



প্রতিধ্বনি the Echo

**Pratidhwani the Echo**

*A Peer-Reviewed Indexed International Journal of Humanities & Social Science*

Published by: Dept. of Bengali

Karimganj College, Karimganj, Assam, India

Website: <https://www.thecho.in>

ISSN: 2278-5264 (Online) 2321-9319 (Print)

---

## **The National Food Security Act 2013 and food security in India: A Challenge**

**Dr. Md. Mafiz Uddin**

*Assistant Professor, Dept. of Economics, Mandia Anchalik College, Mandia, Barpeta, Assam*

### **Abstract**

*The Government policy, food production and nutrition security are intimately interconnected, since only a food based approach governed by appropriate policy can help in overcoming malnutrition in an economically and socially sustainable manner. Food production provides the base for food security as it is a key determinant of food availability. This paper deals with fact how far the National Food Security Act is successful ensuring high productivity and production without associated ecological harm for ensuring adequate food availability. By mainstreaming ecological considerations in technology development and dissemination, we can enter an era of evergreen revolution and sustainable food and nutrition security. Public policy support is crucial for enabling this.*

***Key Words: Food security Act, food production, food availability, sustainable food security.***

---

**Introduction:** Food production is the base for food security. The internationally accepted definition of food security is that given by the Food and Agriculture Organization of the UN (FAO) in the Rome Declaration on World Food Security, 1996, further refined in the FAO's State of Food Insecurity in the World, 2001. "Food security is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life". Swaminathan (1986) has stressed the need for shifting to the concept of 'Nutrition Security', which he has defined as "physical, economic and social access to balanced diet, clean drinking water, environmental hygiene, primary health care and nutritional literacy". Three dimensions *viz.* availability, access and absorption are encompassed in the definition –

- (i) Availability refers to the physical availability of food stocks in desired quantities. Using food grains as a proxy for food (reasonable enough in a context where food grains account for a large share of food intake), availability of food grain is given by domestic production net of feed, seed and wastage plus net imports plus drawdown of stocks. Physical availability in any location within a nation depends on storage and transport infrastructure and market integration within the national territory.
- (ii) Access is determined by the bundle of entitlements, related to people's initial endowments, what they can acquire (especially in terms of physical and economic access to food) and the opportunities open to them to achieve entitlement sets with enough food either through their own endeavour's or through State intervention or both.
- (iii) Absorption is defined as the ability to biologically utilize the food consumed. This is in turn related most crucially to the availability of safe drinking water, sanitation, a hygienic environment, primary healthcare and also to nutritional knowledge and appropriate practices. The starting point is however, food production that determines the base of food availability.

### **Objectives:**

This paper makes an attempt to address these issues focusing on the following queries:

- \* What are the recent Govt. policies to make available food for all in India.
- \* What are the recent trends in the production of food-grains and population in India.
- \* Whether the Govt. policies and food-grains production are sufficient to provide adequate quantities of food at affordable price for balanced and nutritious diet.

**Methodology:** The study is based on secondary data. The secondary data related with Govt. agricultural and food policies, trends of the growth rate of population, trend of the production of food grains, availability of adequate food etc. Agricultural Statistics 2013. To explain the availability of food relevant data are collected from published journal, news paper and also downloaded from internet.

**The National Food Security Act, 2013:** The **National Food Security Act, 2013** (also **Right to Food Act**) is an Act of the Parliament of India which aims to provide subsidized food grains to approximately two thirds of India's 1.2 billion people. It was signed into law on September 12, 2013, retroactive to July 5, 2013. The National Food Security Act, 2013 (NFSA 2013) converts into legal entitlements for existing food security programmes of the Government of India. It includes the Midday Meal Scheme, Integrated Child Development Services scheme and the Public Distribution System. Further, the NFSA 2013 recognizes maternity entitlements. The Midday Meal Scheme and the Integrated Child Development Services Scheme are universal in nature whereas the PDS will reach about two-thirds of the population (75% in rural areas and 50% in urban areas). Under the provisions of the bill, beneficiaries of the Public Distribution System (or, PDS) are entitled to 5 kilograms per person per month of cereals at the following prices:

- Rice at Rs.3 per kg
- Wheat at Rs.2 per kg
- Coarse grains (millet) at Rs.1 per kg.

