Biodiversity Mankind Should Preserve

by Karar Mahmudul Hassan

DARWINISM was not accepted due to the absence of convincing examples immediately after pronouncement of the theory related to various life forms and was subjected to ugly criticism and an unfortunate Darwin died without enjoying the truth embodied in his theory.With the advancement of science and technology, it has now clearly been proved that the various forms of life is due to variation in the life pivot, that gene mutation. Gene mutation led to appearance of various forms of life on earth and the process will continue till the day of resurrection.Whatever the case may be these imperceptible changes accumulate to a well balanced system of progressive evaluation and provided an ideal habitat for both flora and fauna.

'Bio' is a Greek word which means life and 'diversity' connotes manifestations. Life manifestation had been going on since the dawn of earths history along with cooling effect and migration of life from water to terrestrial condition. This variation is the fundamental tool of the progressive evolution applicable to both flora and fauna.

Extreme biotic interferences along with population explosion, retarded the process and magnificent progress in medical science provided the globe with longer life-span and at the same time population shot up to approximately double than what it was about half a century back in the global context. This surplus population exerted profound influence on both renewable and non-renewable resources and retrogression accelerated the disappearance of various beneficial life forces and gave birth to dangerous pathogens causing health hazards.

'Bio-diversity' is of paramount importance to the very existence of human race. How this heritage sustained injury in any geographical location is a debatable question. But biological scientists are now unanimous towards the identification of issues related to the damage inflicted on stratospheric ozone layer and penetration of harmful solar radiation causing serious blow to production systems and thus seriously jeopardising the various forms of life.

It is crystal clear after the 'Rio' conference 'who is doing what'. It also measured the magnitude of the damage already done to earth in search of quality of life. It is time for action. No more diplomatic maneouvering with the fate of billions of human creatures living particularly in the developing countries, should be there. And biological repair is of urgent necessity failing which the human race will face complete annihilation. In the context 'bio-diversity' deserves special attention of biological scientists and policy makers as well as of those who are concerned about it.

It is a healthy sign that biological scientists in Bangladesh have made some breakthrough though not so significant as yet, to tackle the problem and some of them have been showing positive interest to render services for the cause of humanity and also exchange ideas, scientific knowledge and information, with scientists of both developed and developing countries.

The government, NGOs, Universities in general and scientists in particular have joined hands to render services to the cause of humanity so that we can sustain biodiversity, for our future generations. None should deny them their 'right' to live in a healthy and safe environment.

The writer is a Joint-Secretary in the Ministry of Communications.

A Thirsty World

by Someshwar Singh

The world is rushing towards a freshwater crisis as usage increases and existing sources are reduced or contaminated. A holistic approach is urgently required to tackle the problem.

