate. Food items like grams, pulses, milk and milk products, meat, eggs and fish and vegetables had a positive growth rate. If we analyse the overall growth rates of the commodities in rural Punjab, items like cereals, pulses, edible oil and sugar had a negative growth rate. Items such as grams, vegetables, fruits, beverages had a positive growth rate above 2 per cent. Comparing these growth rates with growth rates in rural India (Table 4), we find that cereals, grams and sugar had a negative growth rate, while all other food items had a positive growth rate. Among the non-food items, in rural Punjab, all items had a positive growth rate except footwear. In rural India, the growth rates of all non-food items were positive. Miscellaneous goods and services had the highest growth rate among all the items. It was because people had started spending more on non-food items than food items by 2012.

Comparing the growth rates of various food items in urban Punjab and urban India, in urban Punjab, all food items except cereals and sugar had a positive growth rate. The growth rate of fruits was above 5 per cent. In urban India, among the food items, cereals, edible oil, sugar and salt had a negative growth rate. All other food items had a positive rate, the highest being of fruits. Among non-food items, the consumption of all items had increased over the period of time in both urban Punjab and urban India, but the growth rates in urban Punjab were more than those in urban India. The highest growth rate was of miscellaneous goods and services in both urban Punjab and urban India.

Table 5: Expected Demand for the Year 2025 as Compared to 2011-12 (Based on 1999-2012 Growth Rates) in Rural Punjab

| Sr. No. | Commodity | Expenditure in 2011-12 at constant prices | Proportionate expenditure in 2011-12 | Growth Rate (1999-2012) | Expenditure in 2025 | Proportionate in 2025 |
|---------|---------------------------|---|--------------------------------------|-------------------------|---------------------|-----------------------|
| 1. | Cereals | 55.72 | 5.17 | -2.14 | 42.06 | 2.41 |
| 2. | Grams | 3.16 | 0.29 | 0.12 | 3.21 | 0.18 |
| 3. | Cereal Substitutes | 0 | 0.00 | 0.00 | 0 | 0.00 |
| 4. | Pulses and products | 19.5 | 1.81 | -1.09 | 16.91 | 0.97 |
| 5. | Milk and products | 153.46 | 14.23 | 1.41 | 184.1 | 10.57 |
| 6. | Edible Oil | 31.08 | 2.88 | 2.66 | 43.72 | 2.51 |
| 7. | Meat, Eggs, Fish | 5.9 | 0.55 | 0.35 | 6.17 | 0.35 |
| 8. | Vegetables | 55.57 | 5.15 | 3.44 | 86.26 | 4.95 |
| 9. | Fruits (fresh/dry) | 22.94 | 2.13 | 5.67 | 46.99 | 2.70 |
| 10. | Sugar | 29.01 | 2.69 | -0.68 | 26.55 | 1.52 |
| 11. | Salt | 1.27 | 0.12 | -0.30 | 1.22 | 0.07 |
| 12. | Spices | 24.66 | 2.29 | 1.18 | 28.72 | 1.65 |
| 13. | Beverages | 72.77 | 6.75 | 6.54 | 165.81 | 9.52 |
| 14. | Pan, tobacco, intoxicants | 23.88 | 2.21 | 3.65 | 38.06 | 2.18 |
| 15. | Fuel and Light | 105.36 | 9.77 | 2.74 | 149.72 | 8.59 |
| 16. | Clothing | 64.72 | 6.00 | 2.08 | 84.58 | 4.85 |
| 17. | Footwear | 14.6 | 1.35 | 1.25 | 17.16 | 0.98 |
| 18. | Misc. Goods and Services | 328.96 | 30.50 | 4.66 | 594.7 | 34.13 |
| 19. | Durable Goods | 65.86 | 6.11 | 9.19 | 206.54 | 11.85 |

Forecasting Future Demand

As the nation progresses with time, the structure, level, and pattern of household consumer expenditure also changes. In this paper, based on the household consumer expenditure in 2011-12, the future demand for the various food and non-food items has been calculated for the year 2025.

The production of these goods and services has to be keeping in consideration the demand for these goods in the coming future to avoid any price rise. If the demand is not adequately met by the required supply, it would result in making the consumption basket costly for the consumers and thereby, deteriorating the standard of living of the people. Further, the planners also need to assess the required employment opportunities which would be required to meet the expected demand in future. Thus, reliable estimates of future level of consumption of different goods and services become essential.

