

## Assessment of the Performance of India's Food Grains Production

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### Abstract

Climate change has emerged as an important determinant, particularly in the recent past. In India before economic reforms government was providing a lot of subsidies over the inputs that made the purchase of inputs affordable for the farmer which helps in fighting against the climate change. But after the economic reforms high rise in the prices of inputs of agricultural production has made it difficult for the farmers to purchase the inputs in right amount and vulnerability of agriculture to climate change has increased and it is expected that agriculture sector in India will be negatively affected.

The growth rate in the food grains production and productivity has decelerated when India entered in the era of globalization. The growth rate production of food grains is 2.80 per cent per annum in pre reform period which declined to 1.98 per cent in post reform period. The situation is more worsen in case of growth rate of rice and wheat. The growth rate in productivity of food grains is slightly improved in post reform period over the pre reform period but in case of rice and wheat productivity, the result is quite opposite. In this paper we made a modest attempt to analysis this result by considering the change in growth rate of fertilizer consumption, change in cultivated area, change in irrigated area and change in climate conditions.

**KEYWORDS :-**Food grains, Production, Productivity, Fertilizer Consumption, Irrigated Area, Climate Chang

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### INTRODUCTION :-

The era of 1990s can be marked as a decade of complete departure from the restriction and controlled economic system when the government of India introduced a number of new economic policies in the form of structural adjustment and macro stabilization programme to integrate the national economy. Though, the Indian economy had got its way of rapid economic growth right from the beginning of the eighties, however, acceleration in the growth rate of GDP and per capita income have been realized only after 1991. This continuous and accelerated high growth of the Indian economy provides a large base for being the 4th largest economy of the world in terms of PPP (G.S. Bhulla, 2005). But the main problem with this high rate of growth of GDP and per capita income is that it has been as explicit growth of the economy. The growth performance of the Indian agriculture has decelerated significantly after the opening up of the economy. —Since agriculture continues to be the largest sector of the economy in terms of employment, the deceleration of growth of this sector has serious implications for the living standard of agricultural workers both farmers and agricultural laborersl [Ibid]

The growth rate of agriculture production is generally judged by the performance of food grains and non-food grains production. From these both items of agriculture production of food grain is more significant due to two reasons. Firstly, it provides the base for subsistence by supplying basic food items and secondly, it is the only group of agricultural produce where —Green Revolution| was introduced firstly and more successfully. Its importance has also increased due to the inception of World Trade Organization (WTO) in 1995 and therefore in the present study we shall concentrate our self over the production. At the time of independence agriculture occupied the most dominant place in the Indian economy by providing livelihood to about 70 percent of population and contributing about 48.6 percent of GDP (Sharma, P.N., 2005). After the introduction of Green Revolution, the scene has completely changed about the Indian agriculture has transformed from food shortage to self reliance. This has become possible because of technological changes as well as the Government initiatives in form of various programme. The new method of agricultural practice brought a drastic change in the productivity and production. More and more agricultural land are brought under cultivation with the help of improved irrigation facilities (with the help of assured means of irrigation) cheaply available chemical fertilizers and supply of high yield varieties of seeds in the market. Farm mechanization has also shortened the period of ploughing, sowing and harvesting process of agriculture. The implementation of land reform has further added a new dimension in Indian agriculture. Therefore the successful implementation of Green Revolution and Land Reform not only increases the productivity but also increases the area under cultivation that paved the way for a higher growth of the agricultural sector

**Growth in food grains productions :**

It has been realized that there are limits to increasing the food grains productions through increase in area under cultivation because the country has almost reached a plateau in so far as cultivable land is concerned. The contribution of high yielding varieties which has been the basis of green evolution in seventies has how plateaved and there is hardly and fresh contribution to growth in yields. There is a new awareness that a substantial proportion of food crop output is lost offer harvest. A grain saved is grain produced should be India’s motto as ten percent of food grains produced in the country is lost before it reaches the consumer.

