

ADB

QUARTERLY  
ECONOMIC UPDATE  
BANGLADESH

March 2002

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Bangladesh Resident Mission

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## Asian Development Bank March 2002

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*The Quarterly Economic Update (QEU) is prepared by the Economics Unit of the Bangladesh Resident Mission, Asian Development Bank (ADB). The views expressed in the QEU are those of the authors and do not necessarily reflect the views of the ADB or its member governments. The QEU is published in March, June, September and December.*

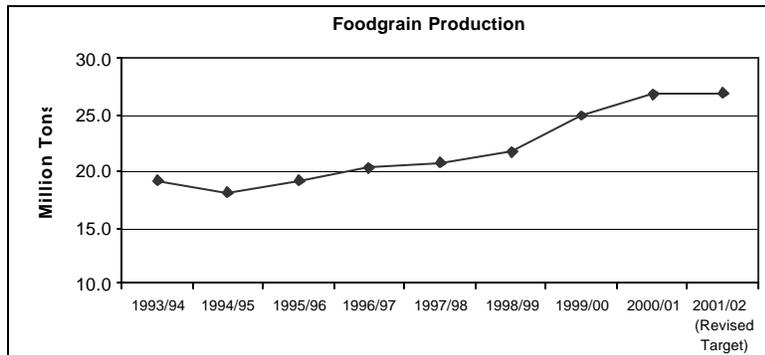
## MACROECONOMIC DEVELOPMENTS

### Overview

1. An unfavorable external environment and the economic fallout from 11 September have notably undermined the country's growth prospects for FY2002. Weak external and domestic demand are likely to drive down GDP growth during FY2002. Although a steady increase in workers' remittances has somewhat mitigated the pressures on the current account, foreign exchange reserves continue to remain under stress. Heightened external pressures have also aggravated the fiscal imbalance with the government's borrowing from banking and non-banking sources remaining high. Monetary policy continues to be accommodating to fund higher spending and inflation has picked up due to an increase in food grain prices.

### Agriculture

2. Following successive bumper crops during recent years, food grain production during FY2002, under the most optimistic scenario, will barely reach the level of FY2001. As against actual production of 26.8 million tons in FY2001, the food grain production target for FY2002 was set at 27.9 million tons (*aus* 1.8, *aman* 11.5, *boro* 12.7, and wheat 1.9



million tons). The actual production of *aus* was 1.81 million tons.

However, *aman* production was adversely affected by inadequate rainfall in July

and excess rainfall in October, particularly in the northern districts. Although the total *aman* area planted was almost the same as last year's level, there was a deficiency in yields in some parts of the country. The *aman* production is estimated at only 10.7 million tons, implying a 4.9 percent decline from the 11.25 million tons recorded during the preceding year. Reflecting a lower *aman* crop, the national average paddy price was 7 percent higher during December – January, FY2002 compared with the corresponding period of FY2001. Despite unfavorable weather and late cultivation, wheat production is currently forecast at 1.79 million tons compared with 1.67 million tons of the previous year.

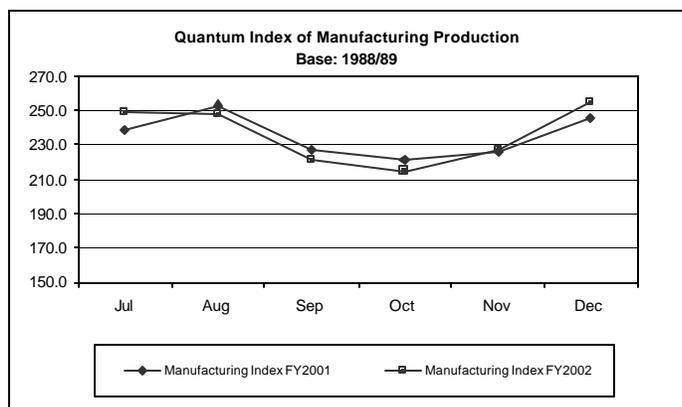
3. There is expectation of a good *boro* crop this year. Higher paddy prices and favorable weather have encouraged farmers to increase the land under *boro* cultivation. This has also resulted in increased fertilizer sales, with peak season (December-February) urea sales increasing by

**Lower  
agriculture  
sector output --**

2.2 percent over the corresponding period of last year. However, even if the targeted *boro* crop is achieved, total food grain production during FY2002 will be around 26.99 million tons, an increase of only 0.86 percent over the production level of 26.76 million tons during the preceding year.

