

## Cash-strapped, Precarious but Not Directionless

BUDGETTING is an economic exercise with a political philosophy of the government of the day, so that it has acquired the label of 'a political document' garbed in the costume of economic figures and statistics. And if this happens to be in an election year a kid-glove approach is bound to be taken to make sure that the voters are not displeased in any way. 'Hard options' are avoided. But what is more to the point is that a government can only venture to ask more from the people when it has managed the economy to the satisfaction of the citizenry at large.

After the generalisations, we now go to the heart of the budget which Finance Minister SAMS Kibria proposed before the parliament on Thursday. It is a Tk 42,859 crore budget with a record deficit of Tk 18,661 crore which is sought to be met by external debts and grants, term loans from domestic sources and borrowing from the banking system.

Foreign assistance receipts have been on a decline so that the projection of Tk 9,421 crore from external sources sounds rather ambitious. As far as the government's borrowing from the banking system goes we have, for the first time, an indicative figure of Tk three thousand crore which is about the same that the revised budget showed as bank lending to the government. Such continual borrowing topped by a prior announcement of the lending target being set to the banks could have an adverse impact on money supply together with a possible credit squeeze on the private sector.

Better revenue collection which is key to a reduction in government borrowing looks like a far cry. A 13 per cent increase in revenue receipts has been envisaged for the next fiscal although only 6 per cent of the 22 per cent increase targeted for the outgoing year could at all be achieved. That amounted to nothing when computed in terms of the rate of inflation. If the budget speech of the finance minister had provided a 'satisfactory explanation' for such a debacle in revenue collection then we would have had some formula to avert a recurrence of the poor revenue collection. We are now having to rely on the revenue budget to finance the development budget, something which raises the importance of revenue collection that much more.

Without making adequate arrangements to garner money for the development budget the government proposes to take up a plethora of new projects. Let the government not borrow more money from the banking sector for this overshooting the figure already indicated. One only hopes project implementation process is rationally spread over the fiscal year without creating undue pressure in the last quarter of it. Just as half-done projects are a liability so also projects taken up on political considerations.

The highest allocation has gone to the education sector followed by defence which has registered a seven per cent increase over last year's level. While one cannot be too sure about the human resource development content of the educational allocation any rise in defence expenditure, even allowing for the rate of inflation, needs to be closely monitored in view of the controversial defence purchases recently made. The relative importance of the social sector cannot be glossed over. Actually, given the law and order situation, we would have liked to see the allocation to the police force, Ansars and VDP raised further.

Although the budget skates on thin ice in terms of balancing income and expenditure it has nonetheless shown a sense of direction. The proposal for an equity development fund for the promotion of investment in software, food processing and agro-processing industries is highly welcomed. The reduction of import duties on raw materials and intermediate goods sounds rightfully protective of local industries. The proposals for Tk 1,800 crore interest earning bonds, reduction in lending rates, subsidy provision for fertiliser and some selected export items, booster to housing projects and above all, expansion of the social safety net represent steps in the right direction.

In the crucial area of mopping up black money, the concessional tax being allowed again to those willing to whiten it needs to be seen in the light of a previous initiative falling through in that area. This should be the last opportunity for them to come out in the open. On the expiry of a pre-set deadline the law ought to catch up with them.

## Sitting on the Fence of World Cricket

SURPRISINGLY enough the miracle did happen. Proving all forecasts by experts all over the world wrong, in a rare case, cricket beat the rain in Bangladesh during the seventh Pepsi Asia Cup. Adjustments, here and there, were needed to be made, though not actually within the playing conditions, to save the tournament from the biggest threat, the threat from the weather and luckily everything went according to the new schedule. And the boisterous but patient cricket fans enduring the excessive heat and humidity were rewarded with a grand finale that will be remembered for a long time to come.

Both Pakistan and Sri Lanka deserve all praise and credit for an extraordinary match they presented to the cricket lovers on Wednesday. But what about the hosts? In a foursome contest Bangladesh were the weakest of the lot. The results show this in unmistakable terms. Bangladesh in this tournament for South Asian countries has turned out to be the cricketing babe of the region — once again. We have had everything at our disposal to organise such important tournaments except a team of our own worthy of competing against India, Pakistan and Sri Lanka, three former World Cup Champions. We have the venue, the crowd, the organisation, the technology, the accommodation, transportation, ticketing outfit — everything required to host world class cricket but ourselves mewling on the sidelines. We are gunning for and mobilising support of other cricket playing nations to support our application for full membership of the ICC, a move that increases our responsibility to perform and deliver at the highest level of the game. We are a nation watching and appreciating others play great cricket, sitting on the fence. It is time we threw our hat into the ring.

