

For a New Paradigm in Water Sector Planning

by Dr Saleemul Huq

Do the planners under of the old paradigm assume that they have done justice to the issue of environment and people's participation?

BAKLADESH being a deltaic country lying on three of the world's major rivers, has of necessity had a long history of planning in the water sector. The planning process over the last four decades has gone through a number of phases starting with the first water sector Master Plan in the '60s which led to the creation of the Bangladesh Water Development Board (BWDB) and the development of over 50 large-scale flood control, drainage and/or irrigation (FCD/I) projects in different parts of the country.

In 1972, the World Bank again undertook a study on Land and Water Sector which led to more, but smaller scale projects in the '70s. In the early '80s a new water sector planning exercise was undertaken through the Master Plan Organisation (MPO) which produced the first National Water Plan in 1986 and led to the statutory body called Water Resource Planning Organisation, WARPO, under the Ministry of Water Resources.

Following the devastating floods of 1987 and 1988, a new effort at water sector planning was undertaken called the Flood Action Plan (FAP) through another organisation called Flood Plan Organisation (FPO). This multi-million dollar planning exercise over five years culminated in the preparation of the "Bangladesh Water and Flood Management Strategy" in 1996. The next phase of water sector planning is due to commence in 1998 with the launching of the National Water Management Plan (NWMP) very soon.

Old Planning Paradigm

From the above historical sequence of planning exercises it is clear that Water Sector Planning has over the years re-

ceived a great deal of attention and resources from both the donors as well as government of Bangladesh (the FAP alone cost over 100 million dollars). However, by and large the entire planning exercise has taken place under a particular planning paradigm which may be characterised as being predominantly "technocratic" and foreign consultant-driven. Thus for example each of the planning exercises described above have invariably consisted of a multi-million dollar Technical Assistance (TA) project funded by a donor (for example the World Bank) under which a contract was given to an international consulting company (or consortium of several companies) who then hired expatriate and national experts to carry out the planning exercise. Although, in all cases there would invariably be a national counterpart (e.g. MPO, FPO, and now WARPO) their role has tended to be minimal as they were not given adequate expert and financial resources.

Thus, despite decades of investments in developing water sector planning expertise through international consulting companies there has been relatively little transfer of technology, skills and capabilities to national organisations such as MPO, FPO, or WARPO. Even other research organisations and institutions such as the Bangladesh University of Engineering and Technology and River Research Institute have tended to be disregarded or relegated to a secondary role in all these planning exercises. The result is that despite substantial investments in Water sector planning the new National Water Management Plan is again going to be awarded to a consortium of international consulting companies (of course, with local counter-

parts).

It is interesting to note that the Netherlands government, which has been a traditionally strong investor in the water sector in Bangladesh for many years, recently carried out an evaluation of the results of 25 years of their support into the water sector, where they found that one of the main beneficiaries of Dutch aid has been (and continues to be) Dutch consulting companies and that despite decades of training programmes for Bangladesh professionals (mostly engineers) in the Netherlands the level of skills and technology transferred has been abysmally poor.

This is not to argue that there has not been any development of skills in Bangladesh over the last 20 years at all.

Certainly Bangladeshi professionals, particularly engineers, are very capable and there are good planning skills in organisations like BWDB, WARPO and now most recently in the Surface Water Modelling Centre as well as in several national private sector consultancy organisations. But by and large considering the level of investments (in the hundreds of millions of dollars) in Technical Assistance spanning about three decades the nation could surely expect a much more substantial national planning capability to have been developed in the country. This certainly represents a lost opportunity.

Environment and People's Participation
Another area in which the

old planning paradigm was lacking is in taking into account environmental issues and ensuring peoples participation. Of course, this is true not only of the water sector but of many other sectors as well. However, to be fair one must admit that the importance of both these issues has been realized only within the last decade or so, sometimes learning from the results of previous planning mistakes.

Therefore, it would be unfair to judge planners of the '60s and '70s for not having foreseen all the consequences of their efforts, many of which only became apparent with time and thus we are able to criticise those plans and projects with hindsight. However, having seen the ill effects of not considering environmental issues and ensuring people's participation in the past it is surely folly on anyone's part to continue to repeat the mistakes of the past.

Fortunately, as a result of the debate during the FAP exercise the importance of both environment and people's participation has now been well recognised and these issues are now central to the new National Water Management Plan to be launched shortly.