Using the growth rates for the years 1999-00 to 2011-12, the demand projections for the year 2025 has been made, based on the expenditure in the year 2011-12 at constant prices, which has further been calculated using 1999-00 as the base year. Some factors have been taken to be constant to make the assessment of such demand successful. These factors are: Price level of all the goods and services do not change, the rate of population growth remains constant, the rate of growth of income does not change, there is no change in the taste, habits and preferences in the time period, etc.

Based on the previous expenditure and the calculated growth rates of the items in the consumption basket, the demand for various food and non-food items for the year 2025 has been calculated in the following tables for both rural Punjab and urban Punjab as well as for rural and urban India.

Table 6: Expected Demand for the Year 2025 as Compared to 2011-12 (Based on 1999-2012 Growth Rates) in Urban Punjab

| Sr. No. | Commodity | Expenditure in 2011-12 at constant prices | Proportionate expenditure in 2011-12 | Growth Rate (1999-2012) | Expenditure In 2025 | Proportionate expenditure in 2025 |
|---------|---------------------------|---|--------------------------------------|-------------------------|---------------------|-----------------------------------|
| 1. | Cereals | 64.33 | 5.01 | -1.23 | 54.77 | 2.67 |
| 2. | Grams | 3.58 | 0.28 | 1.32 | 4.25 | 0.21 |
| 3. | Cereal Substitutes | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 |
| 4. | Pulses and products | 22.15 | 1.72 | -0.94 | 19.59 | 0.95 |
| 5. | Milk and products | 159.77 | 12.43 | 1.60 | 196.39 | 9.56 |
| 6. | Edible Oil | 33.46 | 2.60 | 2.04 | 43.50 | 2.12 |
| 7. | Meat, Eggs, Fish | 9.65 | 0.75 | 0.23 | 99.94 | 4.87 |
| 8. | Vegetables | 60.3 | 4.69 | 2.95 | 88 | 4.29 |
| 9. | Fruits (fresh/dry) | 34.59 | 2.69 | 4.21 | 59.13 | 2.88 |
| 10. | Sugar | 22.13 | 1.72 | -1.23 | 18.84 | 0.92 |
| 11. | Salt | 1.3 | 0.10 | -0.35 | 1.24 | 0.06 |
| 12. | Spices | 26.41 | 2.05 | 4.55 | 47.1 | 2.29 |
| 13. | Beverages | 88.97 | 6.92 | 4.34 | 154.56 | 7.53 |
| 14. | Pan, tobacco, intoxicants | 18.71 | 1.46 | 1.59 | 22.97 | 1.12 |
| 15. | Fuel and Light | 121.33 | 9.44 | 3.05 | 179.3 | 8.73 |
| 16. | Clothing | 73.3 | 5.70 | 1.19 | 85.49 | 4.16 |
| 17. | Footwear | 16.36 | 1.27 | -0.60 | 15.13 | 0.74 |
| 18. | Misc. Goods and Services | 460.23 | 35.81 | 4.13 | 778.86 | 37.93 |
| 19. | Durable Goods | 68.58 | 5.34 | 7.90 | 184.28 | 8.97 |

Table 7: Expected Demand for the Year 2025 as Compared to 2011-12 (Based on 1999-2012 Growth Rates) in Urban India

