Is there a real problem of Food Security?

The long run economic potential of BD cannot be realized unless the people feel confident about the first item on most people’s budget---food. With a population of about 150 million and a projected population of about 220 millions by 2060, there is good reason to be concerned. (Actually, if the popular Western media is any indication, the West is even more worried about the future of BD---not in any constructive sense, but they worry). However, most people also do not seem to realize the incredible strides that BD has already made in expanding its food supply and how much more can be achieved with systematic effort. This article seeks to lay out briefly the reasons for cautious optimism. It begins by dealing with the production potential of local growth. If this is seen to be adequate, and we will argue that it is, then the rest is up to us to achieve. For the sake of easy readability we will refer to rice as the only ‘food’ in question---a simplification that does not affect the essence of the question. Next we discuss the high price of rice that alarmed everyone this Spring and argue that this was a short run problem caused by reliance upon imports from India and a sudden change of Indian policy. Finally we have a few words on food security vs rice security. We have deliberately chosen large and simple numbers and calculations because in questions of this kind one wants to convince ones readers by making them think things through. So our numbers will be adequate if they indicate orders of magnitude and our reasoning will suffice if the reader can confirm all steps. While the article will talk directly only about food, it is taken for granted that other complementary measures that accompany economic growth, such as infrastructure and education etc are all taking place concurrently.
BD has gone from 9 million tons to over 27 million tons and is now practically self-sufficient. It could have tried for full sufficiency but the advising powers felt that it was better to rely on Indian rice for the balance of our needs---on this more later. If the population increases to 220 millions, what has to be the rice production to reassure ourselves. As growing populations have a pyramidal age structure since there are always many more children than youth and more youth than adults, we can think of the additional 70 million as consisting of 15 million adults, 20 million youth and 35 million children. If youth consume 2/3 rds of an adult and children consume 1/3rd of an adult, we have to prepare for 40 million more adults by 2060. If we take this to be 25% of the current output, the goal is to produce 35 million tons in about 5 years. How is this to be done?

1. First, the Yield gap between demonstration farms and farmers is 30%. This is primarily due to input supply irregularity and limited agro extension. It can be made up simply by exercising more care and extension. BD moves to 30 million tons by 2011.
2. Remove GoB management and go to free market for inputs. The appropriate use of inputs contributes about 75% of the yield of HYV varieties. This will ensure the gains of step 1
3. Expand the HYV varieties with local potential – encourage the second generation of HYV varieties developed by BRRI (such as BR-28, BR-43)
4. As about 1/3rd of BD area is by the coast, new coastal varieties from BRRI need rapid expansion in areas such as Shoron Kholo. Training, demonstration and local seed production are sufficient for this.
5. Agriculture Credit is not being adequately financed. The procedures are complex and discouraging. No private institutions exist for this purpose, which is strange in view of the prevalence of microfinance and support for SME’s. By focusing upon the very poor, MFI’s have hitherto been missing the small farmer---who can be especially productive, but who is excluded from the usual MFI by having some assets.

6. Hybrid technology needs package support; for reasons that are unclear, the Government is reluctant to introduce such comprehensive packages. They will provide 20% more output than HYV- and the only new input needed is education and the building of domestic capacity. In the short run import quality has to be assured, since the current imports of poor quality seed are biasing the market against innovation.

Items 3,4 and 5 will each contribute about 15-20% more output. Aggregating the totals, BD has met its goal. What is lacking? Only the vision of what can be done and the will to execute it! What is most pleasing about this prospect is the realization that the primary ‘new’ input is agricultural extension---a domestic resource that BD has plenty of.

Let us turn to the background of the crisis of January-March of 2008. From 1998 onwards BD practically self- sufficient in foodgrain. In 1999 BD attained self- sufficiency in circumstances which need elucidation. The prices of inputs and outputs were similar across neighbors---so smuggling was no attraction. Input management was effective in the forecast of requirements, government monitoring of the private sector was strong and timely. Private import of inputs was liberalized and privately done, but directed by GoB as needed. Free but regulated markets worked. Recently,
TSP and MOP prices have rocketed from 13 to 90. GoB needs to mediate such price shocks in the short run. In the medium term, such increases, if they meet world prices, are to be permitted to work their way through the market system.

If we total the subsidies for fertilizers and for grains over the last two years this comes to about 2-3% of GDP. If the GoB only accepts the responsibility of mediating price shocks and not bearing the burden of removing them, the people will be more used to the risks of a market economy. It is very important to note that the major fear, the unavailability of food in the aggregate, has been removed in the paras above. When price shocks come, this is now a transfer between the rural and urban populations. Since at least 60% of BD live dependent on then land, why is it bad that their incomes increase?

Even as it attained self-sufficiency, BD was gradually pushed into a form of marginal dependency. International organizations pressured BD into accepting the presumed comparative advantage of India and importing a small part of yearly supply. Suddenly, India decided it no longer wanted to be part of this system and raised its export price to a prohibitive level. Till this point BD prices followed world prices, which makes economic sense if BD wants to participate in world trade. With India’s sudden decision, market integration was disrupted and buyers started acting out of fear.

If the people were given accurate and credible figures, very little ‘PANIC’ may have happened. But in the confusion, ordinary people hoarded, say, an extra months supply. Aggregated over millions of households, this created a burden too great for the market to bear without high prices and BDR markets. If 20 million families keep an extra 100 lbs each, or 1/20 ton, then the total withheld comes to 1,000,000 tons—enough to make it look like a
real scarcity. The GoB simply kept reiterating that there was no need to worry; what it should have done is to provide a synopsis of BD food policy, an analysis of price movements and a clear accounting of the reasons why supply was sufficient. In the absence of such publicly verifiable evidence, many households engaged in ‘precautionary’ behavior. The problem with households acting as holders of buffer stocks is that households act not so much out of greed as out of fear. While a profit maximizing arothdar can be persuaded easily to dispose stocks when faced with accurate figures of supply, a household will continue to hoard out of fear. The amounts that can be held in homes far exceeds what can be stored by arothdars. It was a needless ‘crisis’, and one that can be avoided.

The policies and programs suggested above are not to be seen in isolation. Of course all the other measures considered part of good economic policy will continue in parallel. For example, measures to stop the current loss of agricultural land---considered to be almost 2% per year---will be taken, as will continuing population programs. But it is important to emphasise just how much these measures add to the effectiveness of the production possibilities stated above. Let us suppose that economic growth continues as does population growth. It is well known that richer populations diversify their foods and lessen their consumption of cereals. The most dramatic case is probably that of Japan, whose rice consumption per capita has fallen from 140 kg to 70 kg since World War II. If this is any indicator for the future of BD, then rather than being food deficit, there is good reason to think of BD becoming a food exporter.

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