Need for a New Paradigm

It is precisely because the centrality of both environment and people's participation has been recognised that I would urge that there is a need to change to old "technocratic"

planning paradigm altogether and introduce a new more environmentally and people friendly planning paradigm.

The question of course is: what does a new paradigm mean and what would it look like?

To answer this question let us first take a look at how the issues of environment and people's participation would be tackled under the old planning paradigm. This would be very simple: the same old Technical Assistance Project would be prepared as before, only this time the consultants would be required to add an "environmental expert" and "people's participation" expert to their team (this has in fact already happened and we now even have several expatriate experts in the country as "people's participation experts" working on different projects).

In some cases, if the project proponents were very open minded, or daring (or due to donor pressure) they would also require the international consultants to engage an NGO as part of their team to carry out the "people's participation" part of the exercise. Thus, do the planners under of the old paradigm assume that they have done justice to the issue of environment and people's participation? The whole exercise boils down to business-as-usual only with some "environment" and "people's participation" consultants/NGOs tagged on for good measure.

The new paradigm would turn the whole process on its head and say that the first ap-

proach of the planning exercise should be from the perspective of the environment. This means taking into account all the issues related to surface and ground water including wetland habitats, fisheries, navigation, water quality as well as multiple users including urban, domestic, agricultural and industrial. Having done this "environmental planning" exercise for the country as a whole and then for the major regions one would identify the major water-related issues that need to be tackled in each region.

It should be noted that this approach does in no way negate the need for all the traditional planning experts such as engineers, hydrologists, modellers, etc. They all have an important role to play but only after the environmental planning exercise has been carried out, which requires a much broader range of skills including experts from environment, fisheries, ecology, sociology, etc.).

People's Participation

The same is true in the field of ensuring people's participation. Traditionally (under the old paradigm) people's participation was equated with "beneficiary participation" which really meant that after the project had been built it should be taken over by the so-called "beneficiaries" who would then be responsible for upkeep and maintenance of a project they had not necessarily wanted in the first place. Needless to say this has led to major failures of numerous water sector projects in the past.

The later development of "people's participation" (let us call it the revised old paradigm) is to try to involve people in the planning of the projects themselves so that they would have a greater say in its design and hence a greater sense of ownership after its completion. The Ministry of Water Resources has made a major effort to produce Guidelines on Peoples Participation (GPP) to this effect. While, this is a necessary and worthwhile effort I would still characterise it as belonging to the old paradigm (albeit revised) as it still involves people at the project planning stage only.

The new paradigm would be to step back from project-level planning to regional and even national-level planning and ask what people really want or need with respect to the water sector. Now this may seem at first glance a utopian exercise. After all how can you really consult 120 million people? Nevertheless, there are now ways of at least trying to reach a representative number of the stakeholders in order to get some feedback on what the people's priorities are (of course this will vary according to region, socio-economic status, profession and even gender).

The National Environment Management Action Plan (NEMAP) of the Ministry of Environment and Forest which was developed in a nationwide participatory manner in cooperation with NGOs and other groups of civil society is a successful example of such a participatory planning exercise at national level. The point of this paradigm shift is that rather than consulting people about a particular plan or project (as is done now) the people should be asked before developing the plan itself as to what they see

as the priorities to be dealt with.

The planning process would then take that as their point of departure and make it the basis for developing the plans and through a well structured iterative process would continue the consultations through out the planning process. Thus the plan would itself be open to change and modification based on feedback from people at different levels and at different stages in the planning process.

It must be admitted that ensuring adequate participation and inputs into the planning process requires both additional time and resources. However, I would argue that such a time and resource allocation would be very well worth the effort in terms of coming out with an end product which would have the broadest possible support and hence be much more easy to implement. I would further argue that the old planning paradigm has now become an anachronism in this day and age when we are about to cross the threshold to a new millennium.

The days of top-down, technocratic planning are indeed over and the need to involve the citizenry in the development of any major national planning exercise will lead to a more and accountable form of governance for which we should all be striving.

The writer is the Executive Director of the Bangladesh Centre for Advanced Studies. He dedicates this write-up to the memory of Dr Mohiuddin Farooque, the late Secretary-General and founder of the Bangladesh Environment Lawyers Association (BELA), whose untimely death deprived the nation of a valiant fighter for environment and the dispossessed.

Environment and Health: A Changing Pattern

by Dr M Zakir Husain

The conventional public health theory and practice are no more proving adequate to respond to the new requirements. Public health actions with public information and education for environmental health, therefore, need to be re-modelled to sustain a whole new range of public health concept and practice.