**Table No. : 1**

**Food grains production in India**

Year	Production (million tones)
1950-51	50.82
1960-61	82.02
1970-71	108.42

1980-81	129.59
1990-91	176.39
1997-98	192.43
1998-99	195.25
2001-02	209
2008-09	226
2009-10	235
2011-12	246.2
2012-13	250 (Estimates of agriculture minister)

**Availability of food grain :**

Indicate that changes in the precipitate het availability of food grain per day in India.

**Table No. : 2**

**“Changes in the per-capita net availability of food grain per day.”**

Year	Average (grams per capita per day)	% change from previous period
1951-1960	429.8	-
1961-1970	447.5	4.1
1971-1980	442.5	7.2
1981-1990	446.2	5.0
1991-2000	475.5	2.4
2001-2010	454.2	-4.5

Note: The net availability of food grains to be gross production less seed, feed and wastage and exports plus imports and draw down of stocks.

Sources : Calculated from agricultural statistics at a glance.

Post liberalization period witnessed a decline in the per capita net availability of cereals and pulses and emerging food grain availability crisis.

**Food grains damages :**

The following table is indicate the quantity of food gain damaged in India.

**Table No. : 3**

**“Quantity of food grains damaged in India.”**

Year	Quantity (in lakh M.T.S.)
2002-03	1.35
2003-04	0.76
2004-05	0.97
2005-06	0.95
2006-07	0.25
2007-08	0.34
2008-09	0.03
2009-10	0.03

This table indicate that India’s system of grains management is in crisis-

**India’s food security problem :**

India’s food security is very strong but she is not depend on strong base, because she is face many problem.

Malnutrition is nothing new for many Indians. According to the International Food Policy Research Institute’s [2011 Global Hunger Index](#), the upshot of this perennial problem is that about 60 million children in India are underweight and malnourished, while 21 percent of the population as a whole general is malnourished. Unfortunately, this problem is unlikely to change anytime soon, with the recent introduction of the

National Food Security Bill threatening to continue market inefficiencies in food supply and extend the problem of malnutrition far into the future.

The developmental repercussions of this situation are dramatic, not only for individuals who suffer numerous health issues resulting from malnutrition, but also for the economy at large. Malnutrition results in a loss of productivity, indirect losses from impaired cognitive development, and losses from increased longterm healthcare costs.

According to a [report by the World Bank](#), productivity losses in India due to stunted growth, iodine deficiencies, and iron deficiencies are equivalent to almost 3 percent of GDP. While during the colonial era famine was the primary result of “food insecurity,” malnutrition has replaced it as the chief concern of legislators and economists.

## CONCLUSION

Before the inception of new economic reform, the farmers were protected and supported by the Government of India. Government had supplied nearly all agricultural inputs at highly subsidized rate that resulted in form of a revolution in the Indian agriculture. The cheaper availability of factors of production supposed to increase the consumption of fertilizers and land under irrigation facilities so as to increase the total food grains production by increasing the yield and area under cultivation. But after the adoption of new economic policy, it has been assumed by the government that now the Indian agriculture is maintained enough to survive on her own feet. Further the reduction in subsidiary causes to increase the prices of agricultural inputs. This ultimately adversely effected the food grains production and productivity.

From the above analysis data also reveals that, there is significant declined in growth of production and productivity of total food grain production in post reform period. However the growth of coarse cereal and pulses in post reform period has increased. But most heated items of food grain are rice and wheat whose growth of production and productivity adversely affected in post reform period. This is great challenge to Government of India to improve in production and productivity of rice and wheat under new economic regime. . The adverse effect on production and productivity of rice and wheat is not only reduction on subsidiary on agricultural inputs but also the overall declined in amounts of rain fall and shifts in the timing of the rain fall. Any change in rain fall patterns poses a serious threat to agriculture and therefore to the economy and food security

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