Pregnant women, lactating mothers, and certain categories of children are eligible for daily free meals. The bill has been highly controversial. It was introduced into India's parliament on December 22, 2011, promulgated as a presidential ordinance on July 5, 2013, and enacted into law on September 12, 2013.

**Salient features:**

1. 75% of rural population and 50% of the urban population are entitled for three years from enactment to 5 kg food grains per month at Rs. 3 , Rs. 2 ,Rs. 1 per kg for rice, wheat and coarse grains (millet), respectively;
2. The states are responsible for determining eligibility criteria;
3. Pregnant women and lactating mothers are entitled to a nutritious "take home ration" of 600 Calories and a maternity benefit of at least Rs 6,000 for six months;
4. Children 6 months to 14 years of age are to receive free hot meals or "take home rations";
5. The central government will provide funds to states in case of short supplies of food grains;
6. The current food grain allocation of the states will be protected by the central government for at least six months;
7. The state government will provide a food security allowance to the beneficiaries in case of non-supply of food grains;
8. The Public Distribution System is to be reformed;
9. The eldest woman in the household, 18 years or above, is the head of the household for the issuance of the ration card;
10. There will be state- and district-level redress mechanisms; and
11. State Food Commissions will be formed for implementation and monitoring of the provisions of the Act.
12. The cost of the implementation is estimated to be Rs.1.25 lac crore, approximately 1.5% of GDP.
13. The poorest who are covered under the Antodaya yojna will remain entitled to the 35 kg of grains allotted to them under the mentioned scheme.

The intent of the National Food Security Bill is spelled out in the Lok Sabha committee report, *The National Food Security Bill, 2011, Twenty Seventh Report*, which states, "Food security means

availability of sufficient food-grains to meet the domestic demand as well as access, at the individual level, to adequate quantities of food at affordable prices." The report adds, "The proposed legislation marks a paradigm shift in addressing the problem of food security – from the current welfare approach to a right based approach. About two thirds(approx 67%) of the population will be entitled to receive subsidized food-grains under Targeted Public Distribution System. In a country where almost 40% of children are undernourished the importance of the scheme increases significantly." The Indian Ministry of Agriculture's Commission on Agricultural Costs and Prices (CACP) has referred to the Bill as the "biggest ever experiment in the world for distributing highly subsidized food by any government through a 'rights based' approach." The Bill extends coverage of the Targeted Public Distribution System, India's principal domestic food aid program, to two thirds of the population, or approximately 820 million people. Initially, the Lok Sabha Standing Committee on Food, Consumer Affairs and Public Distribution estimated a "total requirement of food grains, as per the Bill would be 61.55 million [metric] tons in 2012-13." The CACP calculated in May 2013, "...the requirement for average monthly offtake is calculated as 2.3 mt for wheat (27.6 mt annually) and 2.8 mt for rice (33.6 mt annually)..." When volumes needed for the Public Distribution System and "Other Welfare Schemes" were aggregated, the CACP estimated rice and wheat requirements to total an "annual requirement of 61.2" million metric tons. However, the final version of the Bill signed into law includes on page 18 an annex, "Schedule IV", which estimates the total food grain allocation as 54.926 million metric tons. The Standing Committee estimated that the value of additional food subsidies (i.e., on top of the existing Public Distribution System) "during 2012-13 works out to be...Rs.2409 crores," that is, 24.09 billion rupees, or about \$446 million at the then-current exchange rate, for a total expenditure of 1.122 trillion rupees (or between \$20 and \$21 billion). However, the Commission on Agricultural Costs and Prices (CACP) calculated, "Currently, the economic cost of FCI for acquiring, storing and distributing food grains is about 40 percent more than the procurement price." The Commission concluded that the total bill for implementation of the Bill "...may touch an expenditure of anywhere between Rs 125,000 to 150,000 crores," i.e., 1.25 to 1.5 trillion rupees. As of the implementation deadline of October 4, 2014, only 11 states had either implemented the Act or declared readiness to do so.