IT is a very different world as we stand on the threshold of the Twenty-first century. Instant global communications, very close proximity of nations and peoples, interdependence of economies in a growing and competitive marketplace have made it a small and at the same time a more vulnerable world. Rapid international travel of persons and goods has rendered interaction and contacts extremely frequent and almost unrestricted. The world today is a village; distances have shrunk, commerce has multiplied, communication has revolutionised information transfer and way of life globally.

In many instances, the pace of transition is too fast and bewildering. These changing conditions have had a profound impact, inter alia, on human health. Public health from an environmental perspective has indeed entered into a complex new paradigm — one of sustainable development with guarantee for human health and well-being. We are facing an unprecedented new challenge. The conventional public health theory and practice are no more proving adequate to respond to the new requirements. Public health actions with public information and education for environmental health, therefore, need to be re-modelled to sustain a whole new range of public health concept and practice.

Environment is endangered today, and chiefly due to human behaviour and enterprise. The threat is real and imminent. The remedy is also chiefly in human endeavour respectful of restraint and restitution as a duty to the future generations.

The main factors causing environmental stress can be enumerated as follows: The world population has increased from less than two billion in the 18th century to nearly six billion by the end of twentieth century. It is estimated that the

world population may not stabilise even at twelve billion by the middle of twenty-first century. Much of this population will live in the poverty-stricken and underdeveloped world. It is likely to create extreme forms of environmental stress and degradation in populations and countries who can least afford to adequately control.

Pollution: The level of air, water, and soil pollution is already causing great concern both in developing and the developed world. Burning of fossil fuels to meet higher demands of energy, intensive agriculture and dependence on excessive use of fertilisers and pesticides, and discharge of untreated or under-treated industrial effluents is already causing serious damage to environment. Higher technology to reduce pollution is either not available or affordable in many countries of the developing world where the level of pollution is rising fast.

Pesticide and fertiliser residues are damaging the soil and water and are contaminating the human and animal food chain. Expansion of agriculture and animal husbandry is encroaching upon forest reserves and altering delicate ecological balance.

In all of this, man is the worst perpetrator and the principal victim; his health is endangered; and in the worst case scenario may jeopardise the very existence of the human species on this lone planet.

Environmental health hazards directly and indirectly affect the human population and lower the quality of life, productivity, and well-being. Environmental health planning is feasible just as it is feasible to make economic growth compatible with environment protection and achieve sustainable development. The price to be paid for economic expansion need not be unacceptably high in the currency of quality of environment and health.

The health effects of air pollu-

tion are not necessarily dramatic and may go unnoticed for a long time. Long term effects of air pollution with suspended particles, sulphur derivatives and lead and other gaseous fumes include respiratory distress, asthma, chronic lung diseases, and loss of vital capacity of people most exposed.

Modern civilisation has been very casual with finite natural resources

It has taken for granted that water is inexhaustible and that we can waste it with abandon, and dump all kinds of pollutants into the sea, river, and other waterways with impunity. Water pollution is mainly due to industrialised lifestyle with excessive consumption and wastes. In recent times, huge accidental oil spillage have produced dramatic consequences by polluting vast stretches of the ocean water killing aquatic and other marine life. While control of pollution due to known effluent discharges are mostly within grasp, the non-specific and elusive sources of pollution are more difficult to monitor and control. Underground seepage, rain water contamination acid rain, contaminated drinking water supply are more pervasive and costly to remove.

Apart from surface and underground pollution of water, excessive drawing of aquifers (underground water tables) is drying up water table and causing contamination of drinking water sources for example by arsenic. Surface water pollution is not only causing many direct health problems such as waterborne diseases but is also affecting the food

chain with direct damage to human health.

One basic problem is that human civilisation has erroneously assumed that the planet with its finite resources is exclusively at our service. Only now we realise that we are not the sole inhabitants of this dear planet — the only one we have. We have to share its resources with other living beings and within our own human species in a more equitable and responsible manner. The planet must survive and then only human species will survive.

Bangladesh is a somewhat unique case in terms of environment and environmental health. Its population is dense and still growing. Its land, water and forest with many other natural resources are finite and are diminishing in relation to its population. Its forest reserve and land fertility are under stress due to over exploitation and over use. This delicately poised equation is in danger of destabilisation. To aggravate the unfavourable situation, the awareness of its population and its industries of the importance of conservation is rather limited, compliance with the environmental regulations is poor while enforcement machinery is inadequate and not rigorous so far.

