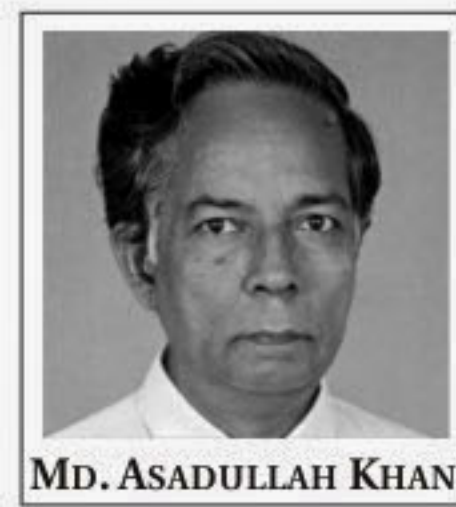


BITTER TRUTH

# Revitalising agriculture



THE spectre of food-grain imports looms large as agricultural growth plunges to an

all-time low and population continues to shoot up. This year, even after a fair harvest of *aman* crop, the steep rise in food prices is somewhat alarming.

In the last decade, there have been signs of stagnation everywhere. Land under food grains has remained at 8.77 million hectares and is decreasing. Because of excessive exploitation of ground water and drought-like situation, ground-water tables have dropped rapidly and shortage of water for farming has reached crisis level.

Worse, there have been no technological breakthroughs or investment in seed technology. The present crisis has resulted from complacency arising out of a miscalculation in the actual population figure and the food yield needed to feed the increasing population.

With coarse variety of rice selling at Tk.38 per kg now as against Tk.32 and fine variety selling at Tk.56 per kg as against Tk.45 just a month ago, consumers are finding it hard to maintain the family budget.

Measures taken fell far short of the need to tackle the situation. It was officially learnt that there is a reserve of 8 lakh 60 thousand tonnes of rice, as against 9 lakh 71 thousand at the same time last year. Food grains at the port stands at 2 lakh 49 thousand and the total reserve stands at 11 lakh 20 thousand metric tons.

Even though the stock is quite satisfactory, prices are jumping. When the government does decide

to import it takes too long, driving prices further up. Instead of going for ad hoc measures the government must focus on a new blueprint on agriculture production, which must offer incentives based on national needs. This is one of the unfulfilled promises of the government.

What needs to be recognised is that agriculture is losing its viability. There are too many middlemen living off it, denying both farmers and consumers affordability. If farmers get better value for their produce, they will be able to invest in quality inputs and use technology to improve their lot.

Agricultural land is being used for non-agricultural purposes, and profitability from the land under agriculture has not increased as land holdings have become smaller and investment is negligible. This sector is also reeling under a crisis of water as it remains heavily dependent on monsoon rain, which has become uncertain due to climatic variations. Mitigating water crisis through pump irrigation has become uncertain due mainly to power shortage.

There is disincentive among the rural farmers to get involved in agriculture, which forebodes an uncertain future. Potato farmers have taken a beating this year. In absence of cold-storage facilities and price support in such a falling market, they are counting heavy losses as they are now forced to sell their produce at Tk.100 per maund in the wholesale market.

Agriculture needs diversification and innovative thinking. It needs to find jobs and to discover and implement a market approach to agriculture. Sky-rocketing prices of rice and other food items is the result of neglect and failure in attaching proper importance to agriculture.



ANDADUL HUIQ/ DRIK NEWS

**Crop rotation and replenishment of micro-nutrients must be ensured to help restore fertility. There has to be optimal use of fertilizers without overdose of nitrogenous nutrients.**

Apart from crop changes, innovative farming techniques are boosting productivity, encouraging new entrepreneurship and having a huge social impact in India.

In the light of bitter experiences in the past few years in the food sector, the people feel that the country has to move away from import-driven economy and develop its own food security system -- like the Food Security Mission that has been set up in India to meet the expected increase in food grain demand.

The government must consider setting up a national authority to find out how best to conserve water in the drought affected areas and to

come up with a time-bound plan.

The major impediment is the lack of technological breakthrough, either in agricultural production technology or in high yielding varieties or hybrid seeds. Crop rotation and replenishment of micro-nutrients must be ensured to help restore fertility. There has to be optimal use of fertilizers without overdose of nitrogenous nutrients.