The Eleventh Five Year Plan saw measures being taken to address the problem facing us. The National Food Security Mission (NFSM) launched in 2007-2008 to enhance the production of rice, wheat and pulses has been implemented across the country during the Eleventh Five Year Plan period. Extension of the Green Revolution to Eastern India comprising Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, Eastern Uttar Pradesh and West Bengal under the *Rashtriya Krishi Vikas Yojana* received an allocation of 400 crore in the budget for 2011-2012 . The States of Madhya Pradesh, Uttar Pradesh, Karnataka, Andhra Pradesh, Gujarat, Chhattisgarh, Bihar, Maharashtra, Orissa, Rajasthan, and Tamil Nadu, constituting nearly 96 per cent of pulses area are being covered under the Pulse Village scheme. It is estimated that India has the potential to cultivate oil palm in 1.03 million hectares to produce 45 million tonnes of palm oil which would be able to cater to the consumption requirement of 330 million people @15kg/capita/per annum. But this would require appropriate public policy support. As the Economic Survey 2012-2013 rightly notes, "it is time to frame a price band for edible oils in a manner that harmonizes the interests of domestic farmers, processors, and consumers through imposition of import duty at an appropriate rate". Guidelines under the Rainfed Area Development Programme (RAPD) focus on the need for an integrated farming system strategy based on conservation agriculture that integrates multi-cropping, intercropping, mixed cropping and rotational cropping practices with allied activities like horticulture, livestock, fishery, apiculture, agro-forestry to maximise farm returns and mitigate impact of extreme weather conditions; this will cover districts with arid, semiarid and subhumid agro ecosystems and less than 60 per cent of the cultivated area under irrigation . All these measures are timely and can greatly benefit by drawing further on the recommendations made in the NCF Reports.

### **Target and achievement of production of major crops from 2010-11 onwards**

(Production: In million tons)

Crops	2010 -11	2010-11	2011-12	2011-12	2013
	Target	Achivement	Target	Achivement	Target
Rice	102.00	95.98	102.00	104.32	104.00
Wheat	82.00	86.87	84.00	93.90	88.00
CoarseCereals	44.00	43.68	42.00	42.01	44.00
Pulses	16.5	18.24	17.00	17.21	18.24
Foodgrains	244.5	244.78	245.00	257.44	254.24
Oilseeds	33.20	32.48	33.60	30.01	33.50
Sugercane	315.00	342.38	350.00	357.67	352.00
Cotton	26.00	33.00	34.00	35.20	35.00
Jute&Mista	11.50	10.62	12.30	11.57	12.00

Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation

**Results and Discussion:** According to Swaminathan , given that India's population is likely to reach 1.5 billion by 2030, the challenge facing the country is to produce more and more from diminishing per capita arable land and irrigation water resources and expanding abiotic and biotic stresses. India currently produces about 230 million tones of cereals to meet the needs of a population of 1.15 billion. While calculating food requirements, the needs of farm animals are often overlooked.

The current situation in India is that cereal production has to be doubled by 2050 in order to meet the needs of the expected population of 1.8 billion, in addition to meeting the needs of livestock and poultry. A similar concern had been voiced by the National Commission on Farmers (NCF) in late 2006, "To double annual foodgrain production from the present 210 million tonnes to 420 million tonnes within the next 10 years, (by 2015), will call for producing at least 160 million tonnes of rice from 40 million ha, and 100 million tonnes of wheat from 25 million ha. Pulses, oil seeds, maize and millets will have to contribute another 160 million tonnes. In addition, the national goal is to raise the production of vegetables and fruits to over 300 million tonnes by 2015. Since land is a shrinking resource for agriculture, the pathway for achieving these goals can only be higher productivity per unit of arable land and irrigation water. Factor productivity will have to be doubled, if the cost of production is to be reasonable and the prices of our farm products are to be globally competitive. The average farm size is going down and nearly 80 per cent of the farm families belong to the marginal and small farmer categories. Fortunately, the ownership of livestock is more egalitarian. Enhancing small farm productivity, increasing small farm income through crop livestock integrated production systems and multiple livelihood opportunities through agro processing and biomass utilization, are essential both to meet food production targets and for reducing hunger, poverty and rural unemployment". Over 60 per cent of the Indian population continue to depend on agriculture and allied activities for their livelihood. Hence, growth of this sector is an essential prerequisite for overall economic growth. According to the Economic Survey 2012-13 , the agriculture and allied sector accounted for 14.5 per cent of the gross domestic product (GDP) in 2010-11 at constant 2004-05 prices. The livestock and fisheries sector accounted for 28.4 per cent to the value of output from total agricultural and allied activities in 2010-11. Whereas overall GDP has grown by an average of 8.62 per cent during 2004-05 to 2010-11, agricultural sector GDP has increased by only 3.46 per cent during the same period. The role of the agriculture sector, however, remains critical as going by the 2001 census it accounts for about 58 per cent of employment in the country. This paper focuses on the food production issues facing India today and gives suggestions on measures needed to increase food production and the policy support required. The National Commission on Farmers (NCF) chaired by Dr M S Swaminathan in its series of five reports from December 2004 to October 2006 had made several recommendations in this direction that continue to be relevant. The paper draws largely on this reservoir already available with us in the section on 'strategies to increase Food Production and Productivity' and hopes that the suggestions made will get the priority and attention they deserve.