Yes, the environment is rapidly deteriorating due to a combination of causes. We may not have reached the emission levels of industrialised countries yet but that is no cause for comfort since our capacity to control or reverse environmental damage is very limited. Paradoxically, we need rapid economic growth which demands large scale use of natural resources; yet sustainable

growth is not a luxury or just an option; it is the only course.

Therefore, good environmental management and conservation must begin now and do so in full earnest. A sustainable development paradigm for the world including the developed world is now established beyond any debate. Within a long term environment agenda for Bangladesh, some of the priority areas for consideration are:

- compulsory environmental impact assessment as a pre-condition for approval of all development projects;
- close strict monitoring and clean up enforcement in all pol-

lution industries.

- regular monitoring of air, water, and soil pollution with targeted curbs in a time-bound plan.

- total and universal public education on environment protection and hygiene.
- integrated pest management and pesticide control.
- enforcement of food safety and hygiene.
- curb on deforestation and rampant exploitation.
- protection of bio-diversity and species conservation.
- moderation of chemical fertiliser use and highly toxic insecticides.

- fine tuned health impact monitoring and greater accountability for damage and repair.

- a genuine and sustained movement to enhance public awareness and empowerment using all information and educational resources; mobilising societal will and actions.

Above all, Bangladesh must achieve stabilisation of its population as early as possible by arresting the current demographic growth and momentum with serious "beyond family planning" programme. In the final analysis, uncontrolled population growth is the single most dangerous threat to the quality of environment and constitutes the threats from other causes.

Professionals and scientists together with empowered and dedicated enforcement agents

are essential. Enlightened and willing co-operation of economic and development sectors in public and private sectors will be absolutely critical. Security of environment, public health, and quality of life of present and future generation are worth making some of the needed sacrifices at the present time. Environment protection is everyone's interest. Above all, the timeless and proven wisdom of farmers, artisans, and fishermen of the land who have for centuries lived in harmony with Nature must be revisited, and given respect and recognition — and this does not necessarily mean to denigrate the need to use the gifts of modern science and technology nor rejection of sound well meaning advice of economic experts and technologists.

The writer is a health consultant

BANGABANDHU MURDER CASE

Verbatim Text of Cross Examination of 45th Prosecution Witness

Continued from yesterday

Cross examination of PW-45 in Bangabandhu murder case, Major General (ret'd) Shafiqul Islam, MP, continued at Dhaka District and Sessions Judge Court today (Tuesday).

Following are the excerpts from his examination by advocate Abdur Razzaq Khan, defence lawyer for accused Lt Col (ret'd) Sultan Shahriyar Rashid Khan:

Q: Had you any contact with Brig Rauf by red telephone?

A: No.

Q: Brig Rauf informed you everything on August 14 night.

A: This is totally false.

Q: Did you seek any clarification from him?

A: Rauf was not under my direct command.

Q: In an interview with Bhorer Kagoj, you said: I asked Col Shafaat Jamil to tame the mutiny. Watching him inactive, I sent CGS to activate him. Later, I myself went to the garrison and found the entire garrison in cheerful mood. I became very sad.

A: I didn't say in the same language. However, the context is correct.

Q: You, in the interview, also said the situation in Dhaka garrison was adverse. They had expressed solidarity with those who revolted.

A: The context is correct, but I didn't say in this language.

Q: Did you ask CGS Bring Khaled Mosharrar to supply shells to the empty tanks?

A: This is not true.

Q: (Quoting from Bhorer Kagoj) You in the interview said: I found Bangabandhu in telephone 3/4 minutes before 6 am. He told me Shafiqul Islam your force attacked my house.

A: I told Bhorer Kagoj this. But the mentioned time is not correct.

Q: There was resentment among the army personnel following formation of Rakshi Bahini and facilities given to them. Army personnel thought that they were being deprived.

A: There was no deprivation in army. However, there was a propaganda.

Q: There was adverse reaction in army for formation of BKSAL and other reasons. I had some question... However, I thought army would have accepted everything if the Rakshi Bahini was not formed. You

made the statement to "Facts and Documents".

A: The context is correct, but not the language.

Q: Did you give any rejoinder to Bhorer Kagoj regarding the interviews of you and Shafaat Jamil?

A: No.

Q: On August 15 morning, Prime Minister Mansur Ali had told you to arrest Khandaker Mushtaque and rescue Bangabandhu.

