What does Bangladesh do next?

As far as Bangladesh is concerned, we need to re-evaluate our strategy in the fight for justice against the consequences of climate change, which have been imposed upon us by the GHG emitters.

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THE most talked about climate change summit in Copenhagen ended with a minimum agreement among the stakeholders. Most of the post-conference analyses by world leaders, academicians, journalists, and participants termed the final accord as disappointing, disastrous, chaotic, and insufficient to meet the future challenges. If we accept the IPCC predictions to be true for the next few decades, then the current way people lead their lives will have to change drastically.

At the current rate of greenhouse gas (GHG) emission, the temperature in the atmosphere will increase by up to 4 degrees Centigrade by the end of this century, which will mean a rise of 3 metres in the sea level. In order to arrest the upward-bound trend in the temperature and sea level rise, the concentration of CO2 will have to be reduced from the current 389 ppm to below 350 ppm.

The world observed the climate summit with much anticipation, with the expectation that everyone involved in policy-making would realise the consequences of global warming and do the needful to ensure the stability of our planet for future generations.

Unfortunately, the world leaders did not live up to this responsibility.

The participants were broadly divided into three groups: (a) the American-led coalition of the major GHG emitters, that included China, India, Brazil, South Africa; (b) the European Union-led less emitters; and (c) the most vulnerable countries (MVCs) and the least developed countries (LDCs), that included Bangladesh, Maldives, and a few African countries.

It appears that, after much negotiation, the main GHG emitters resorted to the infamous philosophy of "divide and rule." The MVCs and LDCs could not stay united and caved in to the desires of the American-led coalition in compromise for a non-binding political accord -- not an agreement -- that promises to keep the temperature rise below 2 degrees Centigrade and to adopt voluntary measures to cut down on GHG emission.

In addition, compensation of $10 billion per year was committed for about 1 billion direct victims from the MVCs and LDCs for adaptation measures. This amount is insulting in view of the fact that each climate change victim is allocated a yearly sum of $10 dollars, which will not buy food for even one day! Yet, Bangladesh, threatened by submergence of 20% of the country and displacement of over 20 million people, accepted the accord and expressed satisfaction!

Although the final accord is a compromise document, and is the first step in the right direction, it cannot be considered to be a satisfactory achievement. Among many unresolved issues, resettlement and compensation for climate refugees remains the most unsettled aspect of the climate change debate. Bangladesh needs to continue to push for a reasonable settlement of this issue in the future. Even US President Barack Obama told the press that he understood why most people were disappointed about the final outcome of the climate summit.

As much as the summit was far from achieving the desired goals, it was not a complete failure. The main accomplishment was that all parties involved recognised that climate change was the greatest challenge of our time and agreed to do something about it. Some of the major GHG emitters, including the US, China, and India, agreed to voluntarily reduce their emission by as much as 25% as compared to 1995-levels.

The leading role of the EU and Japan in terms of their willingness to reduce GHG and provide assistance to MVCs and LDCs with adaptation funds and technology transfer is laudable. However, the championship award of the summit must go to Barack Obama for his role in achieving the final political accord, and, most importantly, for the paradigm shift in US public policy stands in relation to GHG emission. Up until now, the political atmosphere in the US was very much against any commitment to reduce GHG emission.

President Obama appears to understand the magnitude of the issue and is willing to do the work towards finding solutions that are in line with recommendations made by scientists. As long as he can garner the support of his political opponents and the corporate world, he will be able to lead the world out of this crisis and can truly earn the prestige he deserves for winning the Nobel Peace Prize.

As far as Bangladesh is concerned, we need to re-evaluate our strategy in the fight for justice against the consequences of climate change, which have been imposed upon us by the GHG emitters. Although, like all other MVCs and LDCs, Bangladesh did not gain much in terms of receiving financial compensation for mitigation or adaptation measures, it is now a well established fact that Bangladesh is the most affected country due to climate change and most of the GHG emitters should pay close attention to the needs of that country.

