

An Analysis of the Impact of Trade Liberalization on Per Capita Net Availability of Food Grains

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Introduction

The meaning of trade liberalization is reducing the limitations on trade that countries around the world have erected over a large number of years. In other words it can be said that it is a removal of or decline in the trade practices that allows free flow of goods and services from one nation to another. It includes dismantling of tariffs such as duties, surcharges and export subsidies as well as non tariff barriers that is licensing regulations, quotas, and arbitrary standards. The trade liberalization in India refers to the ongoing economic reforms in India that started on 24 July 1991 with a view to liberalizing the economy and integrating it with the world economy. The new economic policy introduced changes in various areas. The policy has salient features which are Liberalization that is external and internal, Privatization, and Globalization which is known as LPG model. The principal objective of this model was to make the economy of India the fastest developing economy in the globe with capabilities that help it match up with the biggest economies of the world. National self-sufficiency in food grains has been a major achievement in post-Independence. The net availability of food grains divided by the population estimates for a particular year indicates per capita availability of food grains in terms of kg/year. Or $\text{Net availability} = \text{Net Production} + \text{Net imports} - \text{Changes in Government stocks}$. The definition of food grains availability is the net output of food grains plus net imports and minus net additions to stocks. It means that if a part of net output is exported that much less is

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~ The chapter is based on the paper presented in "National Conference on Emerging Trends and Scope in Digital Banking, Cashless Economy & Innovations in Commerce and Modern Management & International Seminar on Global Economy: Opportunities and Challenges" Organized by Inspira Research Association (IRA), Jaipur & Shri Bhawani Niketan Girls P.G. College, Jaipur, Rajasthan, India. 29-30 September, 2018.

available for consumption within the country; conversely availability rises above domestic output with imports. Addition to stocks reduces availability while drawing down of stocks adds to availability.

Objectives of the Study

- To evaluate the impact of trade liberalization on per capita net availability on certain food items.
- To assess the reasons and problems behind low per capita net availability of food grains.
- To analyze the per capita net availability of food grains before and after trade liberalization period.
- To determine factors effecting low per capita net availability of food grains.

Collection or Source of Data

The present study is purely based on secondary data and this data is collected from Central Budget, Government of India, New Delhi, Economic Survey, Ministry of Finance, Government Of India, New Delhi, Annual Report Ministry of Agriculture Government Of India, New Delhi, Agriculture Cost and Prices Commission, Directorate Of Economics & Statistics, Government Of India, New Delhi, Reports published by various Ministries, WTO publications, IMF publications. Apart from this the information also collected from the various websites. India remained a severely food deficit economy over two decades after independence, managed to achieve self-sufficiency in food grain production at the national level. The green revolution ushered in a dramatic and steady increase in domestic food grain production practically eliminating the need for food imports, except to a very limited extent in times of extreme emergencies such as droughts and serious crop failure.

Availability refers to the physical availability of food stocks in desired quantities. Using food grains as a proxy for food, availability of food grains is given by domestic production net of food, seed and wastage plus net imports plus draw-down of stocks. Physical availability in any place within a nation depends on storage and transport infrastructure and market integration within the national territory. The per capita net availability of food grains before and after trade liberalization period. Trade liberalization started to affect Indian agriculture in the early 1990s, with the progressive reduction or removal of trade restrictions of various types. After economic liberalization of 1991, major changes have been introduced in foreign trade policy relating to agriculture. They include:

- Channeling in foreign agricultural commodities has been abandoned for large number of commodities except for export of onion and import of cereals, pulses and edible oils.

- Quantitative restrictions on most of the exports and imports of agricultural commodities have been removed.
- Almost all the export incentive schemes were abolished following the devaluation of rupee.
- Import tariffs have been reduced.

These changes in foreign trade policy relating to agriculture were further supported by the policy of exchange rate depreciation. Besides, sharp reductions in the import tariffs on industrial commodities have also helped the domestic agriculture. It has been argued that the operation of all these favourable policies would benefit agricultural sector by increasing the domestic prices. But such a situation may itself act as a depressing factor on agricultural exports when the international prices fluctuate widely. The impact of trade liberalization on per capita net availability of food grains in India can be seen in the below table 1.