**Current situation of food production:** Globally, India is the third largest producer of cereals, with only China and the USA ahead of it. India occupies the first position in milk production and is the third largest producer of fish and second largest producer of inland fisheries in the world. The fisheries sector also provides livelihood to some 11 million people involved fully/partially in fisheries and on subsidiary activities connected with the sector. India ranks first in respect of cattle and buffalos

and second in goats, third in sheep and seventh in poultry population in the world and nearly 90 million people work in the livestock sector. The dairy industry provides employment to 18 million people (9.8 million primary and 8.6 million subsidiary employment), not including persons employed in sale, reprocessing and transport of animal products at secondary market level. Of these, 70 per cent are women and 67 per cent have no access to land, credit or technology. Of the 70 per cent rural households that own livestock, the vast majority are either landless or marginal farmers. Between 1950-51 and 2006-2007, production of food-grains (comprises production of rice, wheat, coarse cereals and pulses) in the country increased at an average annual rate of 2.5 per cent compared to the growth of population, which averaged 2.1 per cent during this period. Warding off doomsday predictions of hunger and famine, India came to be in a situation following the Green Revolution in the late sixties, where we hardly had to resort to food-grain imports between 1976-1977 and 2005-2006, except occasionally. An estimate suggests that without a green revolution, about 30 million children would have died in the developing world between 1970 and 2000, with more than two-thirds of these children being in Asia alone. The rate of growth of food-grains production however decelerated to 1.2 per cent during 1990-2007, lower than the annual rate of growth of population at 1.9 per cent. The per capita availability of cereals and pulses consequently witnessed a decline. The per capita consumption of cereals was observed to have declined from a peak of 468 g per capita per day in 1990-1991 to 412 g per capita per day in 2005-2006, indicating a decline of 13 per cent during this period (GoI 2008). Food-grain availability declined by 4.5 per cent between the two periods 1991-2000 and 2001-2005, after having a lower rate of increase in the period 1991-2000 as compared to that in the period 1981-1990. A point of concern is that moving from the position of self sufficiency that the green revolution helped us attain, we have had to resort to import of food-grains in recent years. Per capita availability of milk increased from 124 g/day in 1950-1951 to 176 g/day in 1990-1991 to 290 g/day in 2011-2012, a figure comparable with the global trend. Our total milk production is the highest in the world, but productivity per animal is extremely low by international standards. Per capita availability of eggs increased from five eggs per head per annum at one time to 55 eggs per head per annum in 2011-2012. Meat production from the recognized sector increased from 1.9 million tonnes in 1998-1999 to 4.9 million tonnes in 2010-2011. Constituting about 4.4 per cent of the global fish production, the fisheries sector gives employment directly and indirectly to about 145 million people. The growth of food-grain production during the 1970s and 1980s was largely due to institutional efforts in raising the levels of technology used in agriculture through research and extension, investments in rural infrastructure and human capabilities, credit support, procurement at minimum support prices and the strengthening of supportive institutions like the Food Corporation of India (FCI). From the early 1990s, however, there has been a focus on expenditure reduction, resulting in decline in public investment in and other forms of support to the agricultural sector. As a result of the decline in public investment, expansion in irrigation, growth in input usage and technological improvement, have all slowed down during the 1990s. This has as expected impacted on production. It calls for stepping up investment in agriculture, both by the private and public sectors to ensure sustained target growth of 4 per cent per annum. At a broader level, the trend in India may be seen as a reflection of the global decline in food output. The per capita world cereal output reportedly declined from 335 kg per year in 1980-1985 to 310 kg by 2000-2005. Among developing countries, China and India, which together accounted for over 30 per cent of world cereal output in the early 1990s, contributed significantly to this global decline. The eleven developing countries China, India, Indonesia, the Philippines, Thailand, Vietnam, Iran, Egypt, Pakistan, Bangladesh, and Sri Lanka which together contributed 40 per cent of world cereal output accounted for only a 15.6 per cent increase in cereal output over the thirteen year period between 1989-1991 and 2003-2004, a rate of growth of only 1.1 per cent per year, well below the nearly 2 per cent population growth rate of these countries. At the same time, the output of their export crops rose up to ten times faster than food-grains, owing to the diversion of land and resources to export crops. The developed countries, which together accounted for about 40 per cent of world cereal output accounted for only an 18.6 per cent rise in cereal output over the same period, or an annual growth rate of 1.3 per cent, ahead of their own population growth, but insufficient to meet their own rising domestic needs and to provide an adequate surplus for meeting the increasing deficit of the developing world. Chapter eight of the Economic Survey 2012-2013 titled "Agriculture and Food Management" gives a comparative picture of the area, production and yield of crops during 1980-1981 to 1989-1990, 1990-1991 to 1999-2000

