Abstract: Eradication of hunger is one of the important goals listed out in Millennium Development Goals (MDGs). Most nations identified as vulnerable have taken some action against malnutrition and food insecurity. This paper tries to compile the food security schemes initiated by 12 such vulnerable nations and their impact on food security. The nations have some commonalities like legacy of colonial era, large population living below poverty line, intermittent periods of double digit inflation, high debt burden but no history of debt crisis, etc. Most of these nations have large tracts of semi-arid tropics and hence many face problems of low agriculture productivity. Yet some have been able to achieve very low levels of malnutrition and hunger in their countries while some have been struggling to feed their masses. This paper gives a critical look at what has worked for the successful nations by taking the case studies of government schemes of these 12 nations.

Key Words: Agriculture growth, Food security, Government food policies.

1. Introduction

In 2012, about a quarter of the children under the age of five years were estimated to be stunted - having inadequate height or weight for their age. This is a significant decline from the 1990 when about 40% of the children of that age were stunted (UNDP, 2014). However, still about 162 million children under 5 are suffering from chronic under-nutrition. Efforts made by the national governments are considered as a major factor in determining the rate at which the malnutrition indicators move or subsidized food. Strict price controls can be imposed to ensure that everyone can have economic access to food. Extensive agriculture extension systems can be put in place to spread the use of new technologies. Direct feeding programs for the target groups across the nation can be started.

This paper tries to compile data about different nations’ policies and approaches towards attaining food security. Section 2 identifies the strategies that worked for reducing malnourishment in different nations. All the data mentioned in this section comes from indexmundi.com or data.worldbank.org. The growth rates for the economies have been calculated using the semi log regression models. Section 3 concludes the paper.

2. Analysis of Major Strategies Used by Nations to Tackle the Problem of Food Security

2.1. Economic growth

In case of Thailand and Indonesia, economic growth and increase in general productivity led to overall fall in poverty and malnutrition. Thailand was already an upper middle income nation in 2011 and its IMR had fallen to 11. Indonesia, a lower middle income country growing at 8.2% p.a., had IMR of 26. Oman achieved very high levels of food security and societal welfare (the IMR was 14.95 in 2012) by using the fruits of its economic growth fueled by petroleum sales. Both Oman and Indonesia have not achieved self sufficiency in food. Yet, the general prosperity has allowed them to easily import all that they need and achieve low levels of malnutrition. It is seen that nutrition achievements attained by high growth rates in these nations are sustainable over a period of time.

However, growth in national income does not always lead to decrease in food insecurity. It is not a solution that would always work. India has been growing very fast (at the rate of 7.28%) and yet the food insecurity did not decrease (the IMR remained high at 46.07 in 2012) because income growth was experienced only by a limited group. Similar was the case for Cambodia which grew at 5.85% but concentration of growth gains in a few hands restricted welfare gains - IMR was high at 54.08 in 2012. In such situations, it becomes the duty of the government to take steps to redistribute at least some part of the gains from the growth.

The figures of malnourishment are alarmingly high for Nepal, Bangladesh, Pakistan, India and Myanmar. Except India, no other nation has undertaken large scale welfare programs for attaining food security. Still Indi finds it difficult to raise its nutrition levels because of its large population.

2.2. Agriculture Growth

Nations like Vietnam (Nguyen, 2006) and China (Zhou and Gandhi, 2007) that concentrated on agriculture development as the solution for food security found that as
production increased (by 3.68% p.a. for Vietnam and 2.4% p.a. for China), the food insecurity reduced considerably. In China, the IMR was 16.06 while in Vietnam it was 18. However, it should be understood that when the landlessness is much higher as in the case of India and some other South Asian nations, mere agriculture growth would not work. In China, only 15.5% are landless, in Thailand 14% and in Vietnam, this number is 12.3%. In these nations, governments succeeded in increasing the agriculture productivity through technology dissemination or liberalization. Increase in productivity automatically led to more production of food grains and thus lesser food insecurity for the farming households. In India, in spite of achieving agriculture growth of 4% p.a. at times, malnutrition did not go down (IMR is 46). This happened because almost 43% of the farmers in India are landless. Increase in agriculture productivity would not guarantee higher wages and food security for the landless. Agriculture growth is still useful to attain food security because availability of food would increase; the government then needs to concentrate only on distribution.

2.3. Liberalization

When China and Vietnam allowed farmers to have some ownership rights over land and total rights over their produce the productivity grew rapidly. Attempts of collectivization of agriculture have never been very successful. Government’s monopoly rights over purchase and sell of grains have also been proved to be counterproductive in these nations. Liberalization of land and agriculture produce markets accelerated their growth process. Before the reforms, both nations were falling short in supply compared to demand. After the reforms, both became self-sufficient and Vietnam became one of the significant exporters of rice in the world.

