No. 47 April 2010

RIS Policy Briefs

Challenges to Food Security in South Asia

A foremost challenge before the SAARC region presently is the attainment of sustainable food security for its population. The international monitoring of hunger and poverty that is undertaken by the Food and Agriculture Organization (FAO) indicates a persistent prevalence and distinct rise in hunger-incidence in this region in recent times. Needless to say, this is consistent with the rising global hunger incidence since mid-1990s. The number of hungry in South Asia[1] increased from 278.3 million in 1995-97 to 336.5 million in 2004-06. The corresponding figures for the world during the same time periods were 824.9 million and 872.9 million. After the twin global crisis of food and finance, the FAO projections for hunger incidence has crossed a billion people (1.02 billion in 2009). When we consider the contribution of the South Asian region in world hunger, the region emerges as one of the hunger hotbeds of the world. In 2004-06, South Asia was home to roughly 38.5 per cent of the world hungry. This is even higher than the contribution of Sub-Saharan Africa (24.3 per cent) to world hunger in absolute terms, although the proportion of the population that is undernourished is higher in the latter region.

The high levels of under-nutrition and persisting hunger in the region not only calls for an assessment of the situation of food production and consumption but also issues like access to food by the poor in the region. This will have consequent implications for the target of achieving food security in the medium and long term. The recent global food crisis and the surge in world food prices in 2008 have thrown a wide range of issues before us. The integration of economies that have occurred with the process of globalization implies that food systems of individual countries are no more insulated from the broader developments in the world economy. The 2006-08 food crisis bears testimony to the fact that how speculation in world commodity futures markets or the US bio-fuels policies can cause volatility and rise in food prices leading to a crowding out of millions of poor people from the food markets in far-away underdeveloped countries.

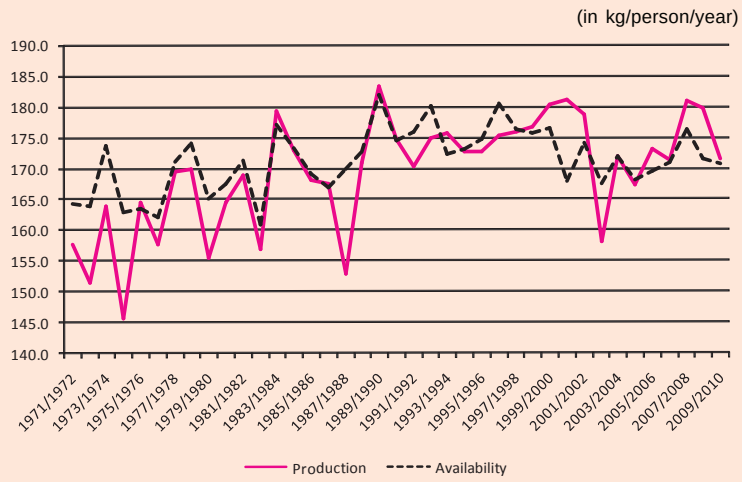
Keeping this context in mind, a brief look at the historical record of food security in the South Asia reveals a mixed picture. The SAARC region had considerably enhanced food production in the past, especially after the introduction of the Green Revolution technology in the mid-1960s. Consequently, there was a significant increase in per capita incomes and food consumption in the region. The per capita production in the region, which was 157.6 kg in 1971-73 (three-year average) substantially increased to 176.3 kg by 1988-90. Likewise, the per capita consumption of foodgrains also rose from 163.9 to 176.3 during this period.[2] The years after 1990 have seen some decline in food production, when its growth rate fell below the 2 per cent rate of growth of population (see Figure 1). As a result, there has been a decline in per capita food consumption; the figure declined to 172.8 kg in 2008-10. Surprisingly, although food production has been high and increasing in the last few years (after 2006), the consumption did not increase commensurately. Thus, there has been a somewhat depressed or stagnated consumption of food grains in the region in recent times. This brings us to the more intricate challenges that remain before the objective of attaining food security in the region.

A peculiar feature in South Asia is the high food prices that have prevailed in the markets

RIS Policy Briefs are prepared to communicate results of RIS research on specific policy issues to the policy makers.

This Policy Brief has been prepared by Dr. Arindam Banerjee, Consultant , RIS.

Figure 1: Per Capita Grain Production and Availability in South Asia: 1971-72 to 2009-10



Source: Calculated by author based on data from the WASDE, USDA(various years).

even after the global food crisis was largely over and prices in the world markets declined from their peak levels. For example, the year-on-year food inflation rate in India has been in double-digit in 2009-10 even when world prices have declined significantly. This has happened in spite of good harvest in the preceding two crop years. Food stocks have also touched a high in the current times both in India as well as in South Asia as a whole. The ending stocks in South Asia were already more than 39 million tons in 2008-09.