Table 1: Per Capita Net Availability of Food Grains (Per Annum) in India During Pre and Post Liberalization Period

(kgs Per Year)

(as on 17.03.2017)

Year	Rice	Wheat	Other Cereals	Cereals	Gram	Pulses	Food Grains
Pre Liberalization Period							
1951	58.0	24.0	40.0	122.0	8.2	22.1	144.1
1961	73.4	28.9	43.6	145.9	11.0	25.2	171.1
1971	70.3	37.8	44.3	152.4	7.3	18.7	171.1
1981	72.2	47.3	32.8	152.3	4.9	13.7	166.0
Post Liberalization Period							
1991	80.9	60.0	29.2	171.0	4.9	15.2	186.2
2001	69.5	49.6	20.5	141.0	2.9	10.9	151.9
2011	66.3	59.7	23.9	149.9	5.3	15.7	170.9
2012	69.4	57.8	21.9	149.1	4.9	15.2	169.3
2013	72.1	66.8	19.2	158.1	5.6	15.8	179.5
2014	72.3	66.8	22.6	161.6	6.0	16.9	178.6
2015	67.9	61.3	28.4	153.8	4.5	16.0	169.8
2016	67.2	72.9	26.1	162.0	-	15.7	177.7
2017(P)	69.5	74.9	29.8	169.8	-	19.3	189.1

Source: Directorate of Economics and Statistics, DAC & FW.

Notes:

- The net availability of food grains is estimated to be Gross Production (-) seed, feed & wastage, (-) exports (+) imports (+/-) change in stocks.
- The net availability of food grains divided by the population estimates for a particular year indicate per capita availability of food grains in terms of kg/year. Net availability, thus worked out further divided by the number of days in a year i.e., 365 days gives us net availability of food grains in terms of grams/ day.

- Figures in respect of per capita net availability given above are not strictly representative of actual level of consumption in the country especially as they do not take in to account any change in stocks in possession of traders, producers and consumers.
- Food grains include rice, wheat, other cereals and all pulses.

(P): Provisional

The above table presents the comparison of per capita net availability of food grains in India between pre liberalization period (1951 to 1981) and post liberalization period (1991 to 2017). It is observed from the above table that the per capita availability of rice per kg per year has increased from 58 kg in 1951 and reached the peak of 80.9 kg in 1991 immediate after liberalization, further it has declined to 69.5 kg in 2017 whereas the per capita net availability of wheat also has jumped from 24 kg in 1951 to 60 kg in 1991 after that reached maximum in 2013 and 2014 that is 66.8 kg and started to decline till 61.3 kg in 2015 again jumped to 74.9 in 2017. Figures about per capita net availability of other cereals shows a little increase during 40 kg in 1951 to 44.3 kg in 1971 which indicates 10.7 per cent increase after that it has decreased continuously till 19.2 kg in 2013 and then started to increase till 29.8 kg in 2017. Now just like rice and wheat, cereals also increased from 122 kg in 1951 to the peak of 171 kg in 1991 in post liberalization period after that decreased to 153.8 kg in 2015 then increased a bit to 169.8 in 2017. The gram per kg per year has increased during 1951 to 1961 by 34 per cent that is 8.2 kg to 11.0 kg after that it has declined about 73 per cent in the next four decades and declined to 4.5 kg in 2015. But in case of pulses, the per capita availability declined from 22.1 kg to 13.7 kg during 1951 to 1981 in pre reform era. This indicates a decline of about 38 per cent in the per capita net availability of pulses after that raised continuously to 19.3 in 2017. If we see the per capita net availability of food grains, then there was a tremendous increase of 144.1 kg in 1951 to 186.2 kg in 1991, which shows 29 per cent increase after that it has reached maximum of 189.1kg in 2017.

Above table clearly shows that a vast increase in per capita annual availability of food grains in year 2013-14. This could be the result some of the schemes implemented in the past that focus on increasing agricultural productivity. The conclusion here is that the rice, wheat, cereals and food grains has increased in pre liberalization period whereas the other cereals, gram and pulses have decreased in the same period. Similarly in the post liberalization period again rice, wheat, cereals and food grains have increased significantly but the other cereals, gram and pulses have mixed trends sometimes stable or declined in the same period. The data of 1981 and 1991 (immediate after trade liberalization) revealed the sharp increase in all the commodities except other cereals and gram. This implies that significant increases in food grain production have not been able to keep up with the increase in population. It

is important to state here that there has been a steady decline in net per capita food grain availability in the post-economic reforms period of 1991 to 2012.