All these measures need to be geared up by experts in the agriculture sector and Bangladesh may follow the Gujrat line of action. Gujrat enhanced its agricultural production through efficient agro-management based on conserva-

tion of water, providing scientific information to farmers, and dispersing soil health cards to them.

Farmers the world over have boosted their yields and fought against desertification by using heavy doses of fertilizers, pesticides and irrigation water, but that strategy has side effects. Agricultural chemicals may gradually poison the soil, and irrigation also deposits a harmful residue; when the water evaporates it leaves behind various salts, which can render the land useless for farming.

These worrisome trends have jolted the agricultural experts worldwide. Former World Watch

Institute president Lester Brown had long ago issued a cautionary signal that global food production had stagnated for the last one decade because of water scarcity and diminishing returns from the use of fertilizer.

Optimists maintain that world hunger has more to do with war, poverty and poor distribution than with the failure of the farmers to get enough grain to sprout. The difficulty, however, is that war and maldistribution are likely to remain facts of life, and poverty can be self-perpetuating rather than self-correcting. Says Robert Brinkman of Food and Agricultural Organization (FAO): "When people get poor, they put pressure on the land, and then they get poorer."

However, degradation of the land is not always irreversible, as shown by FAO experiments. The model project in the Keita Valley of Niger began in 1983 with the ambitious goal of reclaiming some 5,000 sq km of once fertile pasture thought to be irrevocably damaged by flooding and overgrazing. The Italian and Niger governments applied modern concepts of water "harvesting." Small dams and anti-erosion ponds were built to reduce run-off. Trees were planted to act as windbreaks and riverside water sponges. By 1990, 2,000 sq km had been reclaimed, and wildlife had returned.

Bangladesh needs to replicate such projects to combat desertification, salinity intrusion, and inundation of land. It calls for wide creation of FAO style "bottom up" programmes that help villagers with terracing, using drought-resistant crops and organising modest irrigation and reforestation efforts.

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## Meeting the food security challenge

M. SHAHE ALAM

BANGLADESH, being a disaster-prone country, faces food availability problem frequently.

Production of crops through proper utilisation of the limited land resource base is also a great challenge. Despite the impressive achievements in food grain production during the last few decades, food security at farm households and individual levels remains a major concern for the government. Frequent occurrence of devastating floods, droughts and cyclones causes slower agricultural growth, which forces the resource-poor rural people to migrate to urban areas.

Rice is our staple food, and rice production is vital to the economy. It constitutes about 95% of the total cereal grains produced annually. Rice occupies about 80% of the total cultivable land, and more than 90% of the population derives most of their daily calorie requirements from it.

Although rice production increased more than three-fold in the last three and half decades, the country has still not attained self-sufficiency in food. Gradual decrease of cultivable land on one hand and increased population on the other, coupled with depletion of natural resources and competitive world market, are a daunting challenge. Table-1 shows the long-term growth rates in area, production and yield of rice.

Although there has been a gradual decrease of the area under crop production, the harvested area under rice still had positive growth over the years. Due to technological advancement in the rice sector, there has been substantial progress in the yield level. During the pre-green revolution period it was 1.41%, which increased to 1.78% during the early green revolution period (1975-1985). Amazingly, this increased further during the late

green revolution period (1986-2001) and also during the subsequent period (2001/02 to 2007/08).

Therefore, the country has been able to keep pace with the increasing demand for food grain (at least for cereal) through achieving marginal self-sufficiency in food production.

Recent statistics indicate that per capita availability of rice increased from 140 kg in 1972 to 180 kg in 2008, despite the fact that population increased tremendously.

Food security means access to food by all people at all times, and enough food needed for an

**Due to technological advancement in the rice sector, there has been substantial progress in the yield level.**

active and healthy life. Its essential elements are the availability of food and the ability to acquire it. At the national level, it refers to the availability of sufficient stocks to meet domestic demand till the stock can be replenished from domestic production and/or imports. Since food production at domestic level is not always enough to meet the requirement, food grains have to be imported.

Bangladesh had difficulty in procuring food from international market during 2007-08, which led to a serious crisis. Therefore, in order to attain and sustain self-sufficiency in food production (especially in cereal production), the government has to formulate a policy in relation to enhancing productivity.