# Agriculture Should be the Leader

*Traditionally, land and manual labour had been considered major determinants of rural income. The advent of modern technology seems to have propped up a new horizon where investment on water resources, investment in rural non-farm activities and investment on education emerged as critical factors for higher incomes. The changing patterns of demand forestall the obviousness of changing policy prescriptions*

THE linkage effects of agricultural growth are well documented in economic literature. Changes in the structure of the economic progress, that are likely to closely follow, are believed to hinge, inter alia on the various farm and non-farm linkages that such growth tends to generate. In the realm of linkages, however, both demand and supply sides operate — the former being income induced expenditure on food and non-farm goods and services (forward) and the latter from the use of larger inputs (backward). Empirical evidences for a number of countries clearly speak for immense economic benefits arising out of linkages but not much is heard about the same in Bangladesh.

Dr Mahibub Hossain, an eminent economist of Bangladesh (who now works as division Chief, IRRI, Manila), in a recent presentation made an attempt to highlight the linkage impacts that the growth of agriculture in Bangladesh so far injected into the economy. At the very outset, however, one needs to know that substantial doses of agricultural productivity and income have to be filtered through before linkage effects are expected to have significant impact on the structure of the rural economy. On this score alone, the long-term growth of Bangladesh agriculture, value added at only two per cent per year (below the population growth rate), should render the issue of structural changes from farm and non-farm linkages redundant and unimportant. Dr Mahibub Hossain however stops to contest this notion of down-sizing the importance of agricultural linkage notwithstanding the slimmer growth rates in evidence.

The reasons that he cited are as follow: (a) rapid rural urban migration and the recent advance in population controls seemingly posts rural population growth rate below that of the national rate and the slow growth of population so observed has a substantial positive effect on rural per capita

income; (b) within rural areas, labour force moves from agriculture to rural non-farm activities. To substantiate this hypothesis, Hossain, drawing on a BIDS study, pointed out that while the rural labour force grew at 2.1 per cent per year during the 1988-95 period, the number of agricultural workers dwindled by 0.4 per cent per year and the rural non-farm sector witnessed a surge in employment at 5.8 per cent per year. Thus substantial gain in labour productivity in agricultural sector could be in evidence even with a modest growth (two per cent) in agricultural value added. Hossain, further drawing on the same study, observed that average rural household income increased by 2.9 per cent per year during the 1989-94 period when the agricultural income increased by only 1.4 per cent per year. The stimulus to agricultural growth came from a 5.1 per cent per year increase in income from rural non-farm activities, mainly from trading and services. The growth in per capita rural income was estimated at 3.8 per cent per year because there was a 0.9 per cent per year decline in the average size of the rural household.

Forward Linkages: Theory postulates that as income goes up, incremental expenses on food items go down, other things remaining same. In other words, according to the standard economic theory, the income elasticity of demand for non-food items is higher while that of the food items is lower. The household expenditure pattern tends to tilt, as income rises, towards relatively more consumption of vegetables, fruits, fish, meat etc than cereals and grains. Quite obviously, the importance of rice should be one the wane in terms of impor-

tance in the consumption basket and also in the economy due to economic prosperity. It is estimated that the income elasticity of rice in Bangladesh is only 0.18 implying that with a 10 per cent increase in income, the demand for rice will increase by only 1.8 per cent. The interesting question is: Is Bangladesh an exception to the theoretic juxtaposition mentioned above?

Dr Hossain noted that, as per the 1988/89 rural Household

Expenditure Survey (HES), "the market for non-farm goods and services are fairly large and agricultural growth will expand the market substantially." It has been observed that rural households spend only 18 per cent of their incremental incomes on cereals, 14 per cent on other crops, one-tenth on fish and livestock products and about one-third on goods and services produced in the non-farm sectors. If, for example, rural incomes increase by 10 per cent, what would be the forward linkage effects? Well, the market for rural construction and services would expand by 15 per cent, livestock products by about 15 per cent, fish by one-tenth and cereals by about only 5 per cent. Technological

progress gave a tremendous boost to the use of modern agricultural inputs such as chemical fertilizers and irrigation water, there has also been noticeable increase in the growth of demand for mechanical power. Massive consumption of chemical fertilizer promoted an expansion of the fertilizer industry with attendant positive impact on employment generation and infrastructural uplift. Had the industrial sector seized the opportunity of supplying pumps and motors for minor irrigation that are now being mostly imported, the magnitude of backward linkages could be much higher than what has been witnessed so far. Besides these, the linkages to non-farm

sector is also generated through the reinvestment of agricultural surpluses. Non-agricultural investment was found to be highly responsive to growth in agricultural incomes. The rate of investment in agriculture was found almost invariant with the size of landholding, but non-agricultural investment was positively associated with the size of land ownership." Interestingly, the landless and marginal farmers who tend to eke out their living mostly from rural non-farm sectors, had an investment rate of 6.5 per cent of their incomes, 44 per cent of which was allocated for non-farm activities. Needless to mention, perhaps, that provisions for credit to these groups could allow more participation in these activities.