## Manufacturing

4. Based on data for the first half of FY2002, large and medium scale manufacturing is likely to suffer a setback for the entire fiscal year. During the first six months of FY2002, the manufacturing production index of selected items, recorded a marginal increase of 0.22 percent. Excepting chemicals, food products, paper products, and metallic products, production of all other major items declined. Much of the increase in manufacturing production came in December 2001, when the index increased by 3.8 percent over December 2000. However, declining



imports of industrial raw materials and stagnancy in private sector credit growth cast doubts on whether the recovery will be sustained in the remaining months of FY2002. Imports (in terms of L/Cs opened) of industrial raw materials

***-- and a slow-down in export oriented manufacturing --***

during July-January FY2002 declined by 8.4 percent over the corresponding period of last year. The growth of private sector credit was 8.35 percent during this period as against 8.63 percent in the same period of the previous year.

5. Provisional data for small-scale manufacturing indicate a 9 percent increase in the output during the first half of FY2002 as against the same period of the preceding year. The increase is broad-based covering textile, leather, apparel, wood products, papers, chemicals and machinery. Since these enterprises mainly produce for the local market, their output is not affected by the global slow down. However, as small-scale industry accounts for only 35 percent of overall manufacturing output, it is unlikely to significantly offset the setback in large and medium scale manufacturing.

## **Economic Growth**

6. During FY2002, the GDP growth rate is likely to decline to 4.0-4.5 percent compared with 5.2 percent during FY2001<sup>1</sup> due to lower agricultural growth and a more subdued performance in export-oriented manufacturing and services. Lower agriculture growth will be underpinned by the relatively depressed performance in the crop sub-sector, while fishing, animal farming and forestry sub-sectors are expected to show higher growth in comparison with last year. Despite a steady increase in the output of small-scale industry, the overall growth in manufacturing will slowdown considerably due mainly to the dismal performance of the export-oriented large and medium scale manufacturing sector. The contraction in export oriented manufacturing, in turn, is likely to depress service sector activity, particularly in trade, transport and finance.

*-- will lead to lower GDP growth for FY2002*

## **Fiscal Management**

7. Revenue collection has picked up since December 2001 in view of new initiatives launched by the tax authorities, with actual collection falling only slightly below target. Collection during the first eight months of the current fiscal year (July 2001 – February 2002), although short of the target by 1.9 percent, increased by 8.9 percent over the corresponding period of the previous fiscal year. At the end of February 2002, the growth in import based taxes had increased from the six months ending December 2001. However, growth in domestic indirect taxes moderated, while income taxes increased between December 2001 and February 2002.

*Revenue collection has increased --*

8. Although data on budgetary expenditure are not available for the current fiscal year, a sharp increase in domestic borrowing together with a stable level of foreign borrowing indicates a sharp rise in government expenditures. To finance this increased expenditure, government borrowing from the banking system increased by 11.7 percent during the first seven months of FY2002 compared with a 9.5 percent increase during the corresponding period of FY2001. Higher bank borrowing was accompanied by a change in its composition, with the government substantially increasing its borrowing from the central bank, while reducing its borrowing from commercial banks. While, higher government borrowing from the central bank could generate inflationary pressures in the future, lower government borrowing from the commercial banks has yet to translate into significantly higher lending to the private sector. Government borrowing from non-bank sources also increased by around 23 percent during the first seven months of the current fiscal year relative to the corresponding period of FY2001 with adverse implications for higher debt servicing.

*-- but so has expenditure --*

9. In the face of a continuing decline in imports and the stagnancy in domestic industrial production, revenue mobilization efforts need to be

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<sup>1</sup>The FY2001 GDP growth rate has been revised downward to 5.2 percent from the earlier estimate of 6 percent.

further strengthened to achieve the revenue target set for the current fiscal year and to cope with the growth in public expenditure. The Government, however, plans to cut the annual development outlay by around Taka 30 billion to bring outlays more in line with mobilized resources and to contain the fiscal deficit. The Government is planning to withdraw allocations of unapproved projects and reduce allocations to low priority approved projects, without compromising poverty reduction initiatives or reducing allocations to rural infrastructure projects. While these are steps in the right direction, it is important also to track the movements of recurrent expenditures and restrain expenditures of a non-essential nature.