Opening up the markets and loosening controls over imports and exports helped the Bangladesh economy grow faster (Hagblade, 1994). Domestic input cost used to very high there; once cheaper imports were allowed, the overall cost of production declined. Indonesia also could stabilize its economy better with liberalization of imports. Its experiments with BULOG (Badan Urusan Logistik) managing the rice stocks as a monopoly often proved to be disastrous (USAID, 2012). Thus liberalization seems to lead to better growth in at least some of our examples.

It is true that the communist nations could not achieve high productivity growth with their strict centralization of power, but it is also important to realize that their policies led to notable achievements in social sectors. Sacrifice in economic growth was made up by progress in human development indicators for the poor.

Liberalization might not be a preferred strategy always. Having some controls over markets has been deemed necessary at times. India and China still have strict controls over import and export of food grains because they have to ensure that the domestic demand is met fully before exports are made and that the farmers always get remunerative prices for their crops even if at times the crops are produced at prices higher than the international markets (hence restrict the imports). Such control over markets might have helped them in remaining self sufficient in food.

2.4. Price control

Countries can either provide subsidized food, because the poor cannot afford food grains at the market price or they can forcibly keep the prices low so that no subsidies need to be provided. Experiences of different nations have shown that it has not been easy to maintain prices at low levels or at steady levels. Imposition of price controls has often led to shortages and black marketing, as the experiences in India and China show. Implementing low prices for the whole country is also very difficult as has been demonstrated by the experiences of Indonesia. The Indonesian budget deficits often increased tremendously to maintain low prices for rice and that led to uncontrolled increase in inflation, leading to major financial crisis.

In today’s globalized world, as the agriculture markets have been connected to the world markets, it has become more and more difficult for nations to maintain steady prices. The spurs in demand and supply are very difficult to manage.

Thus maintaining steady prices seems like an attractive option, but countries have found it difficult to do so. In the absence of price control, subsidies need to be provided to the poor to increase their accessibility to food.

2.5. Investing in social sectors

Investing almost 10-12% of national income in social sectors has been tried out by Sri Lanka (IPSSL, 2007) and many communist nations. The results are noteworthy. The human development indicators have always been considerably better compared to nations at similar level of economic growth. Ensuring basic amenities to all the citizens has worked wonders for Vietnam (IMR 18), China (IMR 16), Mongolia (IMR 36) and Sri Lanka (IMR 9.47). China and Vietnam have been able to leverage on these foundations by attaining higher levels of growth. Sri Lanka and Mongolia are still struggling to stabilize their economies but the strong foundation of social sectors has helped them in maintaining a higher standard of living. The positive impacts sustain over a long period of time too.
2.6. Self-sufficiency in food

It is shown by all the nations under study that it is not feasible to provide subsidized food to the poor unless the nation is self-sufficient in food or it has earned enough foreign exchange to import food. Most nations suffering from wide scale malnutrition are poor so the second option is not available to them. Agriculture growth and food self-sufficiency are necessary conditions for addressing the problem of hunger. India could start its public distribution of subsidized food grains only after it increased food grain production through green revolution and attained food self-sufficiency. China also manages subsidized food programs and its price control measures well because it is self-sufficient in food.

On the other hand, Mongolia is struggling to maintain its low levels of malnutrition because it is not food self-sufficient and cannot easily afford to import food. When its levels of malnourishment are increasing, it does not have the choice of distributing food at a lower rate. Low levels of malnutrition were attained when it was integrated with USSR because of food aid from USSR. The same is the case with Pakistan, Nepal and Bangladesh. They are not yet fully self-sufficient in food and hence cannot provide food grains at subsidized rates, even when their levels of malnourishment are very high.

3. Conclusion

This paper identifies the effective strategies used by different nations in attaining food security: (a) Economic growth and agriculture growth have been the most dominant strategies tried out and they have worked well in most cases. However, whenever inequalities are high, the growth strategies have fallen short. (b) Removal of excessive controls on agriculture has helped some former communist nations in accelerating agriculture growth and also in attaining food security. (c) Nations that invested heavily in social sectors like health and education have attained higher levels of well being. Their populations are much better off in nourishment levels. (d) Price controls have not proved to be successful for most nations. (e) Achieving self-sufficiency in food has been a pre-condition for many nations for attaining food security but some nations that have earned large incomes from other sources have been able to attain food security by importing food grains.

In short, investing in social sectors and agriculture growth seem to be some of the best practices for attaining food security. In addition, concentrating on feeding infants and young children as well as expecting and lactating mothers can also lead to reduction in malnourishment levels.

References