A: Yes, I have had talks with him over telephone. I can't recall what exactly he told me. However, obviously he was supposed to ask me to send troops. I replied: yes, I'm seeing it.

Q: Did you make your statement to CID on 22/10/96?

A: Yes.

Q: How long the CID personnel talked to you?

A: Five to six hours from 6 pm.

Q: Where?

A: At my house.

Q: When did you involved yourself with Awami league?

A: In 1994.

Q: When did you make your statement on the incident — before or after 94?

A: Before 94. I can't recall whether I gave further statement later.

Q: In 1975, every regiment had respective quarter guards, who discharged the responsibility of security.

A: Yes.

Q: How many quarter guards were there?

A: May be 10/12.

Q: You did not make any directive to naval and air chiefs and they didn't tell you anything.

A: Correct.

Q: I am giving you a suggestion — a successful coup under the chain of command took place on August 15 bringing Khandaker Mushtaque as country's President. You, chiefs of all forces, voluntarily expressed allegiance to the new government and it was circulated throughout the country. But you are making different type of statement for your present political affiliation. You didn't go for any counter action as you were involved in the August 15 change over. You also didn't ask Shafaat Jamil to take any step.

A: This is not correct. No coup took place on that day.

Advocate Abdur Razzaq Khan, also defence counsel for accused Hon Capt (ret'd) Abdul Wahab Joardar, declined to cross examine General Shafiqul Islam on behalf of his client.

Examination by advocate Khan Salfur Rahman, defence lawyer for principal accused Lt Col (dismissed) Syed Farooq Rahman:

Q: Were you in favour of brigade concept?

A: No, I was in favour of division concept.

Q: Was the 1st Bengla Lancer under 46 Brigade for any time after the independence?

A: Never.

Q: Was the military intelligence under the 46 Brigade?

A: One section of the intelligence unit was attached with 46 Brigade.

Q: It was attached till the incident.

A: The intelligence unit was brought under me after the DGF was transferred under President from the command of the Chief of Army Staff.

Q: The rest part of field intelligence unit was under Army Headquarters.

A: Yes.

Q: Was there any other brigade in Dhaka apart from the 46 Brigade?

A: No.

Q: And it means, there was only one brigade in Dhaka which had no intelligence support.

A: Yes, but it had support of the Army Headquarters.

Q: Rakshi Bahini was under which ministry?

A: Under a division of President Secretariat.

Q: Were the formation and training facilities of Rakshi Bahini parallel to the army?

A: Rakshi Bahini stayed at Rakshi Cantonment in Savar.

A: The place where they stayed was later turned into Savar Cantonment.

Q: Is the national flag hoisted always at the residence of Army Chief?

A: Yes.

Q: Was the flag hoisted on the day of occurrence?

A: Obviously, it was supposed to be hoisted.

Q: Were the pictures of dismissed and discharged displayed at the entrances of the cantonment?

A: The system was not intro-

duced at that time.

Q: When did you go to sleep on August 14 night?

A: After 1am.

Q: You had capacity to hold court martial against any army personnel for his disgraceful act.

A: Yes.

Q: Had you been got chance, were you supposed to issue order for holding court martial?

A: Obviously.

Q: Do you consider proclamation of martial law as a reason for not getting the chance?

A: I don't think it was the main reason. I didn't get the opportunity due to overall situation.

Q: No member of army belonged any post in the government formed after the incident.

A: Yes.

Q: The status quo of army was same till August 24, 1975. There was no change in any post.

A: Yes.

Q: Do you know that a court of enquiry took place after the body of a sepoy, killed during the incident, was taken to Comilla?

A: No, I didn't know it.

Q: Did you know that the post-mortem of sepoy Shamsu and Col Jamil was performed in Dhaka on August 15?

A: No.

Q: Martial law was proclaimed since August 15 morning.

A: I heard that Dalim had made such announcement. But we had discussion for the next three days whether the martial was executed or not.

Q: Did you take any attempt to resist the radio announcement?

A: I didn't make a specific directive to resist it. But I had ordered to resist the whole situation.

Q: Was there any Mig-21 plane in the country at that time?

A: Yes.

Q: The versions of army personnel on the incident is different in different periods. There is no similarity among their statements. This is as there was no witness of the incident.

A: I think that there are contradictory statements as they didn't witness the incident.

— UNB

Further texts of cross examination will be published as and when received.

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