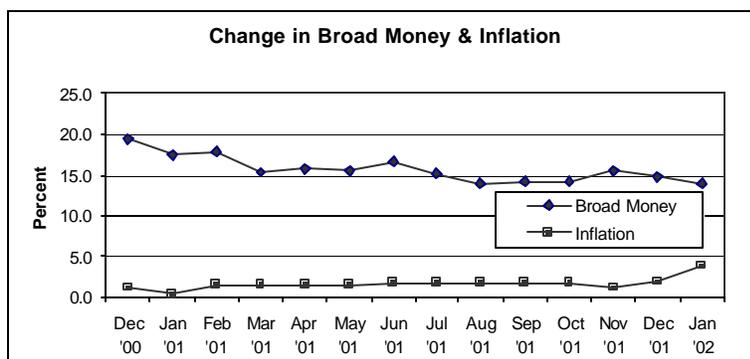
*-- pointing to the need to further mobilize revenue --*

10. In a bid to improve generation of tax revenue, the National Board of Revenue has undertaken to investigate large tax evasion cases. For the first time, over a dozen accounting firms have been assigned the task of investigating evasion cases relating to VAT and income taxes. In addition to these welcome initiatives, there is a need to revisit the tax holiday facilities given to different categories of industries, to find out if these have contributed to industrial expansion in the country. The Government also needs to urgently implement its decision of setting up a public expenditure review commission for suggesting ways of improving public resource management, and a revenue commission for providing recommendations on improving domestic resource mobilization. In order to minimize public sector involvement in the provision of goods and services, and thereby reduce the budgetary burden, restructuring and privatization of the state-owned enterprises (SOEs) need to be accelerated. Although the Government has already abolished the Jamuna Bridge Division, Statistics Division and Department of Supplies and Inspection as a part of its program of public sector downsizing, more progress needs to be made in public sector reforms.

*-- and improve public resource management*

### Monetary Developments

11. During the first seven months of FY2002, growth in domestic credit decelerated marginally to 8.2 percent from 8.5 percent in the



corresponding period of FY-2001. This was due to a marginal decline in credit to SOEs' and a moderation in credit growth to the private sector, reflecting tighter expenditure controls, high real interest rates, and a slower pace of economic activity. Although net credit to government increased during the first seven months of FY2002 relative to a year ago, on a point to point basis credit growth to the government has moderated since November

*Money and credit growth moderate --*

2001, due to increased efforts to contain the fiscal deficit. The slower pace of credit growth was accompanied by a further decline in net foreign assets of the banking system, reflecting on-going pressure on reserves. The pace of decline in foreign assets has, however, moderated considerably between end September 2001 and January 2002. As a result of these developments, broad money growth at 14 percent remained unchanged between September 2001 and January 2002. On a cumulative basis, during the first seven months of FY2002, broad money growth at 6.1 percent was somewhat lower than the 8.5 percent growth rate achieved during the corresponding period of FY2001. Slower growth in money supply was, however, accompanied by a steep rise in reserve money, with the latter rising by 8.6 percent during July 2001-January 2002 as compared with an increase of 1.3 percent during July 2000-January 2001. The main reason for this increase was the surge in commercial banks' foreign exchange deposits with Bangladesh Bank in December 2001. The latter, which was made in response to requests by Bangladesh Bank, helped to prop-up the level of reserves in December 2001.

12. Interest rates remained relatively stable during this period, except for a brief and sharp spike in the inter-bank call rate during the second half of February 2002. The latter was caused by a sudden change in rules that disallowed commercial banks from using their foreign exchange balances to meeting their cash reserve requirements. Although the central bank directive was made with a view to strengthening monetary management ? since the foreign exchange component of the cash ratio constituted an expansionary device in the event of devaluation ? it was made just before the Eid season, when liquidity is typically tight. This forced banks into the money market to meet their reserve requirements, and caused rates to soar. Rates, however, soon came down as liquidity was injected into the market by maturing and premature encashment of treasury bills, and by the activation of a central bank rediscount facility.

*-- while interest rates remain stable despite a temporary hike in inter-bank rates*

13. The banking sector still continues to be stymied by bad debt. As reported, the ratio of non-performing loans (NPL) to total outstanding loans amounted to 31.5 percent at the end December 2001. Although this represented a modest improvement from the NPL figure of 34.9 percent at the end of 2000, in absolute terms it represented an increase of Tk7.4bn. The provisioning shortfall of the banking sector has increased to Tk46.2bn at the end of 2001, from Tk41.9bn at the end of 2000. Of this shortfall, around 84 percent is attributable to the nationalized commercial banks.