and 2000-2001 to 2011-2012. With regard to rice and wheat, while the compound annual rate of growth (CAGR) in area was marginal at 0.41 and 0.46 per cent, respectively during the 1980s, growth in both production and yield was above 3 per cent. The CAGR of area improved to 0.68 per cent for rice and 1.72 per cent for wheat between 1990-1991 to 1999-2000, but it fell for both production and yield in the case of rice and yield in the case of wheat. The subsequent decade 2000-2001 to 2011-2012 saw an improvement of area under wheat but the CAGR of production fell for both rice and wheat. This suggests that in these two crops there is need for renewed research to boost production and productivity. Further, it is necessary to note that these two crops together constituted 78 per cent of total food-grains production in 2009-2010.

In the case of coarse cereals which accounted for 15 per cent of the food-grain production in 2009-2010, there has been no major technological innovation. The growth rate in area of total coarse cereals comprising *jowar*, *bajra*, *ragi*, maize, small millets and barley, was negative in all the three periods 1980-1981 to 1989-1990, 1990-1991 to 1999-2000 and 2000-2001 to 2011-2012. This could have been either due to shift to other crops or relatively dry areas remaining fallow. However, growth in production and yield for coarse grains which was 0.40 and 1.62 per cent, respectively in the 1980s improved significantly to 3.01 and 3.85 per cent, respectively in the 2000-2001 to 2011-2012 period, largely due to the improvement in maize. With regard to pulses, while during the 1980s there was negative growth in total area under pulses and growth in production and yield was 1.52 and 1.61 per cent, respectively, during 2000-2001 to 2011-2012 whereas area and production grew by 1.6 and 3.69 per cent, respectively, growth in yield at 2.06 per cent was almost stagnant. There has been progressive decline in per capita availability of pulses; it fell from 69 grams in 1961 to 32 grams in 2005. The requirement was estimated to be 21.3 million tonnes by 2012. The Economic Survey 2012-2013 reports the estimated production of pulses in 2011-2012 as 17.09 million tonnes, indicating a wide gap in demand and supply. On the oilseeds front, per capita annual consumption of vegetable oil in the country at 14.10 kg is far below the global average of 23.60 kg. The production of oilseeds, though has increased in recent years from 184.40 lakh tons in 2000-2001 to 297.99 lakh tons in 2011-2012, has not kept pace with the demand for edible oils in India. A substantial portion of our requirement of edible oil is met through import of palm oil from Indonesia and Malaysia. Any disruption in the supply of palm oil from these countries will put the country in a difficult situation, especially since a large quantity of the global production of vegetable oils is being utilized for production of bio-diesel in Europe and North America. Such nonfood use of edible oils ultimately reduces their availability and pushes up their prices. With regard to the requirements of the livestock sector, it is estimated that current levels of fodder production are sufficient to feed only half of our animal population. Green fodder shortage is estimated at 34 per cent. The gap between demand and supply of animal feed is alarming. From many perspectives, agriculture in the country today is in a state of crisis. A national survey some years back revealed that given a choice, 40 per cent of farmers in India would not like to be in farming. Farming is increasingly seen as an unviable activity, characterized by rising input costs and unremunerative prices. It has to be understood that nearly 80 per cent of the land holdings in India are below 2 hectares in size. Unlike in industrialized countries where only 2 to 4 per cent of the population depends upon farming for their work and income security, agriculture is the backbone of the livelihood security system for two third of India's population. In effect, farmers also constitute the largest proportion of consumers. Hence, improving small farm production and productivity, as a single development strategy, can make the greatest contribution to the elimination of hunger and poverty. Experience of countries that have succeeded in reducing hunger and malnutrition shows that growth originating in agriculture; in particular the small holder sector is at least twice as effective in benefitting the poorest as growth from non-agriculture sectors. The World Bank's World Development Report 2008 that focused on 'Agriculture for Development' had also emphasized in a similar vein, "Using agriculture as the basis for economic growth in the agriculture-based countries requires a productivity revolution in smallholder farming". As stated earlier, higher productivity requires higher investment in agriculture and agriculture research an impact that needs to be heeded by the policy makers.

