

Demographic Transition and Household Consumption Dynamics in India: Recent Trends and Policy Implications

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Abstract: *India is experiencing a major demographic and socio-economic transformation that is marked by significant changes in population structure, fertility behaviour, life expectancy, urbanization as well as household consumption patterns. The decreasing birth rates and increasing life expectancy are an indication that India is well progressing into the later phases of its demographic transition leading to age structure, household size, and dependency ratio adjustments. Concurrently, there are changes in labour markets, job opportunities and living conditions especially urbanisation and internal migration that is changing the nature of urban centres. The implications of these demographic changes are far reaching in terms of income distribution, participation of labour and household expenditure behaviour.*

It uses recent secondary data on population growth, age and gender structure, literacy levels, fertility and mortality pattern, household composition, and household consumption expenditure to provide a comprehensive overview of the changing demographic profile in India as well as the relationship between the changing demographic profile and the household economic behaviour. As the analysis shows, although income is the greatest factor that determines household consumption, demographic information include household size, age composition, and place of residence is critical in determining the expenditure patterns among the food, health, and non-food items. The fall in fertility and the reduction in the size of household are linked to the per capita consumption shift and the growing life expectancy has contributed to the slow increase in health-related expenditure.

The results also show that there are continuing and, in other instances, increasing rural urban consumption differentials. The consumption level and the diversity of expenditure baskets are typically high in urban households, and low in rural households, though a significant portion of their expenditure remains devoted to food. These trends highlight the necessity of policy response, which is strategically and regionally focused, and which can mitigate income inequality, enhance the strength of employment opportunities, health and educational services accessibility, and inclusive growth of consumption within the framework of the current demographic shift in India.

Keywords: Demographic transition, household consumption, urbanization, fertility, India, socio-economic development

I. INTRODUCTION

At the moment, India is almost 1/5 the global population, demographic dynamics is in the centre of the national, as well as global development discourse. The nation has experienced a major demographic shift along the last several decades characterized by a steady fall in fertility rates and mortality, as well as, by the marked increase in life expectancy and literacy rates. The changes not only testify to the developments in healthcare, education and the quality of living but also indicate the changes in the age composition, a household size, and the level of dependency. At the same time, the

increased urbanization process and the reorganization of the economy structure has remodeled labour markets, redistribution of household income, and has impacted consumption patterns in rural and urban regions.

These demographic changes are important in understanding the trend in household expenditure especially in an environment where income inequality is increasing and consumption baskets transform. Alteration in population structure, urban living and household makeup is not only influencing the degree of consumption but also how the expenditure is distributed among food, health and non-food products. It is against this background that the current paper summarizes current demographic and household level indicators to investigate the interactions between population dynamics and income, urbanization and consumption patterns in India. Combining demographic trends and consumption behaviour, the work informs about the socio-economic consequences of demographic transition in India, which is larger, and the issues, which are of interest in policy making in order to achieve inclusive and sustainable development.

Objectives of the Study

The main aim of this paper is to discuss the current demographic transition in India and to evaluate its effects on the household consumption behaviour. In particular, the research will attempt to:

- Examine the recent changes in population growth, age and gender structure, fertility, mortality, literacy and urbanization in India.
- Examine household structure and composition, especially household size and the increasing popularity of nuclear households.
- Evaluate patterns and trends in domestic consumption spending (food, health, and non-food).
- Comparison between rural and urban household consumption behaviour and quantification of the degree of consumption differentials.
- Explain the policy implication of demographic change in income distribution, the labour markets and household welfare in India.

Rationale of the Study

Demographic transition in India is a major turning point in the course of the development of India, and it has a significant implication on the growth of the economy, welfare of households, and social policies. Age structures and dependency ratios are changing due to declining fertility and rising life expectancy, and labour markets and consumption patterns are changing due to rapid urbanization and internal migration. Although these changes are significant, to a large extent, the literature that we have looks at demographic change and consumption behaviour separately.

The aim of the study is driven by the fact that there is need to combine the demographic trends and household consumption dynamics with current and extensive secondary data. The study offers a wider perspective to the effects of demographic forces on economic behaviour and inequality by relating the population factors with the household spending patterns. The results are especially applicable to the policy makers who want to develop specific interventions in the employment creation, social protection, health funding, and city planning. The research therefore adds to the existing discussions on the idea of inclusive and sustainable development within the framework of the Indian demographic change.