*Non-performing loans remain high*

## **Inflation**

14. Annual average inflation picked up to 1.81 percent in January 2002, from 1.56 percent in December 2001. Underlying inflationary pressures are also on the rise, with inflation on a point to point basis increasing from 1.66 percent in June, to 3.81 percent in January 2002. The pick-up in inflation was due to price increases involving both food (mainly rice) and non-food items such as fuel and transportation costs.

*Inflation picks up*

This, in turn, was attributed to higher domestic demand arising from the festivities associated with Ramadan, and a lower *aman* crop.

15. The exchange rate was devalued by a further 1.6 percent in January 2002. The official and kerb market rate continues to move in step. The current kerb market rate of Tk57.6:US \$1 is in fact below the official rate of Tk57.9:US \$1. This implies sufficient unofficial inflows of foreign exchange to keep the kerb market liquid.

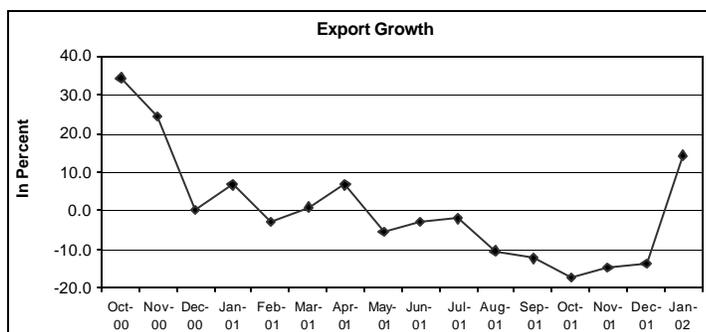
**Confidence in the official exchange rate remains high**

### Balance of Payments

16. The global economic slowdown and the aftermath of the September 11 terror attack on the US have extracted a heavy toll on Bangladeshi exports. Preliminary trade data for the first seven months of FY2002 (July-January) indicate that merchandize exports (f.o.b basis), at US\$3534mn, declined by 8.3 percent over the corresponding period of FY2001, despite some improvement in January 2002. Much of this decrease was in ready-made garments and frozen foods. While the decline in ready-made garments was evident for much of 2001, reflecting the slowdown in global demand and the granting of duty and quota free access to Caribbean and Sub-Saharan countries by the US (see QEU, December 2001), the decline in frozen foods is more recent, and has been attributed to higher freight and insurance costs after the September 11 attacks. Mirroring the slowdown in exports, year-on-year imports (on a c.i.f basis) declined by 4.7 percent during the first six months of FY2002 to US\$4275mn. In terms of L/Cs opened, imports declined by 8.7 percent during the first seven months of FY2002 over the corresponding period of FY2001. Significant declines were evident in industrial raw materials and petroleum and petroleum products, reflecting the slowdown in the import intensive garment industry and lower oil prices. However, L/Cs opened for capital machinery, especially those for the textile industry, recorded a notable increase indicating some efforts at promoting backward linkages in the garment industry.

**Exports and imports continue to decline --**

17. The decline in imports was, however, not enough to keep the



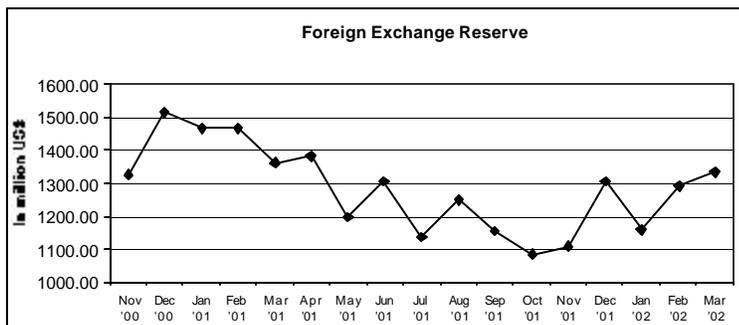
trade deficit from widening to US \$1276mn during the first six months of FY-2002 from US \$1100mn in the corresponding period of FY2001.

**-- but a widening trade deficit is mitigated by higher remittances --**

Notwithstanding the higher trade deficit, the deficit in the current account of the balance of payments (excluding official grants) narrowed to US\$64mn from US\$167mn in July-December 2001. This was mainly due to lower service payments and higher inflows of transfers. During the first eight months of FY2002, remittances from Bangladeshi overseas workers increased by a massive

28.5 percent over corresponding period of FY2001. The increased inflow of remittances has been variously attributed to, among others, the repatriation of savings by expatriate Bangladeshi workers returning home, and greater efforts to increase the share of remittances coming through official channels. As indicated in QEU December 2001, the high growth rate in remittances is unlikely to be sustained, as the temporary effects of the savings repatriation will be eventually overtaken by a declining number of Bangladeshis working abroad. Preliminary data for February 2002 indicate that remittances have declined somewhat over the January 2002 level.