To improve nutritional status a pilot programme on nutri-farms for introducing new crop varieties rich in micro-nutrients such as iron-rich bajra, protein-rich maize, and zinc-rich wheat was implemented as a sub scheme of Rashtriya Krishi Vikas Yojana (RKVY) in 2013-14 in the 100 districts of nine states which are most affected by malnutrition, with an outlay of Rs. 200 crore. According to the economic survey 2013-14, it is not only important to increase per capita availability of food grains but also to ensure the right amounts of food items in the food basket of the common man. For this, a thrust on horticulture products and protein-rich items is required for enhancing per capita availability of food items as well as ensuring nutritional security.

The National Food Security Mission (NFSM) was implemented in 11th Plan (2007-2012) to increase the food grains production by 20mn tonnes (10mn tonnes of Rice & 8mn tonnes of Wheat and 2mn tonnes of Pulses) by the year 2011-12 (XI Plan) to meet the demand of growing population. The Mission has delivered its envisaged outcomes and an additional food grains production of about 40mn tonnes has already been achieved by 2011-12 against pre-NFSM year of 2006-07.

The highest ever food grain production of 257.44mn tonnes is estimated during 2011-12 (4th Advance Estimate) which is 13.44mn tonnes higher than the Planning Commission's projected demand of 244mn tonnes. Some of the other important schemes for agricultural development in India include National Mission for Sustainable Agriculture, Bringing Green Revolution to Eastern India, Rain-fed Area Development Programme; and National Agricultural Insurance Scheme etc. With 56.6% of working population engaged in agriculture and allied activities, agriculture is an important component for the Government to focus on in the Budget.

Also, despite more than half of the country's dependence on the sector for livelihood, it represents only about 14% to the GDP. Factors are affecting low per capita net availability of food grains in post liberalization period. The problem or reason behind the low per capita net availability of food grains mainly is low growth rate. The agriculture sector in India has been plagued by low growth rate since Independence. The growth target for agriculture was 4% for 11th Plan but only 3.6% growth could be achieved. "The average annual growth rate of agriculture and allied sector during the first four years of the current Five Year Plan period (2012-17) has been 1.6 per cent as against the 12th plan target of 4 per cent per annum," Minister of State for Agriculture Mohanbhai Kundariya said in a written reply to Lok Sabha. According to the Economic Survey, 2013-14, released by the Ministry of Finance before Budget 2014, there was record production of food grains in 2013-14, especially of pulses and oilseeds. There has also been an increase in the net as well as per capita availability of food grains.

Another big reason behind low per capita net availability is decline in public investments, especially in irrigation; this is directly reflected in the reduced share of capital formation in agriculture in the overall GDP. Moreover in the 1990's, the quality of public sector agricultural research, technology development and extension services deteriorated. The farmers today is not only experiencing a slowdown in agricultural productivity and rise in input costs but also facing the volatility of the market domestic and international both because of trade liberalization.

An elaborated review of trade and food availability shows that many of the benefits expected from trade liberalization have not accumulated for various reasons. First regarding per capita net availability the WTO (World Trade Organization) AoA (Agreement on Agriculture) created an imagination that the developing countries would reduce their support to agriculture then consequently increase in prices would induce greater production in developing countries. But this imagination has failed as the developed countries were unsuccessful to reduce their domestic support to agriculture. Moreover because of this same reason, there has been no reduction in the volatility of international prices and price stability has so far perplexed the developing countries. The slowdown in the world economy since 1997-98 has resulted in income growth in all the developing countries. The policy makers have realized that food security can only be provided through increased production of food grains, stability of supplies, and more access through rise in income levels of population.

The main policy devices for augmenting growth were ample investment in rural infrastructure, land reforms and the introduction of better technological practices. This kind of poor attention or negligence by government towards agriculture sector has led to the further deterioration in agricultural productivity and more importantly food grains, during the post liberalization period. This has made huge number of small and marginal farmers to quit agriculture or their lives also at several times. These trends have led to rise in food prices because poor farmers did not have capacity to migrate themselves in urban areas for job, which again hit the lives of small and marginal farmers and other poorer and weaker sections quite heavily and negatively, as they were pushed away from accessing food items as food grains became overpriced. It can be evident from the fact that the malnutrition (380 million suffering from malnutrition) has increased more rapidly during the post reform period. Therefore the basic and important requirement in India is to protect our farmers as well as consumers from vicious repercussions arising under WTO regime, to make sure that food is accessible both economically and quantitatively to the poor people. For this purpose, the government must initiate policies which increase the support system to agriculture in terms of imposing heavy import duties on agro goods and quality controls, providing sufficient credit and storage facilities.