**Backward Linkages:** Agricultural growth in Bangladesh mainly sprang from the technological progress that had shifted the production possibility frontiers. Although mostly

from a 1995 survey at 0.70 while the ratio was 0.59 for the incomes from crop cultivation, 0.32 for income from trade and 0.30 for income from services. Because of the greater access of the non-poor households to wage income and income from business and services, the overall inequality in the distribution of income in the scale of land ownership was only 0.27 but when measured in the scale of per capita income the concentration is about 0.40."

**Policy Implications:** Traditionally, land and manual labour had been considered major determinants of rural income. The advent of modern technology seems to have propped up a new horizon where investment on water resources, investment in rural non-farm activities and investment on education emerged as critical factors for higher incomes. The changing patterns of demand forestall the obviousness of changing policy prescriptions. According to Dr Hossain, the government should place heavy emphasis on agricultural research for development of (a) appropriate technologies for rained ecosystem; (b) HIV for non-rice crops; (c) farming system to fit non-rice crops in rice based system that takes into account the seasonal distribution of rainfall and other agroclimatic factors and (d) appropriate institutions and social organisations to promote rich-fish farming system.

## Beneath the Surface

by Abdul Bayes



## OPINION

### "Duel with a Deadly Disease"

Dr Ram Dulal Bhownick

names of groundwater arsenic contamination yet.

According to Saraban Tahura and others, "... if this discharging process of groundwater continues our shallow groundwater reservoir will be exhausted eventually and proportion of arsenic may further increase". Some others also expressed similar view elsewhere. As far as I understand, this argument may mean that; (a) further decline of groundwater level will decrease the total amount of the groundwater reserve (that is, water volume will be less) thereby increasing the concentration of arsenic dissolved in it, or (b) further decline of groundwater level may cause exposure of groundwater to sources that have higher concentrations of dissolved (available) arsenic, or (c) both the a and b. These meanings also have assumption that in these cases arsenic will be dissolved in groundwater in a rate and/or amount that will ultimately cause the concentration of arsenic in groundwater higher than the present concentration. But, how do we know that these meanings and their assumptions are valid? What are the evidences? I do not think, there is any substantial one till date. On the contrary, consider the research finding and speculation of A J Horowitz, K A Elrick and R B Cook. These researchers in 1990 in a river system of South Dakota, USA found arsenic in the oxidized sediments in two forms, one associated with iron oxide coatings and one found in the arsenopyrite. This is somewhat unexpected because sulfide minerals are not considered particularly stable in oxidizing environments. They speculate that the iron oxide rinds found on the arsenopyrites and the other sulfide minerals found in the oxidizing segment prevent further oxidation of the underlying sulfide minerals, and thus stabilize them. Besides this speculation, consider the puzzling fact that between two tubewells barely ten feet apart one may discharge groundwater with high concentration of arsenic, and the other one may discharge groundwater with low arsenic concentration (in Bangladesh, and in West Bengal, India there are so many instances of this). So, increase in arsenic-concentration in groundwater may not be simply related to the decline in groundwater level. There may be so many factors involved in raising the arsenic concentration in groundwater. After all, we do not know the exact dy-

scale may not solve the problems in the long run, that may even backfire one day. We are not sure that even these deep tubewells will not eventually start discharging arsenic-contaminated water; in fact, in a few cases already deep tubewells water was found arsenic-contaminated. Possibility of contamination of deep tubewell water with other harmful chemicals should also be considered. So, we must be cautious.

To be practical, no single technology or measure seems sufficient for ensuring arsenic-free (and, as well, harmful microorganism) free water, at least at present. A combination of efficient technologies/measures may need to be employed depending upon the context and requirement (social context, economic capability of beneficiaries, season, regional characteristics, immediate/mid-term/long-term requirements, etc). In this situation, arsenic removal technologies got more thrust in arsenic-contamination mitigation programme understandably due to its huge business potential. Many Bangladeshi and foreign (USA, Germany, India, Taiwan) companies and individuals are lobbying for marketing of their household filters and larger arsenic removal plants. Still, some of the 'effective' alternatives to arsenic removal technologies and installation of deep tubewells" that are described by the authors are already in experimentation in the field (for example, use of rain water, sanitary protected dugwell, and Pond Sand Filter). Why implementation of these alternatives (and other measures) is frustratingly so slow and limited is another story. This is the typical story of our careless, apathetic and irresponsible attitude. And, the story of the national and international bureaucracies and vested interest groups.