18. The lower current account deficit was, however, offset by a smaller capital account surplus owing to lower inflows of direct investment



and an increased incidence of loan repayments. The overall balance thus roughly halved to US\$46mn during this period from the corresponding

*-- and a lower current account deficit is offset by reduced capital inflows*

levels of FY2001. Although gross international reserves, at US\$1,337mn on March 31, 2002, remain low, the level of reserves has increased slightly since February 2002. International reserves have been held-up by the spurt in remittances and lower imports.

### Political Developments

19. The political situation continues to be confrontational. The ruling party (BNP-led alliance) and the opposition (Awami League) are yet to reconcile their differences. The Awami League continues to boycott parliamentary sessions. Law and order still continues to be a concern, as crime rates remain high in the capital and some other parts of the country. The ruling and opposition political parties will need to reconcile their differences if the country is to carry forward much needed critical reforms to accelerate economic growth and bring about a faster reduction in poverty.

## SHOULD THE TAKA BE DEVALUED?

20. In the context of the recent downturn in exports and increased pressure on foreign exchange reserves, there have been numerous calls for currency devaluation to restore competitiveness of the country's export industries.

21. For a relatively small economy such as Bangladesh (in terms of world markets), where the world price of both exports and imports are given, devaluation is considered important in that it alters the relative price in takas in the domestic economy<sup>2</sup>. Devaluation raises the taka price of exports, making exporting more attractive. It also raises the domestic price of imports, making domestically produced goods relatively more attractive than competing imports. However, devaluation is often a subject of controversy since it has distributional consequences. One intended result of devaluation is by increasing the (domestic) price of exports, real resources are shifted to the export sector. These real resources have to come from somewhere, so that there are resulting income losses elsewhere. If, in fact, such transfers are avoided by compensating adjustments to all other sectors (to offset the effects of a rise in the taka cost of imports) than the effect of the devaluation would be wiped out and the exporter will find his/her initial improvement dissipated by inflation.

***Devaluation has distributional consequences***

22. Presumably it would generally be to the exporters' advantage to support devaluation, and when export performance has been sluggish there may well be a prima facie case for leaning towards the exporters' interest. By how much then should the taka be devalued to restore export competitiveness?

23. Our analysis reveals that during the three-month period November 2001 to January 2002, the average value of the real effective exchange rate of the taka<sup>3</sup> was at a similar level to the rate that prevailed during the latter half of 1997. If one was to consider movements of the taka vis-à-vis the currencies of competitor countries, the situation is somewhat ambiguous. Table 1 shows that when real exchange rates are measured bilaterally with respect to the US dollar, the taka had depreciated by 16.4 percent compared to end 1996, whereas the Indian rupee had depreciated by only 7.3 percent<sup>4</sup> and the Sri Lankan rupee by 15 percent during the same period. The Thai bhat, on the other hand, had

***The adjustment in the taka against competitor country rates is not large --***

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<sup>2</sup> Of course, the relative price can also be affected by other policy instruments such as tariffs, price controls and taxes.

<sup>3</sup> The real effective exchange rate is defined as the nominal trade weighted exchange rate in terms of foreign currencies multiplied by the domestic consumer price index and divided by the composite foreign price index. As defined, an increase in the index signifies an appreciation of the value of the taka.

<sup>4</sup> Although there has been much discussion in Bangladesh of the need to devalue the taka in light of recent depreciation of the Indian rupee, our analysis shows that when measured bilaterally with respect to the dollar, or for that matter the Indian rupee, the taka has depreciated relative to the rupee irrespective of what base year we use. The only instance this does not hold is when 1990 is used as a base year. This was the year India undertook its massive devaluation following an impending balance of payments crisis. As this is not a typical year, we decided against using 1990 as our base year.

depreciated by a massive 40.1 percent following its financial crisis in 1997. The Vietnamese dong and Pakistani rupee had also depreciated relatively more against the dollar, by 26.4 percent and 23.6 percent respectively.