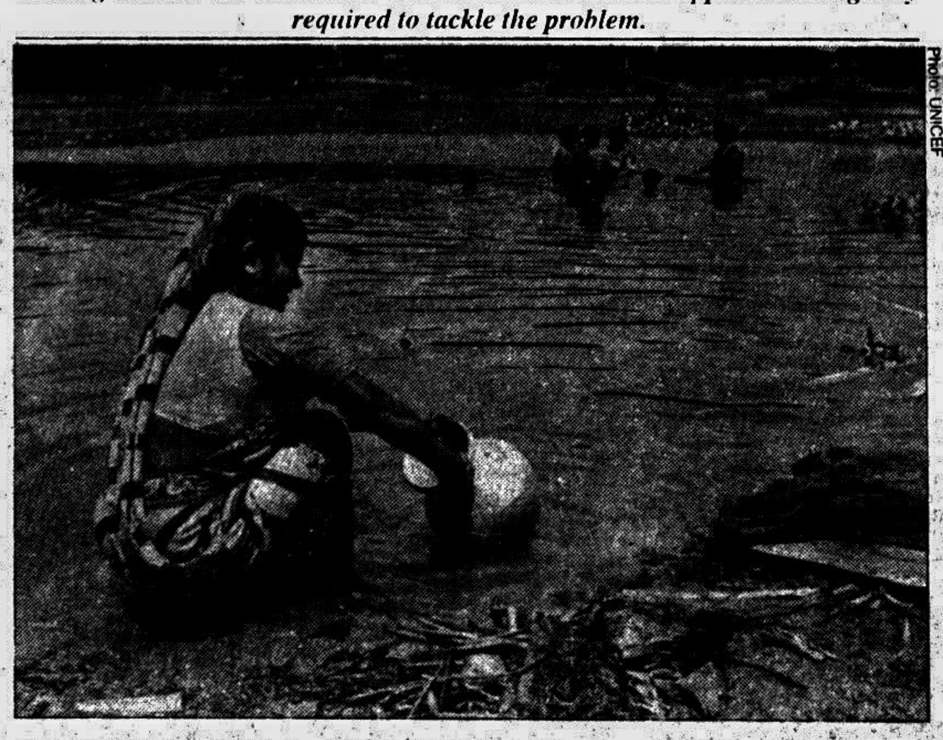

Photo: UNICEF

HE statistics revealed at the 1977 United Nations Water Resources Conference in Mar del Plata, Argentina, led the UN to declare the 1980s as the International Drinking Water and Sanitation Decade. Almost 20 years later, the world is closer than ever to a water crisis.

The water situation is provoking tense diplomatic talks. In the Middle East, agreement on access to water is an important part of the peace accords between Israel and its neighbours. The sharing of river waters is a constant source of friction between India and Bangladesh.

For millions of families in the developing world, long-distance treks to search for water continues. In Port-au-Prince, Haiti, the poorest households sometimes spend 20 per cent of their income on water. In Jakarta, Indonesia, 32 per cent of its 7.9 million inhabitants buy water from street vendors at about $1.50 to $5.20 per cubic meter, depending on the distance from the public tap. Similar situations exist in Karachi, Pakistan; Nouakchott, Mauritania; Dhaka, Bangladesh; Tegucigalpa, Honduras; and Onitsha, Nigeria.

In Mexico City, water is now being pumped from the Cutzamala river, to a height of 1,000 meters, then into the Valley of Mexico. It may soon have to be pumped over a height of 2,000 metres as the groundwater table slips further down. In Amman, Jordan, the falling groundwater table has forced a shift to the more expensive use of surface water. Beijing must consider drawing water from a source over 1,000 kilometres away.

California's Pacific Institute for Studies in Development, Environment, and Security notes that at least 40 per cent of the world's population lives near 250 river basins — such as the Danube, Nile, Tigris, Indus, Brahmaputra, and Mekong — which are the source of frequent tension between nations.

But even within national boundaries, the sharing of water resources has generated a lot of heat — between provinces, agriculturists of different regions, between agriculture and industry, and between rural and urban areas. In India, water is the cause of a continuing battle between the southern provinces of Karnataka and Tamilnadu.

According to a recent World Bank study, as the human population doubles to at least eight billion in the next 30 years, world demand for water will rise a staggering 650 per cent. Twenty-six countries, with a combined population of almost 250 million, are already considered water-scarce.

Africa alone has 11 water-scarce countries, and four more will be added to the list by the end of the century. About one-third of the African population, 300 million people, will be living in water-scarce countries by the year 2000. In the Middle East, 9 out of 14 countries already face water scarcity.

The critical question is how to make water use sustainable. Global demand for water doubles every 21 years. About 8 per cent of the world's freshwater supplies are used for human and sanitation needs. Agriculture accounts for 60 to 70 per cent, industry 20 per cent.

For all its apparent abundance, however, the supply of freshwater is limited. About 99 per cent of earth's water is either saline or frozen. Of the remaining one per cent, most is groundwater and soil moisture. Thus the net availability of freshwater for all human uses is one-hundredth of that one per cent.

And not even all of that can actually be used. For example, two-thirds of the annual rainfall evaporates into the atmosphere. More than half of the remaining water flows into seas without being used.

"It is no longer a question of just paying money to make water available," observes Biksham Gujja, Manager of WWF International's Freshwater Programme. "There is no simple techno-economic fix either. To ensure the availability of freshwater on a sustainable basis, the whole question of the water cycle, the quality and quantity of water, has to be looked at from an ecosystems and cross-sectoral approach."

Among WWF's conservation priorities, water occupies a prominent place. The principal challenge, however, is to prevent the rapid degradation of freshwater sources in the name of development. Hundreds of wetlands are being destroyed, lakes are drying up or being contaminated, and rivers are filled with effluent and wastes. River-transported pollutants account for more than 60 per cent of marine pollution.