President Obama recognised this fact in his speeches. In preparation for COP 16, to be held in Mexico in 2010, and in her continued fight for climate justice in the future, Bangladesh needs to do the following:

- Form partnerships with other MVCs and LDCs and provide leadership on behalf of these countries in future negotiations;
- Not abandon her friends and partners from MVCs and LDCs for national gains;
- Invest in developing domestic capability in coping with consequences of climate change in terms of adaptation and mitigation measures;
- Adopt an ecological and open approach as opposed to the current cordon approach in all adaptation measures in coastal areas;
- Since Bangladesh is a small part of the Ganges-Brahmaputra-Meghna watershed and since water-related problems (such as drought in winter months and flooding in rainy season, salinity ingress due to reduced river flow from upstream regions, riverbank erosion and siltation of riverbeds due to unstable inflow in rivers) will be the main concerns in the future, Bangladesh needs to work with India and other co-riparian countries for achieving an integrated water resources management plan for all common rivers;
- Invest in research and development of sediment-capture technologies in coastal areas in order to accelerate coastal land reclamation process;
- Not build new polders or embankments in coastal areas as adaptation measures against sea level rise, because such measures will reduce vertical growth of land by reducing sediment deposition from natural tides and flooding in the coastal areas. Building of such polders will deprive the land from its natural coping mechanism against sea level rise, resulting in permanent water-logging that is currently occurring in Bhabadah in Jessore, and in New Orleans, Louisiana, USA;
- Adopt best management practices in all spheres, including domestic capacity building that will allow it to better cope with climate change.

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Where will she go from here?

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Networking for global development

This approach of networking for development is, in theory, exciting since the GDN covers every region of the world through supporting regional partnerships. Moreover, it provides a global knowledge base for policy researchers through journals and other publications.

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IN this 21st century, globalisation brings speed in human lives, where networking becomes a major vehicle for promoting cross-border social movement, businesses and personal contacts. Even though the aim of globalisation is to foster development in the world under one economy, its critics argue that globalisation is a myth since it is failing to bring benefit for a large number of people as the gap between poor and rich is increasing.

That is why, every year the G8 summit -- a summit of richest nations of the world -- experiences protests by anti-globalisation groups, which regularly end in violence. Nevertheless, extensive media coverage of such anti-globalisation movements and networking among the groups via internet and mobile telephones, in order to form and promote anti-globalisation movement, indicates the globalisation of the anti-globalisation movement. Therefore, it will not be realistic to deny globalisation even from an anti-globalisation perspective in this 21st century world.

However, at the same time the existence of regional integration -- the European Union, North American Free Trade Area -- within this "globalised" world depicts that it is indeed a superficially globalised world we are living in. It is in fact more of a region-global world we are living in today rather than in a truly global world.

On the other hand, problems such as global poverty or global warming are global by nature. The responsibility, therefore, goes to the global policy makers who really can make a difference by addressing real issues and challenges for global development by going beyond regional dichotomy in the form of North-South or East-West distinction since there is a need for global policy integration.

Nevertheless, it will suffice to say that policy makers in this world are busy with politics rather then engaging in research. Here, the role of policy researchers becomes significant as they can generate knowledge, addressing the real problems that are hindering the development of this world, and brief policy makers with their evidence-based knowledge so that they can come up with more effective policy solution.

Networking among such researchers dispersed across various regions of the world can be a very effective vehicle for generating a global knowledge base for the global policy makers. Based on this simple theory, Global Development Network (GDN), an international organisation launched in 1999, by nature facilitates and supports networking among policy researchers in various regions of the world to promote global development.

The GDN has 11 regional networking partners -- CERGE-EI from Eastern and Central Europe, African Economic Research Consortium (AERC) from Africa, Economics Education and Research Consortium (EERC) from Russia and the Commonwealth of Independent States (CIS), East Asian Development Network (EADN) from East Asia, European Development Research Network (EUDN) from Europe, GDN Japan from Asia Pacific, Latin American and Caribbean Economic Association (Asociación de Economía de América Latina y el Caribe) (LACEA) from Latin America, Economic Research Forum (ERF) from the Middle East and North Africa, Bureau for Research and Analysis of Development (BREAD) from North America, South Asia Network of Economic Research Institutes (SANEI) from South Asia, and Oceania Development Network (ODN) from Australia, New Zealand and the South Pacific.