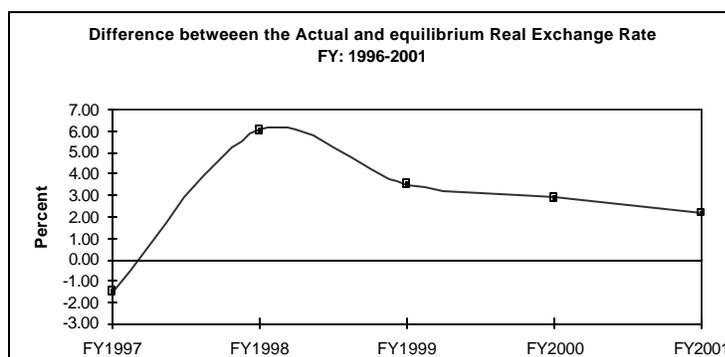
**Table 1**

**Relative Movement of the Real Exchange Rates of Bangladesh and some of its Main Competitors against the US\$**

	<b>End-1996</b>	<b>October-2001</b>
US\$	100	100
Bangladeshi taka	100	83.6
<b>Competitor currencies</b>		
Indian rupee	100	92.7
Pakistani rupee	100	76.4
Sri Lankan rupee	100	85.0
Vietnamese dong	100	73.6
Thai bhat	100	59.9

24. Very preliminary results from the estimation of long run equilibrium real exchange rates,<sup>5</sup> reveal that the misalignment between the actual and equilibrium real exchange rate for the period 1997 to 2001 has been relatively small, and has progressively narrowed since 1998. During 2001, the misalignment was only 2.2 percent (see Figure).

*-- and the misalignment between the actual and equilibrium rate is small --*



<sup>5</sup> The equilibrium real exchange rate is defined as the rate that is consistent with fundamentals. The equilibrium rate was estimated by two methods: (i) residual based co-integration, and (ii) an augmented autoregressive distributive lag (ARDL) procedure. The results of the ARDL procedure were more robust than the co-integration approach, and have been adopted here. The fundamental variables used for the estimation of equilibrium real exchange rate were government consumption, debt service ratio, openness (as a proxy for trade liberalization), excess credit supply (to indicate loose monetary policy), and a ratio of fiscal deficit to lagged high powered money (to indicate loose fiscal policy). Three-year moving averages of these variables were taken to smooth out temporary volatility. The results of the estimation reveal that the error correction model corresponding to the ARDL procedure indicates a highly significant error correction coefficient, with a moderate speed of convergence to equilibrium. Interestingly, the short-run coefficient indicating loose fiscal policy is positive and is highly significant. This is consistent with theory, and indicates that an increase in the fiscal deficit relative to the monetary base in the previous period will increase domestic demand for non-tradables and lead to an appreciation of the real exchange rate.

25. From the above analysis it is apparent that the range within which the taka should probably be adjusted is not large as to result in drastic changes throughout the economy. It then becomes evident that the exchange rate will not by itself transform export performance, and other policy measures will be equally important.

26. In this context it is worth noting that despite significant trade liberalization in Bangladesh in the last decade-and-a-half, the unfinished agenda on the trade policy front is large. Despite a progressive reduction in nominal tariffs, recent studies have found a wide variance of effective rates of protection. Some firms (usually those with low domestic value added), were found to be highly protected while others (often engaged in activities where Bangladesh would be expected to have a comparative advantage), received negative protection. This, in turn, provides incentives for domestic industrial firms to produce for the local market rather than for exports, resulting in a less than optimal allocation of resources. However, any further attempts to reduce the overall level of protection should simultaneously involve an estimation of the required exchange rate adjustment. This is because, a reduction in import taxes effectively results in an increase in demand for imports which may need to be balanced by suitable exchange rate adjustment.

27. In addition to these trade related distortions, a number of other constraints hinder export growth in Bangladesh. These include inadequate physical infrastructure (electricity, ports and roads), non-availability and high cost of credit, and a number of governance related issues, including excessive red-tape and corruption. All these factors raise the cost of doing business in Bangladesh, making Bangladeshi products less competitive in international markets.

***Other policy measures are equally important in stimulating exports***

## **IMPLEMENTATION OF THE PARTNERSHIP AGREEMENT ON POVERTY REDUCTION**

28. In April 2000, the ADB and the Government of Bangladesh signed the Partnership Agreement on Poverty Reduction' (PAPR). Consistent with international development goals, the PAPR specifies medium term (up to year 2005) and long term (up to year 2010) goals for reducing income poverty, and improving other social indicators such as primary education, gender disparities, maternal and infant mortality rates, malnourishment, and access of women to reproductive health services. In order to prepare a comprehensive agenda for the implementation of PAPR, the ADB has undertaken several studies on the different aspects of the poverty reduction program, and reviews work undertaken by others which is also relevant to the PAPR.