One-fourth of China's lakes are polluted and thousands of Swedish lakes have been destroyed by acid rain. In Poland, three-quarters of the river water is too contaminated even for industrial use. In India, more than 4 million hectares of once-productive land have been abandoned because of waterlogging and salinisation.

Perhaps the most startling example is the Aral Sea in Central Asia : its water volume has decreased by two-thirds in recent years, and its water become increasingly saline, threatening the health of nearly 50 million people in the Aral Sea Basin. The main reason has been the excessive extraction of water for irrigation from the Amu Darya and Syr Darya rivers which feed it.

Shortsightedness and fragmented approaches are as much of a problem as wastage in the home, agricultural fields, or factories. Fundamental change is needed in the way water resources are managed, taking into account social equity and ecological sustainability.

Meanwhile, the search for local solutions is easing the problem. For example, WWF's freshwater study in India, in collaboration with UNICEF, aims to integrate environmental concerns and basic needs of local communities. Individual case studies will be carried out in seven different types of India's eco-regions. But much more is required to satisfy the world's thirst for increasingly scarce freshwater.

WWF Feature

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Countries Predicted to Have Scarce Water Resources in 2000

Country[1]	Population in 2000	Water availability: Internal renewable water resources	Water availability: Water resources including river flows from other countries
	(millions)	(...m3 per caput....)	
Egypt	62.4	29	934
Saudi Arabia	21.3	103	103
Libyan Arab Jamahiriya	6.5	108	108
United Arab Emirates	2.0	152	152
Jordan	4.6	153	240
Mauritania	2.6	154	2,843
Yemen	16.2	155	155
Israel	6.4	260	335
Tunisia	9.8	384	445
Syrian Arab Republic	17.7	430	2,008
Kenya	34.0	436	436
Burundi	7.4	487	487
Algeria	33.1	570	576
Hungary	10.1	591	11,326
Rwanda	10.4	604	604
Botswana	1.6	622	11,187
Malawi	11.8	760	760
Oman	2.3	880	880
Sudan	33.1	905	3,923
Morocco	31.8	943	943
Somalia	10.6	1,086	1,086

A[1] number of other countries with smaller populations, e.g. Barbados, Cape Verde, Djibouti, Malta, Qatar, and Singapore, are also included in the water-scarce category.

Source : FAO calculations based on World Bank/WRI data.