| Sr. No. | Commodity | Expenditure in 2011-12 at constant prices | Proportionate expenditure in 2011-12 | Growth Rate (1999-2012) | Expenditure In 2025 | Proportionate in 2025 |
|---------|---------------------------|---|--------------------------------------|-------------------------|---------------------|-----------------------|
| 1. | Cereals | 79.96 | 6.61 | -2.12 | 60.52 | 3.29 |
| 2. | Grams | 1.33 | 0.11 | 2.62 | 1.86 | 0.10 |
| 3. | Cereal Substitutes | 0.57 | 0.05 | 0.00 | 0.57 | 0.03 |
| 4. | Pulses and products | 23.35 | 1.93 | -0.29 | 22.48 | 1.22 |
| 5. | Milk and products | 84.78 | 7.01 | 1.03 | 96.86 | 5.27 |
| 6. | Edible Oil | 32.21 | 2.66 | 1.42 | 38.69 | 2.10 |
| 7. | Meat, Eggs, Fish | 44.16 | 3.65 | 3.93 | 72.89 | 3.96 |
| 8. | Vegetables | 55.98 | 4.63 | 1.89 | 71.4 | 3.88 |
| 9. | Fruits (fresh/dry) | 41.46 | 3.43 | 5.50 | 83.16 | 4.52 |
| 10. | Sugar | 12.58 | 1.04 | -0.82 | 11.3 | 0.61 |
| 11. | Salt | 1.27 | 0.10 | -0.64 | 1.17 | 0.06 |
| 12. | Spices | 29.32 | 2.42 | 3.95 | 48.52 | 2.64 |
| 13. | Beverages | 108.64 | 8.98 | 5.48 | 217.37 | 11.82 |
| 14. | Pan, tobacco, intoxicants | 19.46 | 1.61 | 1.41 | 23.35 | 1.27 |
| 15. | Fuel and Light | 80.9 | 6.69 | 1.55 | 98.81 | 5.37 |
| 16. | Clothing | 64.9 | 5.37 | 1.76 | 81.42 | 4.43 |
| 17. | Footwear | 12.12 | 1.00 | 1.45 | 14.61 | 0.79 |
| 18. | Misc. Goods and Services | 452.52 | 37.41 | 4.08 | 761.05 | 41.38 |
| 19. | Durable Goods | 64.11 | 5.30 | 5.79 | 133.26 | 7.25 |

Table 8: Expected Demand for the Year 2025 as Compared to 2011-12 (Based on 1999-2012 Growth Rates) in Rural India

| Sr. No. | Commodity | Expenditure in 2011-12 at constant prices | Proportionate expenditure in 2011-12 | Growth Rate (1999-2012) | Expenditure In 2025 | Proportionate in 2025 |
|---------|---------------------------|---|--------------------------------------|-------------------------|---------------------|-----------------------|
| 1. | Cereals | 70.33 | 10.69 | -3.23 | 45.9 | 4.52 |
| 2. | Grams | 0.95 | 0.14 | 3.09 | 1.41 | 0.14 |
| 3. | Cereal Substitutes | 0.41 | 0.06 | 0.00 | 0.41 | 0.04 |
| 4. | Pulses and products | 18.17 | 2.76 | -0.14 | 17.84 | 1.76 |
| 5. | Milk and products | 52.85 | 8.04 | 1.68 | 65.63 | 6.46 |
| 6. | Edible Oil | 24.58 | 3.74 | 2.36 | 33.29 | 3.28 |
| 7. | Meat, Eggs, Fish | 31.49 | 4.79 | 5.28 | 61.50 | 6.06 |
| 8. | Vegetables | 43.52 | 6.62 | 2.91 | 63.19 | 6.22 |
| 9. | Fruits (fresh/dry) | 18.63 | 2.83 | 6.36 | 41.53 | 4.09 |
| 10. | Sugar | 10.89 | 1.66 | -0.46 | 10.26 | 1.01 |
| 11. | Salt | 1.12 | 0.17 | 0.21 | 1.16 | 0.11 |
| 12. | Spices | 23.03 | 3.50 | 4.30 | 39.81 | 3.92 |
| 13. | Beverages | 51.95 | 7.90 | 7.46 | 132.37 | 13.03 |
| 14. | Pan, tobacco, intoxicants | 21.12 | 3.21 | 3.23 | 31.93 | 3.14 |
| 15. | Fuel and Light | 52.49 | 7.98 | 2.82 | 75.35 | 7.42 |
| 16. | Clothing | 39.41 | 5.99 | 1.32 | 46.74 | 4.60 |
| 17. | Footwear | 6.72 | 1.02 | 1.74 | 8.41 | 0.83 |
| 18. | Misc. Goods and Services | 160.31 | 24.37 | 4.07 | 269.27 | 26.52 |
| 19. | Durable Goods | 29.73 | 4.52 | 6.75 | 69.5 | 6.84 |