The spiraling of prices that is currently ongoing in the region was set off not by the lack of foodgrains but more by the bad monsoon and expectation of a poor Kharif crop in 2009. Given the earlier production trends and the level of foodgrain stocks in the region, it has been amply clear that hoarding and speculation by private traders have played a major role in the persistent high prices in the food markets (including for pulses and sugar). This is also corroborated by the fact that these high prices have come without any significant increase in demand; rather as noted earlier, food consumption has been either declining or remained stagnant over the last two decades. Thus, there has been no serious demand-supply mismatch in the foodgrains market, in any real sense, which could have triggered such high prices.

Hoarding and speculation in foodgrains, leading to high prices, have serious implications for food security even in times of plenty. This reduces the access to food, more so for the lower-income classes, as this section of the population spends higher shares of their income on food. This, in turn, perforce leads to adjustments in the diets of the poor, leading to an intensification of the problem of under-nutrition that this region is already burdened with. The high prices also do not translate in higher income for farmers or food growers due to two reasons.

First, when price rise is essentially caused by speculation by private traders, it is normally the retail food prices that increase. Similar increase in food prices is not observed in terms of the wholesale prices or farm gate prices which are more crucial from the point of view of farm incomes. Secondly, given that an overwhelming majority of farmers in the region are *net food buyers*, a prolonged existence of high food prices would mean a depletion of the real income of farmers, when they run out of their on-farm food supplies and reach out to the retail markets for food consumption. Therefore, high food prices, which persist for a fairly long period, adversely affect the low income classes in the urban areas as well as the large section of agricultural and non-agricultural labour and millions of small farmers in the rural areas in a region like South Asia. This augurs badly for any programme that aims to reduce the incidence of hunger and poverty.

Given the situation in the SAARC region in terms of food prices and consumption that we discussed above, there are two major challenges that need to be addressed on the issue of food security. The first of these would emerge in enhancing food production and also that of other essential food items like pulses and sugar. This is important as even though currently, there is no serious macro-economic supply-demand mismatch in foodgrains, one cannot overlook the fact that this apparently comfortable situation has been enabled essentially by a depressed state of consumption for foodgrains. Unlike the experience of the developed world, particularly the US and Western Europe, the emergence of a high growth regime in South Asia (mainly in India) and rising per capita incomes have not been accompanied by a rise in the demand for grains. Rather, the per head grain consumption levels have remained stagnated in the current decade

[1] *The State of Food Insecurity in the World: Economic Crises-impacts and lessons learned*, (FAO, Rome, 2009) considers only the five countries Bangladesh, India, Nepal, Pakistan and Sri Lanka. The actual number of hungry would be higher when we also include the remaining three members of the SAARC.

[2] The figures for per capita production and consumption of grains are calculated using USDA database on grains and FAO population figures.

at a level much lower than that in the early nineties. This has served as a source of persistent hunger and malnutrition in the region in the long term. In case the regions aims to raise the demand for foodgrains on a normative per-capita basis to levels of other developing regions[3], which has made progress on this front, there would be a much higher requirement for foodgrains in future than that projected on the basis of the recent trends.

The attempt to reach higher levels of normative foodgrain consumption by the South Asian region, thereby also fortifying the diets of the population with important macro- and micro-nutrients, will definitely require larger foodgrain supplies in the future. Given also the large absolute volume of demand for foodgrains that the region continues to have, relative to the total world trade in foodgrains, it will not be prudent to depend on imports for enhancing grain supplies. A point also to be noted in this regard is that most of the cereals are commodities, which are thinly traded in the world market. Given the current dimensions of world trade in grains, it is important for the South Asian nations to enhance the self-sufficiency in food-production and keep their dependence on grain imports at a restricted and reasonable level. Major food importing countries in South Asia, like Afghanistan, Bangladesh and Sri Lanka, can substantially benefit by raising domestic food production. Table 1 reveals that over this decade (between 2000-1 and 2009-10), the average trade share of world output is quite low for nearly all cereals.