**Conclusion:** It is clear that India will remain a predominantly agricultural country during most of the 21 century, particularly with reference to livelihood opportunities. Therefore, there is a need for both

vision and appropriate action in the area of shaping our agricultural destiny. Our major agricultural strengths are our large population of hard working farm women and men, our varied climatic and soil resources, abundant sunshine throughout the year, reasonable rainfall and water resources, a long coast line and rich agro-biodiversity. Converting these into jobs and income is the challenge. There are however, several available areas of improvement for increasing the levels of production and productivity and improving the lives of the people dependent on agriculture and allied activities. An integrated crop livestock/fisheries farming system has to be the way forward for the country. The Green Revolution had been largely confined to irrigated farming areas and to rice and wheat. The per unit area productivity of Indian agriculture today is much lower in India as compared to other major crop producing countries. There are also wide gaps in the yield among and within States. China has yield rates far ahead of India in all the three major food-grain crops cultivated. As the Economic Survey of 2012 2013 has observed “improvement in yields holds the key for India to remain self sufficient in food-grains”. Factor productivity in relation to fertilizer application is low and this enhances the cost of production without the desired impact on yields. Proper attention to soil health, access to water, quality seeds and other inputs and package of practices suited to the crop and the agro-ecological region are part of the package needed to enhance farm productivity. As a single agronomic intervention, supply of the needed micronutrients to address the hidden hunger in the soil has the greatest impact on increasing yield. Mandatory water harvesting and recharge of wells and groundwater resources can enhance water availability. Access to timely and adequate credit and effective crop insurance are two other crucial factors. There is also the issue of remunerative price. Ideally, given that the majority of our farmers are small and marginal in nature with land holdings of less than five acres, organization of small farmers’ horticulture, cotton, poultry, aquaculture and other estates, to promote group farming and economies of scale both at the production and post-harvest phases of farming will help to enhance the productivity, profitability and sustainability of small holdings. Research on technology for dryland farming should be encouraged and these technologies made available to small and marginal farmers. The technology strategy for an evergreen revolution should have the following three components.

The goal of food self sufficiency however, unfortunately seems daunting especially in the context of the issue of producing enough and agriculture *per se* not getting the priority attention it deserves. The issue can be effectively addressed only when this is set right. Public policy support is crucial for ensuring this. To conclude, drawing again on the NCF reports, “Food security with home grown food-grains can alone eradicate widespread rural poverty and malnutrition, since farming is the backbone of the livelihood security system in rural India. This will enable the Government to remain at the commanding height of the national food security system. Building a food security system and containing price rise with imported food-grains may sometimes be a short term necessity, but will be a long term disaster to our farmers and farming. A well defined, “Food Security Policy is an urgent necessity”.