This approach of networking for development is, in theory, exciting since the GDN covers every region of the world through supporting regional partnerships. Moreover, it provides a global knowledge base for policy researchers through journals and other publications.

In addition, it promotes knowledge dissemination sessions for policy makers and policy researchers through organising annual conferences. However, a major drawback of such a concept is that it is really hard to measure to what extent and to what capacity policy researchers are in fact able to influence policy makers.

The failure of the recent Copenhagen Summit, which was considered as the most important summit after the end of the Second World War, shows that, despite the research-based evidence which stresses the need for integrated global action to mitigate carbon emission, regional and national interest could jeopardise global interest.

Similarly, even though the global policy makers are meeting in various summits to tackle issues to address global poverty, almost half of the world now lives on less then $2.50 per day according to the World Bank Development Indicators 2008.

Moreover, even though research indicates that the discriminatory non-tariff barriers imposed by the developed world for the product exporters from the developing world are in fact against the philosophy of global development, policy makers of the EU and North America continue to protect their producers at the expense of increasing poverty in the developing world.

Therefore, such a gap between policy researchers and policy makers requires to be eliminated, and only then can networking for development become an effective vehicle for actual global development.

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Costs of blindness and poverty

The cost of treating all causes of cataract blindness in Bangladesh is estimated to be Tk.350 crore ($50 million) only. ORBIS experience in Manikgonj district in eliminating cataract blindness revealed that the immediate internal rate of return of cataract surgery is 1,000% in the following year.

ABU RAIHAN

BLINDNESS has profound human and socioeconomic consequences. The costs of lost productivity and of rehabilitation and education of the blind constitute a significant economic burden for the individual, the family and society. The economic effects of visual impairment can be divided into direct and indirect costs. The direct costs are those of the treatment of eye diseases, including the relevant proportions of costs for running medical and allied health services, pharmaceuticals, research and administration.

The indirect costs include lost earnings of visually impaired people and their caregivers and costs for visual aids, equipment, home modifications, rehabilitation, welfare payments, lost taxation revenue and the pain, suffering and premature death that can result from visual impairment.

The most comprehensive national assessment of the economic cost of visual impairment was conducted in Australia, where five principal eye conditions -- cataract, age-related macular degeneration, glaucoma, diabetic retinopathy and refractive error -- account for about 75% of all visual impairments. The analysis predicted that the direct cost of treating eye disease in Australia in 2004 could be A$1.8 billion.

Estimated total costs of eye disease in Australia, 2004:

- Suffering and premature death associated with visual impairment A$4818 million
- Direct medical costs A$1824 million
- Lost earnings for the visually impaired A$1781 million
- Cost of caregivers, including their lost earnings A$845 million
- Aids, equipment, home modifications and other indirect costs A$371 million
- Taxation revenue forgone and welfare payments A$208 million

Global scenario: Disability adjusted life years (DALYs) from visual disability in comparison to other diseases:

- Perinatal condition
- Lower respiratory tract infection
- Ischaemic heart disease
- Cerebrovascular disease
- HIV/AIDS
- Visual disorders
- Diarrhoeal disease
- Unipolar depressive disorders
- Malaria
- Pulmonary disease
- Chronic obstructive disease

Avoidable visual impairment: A human, social and development issue

Cataract is by far the main cause of readily curable blindness. As there are no known effective means of preventing the commonest forms of cataract, surgery should be provided to all those in need. Cataract surgery can be one of the most cost-effective of all health interventions, with a cost per DALY saved in the order of $20-40. Good-quality, high-volume cataract surgery can be provided at less than $10 per DALY in some settings. Cataract interventions are thus as cost-effective as immunisation and can significantly and rapidly reduce avoidable blindness.