Essence of People's Participation in Development Programme

by Someshwar Singh

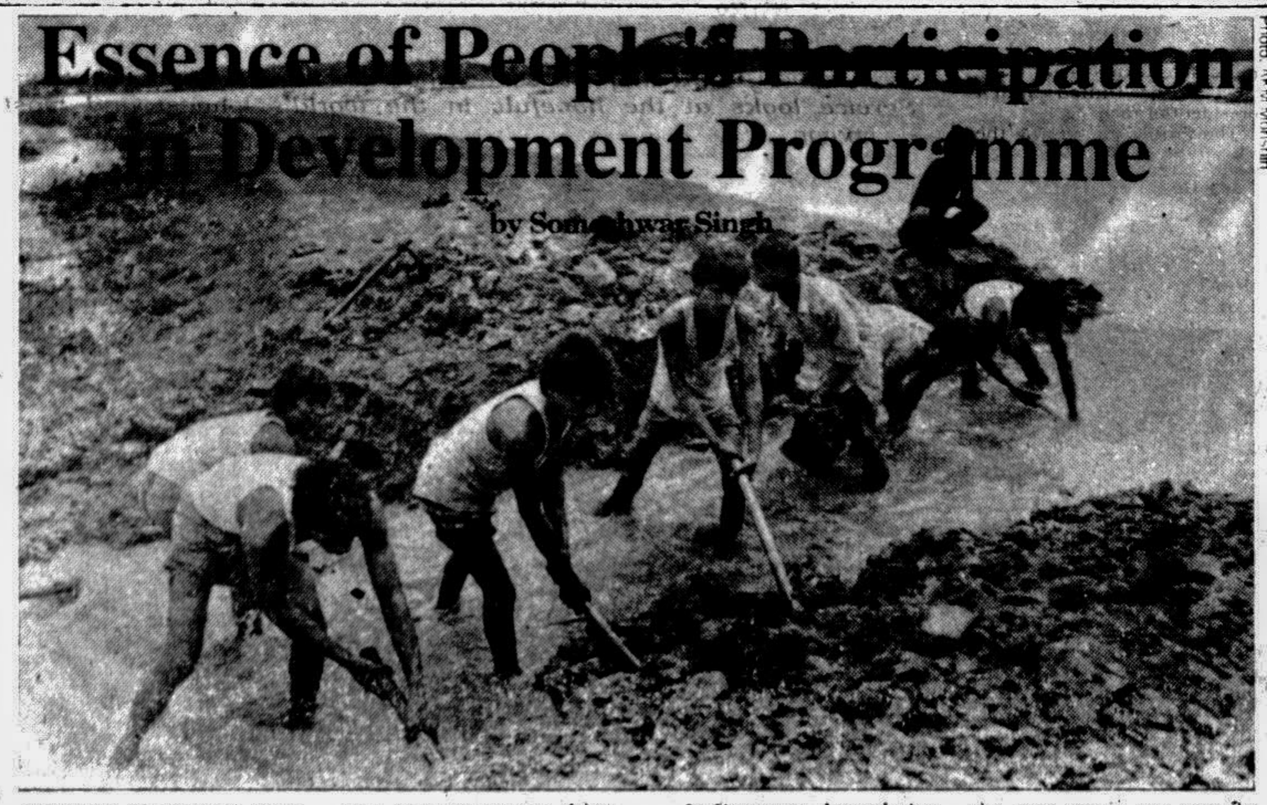

Photo: ARM Mohsin

IN recent years, participatory approach in development programme has been exploded. Many exciting, innovative and important new approaches to development research, planning and action are being evolved rapidly all over the world. Participatory Rural Appraisal (PRA) is such a new approach in the policy-planning and development process. Rapid Rural Appraisal (PRA) is one of the precursors of PRA, which was evolved in the late 1970s and 1980s. At the end of 1980s, for practical research and planning approach, more decentralised planning and more democratic decision-making techniques considering social diversity, community participation and empowerment got importance under PRA. Under this approach, local people can share, enhance and analyse their knowledge of life and conditions to plan and to act. It also enables the local people (rural and urban) to undertake their own appraisal analysis, action, monitoring and evaluation.

People's Participation and Empowerment: Four decades of development works with different paradigm i.e., 'modernisation,' 'dependency' 'trickle down' or 'top-bottom' approaches could not sustain due to their wrong perceptions and lack of peoples participation. Despite some isolated successes these policies or approaches were obviously not for solving the people's problem.

Considering the drawbacks or shortfalls of many policies and programmes and realising the need for good and timely information and insights from the local level people, the policy planners and development workers could realise the necessity of greater awareness of the value of local knowledge. Participatory process, primarily, empowers the local people to think about their problems and find out the possible solutions to change their life pattern. It also intends to enable the local people to conduct their own analyses and often to plan and take action. Simply generation of ideas and collection of information for any long-term programme interventions have not been totally accepted by the contemporary social scientists, especially the anthropologists and sociologists and community development workers. The social scientists are giving more emphasis on peoples expectations and desires, their attitude towards the programme, their perceptions and knowledge base about their own culture, economy and society. What problems do people face, what do they think about their problems, what do they believe and how do they behave with other peoples etc. are more important for any policy implementation. From anthropological perspective, any development programme should match with the expectation of targeted community, socio-cultural and geographical environment and other realities of the project area. Thus, the participatory process should encompass all the attitudes, beliefs and value practices of the local people. Long terms dialogue and sustained interaction with the local people are main objectives of this type of participatory development approach. This approach does not offer any quick solution to complex problems. According to this approach, there is no short-cut way to succeed without involving the local people in their own problem identification, analysis of problems, planning and leading to action.

Indigenous knowledge system-approach and people's participation

Every cultural group or community has some distinct cultural values, goals and aspirations. Development programmes for such a community should reflect the aims and aspirations of those people for whom the programme is initiated. Every locality envisages some character features of community life, value practices, pattern of thoughts etc. Consideration of this socio-cultural reality and knowledge base of the local community lead the planners to determine the appropriate policy-intervention. Planners should remember that the stakeholders know a great deal not only about their immediate circumstances, time and resource base but also able to take any new scheme for their own development. The problems facing people are also more or less concerned about their economic environment, the myriad and complex constraints which may cause particular initiative to fail.