Limitations of the Study

In spite of its contributions, there are some limitations in the study. To begin with, it is an analysis of the secondary data which is rather descriptive in nature and thus does not allow developing any causal connections between the demographic factors and the household consumption behaviour. Second, the consumption patterns intra-households and intra-regions might be obscured by the use of the aggregated indicators. Third, this paper fails to directly explain short-term economic shocks or household-level behavioural changes, which can also affect consumer spending. Lastly, lack

of micro-level panel analysis limits the time changes between the dynamic analysis. Future studies can overcome these constraints to use household-level microdata and better methods of econometrics or AI.

Data and Methodology

Secondary data collected by the researcher is the basis of this study based on nationally and international recognized sources such as the World Bank, MOSPI, Indian Census and other official agencies. The data includes measures on population growth, age and gender structure, fertility and mortality, household size and structure, income classes and household consumption expenditure.

It is a descriptive analysis that is aimed at establishing current trends and patterns instead of trying to estimate the causality. This method is appropriate to define macro-level demographic and socio-economic background concerning other micro-econometric and policy-oriented studies. The uploaded dataset is used to draw all the important indicators and trends.

Demographic Trends in India

Population Growth and Population Density.

The overall population in India has been on continuous growth and is estimated to have more than 1.4 billion with population density always growing with time. This development exerts a long-term strain on the land, infrastructure, and social facilities. Although fertility has shed off, population momentum has guaranteed that there will be a continued rise in absolute population values.

Age Composition and Gender Composition.

The age structure in India indicates a fairly youthful population with a big proportion of those in the working age (15-64 years old). This will generate economic growth opportunities but also issues of job creation and skill acquisition. Gender ratios have also improved slowly, however, there is still regional and rural urban imbalance.

Fertility, Mortality and Life Expectancy.

The total fertility rates have decreased to a close view of replacement rates and the birth and death rates have also dropped down considerably. The life expectancy is now more than 70 years old and this indicates advancements in standards of care and living. These trends indicate the transition of India through the demographic transition, and this will have an effect on ageing, healthcare demand, and social security systems.

Household Structure and Composition.

In India, the household size is highly skewed to three to five members and nuclear households are becoming more and more popular particularly in the urban regions. This change in household arrangement indicates some more general socio-economic transformations including urban migration, altering family norms, and higher participation of women in labour.

The increasing size of smaller and nuclear families has significant consequences to consumption behaviour, housing demand and intra-family resource allocation.

Income, Urbanization, and Consumption Spending.

Income and Trends in the Labour Market.

There is a moderate improvement in the labour force participation rates and the increase in the per capita national income over the past few years. The increase of real wages of regular workers however has been moderate and there is concern regarding income security and purchasing power, especially on the lower income groups.

Urbanization and Migration

The pace of urbanization has increased and a third of the Indian population is now living in the urban regions. The rural to urban migration has led to urbanization, which has changed the labour market and consumption trends. Urban households normally have better consumption, and are also highly cost of living.

Housing Consumption Trends.

The expenditure on household consumption has been on an increase each year, which is an indicator of economic growth and the growing number of middle-income earners. Nevertheless, there are still enormous rural-urban and social



group differences. The proportion of food to total consumption is still more in rural areas as per the Engel law, whereas in urban households, the proportion of non-food and services is more.

The issue of consumption inequality is still a burning issue especially in the lower fractile groups where the rural to urban disparities have been increasing over the recent past.

Discussion and Policy Implications

It is on the basis of this that the evidence suggests a multi-faceted relationship between household economic behaviour and demographic change in India. The reduction in fertility and rising life expectancy indicates a slow ageing of the population, which will pose new challenges on the healthcare, pensions, and long-term care models. Simultaneously, the movement towards urbanization and the transformation of the household structure are already modifying the consumption baskets and residential demands.

- Policy wise, the trends demand:
- Enhancements in the creation of jobs to make use of the workforce.
- Increasing social security of the aged and frail.
- The subject of rural and urban and social group differences in income and consumption.
- To maintain growth in productivity, investing in education and skill development.

II. CONCLUSION

The demographic transition is still in progress in India, but it is highly interconnected with the transformations in the household income, household structure, and consumption behaviour. The demographic landscape of the nation has been transformed by the decreasing fertility rates, increased life expectancy, the advances in literacy, and a faster pace of urbanization. These changes have also shifted the size and composition of households, altered labour force participation and have also changed the allocation of their resources by households to various types of expenditure. Subsequently, driven by the same, demographics has been given growing significance in explaining consumption patterns, inequality, and welfare in modern India.

