CHAPTER: 5

SUMMARY of MAIN FINDINGS and CONCLUSIONS

5.1 Summary of Main Findings

The findings of the study do not support the first hypothesis and the expenditure elasticities of demand for food and non food item groups show significant variation among the major Indian states and at all India level (appendix tables 5R-16U). Expenditure elasticity of demand for cereals in 1993-94 for the rural areas in Assam has been estimated at 0.58, and for the same period expenditure elasticity of cereals for the rural areas of Haryana is 0.21. Similarly, for dry fruits in the urban areas of Bihar during 1993-94 expenditure elasticity has been estimated at 4.89 and for Karnataka the expenditure elasticity estimated at 1.33. Expenditure elasticity of demand for cereals during 2004-05 is 0.15 in rural Punjab and it is 0.45 in rural Chhattisgarh whereas it is 0.27 at all India level. Expenditure elasticities for dry fruits in rural areas of all India in 2004-05 is 1.53 which classifies it as luxury product and in the rural Karnataka it is a necessity item since expenditure elasticity is 0.80 (statistically less than one), however very high expenditure elasticities for dry fruits in states such as Jharkhand (4.90), Bihar (3.89) is responsible for a high all India level value of expenditure elasticities for dry fruits. Expenditure elasticity for Milk and milk products in the rural areas of Assam is 1.74 and for the same period it is 0.79 in rural Punjab. The study finds the similar differences in the expenditure elasticity of non food item groups estimated for different states and at all India
The expenditure elasticity of demand during 2009-10 in the urban areas of Gujarat for cloth has been estimated at 0.85 and in the urban areas of Assam it is 1.08. The variation in expenditure elasticities prove that the elasticities estimated at all India level are not sufficient for explaining the consumption pattern for different states. In all three periods 1993-94, 2004-05 and 2009-10 the expenditure elasticities for urban area are consistently lower than the rural areas which indicate that increasing urbanization and other related factors leads to a decrease in the percentage increase in the expenditure on food products. Expenditure elasticities in 2009-10 show a decline over 1993-94 and indicate that with the increase in income level consumers prefer relatively less expenditure on the food items.

The evidences from the findings of the present study do not support the second hypothesis as the pattern of the consumption pattern in many states shows a shift towards the non food products like durable goods. The total food item group has been categorized as the necessity item during 1993-94 and 2009-10. However, if considering the particular food items groups like dry fruits, then it has been categorized as the luxury food item in the urban areas of all the states during 1993-94 except in Karnataka (equal to one) however during 2009-10 dry fruits item group has been categorized as the necessity food item in economically developed states, Karnataka and Maharashtra. Milk and milk product item group has been categorised as the luxury food item group in the urban areas of all the states except Gujarat, Haryana and Punjab during 19993-94, however milk and milk products items group is necessity food item during
2009-10 in the urban areas of Karnataka and Punjab. In some other relatively developed states like Gujarat, Haryana and Punjab the elasticities have reduced from more than one (Luxury) to one. The elasticity for food item group like cereals is consistently in the necessity food item group during 1993-94 and 2009-10. Non food item group cloth and food wear have been categorized as the luxury item for all the states as well as at all India level during 1993-94, whereas during 2009-10 cloth and foot wear item groups have categorized as the necessity items. The durable goods non food item is consistently categorized as the luxury item during 1993-94 and 2009-10. The finding indicates a shift in the consumption expenditure pattern towards durable goods and other luxury items.

Findings of the study reveal positive quality preferences for food products like cereals and pulses for Indian consumers during 1999-00 and 2009-10, and hence the third hypothesis has been rejected. The quality elasticity of demand for cereals and pulses during 1999-00 has been estimated at 0.11 and 0.09 respectively for rural areas at all India level. During 2009-10 the quality elasticity is higher for cereals and pulses at 0.23 and 0.18 respectively for the rural Indian consumers. The findings of the study also suggest that the urban consumers show higher quality preferences for food products. The findings of the study suggest that the elasticities estimated with, per capita consumer expenditure for consuming households as dependent variable gives uniformly smaller values than that of the same estimated with per capita consumer expenditure as the dependent variable. In other words the elasticity estimated only for the consuming HHs are lesser than the elasticities estimated for all
HHs. Engel elasticity estimated only for consuming HHs in case of dry fruits is 0.57 during 1999-00 whereas, Engel elasticity of dry fruits estimated for all HHs is 1.43.