The average share of the output that is traded is a little more than 12 per cent for all cereals. Importantly for the SAARC region, the share of rice output that enters the world market is less than 7 per cent. The same also holds for jowar or sorghum where the traded share is higher than rice but still less than 11 per cent. Wheat is one exception, which not only has a substantially high 18.8 per cent of its output being traded but the time-series data also shows a moderately rising trend in this regard for wheat. From 17.4 per cent in 2000-1, the traded share of wheat output rose to nearly 21 per cent in 2008-9. However, one must be cautious in drawing policy conclusions from this growing trade in wheat as it needs to be examined as to how much of this increase in world trade was triggered by the high food prices that were globally observed during the recent food crisis. An observation for a longer term is needed to ascertain whether this rising trend in trading of wheat is sustainable trend or more of a short-term spike.

It is, therefore, impending upon the region to increase the productivity and production of foodgrains at a rate faster than the growth of the population in the future. In this domain, there is a large scope for regional cooperation within the SAARC nations. There is an important role to be played by collaborative research in agricultural productivity and inputs for cultivation. The SAARC Agricultural Information Centre (SAIC), based in Dhaka since 1989, can facilitate such collaboration in a pro-active manner. An exchange of technical know-how and best practices with regards to agriculture and allied activities in the region will also go a long way in mutually benefiting the member nations, given the differences in crop yields that exist currently in the region, particularly for rice production. The development of joint projects on the enhancement of research and extension services in agriculture and marketing mechanisms ensuring better product prices will definitely benefit the millions of small farmers in the regions and also increase food production in the future.

The second challenge would be the provision of food at reasonable and cheap prices to the population so that real incomes are not depleted by unusually high market prices of foodgrains. Given the existing demand and supply condition, this requires a better

Table 1: Percentage of Output Traded in World Markets between 2000-1 and 2009-10

Selected Cereals	
Commodity	**Average**
Barley	11.9
Corn	12.0
Oats	8.6
Rice, Milled	6.9
Rye	4.5
Sorghum	10.8
Wheat	18.8
Total	12.6

[3] The per capita food consumption in other developing regions like North Africa and West Asia, where the levels of hunger incidence are much lower, was 377.1 kg and 344.3 kg respectively in 2008-10. The same figure for china in 2008-10 was also a much higher 293.3 kg.

management of foodgrain stocks and an effective use of the public distribution system. A regional cooperation on this front can be manifested in terms of a *South Asia Grain Reserve*. This regional food stock will serve as a buffer in years of foodgrain supply shortfall and prevent the kind of crisis that Bangladesh recently faced during the global food crisis because of her over-dependence on the world market for rice imports required to feed the population. A well-entrenched cooperation on this basis can enable a significant reduction of potential vulnerability of the member nations to larger global factors in the food markets. Apart from that, the regional grain stock will also be an additional effective tool in the hands of the governments to prevent undue speculation in the food markets by private traders. A robust public distribution system and a regional grain reserve can act as an effective check against any inflationary expectations that may arise even when there is no supply shortfall in any real sense.

In summary, the challenge of food security is one of the serious problems that the region is currently grappling with. Given the rich bio-diversity and agricultural base of the region, there is an ample scope for cooperation within the SAARC countries in this avenue. Collaboration in the domain of agricultural research accompanied by both financial and infrastructural commitments can substantially overhaul the food and agricultural production system in the region. This will also augment the returns for the large number of people who depend on the agricultural sector for their livelihoods; simultaneously also improving the access to food in the rural countryside. On the other hand, cooperation in terms of building a regional foodgrain stock will shield the region from the short-run shocks that originate in the global and regional food markets and also provide the much required improvement and stability in the food security situation in South Asia.

*****

#46 ***The Advent of Corn-based Ethanol: A Re-examination of the Competition for Grains*** March 2010

#45 ***Fossil Fuel Subsidy Reform in India: Addressing the Challenges*** January 2010

#44 ***Agro-industry as the 'Mahayana' of International Cooperation: A World Waiting to be Born*** January 2010

#43 ***Regional Keynesianism: An Urgent Need of the Hour and Its Relevance for India Today*** September 2009

#42 ***IPR, R&D Capability and Health Care: Key Issues before India*** June 2009

#41 ***Financial Crisis, Global Economic Governance and Development: Responses of Asia and the Global South*** February 2009

#40 ***Reforming the Bretton Woods System for Inclusive Development and Democratic Global Governance*** December 2008

#39 ***IBSA Partnership for Shared Prosperity and Inclusive Globalization - Report of Third IBSA Summit Academic Forum*** December 2008

#38 ***Deepening Regional Cooperation in the Bay of Bengal: Agenda of the BIMSTEC Summit,*** November 2008

#37 ***Emerging Aid Architecture: Tightening the Conditionalities?*** July 2008

#36 ***Back to the Drawing Board: No Basis for Concluding the Doha Round of Negotiations,*** April 2008