29. This issue of QEU examines the key findings of the recently released preliminary report of the Household Income and Expenditure Survey – 2000 of the Bangladesh Bureau of Statistics (BBS), particularly in light of the PAPR medium and long terms targets for income poverty reduction.

### **Household Income and Expenditure Survey (HIES) – 2000: Implications for Income Poverty Reduction Goal under PAPR.**

#### **Poverty Incidence**

30. Poverty lines constructed using the cost-of-basic needs (CBN) method represents the level of per capita expenditures at which the members of a household can be expected to meet their basic needs of food caloric requirement (2,122 kcal per day and person) and also non-food consumption. The CBN method adopted in the HIES uses two different poverty lines – upper poverty line and lower poverty line to estimate the poverty incidence during 1991/92-2000. The lower poverty line incorporates a minimal allowance for non-food spending for those who could just afford the food requirement, while the upper poverty line makes a more generous allowance for those who just attained the food requirement.

*The poverty incidence has declined by one percentage point a year*

31. The findings of the study reveal that during the decade ending 2000, the national poverty incidence, measured by both the upper and lower poverty lines, has declined moderately. In 2000, 49.8 percent of the country's population was below the upper poverty line, compared with 58.8 percent in 1991/92. Over this period, the incidence of extreme poverty as measured by the lower poverty line declined from 42.7 percent to 33.7 percent. According to both the upper as well as lower poverty estimates, in the course of the decade, the incidence of poverty declined by about 9 percentage points. During this period, headcount indices declined by about one percentage point per annum in terms of both poverty lines, while real per capita mean expenditures increased by 2.5 percent per year.

32. The impressive economic performance of the decade, which resulted in an annual average GDP growth rate of about 5 percent (3 percent in per capita terms), was instrumental in the progress in poverty reduction. However, rising income inequality has reduced the rate of poverty reduction. Although the headcount rate has declined, the challenge in addressing extensive poverty remains daunting. The number of people living below the upper poverty line virtually remained unchanged at around 63 million while the number of extreme poor declined only marginally over the decade.

### **Rural, Urban and Regional Variation in Poverty**

33. In 2000, the headcount rate (upper poverty line) for urban poor declined to 36.6 percent as against 44.9 percent in 1991/92. Over the same period, rural poverty dropped to 53 percent from 61.2 percent. Rural poverty remained more extensive than urban poverty throughout the decade based on both the upper and lower poverty lines. According to the upper poverty line, progress in poverty reduction in urban vis-à-vis rural areas was more or less identical. However, on the basis of the lower poverty line, rural poverty declined at a faster rate than urban poverty. 85 percent of the poor lived in rural areas. As a result, the incidence of rural poverty dominated the national average. Reduction in rural poverty mainly contributed to the decline in national poverty while migration to urban areas contributed to a small portion of the decline.

*Rural poverty remains more extensive than urban poverty*

34. Aside from rural and urban differences, there are also considerable variations in the extent and reduction of poverty within regions, and also between urban and rural areas within these regions. In 2000, the poverty incidence was highest in Rajshahi Division with 61 percent of people living below the upper poverty line while it was lowest in Barisal Division with a 39.8 percent poverty incidence. The progress in poverty reduction in terms of headcount rates also varied widely across the regions. Dhaka Division experienced faster progress in poverty reduction while in Chittagong Division, the poverty incidence increased slightly over the decade.

### **Depth and Severity of Poverty**

35. HIES data show an improvement in poverty incidence in terms of the depth and severity of poverty as measured by the poverty gap and squared poverty gap. The poverty gap estimates how far below the poverty line the poor were on average as a proportion of that line. The squared poverty gap takes into account not only the distance separating the poor from the poverty line, but also inequality among the poor. Using the upper poverty line, the national poverty gap declined from 17.2 percent in 1991/92 to 12.9 percent in 2000. Over this period, in urban areas, the poverty gap declined from 12 percent to 9.5 percent while in rural areas, it declined from 18.1 percent to 13.8 percent. Similarly, in the course of the decade, the squared poverty gap declined from 6.8 percent to 4.6 percent at the national level; in urban areas it declined from 4.4 percent to 3.4 percent and in rural areas it declined from 7.2 percent to

4.9 percent. According to both of these measures, poverty declined over the decade, and rural poverty remained more extensive than urban poverty. The trends in these measures are also true for the lower poverty line.