The fourth hypothesis of the present study, that the growth of per capita consumer expenditure is same for top and bottom quintile is rejected on the basis of the findings of the present study. The percentage increase in the monthly per capita consumer expenditure on non food during 2004-05 as compared to 1993-94 for the first two quintiles was significantly smaller as compared to that of the top quintile in urban areas. The percentage increase in the monthly per capita consumer expenditure on total food and also in the total expenditure during 2004-05 as compared to 1993-94 for the first four quintiles was significantly smaller as compared to that of the top quintile in the urban areas. Similarly, the percentage increase in the consumer expenditure during 2009-10 over 1993-94 also differs for the top and the bottom quintile. Percentage change for consumer expenditure on total food in urban areas is significantly lower for top quintile as compared to first, second, third and fourth quintiles whereas, in rural areas the difference in the percentage change of per capita consumer expenditure on food is insignificant. Percentage change for consumer expenditure on non food in urban areas is higher in top quintile than that of the first, second, third and fourth quintiles whereas, in the rural areas the percentage change of per capita consumer expenditure on non food is significantly lower in the top quintile than that of the first four quintiles. Possibly, because the per capita consumer expenditure on non food was very low
for the bottom quintile during 1993-94 and then it has increased during 2009-10, the low base expenditure has lead to a higher percentage change in the per capita expenditure as compared to the top quintile. Percentage change for total consumer expenditure has found to be higher in top quintile as compared to the bottom four quintiles in urban areas. Possibly the better quality (higher price) preferences of high income urban consumers is one of the reason for greater percentage change in their per capita consumer expenditure compared to bottom quintiles.

The fifth hypothesis of the present study that there is no perceived change in the post retirement consumer expenditure has also been rejected on the basis of the findings from the present study. Post retirement study finds a drop in the post retirement consumption expenditure for Indian consumers. The factor analysis performed with the responses collected from 200 respondents, provides four factors responsible for the post retirement drop in the consumption expenditure. These four factors with Eigen value more than one, are explaining about 60 percent variance altogether. The drop in the consumption expenditure is accounted to four factors; Personal and family; Social; Financial; and Income tax.

5.2 Conclusions

The present study presents an informative analysis of consumption pattern in India by analyzing the NSSO consumer expenditure data on different food and non food item groups from four latest quinquennial rounds. The study
differentiate itself from the earlier study by taking the analysis of consumption pattern at disaggregate levels. The log-linear Engel function has been re-estimated in the present study at disaggregate level which provides the comparatively more realistic picture of the differences in the elasticities for different states and at all India level. Earlier studies like Murty, 1998, Bhalla and Hazell; 1997, estimated the elasticities at all India level but it varies for different states as proves by the findings of present study. On the basis of the findings of the study it can be concluded that the elasticities estimated by using the all India level data are different from the elasticities estimated for different states by using the state level data (appendix tables’ 5R-16U). The findings also suggest the difference in the elasticities between rural and urban areas of states.

This study explains the inter-state variation in the consumption pattern in India. The present study highlighted the shift in the consumption pattern over period from 1999-94 to 2009-10 and concludes that the consumption expenditure of Indian consumers is shifting towards the non food item groups such as durable goods item group and miscellaneous good and services item group.

The study also explains the quality preferences of Indian consumers by estimating the quality elasticities of demand for different food item groups in Indian context. The findings of the present study allows to conclude that Indian consumers have positive quality preferences for food product groups like cereals and pulses, and the urban consumers’ shows higher quality preferences compared to their rural counterpart, which can be attributed to the relatively higher per capita income of urban consumers. Furthermore, the quality
elasticities estimated for during 2009-10 are higher than the quality elasticities estimated during 1999-00, this finding provides an opportunity to conclude that the increasing per capita income of Indian consumers is leading them towards the consumption of the better quality food products.