The local people, for example, who are frequently affected by floods, are now already accustomed to cope with flood. They have developed some indigenous techniques to survive with flood water, or to protect themselves from flood. This indigenous ways of existence and subsistence with limited resources are the great assets for the development workers and future policy-planners. Our social traditions and life long experiences show that the poor people are usually very rich in initiative. Inspite of considerable disadvantages, these poor people still manage to ensure some sorts of development out of very few resources. Development planners can take into account this accumulated knowledge as well as traditional skills and technology for their future policy formulation and determining more sustainable development programmes. Here the utilisation of indigenous knowledge may greatly help to achieve the desire goals of development in general. 'Indigenous knowledge System' or 'Development from Below Approach' has many advantages of knowing the social, cultural and economic processes of the life of targeted people. Gaining access to the local culture, working with the local people and sharing the pains and pleasures of their lives are some preconditions for having maximum response from the stockholders to the development programmes.

Many development programmes in Bangladesh require large amount of foreign aids and this aids received mostly in the name of millions of people are not spent properly for maximum welfare of the poverty stricken grassroots people. Even most of the policies are not formulated with the concern of targeted people. Here the stakeholders, in true sense are treated as outsiders. But the fact is that success of such local level development programme depends on true participation of the people of targeted community. Without giving due honour and responsibilities to the local people, people's participation in policy adoption, implementation and evaluation can never be achieved. The local people are to be encouraged, motivated, respected to volunteer or to participate at different stages of policy formulation and implementation. Local people are to be asked first about their problems and possible ways of solutions. And these can not be done simply by survey, country side visits, interviewing etc. For any of the big projects like Jamuna Multi-purpose Bridge Project (JMBP), Flood Action Plan (FAP), Dhaka Metropolitan Development Planning (DMDP) etc. involving much time and high cost, people's participation is the fundamental requirement to make it a success.

People's Participation: Examples in Bangladesh

In Bangladesh except some NGOs, participatory approach is not practising in the development programmes at different levels Grameen Bank, BRAC, Proshika, ASA etc have introduced this approach at their grassroots level development activities and very recently the Government of Bangladesh has given emphasis on people's participation in the Fourth Five Year Plan, National Environments Management Action Plan (NEMAF) and also in the proposed Participatory Perspective Planning (PPP) concept. Both Government and other non-governmental organizations and agencies now could realise that centrally formulated policy might have little success but in the long run optimum benefits can not be gained.

NGOs conference on FAP: A New Experience of People's Participation

On 27 November last a people's conference on FAP (Flood Action Plan) was organised jointly by the Coalition of Environmental NGOs (CEN) and the Association of Development Agencies of Bangladesh (ADAB) in Dhaka. People from different districts and different social groups including farmers, fishers, development workers, researchers, planners, consultants (local and international), government and donors agencies officials, women and so on participated in this conference. All the participants and speakers mostly highlighted the lack of people's participation in FAP implementation projects. They opined that the FAP process not only did not include people's participation but also resorted to anti-people activities. Some of these activities for example, embankment, land acquisition etc. are working as 'death traps' for the local people. Without considering the people's knowledge base, FAP is rather taking some inappropriate programmes and creating conflicts among local communities. The conference concluded stressing the need for integrated water resources management and development. For the policy-planners and development workers, this NGOs conference is a new experience to review their many other programme activities with participation of stakeholders.

Following the reactions expressed in the people's conference of FAP the fourth conference on FAP also clearly echoed the same view that 'people's' participation at all stages of Flood Action Plan should be ensured. Considering the people as our strength, our Prime Minister also opined in her message sent to the conference that people are the source of all power and it is only with their help that sustainable development could be achieved. The donor agencies including UN organisations reportedly suggested consultations with the grassroots levels. They were agreed to provide fund on condition of people's participation at all the stages: in conceptualisation, in baseline study, in planning, in feasibility, in implementation and in the operation, maintenance and monitoring of water sector projects. From this conference, the future policy planners and development workers should realise that people's participation is not required for water management plan but also inevitable for any massive programme or almost in every domain of local action and development including community development, environment, social forestry, women development, rural credit programme, health & sanitation programme, fisheries, disaster management, urban development, etc.

Conclusion

Like decentralization of power and administration, people's participation in decision making process is becoming more and more popular in many developing and developed societies Bangladesh, at a transitional phase, requires more practices of peoples participation in every sphere of social, economic and political life. So, we should give more emphasis on people's view and should try to bring about people's consensus at all stages of development programme, planning and implementation.