### **Income Inequality**

36. According to HIES data, income inequality increased notably, particularly in urban areas over the decade. The Gini coefficient of income distribution at the national level increased from 0.388 in 1991/92 to 0.417 in 2000. Income accruing to the highest decile increased from 29.23 percent in 1991/92 to 38.14 percent in 2000. For the top 5 percent of households, it was more prominent, 28.66 percent in 2000 as against 18.85 percent in 1991/92. Urban income distribution worsened at a faster rate than rural income distribution. The Gini coefficient increased sharply in urban areas from 0.398 to 0.452 while in rural areas it increased marginally from 0.364 to 0.366 over this period. Despite a considerable increase in average incomes, the income distribution in urban areas has become much more uneven.

*Income inequality worsens*

### **PAPR Goal for Income Poverty Reduction**

37. PAPR envisages goals for income as well as human poverty reduction consistent with the targets set under the international development goals (IDGs) established through a series of world summit meetings in the 1990s. In PAPR, there are both medium and long term targets for income poverty reduction. The medium term target is a 25 percent reduction in the proportion of people below the poverty line by 2005, and the long term target is a 50 percent reduction in the proportion of people below the poverty line by 2010. If we take the latest HIES headcount index of around 50 percent as benchmark for income poverty, the proportion of people below the poverty line will need to decline to 37.5 percent by 2005 and 25 percent by 2010 so as to meet the PAPR goals. This translates into a 2.5 percentage points decline in income poverty per annum during the decade 2000–2010. However, in the decade ending 2000, income poverty declined by about only one percentage point per year. Faster progress in poverty reduction thus remains the central development challenge in Bangladesh.

*Faster progress in poverty reduction remains a priority*

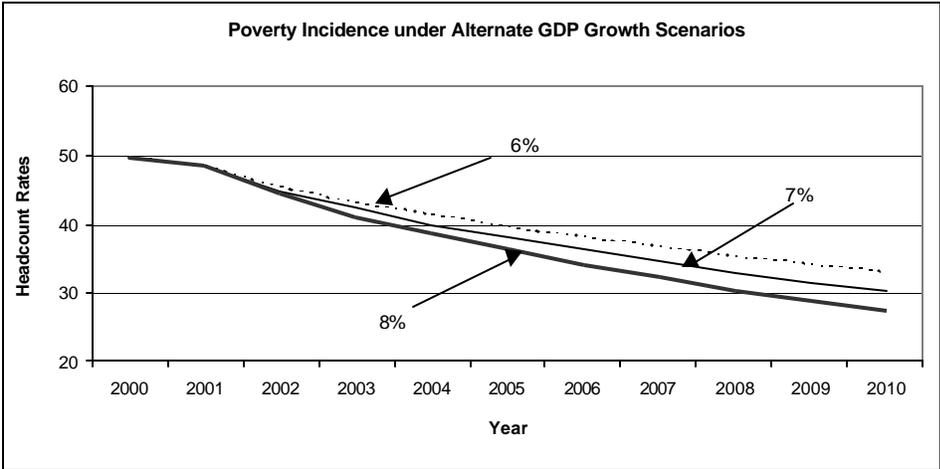
### **Linking Poverty and Economic Growth**

38. There is growing empirical evidence that high and sustainable economic growth successfully lowers the level of poverty. The effectiveness of economic growth in reducing poverty, however, varies greatly across countries. We have used a macroeconomic model to determine the responsiveness of poverty reduction to economic growth in Bangladesh<sup>6</sup>. The responsiveness of the rate of poverty reduction to economic growth was ascertained from an inequality adjusted rate of

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<sup>6</sup> Background paper on “Modeling the Macro economy of Bangladesh”, Bangladesh Resident Mission, Asian Development Bank, January 2002.

growth in average income. This effect was measured, first, by calculating the overall responsiveness of poverty to changes in real per capita income and, second, by decomposing the effect into that portion associated with economic growth and that portion associated with income inequality.



39. The growth and inequality elasticities were incorporated into the macro model to show the linkages between economic growth projections and the incidence of poverty in the country. Three growth scenarios were considered, 6, 7 and 8 percent per year to forecast the poverty incidence in terms of upper poverty line headcount indices till the year 2010 on the assumption that the past responsiveness of poverty and inequality to growth will continue in the near future. Based on these simulations, Bangladesh will need a sustained annual GDP growth rate of over 8 percent to meet the income poverty reduction target of PAPR. However, sustained progress in poverty reduction will depend not only on rate of economic growth but also on the type of growth, institutions and policies.