A large working-age population is one of the greatest opportunities to come as a result of Indian demographic transition. The age structure may be favourable which can potentially create a demographic dividend due to the higher labour supply, higher productivity, and economic growth. An increase in employment and income levels by the working age population can increase household buying power and increase in the consumption levels. The achievement of this dividend however depends on the ability to secure enough workplaces, skills growth and inclusive labour market policies. These supporting conditions will not ensure that the demographic advantage is converted into long-lasting gains in household welfare.

Simultaneously, demographic transition has a number of issues. Income and consumption disparities which have persisted to date are still a significant issue between rural and urban regions and social and income classes. Although urban households tend to have better average incomes, consumption baskets will be more diversified, whereas rural households tend to spend more of their money on food, indicating a lack of income and poor access to service. The rapid urbanization has also exerted a strain on urban infrastructure, housing, healthcare and government services, which have resulted in poor living standards and a high cost of living to various households.

The other arising problem is population ageing. The life expectancy has been improved and this has increased the percentage of the elderly people and subsequently this results in a high dependency ratio and a increased demand on the healthcare and social support systems. The ageing population is likely to spend a higher percentage of their income on health-related products, thus placing a burden on the household budget, particularly in the event that they do not have proper health insurance or social safety nets. These tendencies emphasize the necessity of policies that will deal with the long-term consequences of the ageing population, such as funding of health, pensions, services to the elderly.

The relationship between demographic transition and consumption behaviour is also complicated by changes in household structure. The growing number of small and nuclear families especially in cities impacts on the economies of scale in consumption, and changes expenditure behavior. Smaller households can have greater per capita consumption

but can equally be more vulnerable to income shocks because in most cases, they have fewer earners. These structural changes are critical in understanding how to come up with policies that will help in the resilience of households and financial stability.

Decent sensitivity of the demographic trend and household consumption is thus critical towards the development of inclusive and sustainable policies in development. The policymakers need to consider the differences between regions, social groups, as well as the household needs when developing interventions concerning employment, education, health, and social protection. The policies that should be used to guide inclusive growth ought to not only be based on the generation of income but also should take into account demographic realities that influence consumption behavior and welfare outcomes.

It is possible that future research will develop on this study to combine micro-level household data with sophisticated econometric and AI-based techniques. Extracting the longitudinal data on household level would provide a more accurate view of the causal relationships among the demographic features, income dynamics, and consumption behaviour. Predictive accuracy can also be improved further with AI and machine learning methods, as it can include non-linear, complicated interactions that more traditional models can fail to capture. These methods would give a better understanding of vulnerability and resilience of consumption and reinforce the policy-making evidence base of how to design policies effectively that are future-oriented in the changing demographic situation of India.

Future Research Recommendations.

The study of demographic transition and household consumption in India can shift towards more detailed instead of descriptive studies in the future. A significant way forward has been the utilization of household-level longitudinal data, including panel data of surveys such as CPHS to study the impact of income, employment status, household make up and demographic variable changes on consumption behaviour with time. The panel analysis would enable the researcher to establish co-relations and would provide the household reaction to both the gradual demographic changes and the abrupt economic disruptions.

The other potential avenue of further research is the use of sophisticated econometric and Artificial Intelligence (AI)-based techniques. Machine learning, structural equation modelling, and causal inference frameworks can be used to reveal potentially complex and non-linear demographic-consumption outcome relationships which might not be adequately modeled using traditional regression forms. Such approaches may also enhance the forecasting of consumption vulnerability between the various groups of the population.

Other studies that should be done in the future include intra-household dynamics, especially gender and age disparities in spending allocation. The allocation of resources in households can also help in giving more insight into welfare and nutrition as well as health outcome, particularly in ageing and women headed households. Also, regional and district-level analyses can be used to determine spatial inequalities and to make location-specific changes in policy.

Lastly, the role of the institutional factors and public policy, including the availability of social protection programmes, healthcare services and city infrastructure, in influencing consumption behaviour, may be included in the future research. Bringing together demographic transition and policy assessment will be of significant importance in comprehending how India can realize an inclusive and sustainable growth amid the current demographic transformation.

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