Onchocerciasis has been brought under control in many parts of West Africa through the WHO Onchocerciasis Control Program, and the disease has been eliminated as a public health problem in 11 countries, equating to more than 600,000 cases of blindness prevented, 5 million years of productive labour added and 25 million hectares of land made use of. The economic return rate, a measure of the total economic benefit of a program in comparison with its total cost, has been estimated to be highly satisfactory.

Trachoma requires a range of medical, behavioural and environmental interventions. Data from some endemic countries show that both non-surgical (education and antibiotics) and surgical interventions (lid surgery for trichiasis) are among the most cost-effective measures for controlling blindness.

In the field of childhood blindness, control of xerophthalmia has also been shown to be cost-effective. Mass distribution of vitamin A capsules twice a year is one of the best health interventions available, with a cost per DALY saved of only $9. The comparable cost for vitamin A fortification would be about $29 per DALY saved.

Economic models at this level of detail are not yet available at a global level; however, according to a conservative analysis published in 2003 of the loss of productivity of individuals with visual impairment, the annual global economic impact of blindness and low vision in 2000 was $42 billion. In the absence of a decrease in the prevalence of blindness and low vision, this figure was projected to rise to $110 billion per year by the year 2020.

With successful implementation of VISION 2020, the annual loss of productivity of individuals with visual impairment was projected to rise only $58 billion in 2020, equivalent to an overall global saving of $223 billion over 20 years.

Projected worldwide cost of reduced productivity due to visual impairment during 2000-2020

World Health Organisation (WHO) has estimated that up to three-quarters of all blindness worldwide is avoidable. In children, about one-half of the causes can be prevented or treated, and the patterns of the causes of blindness in adults and children vary considerably from region to region.

In an effort to eliminate avoidable blindness from the earth by the year 2020 an action plan for 20 years was undertaken by WHO in collaboration with the International Agency for the Prevention of Blindness (IAPB) in 1999 through Beijing Declaration. The program is known as Vision 2020: The Right to Sight. Bangladesh ratified the vision 2020 global initiative in 2000, and is one of the first few countries in the world to do so.

Socioeconomic studies have shown that the prevention and treatment of avoidable blindness promote and accelerate progress towards a broader global development agenda, such as the Millennium Development Goals.

Without implementation of the Vision 2020 Program, the amount of lost productivity in 2000 was $42 billion per year, and could be $110 billion per year in 2020.

With the successful implementation of Vision 2020 Program, the amount of lost productivity in 2020 could be reduced to $58 billion per year.

The direct links between the activities of VISION 2020: The Right to Sight global program and human social and economic development must be strongly expressed and disseminated to decision makers at all levels.

Cost of blindness and poverty reduction in Bangladesh

There has been no study in Bangladesh to estimate the economic burden of blindness in the country and the cost of care. A South Asian study (India) revealed that not only did 85% of the men and 58% of the women who regained their sight return to work, but that there was also a financial return of 1,500% on the expense in the year following the surgery.

The economic burden of blindness in India for the year 1997, based on current assumptions, was $4.4 billion, and the cumulative loss over lifetime of the blindness was $77.4 billion. Childhood blindness accounts for 28.7% of this lifetime loss. The cost of treating all cases of cataract blindness in India was $0.15 billion (Shamanna et al. 1998).

In Bangladesh, it is estimated that there are about 550,000 cataract blind adults and 40,000 blind children in the country. The cost of blindness due to lost productivity is estimated to be Tk.2,500 crore ($350 million) in 2008, and the cumulative loss over lifetime of the blind is Tk.42,250 crore ($6 billion).

The cost of treating all causes of cataract blindness in Bangladesh is estimated to be Tk.350 crore ($50 million) only. ORBIS experience in Manikgonj district in eliminating cataract blindness revealed that the immediate internal rate of return of cataract surgery is 1,000% in the following year.

The current rate of resource allocation to treat national blindness is very low (about Tk.4 crore per year). This little amount cannot free the country from blindness as new cases will pile up over the years. It is well established that poverty and blindness are tied together; one causes the other. Resource allocation needs to be increased urgently to Tk.60-70 crore per year for the next five years for the effective elimination of avoidable blindness. This, in return, will contribute to the national economic productivity and, thereby, in poverty reduction.

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