The study also pointed out the possible difference in elasticities if consuming households are being taken under consideration. The numerical value for expenditure, Engel, and quality elasticities are less in case when only consuming households are being considered in the model. The elasticities estimated by using per capita consumer expenditure of consuming households as dependent variable provides the estimates of elasticities when all the households would start consuming the specific food item. The present study concludes that when all HHs in a particular decile start consuming an item then the elasticities will decrease.

The percentage increase in the monthly per capita consumer expenditure on non food during 2004-05 as compared to 1993-94 for the first two quintiles was significantly smaller as compared to that of the top quintile in urban areas. The percentage increase in the monthly per capita consumer expenditure on food and also in the total expenditure during 2004-05 as compared to 1993-94 for the first four quintiles was significantly smaller as compared to that of the top quintile in the urban areas. Similarly, the percentage increase in the consumer expenditure during 2009-10 over 1993-94 also differs for the top and the bottom quintile. Percentage change for consumer expenditure on total food in urban areas is significantly lower for top quintile as compared to first, second, third and fourth
quintiles. Percentage change for total consumer expenditure has found to be higher in top quintile as compared to the bottom four quintiles in urban areas over the period 1993-94 to 2009-10. Possibly the better quality (higher price) preferences of high income urban consumers is one of the reason for greater percentage change in their per capita consumer expenditure compared to bottom quintiles. The present study concludes the divergence in growth of per capita consumption expenditure in the same line with the earlier studies, Ahluwalia, 2001; 2002; Bhattacharya and Sakhivel, 2004.

The findings of the study provide evidence that the people in post retirement age experience a drop in the consumer expenditure. The present study concludes the consumption smoothing hypothesis of standard life-cycle model does not hold good in Indian context. This conclusion of the present study is in the same line with the earlier research, documented in the context of UK (United Kingdom), Banks, Blundell and Tanner, 1998 and US (United States of America), Bernheim, Skinner and Weinberg, 2001. The one-off drop in the post retirement consumption expenditure cannot be completely explained by the life-cycle model rather it deserves a different explanation.

5.3 Implications of the Study

The present study may have its implication for the future studies as it provides a detailed explanation about the differences in the expenditure elasticities among the major Indian states and at all India level. The present study suggests that the aggregate level estimations may mislead the analysis of the consumption
pattern. The study also proves that the log-inverse and log linear models both will give equally good estimates for elasticities however the log-inverse model can be used where we expect the elasticities to decrease in upper income groups while the log-linear model assumes the constant elasticities of demand across the income groups. The log-log-inverse model and log-log-inverse square models show the problem of multicollinearity in context of Indian consumer expenditure data although the log-log-inverse model has been used by Gale and Huang, 2007 in Chinese context. The presents study also indicates the possible differences in the elasticities estimated both for consuming and non consuming HHs together and elasticities estimated only for the consuming HHs.

Projection of the market demand for different food and non food item groups in different major states can be made on the basis of the elasticities estimated in the present study, which can help the producers to take the production decision of different food and non food item groups. The present study proves that the expenditure elasticities estimated with the national level consumer expenditure data are not same at state level. Study found a significant variation in the magnitude of the elasticities among the states. Therefore, the findings of the presents study may be used by the policy makers for projecting the future demand for different food items more precisely. The findings of the study can also be used for policy implications in case of categorising the food and non food items in two categories viz. necessity and luxury separately for all major Indian states.
The study also finds a drop in the post retirement consumption expenditure by the older age population in India context. The finding may have its implications on the government welfare programmes for the older age population.

5.4 Limitations:

The present study is restricted with the estimation of elasticities only for major Indian states however in future some studies may be expanded by including the minor states in the study. Average monthly consumption expenditure data have been used in the present study for estimating the elasticities however if available the unite level data may be used for calculating the elasticities across the deciles which may fetch some more realistic picture about the consumption pattern. The post retirement consumption expenditure study carried out by using the primary data in the study can be elaborated further by collecting the data from some more Indian cities in order to explain the post retirement consumption expenditure pattern in Indian context. The future study on post retirement consumption expenditure can also be elaborated by collecting the data from the rural and the urban areas separately.