What we need to face such a dangerous, complex and gigantic problem of arsenic contamination is a comprehensive disaster management strategy incorporating short-, medium-, and long-term objectives. And, we need timely, concerted and coordinated efforts. Do we have all these at present? The answers are both no and yes. Regrettably, no, we do not have these in practice. Then, do not we have these at all? Yes, most probably we have these in our project documents.

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## Elitism in British University Attacked

by Harun ur Rashid

*Labour party leaders took the view that the elitism in the Universities should be discarded and students should be enrolled on the basis of merit only and not on the status or pedigree they enjoy in the society. It is about time they argued that the old British attitude of the privilege of birth rather than potential of a student should end.*

A heated debate has been raging in Britain when the admission of Ms. Laura Spence, a bright student from a state comprehensive school, was rejected by Magdalen College in Oxford. The 18-year old student with 10-A to her credit at the Advanced level of GSCE, was, however, accepted by Harvard University in USA with a scholarship. The acceptance of Laura by Harvard University has exposed the perceived unfairness of the internal procedure of the admission of Oxford University.

There is a belief that Oxford and Cambridge Universities accept students with good pedigree from 'public schools' (private schools) and Laura was not accepted simply because she came from a state school and was not born in a family of privileges. Labour's Chancellor of the Exchequer Gordon Brown denounced the Oxford decision last week and said that Laura was a 'victim' of an interview system that was more reminiscent of 'the old boy network and the old school tie' than genuine justice in British society.

Labour party leaders took the view that the elitism in the Universities should be discarded and students should be enrolled on the basis of merit only and not on the status or pedigree they enjoy in the society. It is about time they argued that the old British attitude of the privilege of birth rather than potential of a student should end. Mr. Brown hinted that he might consider reduction of grants to the Universities that perpetuate the elitism.

The British Health Secretary (Minister) Alan Milburn as part of the campaign is expected to unveil a pilot scheme to help the students win places at medical colleges if they show academic potential untapped at school. Plans are being introduced to pick promising stu-

dents from state schools and encourage them to apply to top universities in Britain.

Oxford's Vice-Chancellor Colin Lucas called Mr. Brown's remarks deeply disappointing.

He said that "Oxford University is constantly seeking out the most able students to come and study with us—whatever school they have been to, whatever their background, whatever their accent." However it was admitted that the share of state school students it accepts had been substantially below the proportion of students from private schools.

There is a view that Mr. Brown's outburst to demolish elitism in the Universities is designed to shoo up the popularity of the Labour Party which has been declining in the community.

The Conservative opposition leader William Hague has put forward populist policies on tax, pensions, crime prevention and immigration to win the next election. A view prevails that the ruling Labour Party has to find an issue which catches the imagination of the community and the attack on university elitism is perceived to go well with the public.

In the advanced economies the ordinary people have grown more affluent and the class war is less prevalent. Fairness and justice are replacing the old privileges of birth. Justice, according to Plato and Socrates, is a virtue, which gives his/her due. It follows that any institution trying to meet the demands of the community must accept the expectations of the community. Again, the Taiwanese with high arsenic intake and blackfoot disease were found to have significantly higher mortality rates for ischemic heart disease (such as, 'myocardial infarction' as popularly known as 'heart attack'). So, these organic substances deserve attention, and I think, the claims of the Bangladeshi researchers about dissolution of absorbed arsenic by organic acid produced from anaerobic decomposition of organic waste or at low pH. These claims are significant also for other reasons.

During the decomposition of organic waste (such as, vegetation) degradation-resistant organic materials called humic substances are formed. These humic substances have a strong effect on the properties of water and play an important role in the mobility of arsenic in environmental water. Humic acids (insoluble humic substances) are the most active component of organic fractions and have a strong retention for arsenic. On the other hand, fulvic acids form soluble complexes of metals in water. They are probably involved in iron solubilization and transport. Hence, fulvic acids can increase the leaching and mobility of arsenic. In addition, fulvic acids can directly react with arsenic, resulting in a decrease in the adsorption of the corresponding arsenic complex. Role of these organic materials, at least the humic acids, in arsenic-contamination of drinking water is particularly important for their alleged role in gangrene formation in humans. Researchers in Taiwan have demonstrated that the main cause of the painful gangrene formation of the extremities, mainly toes and feet, (blackfoot disease) is not arsenic but humic acids. It is noteworthy that the blackfoot disease was found even in an area of Taiwan where most drinking water contains low concentrations of arsenic.

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