

Population Income and Demand for Food Grains in India

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Abstract:- Changing consumption patterns, income levels sustainable economic growth and growth of population are changed the India food basket from traditional staple foods to High value foods and processed foods. Due to increase in population over all food consumption increased and led to increase in demand for food grains.

On the supply side India achieved impressive growth of food grains production with the improvement in irrigation facilities and infrastructure facilities in rural areas and discovery of high yielding varieties like rice and wheat. Changing scenario in consumption and food production will have a significant influence on supply and demand of food grains and food security. In this paper an attempt is made to know the supply and demand of food grains in the coming decade by projecting the demand and supply of food grains.

Demand for food is expected to increase significantly due to large growth of population, increase in incomes, and dietary changes in the coming decade. India has to face significant challenges in attaining food self-sufficiency due to decrease in agricultural productivity, climate change. Hence, there is a need for improving agricultural productivity through research and development methods.

I. INTRODUCTION

Changing consumption patterns, income levels sustainable economic growth and growth of population are changed the India food basket from traditional staple foods to High value foods and processed foods. Due to increase in population over all food consumption increased and led to increase in demand for food grains.

On the supply side India achieved impressive growth of food grains production with the improvement in irrigation facilities and infrastructure facilities in rural areas and discovery of high yielding varieties like rice and wheat. Changing scenario in consumption and food production will have a significant influence on supply and demand of food grains and food security.

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II. OBJECTIVES OF THIS PAPER

- Estimating population projections and income levels.

- Estimating Demand projections of high value products and suggesting measures to increase productivity.

Data source:

Secondary source of data collected from different sources like Central Statistical organisation population statistics etc.,

III. POPULATION PROJECTIONS:

According to the Registrar General of census Government of India (2006), the total population of the country is likely to increase from 1081 million in 2004 to 1195 million in 2011 to 1272 million in 2016 . It has further estimated to increase 1342 million in 2021.

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Year	Rural	Urban	Total
2004	772.0	309.1	1081.1
2011	801.1	385.2	1195.3
2016	842.1	430.3	1272.4
2021	886.1	455.2	1341.3

Table 1. Population projections
Source : Government of India (2006)

The Table 1 indicates there is a gradual increase in urban population . The total population is increasing significantly. Increasing urbanisation have changed the dietary habits and increased the demand high value products and processed foods.

IV. INCOME GROWTH

It is assumed that Indian economy would grow by 9 percent per year over the next 15 years. The following table shows the projected growth rates of income.

Particulars	2004-11	2011-16	2016-21
Net national product at factor cost	9.0	9.0	9.0
Per capita income			
Rural	3.46	3.52	3.58
Urban	11.8	12	12.19
All India	7.57	7.75	7.91

Table 2. Projected growth rates of income

The income growth rate of per capita income in urban areas is three times higher than the growth rate of per capita income in rural areas. Increasing urbanisation and increase in incomes in urban areas have changed the dietary habits towards high value products and increases demand for food grains.

V. CONCLUSIONS

➤ Demand and supply projections of food grains in India:

Increasing demand for high value food products like milk products animal products and fruits and vegetables is likely to cause a shift in area production of changes the agricultural production, marketing, processing and retailing in the country. To know the future demand and supply of high value products an attempt is made to project supply and demand for another decades'

Projections in million tonnes

Commodities	Supply and demand gap	2010	2020	2030
Vegetables	Supply (S)	141.8	187.5	211.2
	Demand (D)	125.6	155.6	191.7
	Availability(A)	107.4	142.3	159.5
	Gap (A-D)	-18.2	-13.6	-32.2
Fruits	Supply (S)	74.1	98.1	117.1
	Demand(D)	65.2	81.1	104
	Availability(A)	57.9	79.1	94.1
	Gap (A-D)	-7.3	-2	-9.9
Milk	Supply(S)	117.1	157.1	189.1
	Demand (D)	112.2	139.0	171.2
	Availability(A)	111.5	149.1	178.9
	Gap (A-D)	-0.7	10.1	7.7
Poultry and meat	Supply(S)	4.5	7.1	8.5
	Demand(D)	5.2	6.7	8.9
	Availability(A)	4.4	6.2	7.9
	Gap(A-D)	-1.2	-0.5	-1
Eggs	Supply(S)	3.2	5.0	6.5
	Demand(D)	3.5	4.5	6.0
	Availability(A)	2.9	4.6	6.1
	Gap(A-D)	-0.6	0.1	0.1
Fish	Supply(S)	7.5	10.1	14.1
	Demand(D)	6.5	7.9	11.2
	Availability(A)	6.4	8.5	11.8
	Gap(A-D)	-0.1	0.6	0.6

Table 3. Demand supply projections and gaps for high value food commodities in India.

The domestic demand and supply projections were presented in the table. In the table supply demand and also availability (net domestic supply), has been computed from production after adjusting for post harvest losses. The supply demand gap is the difference between the availability and demand.

The supply demand gap of vegetables reveals that the increase in demand is very high, and India is going to face substantial shortage of vegetables by 2030. The same is applicable to fruits also. Milk may get surplus production after 2020. India may attain self sufficiency in milk production by 2030. Animal foods like fish, poultry, meat, eggs also face deficit by another two decades. India will need to import significant amount of vegetables, fruits and other high value products in future decades. It has to increase productivity through research and development to meet the gap between demand and supply of food grains.

It is observed that an increase in demand for high value products is due to the increase in population and income levels. Rapid urbanisation is changing the food habits and taste and preferences towards high value products. In the coming decade India will emerge as most populous country in the world. House hold income strongly influence the dietary pattern. Changing dietary pattern increases the relative prices of food grains. In India food basket has more diversified with a significantly higher share of high value products like milk vegetables, meat and fish in both rural and urban areas. Therefore shift in dietary habit increases demand for high value products.

To meet this growing demand for food requirements either we have to increase the production or depend on imports. There is a significant increase of agricultural production in the country, but it is not sufficient to the future supply requirements. Imports will help to meet the situation in the short run where as in long run focus should be on increasing productivity of agriculture. There is a need for public capital formation in improving irrigation facilities efficient usage of water through drip irrigation, providing plant nutrition, agricultural inputs, climate change, infrastructure, etc.,

Government policies should be in the form of maintaining balance between production and demand. Increasing demand of high value food can be met only with the increase in productivity in agriculture. Improving yield levels would require serious efforts. This can be achieved through research and development activities. If we can achieve this then the increasing long run demand requirements of the country can be met in future.

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