Going beyond food production and availability, it is important that the government works with agricultural universities on mainstreaming nutritional considerations in the design of cropping and farming systems research. There is a need to bring about a paradigm shift from the concept of food security at the aggregate level to one of nutrition security at the level of every child, woman and man. Articulating the public policies needed for achieving nutritional security, such as greater attention to pregnant women and infants (during the first 1000 days in a child's life), financial support to nursing mothers for enabling them to feed the baby at least for the first 6 months, holistic approach to nutrition involving concurrent attention to balanced diets, clean drinking water, sanitation and primary health care are crucial. Drinking water security is an essential component of nutrition security. The School Noon Meal programme provides an opportunity for ensuring nutrition security to children. Dying wisdom and vanishing crops in relation to nutrition security should be protected. Food safety issues and codex standards should be widely known. Steps should also be taken to prevent food losses both in terms of quantity and quality through safe storage and post-harvest handling.

## **References:**

1. Swaminathan M S & Bhavani R.V. “ Food production & availability – Essential Prerequisites for sustainable food security. *Indian J Med. Res* 138, sep.2013, pp 383-391.
2. New Delhi, Ministry of Agriculture, Government of India, (2013) Department of Agriculture & cooperation ,Director of Economics& statistics.
3. Food and Agriculture Organization (FAO) 2003. Trade Reforms and Food Security Conceptualizing the Linkages, Corporate Document Repository, Food and Agriculture Organization of the UN, Rome. [accessed on August 24, 2013].
4. New Delhi, Ministry of Agriculture, Government of India, (2013) Department of Agriculture & cooperation ,Director of Economics& statistics.
5. Government of India, Ministry of Agriculture Department of Agriculture& cooperation New Delhi(2012-2013)”state of Indian Agriculture” pp 02-74
6. Economic Survey 2012- 2013. New Delhi: Ministry of Finance; 2013. Government of India (GoI)
7. New Delhi: Ministry of Agriculture, Government of India; 2005. Aug, National Commission on Farmers (NCF). *Serving farmers and saving farming: From Crisis to Confidence*, 2 Report.
8. New Delhi: Ministry of Agriculture, Government of India New Delhi; 2006. Apr, National Commission on Farmers (NCF). *Serving farmers and saving farming: Jai Kisan A draft National Policy for Farmers*, 4 Report.
9. Report on the state of food insecurity in rural India. Chennai: M.S. Swaminathan Research Foundation; 2008. Dec, M S Swaminathan Research Foundation (MSSRF)
10. Patnaik Utsa 2009. *Origins of the Food Crisis in India and Developing Countries*, Monthly Review. [accessed on August 24, 2013];JulAug;61(3) Available from: <http://monthlyreview.org/2009/07/01/originsofthefoodcrisisinindiaanddevelopingcountries>
11. National Sample Survey Organization (NSSO) *Situation assessment survey of farmers report No. 496 (59/33/3) Some Aspects of Farming NSS 59 Round (January-December 2003)* Ministry of Statistics and Programme Implementation, Government of India. 2005
12. Food and Agriculture Organization 2009 “How to Feed the World in 2050”, Food and Agriculture Organization of the UN, Rome. [accessed on August 24, 2013]. Available from:[http://www.fao.org/fileadmin/templates/wsfs/docs/expert\\_paper/How\\_to\\_Feed\\_the\\_World\\_in\\_2050](http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050).
13. Agricultural statistics as a glance 2010. New Delhi: Directorate of Economics & Statistics, Ministry of Agriculture; 2010. [accessed on 24 August 24, 2013]. Government of India (GoI)Table 7.2. Available from:[http://eands.dacnet.nic.in/Advance\\_Estimate2010](http://eands.dacnet.nic.in/Advance_Estimate2010).
14. Swaminathan MS. New Delhi: Academic Foundation; 2010. From green to evergreen revolution.

\*\*\*\*\*