Conclusion

In the present study it is clearly visible that the new economic policy introduced changes in various areas. India has a large and diverse agriculture and is one of the world's leading producers and exporters. It is also a major consumer, with a growing population to feed. National self-sufficiency in food grain has been a major achievement in post-Independence India. The green revolution ushered in a dramatic and steady increase in domestic food grain production practically eliminating the need for food imports, except to a very limited extent in times of extreme emergencies such as droughts and serious crop failure. The conclusion here is that the rice, wheat, cereals and food grains has increased in pre liberalization period whereas the other cereals, gram and pulses have decreased in the same period. Similarly in the post liberalization period again rice, wheat, cereals and food grains have increased significantly but the other cereals, gram and pulses have mixed trends sometimes stable or declined in the same period. The data of 1981 and 1991 (immediate after trade liberalization) revealed the sharp increase in all the commodities except other cereals and gram. This implies that significant increases in food grain production have not been able to keep up with the increase in population. It is important to state here that there has been a steady decline in net per capita food grain availability in the post-economic reforms period of 1991 to 2012 after that in 2013 we can clearly see a sharp rise in almost all the commodities like rice, wheat, cereals, gram, pulses and food grains only other cereals declined in this period.

The per capita net availability of commodities highlights the fact that despite the changes in the macroeconomic policy framework and trade liberalization, the Indian agriculture sector neither experienced significantly higher growth subsequent to the initiation of economic reforms in 1991 nor did it derive the expected benefits from trade liberalization. After gone through above table it is very clear that there is a lack of attention on agriculture sector in the post liberalization period. It clearly indicates that the whole economy has been moving from agriculture sector to industrial and service sector. The main point we should always keep in mind is that the agriculture sector is the backbone of our economy as almost one-third of or population is directly involved in this sector. So government should give more attention to protect agriculture sector by increasing public and private investments and making available credit facilities and subsidies mainly for the poor farmers and protected food security and also make it globally competitive by export promotion and import substitution.

Suggestions

- There was a decline in per capita net availability of almost all the above commodities except wheat in post liberalization period. Government should start provide incentives to farmers especially in the field of cereals which is the major and cheapest source of calories. Similarly pulses are also rich in protein

which enhances the health system of citizens of India so there is a need of better public distribution system, nutrition support programs, mid day meal scheme etc. also to encourage the farmers to adopt organic farming, yield raising inputs and reducing the gap between prices in the retail market and prices received by the farmers.

- People are transferring from rural area to urban area for income. There is a need of innovations in crop technologies, implementation of attractive programs and marketing through advertisements to attract young and educated people, provide fellowships to agriculture researchers, increase in agricultural colleges which invite students to make their career in agriculture. These measures will eventually increase job opportunities of skilled labour like the need of drivers, machine operators, mechanics, quality testing technicians, etc.
- India should maintain sufficient level of protection for farmers, since we have a large number of marginal and small farmers. India should pressurize on developed countries to a substantial reduction in domestic support, lowering tariffs and export subsidies on agriculture sector which are very much affecting in the competitiveness in its agricultural production.
- Capital formation in public sector need to increase especially to increase agricultural production. Public sector investment is needed to for infrastructural development relating to building of roads, storage and cooling chain system facilitation. The increasing dominance of private investment in agriculture clearly indicates worsening of income distribution pattern in the rural society this needs to be focused.
- In India, a sufficient and good storage warehousing facilities at appropriate places should be set up to improve credibility in agricultural markets and to avoid distress sales. Setting up of quality testing labs, weighing facilities, providing required certificates to exporters should be given attention.
- The most important area for technological change should be the proper management of water because farmer of India heavily depends on monsoon. The irrigation system need to be made more effective and the agricultural research from scientists or policymakers should focus on rainwater harvesting, particularly in the dryland areas or unirrigated areas.
- After implementing support policies and subsidy program for farmers, the work is not done here, there is a need to check on the selected areas that whether the needy people are actually getting it or enjoying the advantage of the policies implemented for the good sake of farmers.

- Agriculture sector should receive the equivalent attention as industrial sector because it is the only sector whose price gets decided by others whereas price in industrial sector gets decided by industrialists itself and supported by government in the form of incentives and capital investments.

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