A report on food availability early warning prepared by FAO indicated that there will be a sharp decrease of about 6% in food supply in the world market this year (Prothom Alo, Jan. 16).

Furthermore, food prices increased by about 4.2% in the meantime due to the shortage in the world market. Since food prices increased, many countries that give food subsidies will have to incur about 12% additional cost for procurement of required food.

The Ministry of Food and Disaster Management (MoFDM) also estimated that food subsidy will require an additional

Table 1: Growth rates in area, production and yield of rice in Bangladesh (1950/51-2007/08).

Year	Growth rates* (percent per annum)		
	Area	Yield	Production
1950-51 to 1969-70 (pre green revolution period)	1.08	1.41	2.50
1973-74 to 1985-86 (early green revolution period)	0.39	1.78	2.17
1985-86 to 2001-02 (late green revolution period)	0.24	2.81	3.05
2001-02 to 2007-08	0.26	2.33	2.62

\* Refers compound growth rates computed by fitting semi-log functions (Ln Y=a+bt) to the data.

Tk.1,000 crore for the current fiscal year. According to the elite think tanks, the government has to increase the food stock rapidly, because the prices of both fertiliser and food in the world market will rise sharply due to the rise in fuel price by \$30 per barrel.

Some important concerns in meeting the challenge:

- Because of its geographical location, the country is often at the mercy of natural calamities such as floods, cyclone, drought etc. The situation is likely to aggravate due to the global climate change;
- The rice economy has made remarkable progress due to development and distribution of improved rice varieties supported by expansion of irrigation;
- The dry season irrigated/*boro*

rice now accounts for over 55% of total rice production, as compared to about 25% during 1980s, (when wet season *aman* rice dominated with a share exceeding 50%). Almost 90% of the growth can be attributed to technological progress in rice cultivation;

- An increase in population by about two million every year means that an increase in production by 0.35 million tons every year must be targeted;
- Without development and distribution of new technologies for unfavourable environments (salinity affected coastal areas,

flood prone areas etc.) sustaining the growth in rice production will be highly difficult;

- Against such a backdrop, despite the gains achieved in augmenting food availability, safety net programmes are a must to insulate the poor from shocks and help them to be food secure;
- Since the international market can no longer be relied upon as a source of food grains (when there is a shortage in the domestic market), the urgency of raising domestic production in meeting the growing demand should be emphasised.
- A shift in strategy from self-reliance to self-sufficiency in food has thus become imperative.

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## READERS'

### REACTIONS

#### Khaleda's call for transition

She can demand a mid-term election. There is nothing undemocratic here. Again, the major uprising about what she has given a hint, and which according to her will be similar to the ones we have been seeing in the Middle East, is only possible when people from all walks of life, join her. So nothing is wrong as long as people join her to such an extent that the demand becomes strong enough to mend the constitution and go for election.

Md. Russell Talukder

It is ridiculous for a political leader, who has a thin presence in the Parliament, to ask for a mid-term election, Citing example of the unrest in the Middle East is even more bizarre. The former Prime Minister should have this basic knowledge that despite many shortcomings Bangladesh is a democracy.

Hafeejul Alam

#### Finance minister's theories by M.Hafizuddin Khan

People who were never accountable for their work will always have inefficiency and arrogance all over them. Mr. Muhit is the same bitter fruit from the same tree. What do you expect?

Anonymous

#### Our future is in our past by Syed Badrul Ahsan

One of the basic reasons we fought for Bangladesh was democracy. The writer terms Zia and Ershad's period as aberration, if that be, what about the period where democracy was killed in just a few minutes. The core of our fight for independence was thrown into the bin. Mr. Ahsan never writes a single word about that event. To me the writer is intellectually dishonest.

Rahimullah

Secularism is a sense of belief. It cannot be ensured by just writing in the constitution. Did we take any measures to eradicate social discrimination? Still sex, religion, caste information are being questioned in our government organisations. If I say Ershad regime was more secular than Awami League because they maintained a holiday on Lord Krishna's birthday, what would you say? Indian government still celebrates opening ceremony by lighting lamp and cracking coconut which is predominantly part of a Hindu culture. Still they are secular! With majority of the population being believer in Islam and Arabic language literate, some Arabic jargons come in our day to day life. Terming it as non-secular is an expression of narrowness and a failure to understand the basic spirit of secularism.

Kazi Ahmed, Canada