

FOOD SECURITY (1)

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Every day, 820 million humans go to bed hungry, more than 1 billion tonnes of food is wasted every year, a third of the total produced. Two billion people in the world suffer from obesity and diabetes – with catastrophic costs to society. 500 million small farmers continue to provide much of the food the world consumes, living often in conditions of great poverty and vulnerability. How do we overcome this?

The global food system is responsible for a third of all greenhouse gas emissions, which is more than all emissions from transport, heating, lighting and air conditioning combined. The global warming this is causing is now damaging food production through extreme weather events such as floods and droughts. Reducing meat and dairy consumption is the single biggest way individuals can lessen their impact on the planet, according to recent research. And tackling dangerous global warming is considered impossible without massive reductions in meat consumption.

India has a very high prevalence of undernourishment and micronutrient deficiency. India's biggest agricultural challenge is water: its crops and livestock are taking a heavy toll on the water system relative to other countries in the index, and the country lacks initiatives to promote water recycling

Over the years India has miserably failed to achieve food security. The number of people without enough food to eat on a regular basis remains stubbornly high through the ages. In India about 29 % of the 872.9 million people are malnourished. There have been various reasons contributing to this. Rainfall has been constantly irregular in India and moreover the recent changes in the climatic conditions all over the world have contributed to the problem of unavailability of food. It is said that India attained national food self-sufficiency 35 years ago yet about 35% of its population remains food insecure.

In the past three decades the South Asian countries have made considerable advancement in food production which was elicited by the Green Revolution. Green Revolution was introduced in 1960s and they brought in the use of High Yielding Variety (HYV) of seeds. It brought about a revolutionary boost in production. Now there was a huge expansion in the crop yield which contributed to the country's growth. But agriculture was highly decelerated in the country and more focus was laid on industrialisation. Thus, the wave of green revolution did not reach all parts of the country and its full effect was not realised. It remained regional and only affected the rich farmers. Also, in the 1960s India experienced two major droughts and there was a severe food shortage. There was not sufficient food for all. Also, we can say that green

revolution was successful to some extent but the aim of self sufficiency and food security still seem like a distant dream.

In India, climate plays a major role in agriculture. Agriculture even to this day is highly dependent on the vagaries of monsoon. Climatic change will affect food security through its impacts on all components of national and local food production system. There has been a rising trend in the temperatures all over the world. This has contributed to a fall in rainfall drastically. Another aspect of climatic change is that of extreme weather events like cyclone which has made agriculture losses higher and has affected total production. Climatic changes as seawater incursion and unusual flooding are affecting greatly as well. Changes in temperature and precipitation influence water run-off and erosion affecting soil organic carbon and nitrogen content and salinity in the soil. Thus, the changing weather condition all over the world has had its toll on agriculture. The new climatic conditions are more likely to have negative impacts such as a rise in the spread of diseases and pests, which will reduce yields. Rainfall trends have changed and decrease in rainfall has led to a fall in production. Rising temperature, changing precipitation patterns and an increasing frequency of extreme weather events are expected to be the reasons for reducing regional water availability. In a country like India where there is lack of irrigation facilities and agriculture is completely dependent on rainfall, irregular rainfall directly affects the total crop production. Unavailability of sufficient water is also another reason for crop failure. Grain output has been stagnating for over a decade and there is a growing gap between supply and demand. A decrease in production leads to poor availability and thus food security of the country is poor. The crisis has been building up for some time. The food grains yield of Indian farmers are not going up. Thus, we come to the conclusion that climate change will reduce crop yield in the tropical country like India. The regional inequality in food production resulting from climate change will have a very great implication on the food security of the country.

In a country as huge as India where population grows at about 8 % and where a large chunk of the population is malnourished and under-weight it becomes necessary to attain food security. The supply chain between the farmers and the consumers should be shortened. Farmer friendly marketing processes should be introduced. And most important a second revolution is necessary to bring about stability in the Food Security in the country.



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