Table 5 explains the demand for various food and non-food items in the year 2025 as compared to their demand in 2011-12 in rural Punjab based on the growth rate during 1999-2012. The demand for items like milk and milk products, edible oil, vegetables, fruits both fresh and dry, beverages, pan, tobacco and intoxicants, fuel and light, clothing, and expenditure on miscellaneous items is likely to increase by a substantial amount in 2025. The growth in the expenditure on beverages and durables is quite high. The proportionate expenditure on cereals would be approximately half of the expenditure in 2011-12. The proportionate expenditure on milk and milk products would reduce to almost 11% from 15% in 2025, while the same would increase for beverages from 6.75% in 2011-12 to 9.52% in 2025. There is also a significant increase in the proportion of expenditure on durables in 2025 as compared to 2012. It can thus be seen from the table that for rural Punjab, the items which behaved as luxury in 2011-12, would be considered as necessities in 2025.

Table 6 depicts the expected future demand for the year 2025 in case of urban Punjab as compared to 2011-12, based on 1999-00 growth rates. The table highlights that the absolute expenditure would slightly decrease in case of cereals, pulses and pulse products, sugar and

footwear, while it would increase for milk and milk products, edible oil, meat, eggs and fish, fruits both fresh and dry, spices, beverages, pan, tobacco and intoxicants, fuel and light, miscellaneous goods and services and durables. Among these, there would be a significant increase in expenditure on milk and milk products, meat, eggs and fish, beverages, miscellaneous goods and services, and durables. However, the proportion of expenditure on milk and milk products would reduce by almost 3% in 2025, while it would increase for meat, eggs and fish by almost 5% and by 5.5% in case of durables. The proportion of expenditure for rest of the items would almost remain similar to the proportion of expenditure of such items in 2011-12.

In case of urban India (Table 7), the absolute expenditures would increase substantially for meat, eggs and fish, fruits both fresh and dry, spices, beverages expenditure on miscellaneous items and durables. However, there would be no significant change in the proportion of expenditure on these food and non-food items in the year 2025 as compared to the expenditure in 2011-12. The proportionate expenditure on cereals has reduced to almost half of the proportionate expenditure on it in 2011-12.

The demand projections in case of rural India (Table 8) are quite similar to the demand projections in case of urban India for the same years. The

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proportion of expenditure on cereals would reduce to less than half of the proportion of it in 2011-12. For the rest of the items, the proportionate expenditure forecasted for 2025 remains almost similar to the proportionate expenditure calculated for 2011-12. The demand for beverages would increase both for urban India and Rural India, but the increase in urban India in absolute terms is much more than increase in Rural India. Among other items, the demand for fruits both fresh and dry, durables, and miscellaneous items would increase by the year 2025.

Conclusion and Policy Implications

Although the absolute expenditure on various food and non-food items has been increasing in Punjab over the years and as per the trend of growth rates, would further increase by 2025, the proportionate expenditure on these items would show some variations over the time period. In the coming years, demand for food items like cereals and food grains would decline. This is so because as the income of the people rise, this shift from inferior to the superior products. Consumption of vegetables, fruits, beverages, meat, eggs and fish, among the food items, would increase significantly in the coming future, both in rural Punjab in rural India.

People in urban areas prefer to spend more on luxuries than on necessities. Their expenditure on non-food items is more than that on food items. As compared to the rural areas of Punjab and India, in

urban Punjab and urban India, the demand for clothing, footwear, miscellaneous goods and services and durable goods would increase by 2025.

However, these demand projections are subject to a number of conditions. Social, economic and political stability is required for such projections to hold true. Also, these projections would remain relevant only if the assumptions like constant population growth, no change in taste, fashion and preferences of people, no change in price level, etc. are not void.

References

1. Gangopadhyay, Shubhashish and Wadhwa, William (2004), "Changing Pattern of Household Consumption Expenditure", SERFA.
2. Sethi, Narayan and Pradhan, Hemanta Kumar (2012), "Patterns of Consumption Expenditure in Rural Households of Odisha of India: An Engel Ratio Analysis", OIDA International Journal of Sustainable Development, Vol. 5, No.34, pp.107-120.
3. Kumar, P, Joshi, PK and Mittal, S (2016), "Demand vs Supply of Food in India- Futuristic Projection", Proceedings Indian National Science Academy, 82, No.5, pp. 1579-1586.
4. World Economic Forum Report (2019), "Future of Consumption in Fast-Growth Consumer Markets: INDIA".