

Climate change negotiations What can Bangladesh do?

As one of the countries most vulnerable to the detrimental effect of climate change induced by global warming, Bangladesh indeed has the moral right to be heard and to have her concerns noted at the conference of parties. However, to build a position of strength in international negotiations on this advantage, the country must go beyond *ad hocism* and chalk out long-term strategies, writes Saleemul Huq

BACK in 1992, at the Earth Summit in the Brazilian capital of Rio de Janeiro, almost all the countries in the world agreed upon the UN Framework Convention on Climate Change (UNFCCC) to launch a concerted effort to resolve the phenomenal environmental problem called global warming. By signing the convention, the developed countries in way accepted that they had been responsible to large extent and committed to reduce greenhouse emission to the levels of 1990. However, the UNFCCC didn't attach any specific time frame or country-by-country reductions. After intense debate at the third Conference of the Parties (COP3) held in Kyoto, Japan, the developed countries were made to agree to the First Commitment Period. They agreed upon specific reduction in greenhouse emission by 2008 to 2012. However since the signing of the Kyoto Protocol it has not yet come into force which requires ratification by at least 55 countries representing at least 55 per cent of global greenhouse gas emissions.

US Senate's reluctance to ratify the protocol poses the biggest hurdle. Although President Clinton has signed the Kyoto Protocol, it has to be ratified by the Senate before it can become a law in the country. The Senate argues that it will cause hardship their economy and the protocol exempts developing countries from accepting caps or reductions and hence is not fair. This issue would come up for serious debate in the upcoming sixth Conference of the Parties scheduled to begin some time next month at The Hague.

Numerous studies suggest that Bangladesh would be one of the worst victims of climate change. Global warming would induce more rainfall in the monsoon to cause flood and less rainfall in the winter to cause drought. Also, there could be severe cyclones. More frightful is the prospect that a huge area could go under water with sea-level rise. One metre increase in the sea level would engulf one-fifth of the country, affecting approximately one quarter of the total population, which means 30 million now and would be a lot more in future. Clearly, the country has a lot at stake in international negotiations on climate change and should carefully plan its strategy.

The prevention aspect is the basis for international negotiations that aim at getting countries to reduce their greenhouse gas emissions and thus preventing the world from entering a "run-away greenhouse effect". This aspect of climate change is called "mitigation" as it aims to reduce greenhouse gases entering the atmosphere and induce global warming. The other way of coping with climate change is called "adaptation" which refers to managing the impacts of climate change as and when they occur. So far in the international negotiations the emphasis has been on mitigation with little attention to the adaptation aspect, which could be crucial for most vulnerable countries.

International negotiations on climate change take place under the rules of the UN and the UNFCCC, which has a secretariat in Bonn and is governed by all countries who have ratified the Convention and who meet annually at the Conference of Parties (COP). However, the COPs are only the tip of the iceberg in terms of negotiations. Intense negotiations take place amongst COPs at the meetings of the subsidiary bodies that are held more frequently. Much of the detailed negotiations take place at these meetings and the formal COP is used for ministerial level negotiations on the major outstanding issues.

Like all other developing countries, Bangladesh is also invited to all the meetings. This includes the COPs where the Minister for Environment is usually invited as well as the subsidiary bodies meetings where the UNFCCC Focal Point in Bangladesh (or his representative) is invited to attend. The UNFCCC Focal Point in Bangladesh is the Secretary, Ministry of Environment and Forest (MOEF).

At the ministerial meetings each country is allowed to make a 5-10 minute presentation at the plenary session. Bangladesh has always tried to make a good presentation but it should be recalled that the ministerial statement is only for the record and has no bearing on the negotiations whatsoever. Sometimes it seems that we spend an inordinate amount of time at the last minute fashioning the minister's statement when the real work has already been decided elsewhere in our absence.

What can we do?

The first thing that has to be done is to realise and accept that climate change (unlike perhaps many other international environmental agreements) is an issue of great developmental rather than just environmental consequence to Bangladesh. Hence it deserves to be treated much more seriously than many other issues for our very future existence depends on the outcome of the international climate change negotiations. The second thing to realise is that international negotiations on climate change are continuous and long-term phenomena and not something that has to be done once and then can be forgotten about. Hence we need to have a long-term strategy to take part in international negotiations. It is only by taking such a long-term approach can we hope to have any influence on the negotiations as these are subject to many different influences and so far our voice is of little or no consequence in the international scene. However, the advantage for Bangladesh in the climate change negotiations (as opposed to many other international arenas) is that due to our very vulnerability to the problem we have a moral right to have our voice heard and our concerns noted. Hence we must learn to use this to our advantage. This means more than simply going to the negotiations with begging bowl in hand and asking for

handouts but rather becoming engaged in the process and getting our just desserts as a matter of right (and negotiating skills) rather than simply pity.

In international negotiating terms this translates into building alliances and lobbying skills. In today's world no country (except the US) can afford to be a lone voice in the international arena. All countries (even the developed countries of Europe who negotiate through the European Union) have to form coalitions of like-minded countries with a common interest. Bangladesh has traditionally done so by following the common negotiating stance of the developing countries which negotiate under the common umbrella of the "G77 and China" (which actually consist of over 100 countries but the title has remain unchanged). However in the case of climate change the G77 contains a mixture of different perspectives and does not present a common front on every issue. Thus, for example within the G77, the oil producing countries such as Saudi Arabia and Kuwait want to protect their exports of oil and hence tend to prevent any action on reducing greenhouse gas emissions. The largest countries such as India and China have their own perspectives, especially with respect to the fact that they both have huge reserves of coal (which is the worst greenhouse gas emitting fossil fuel) and want the freedom to use these reserves without restriction. Brazil also wants to be able burn and use its Amazon forest. On the other hand the small island states, some of which are likely to face annihilation due to climate change and sea level rise, take the most militant position in favour of maximum reductions (by both developed as well as developing countries) of greenhouse gas emissions. Forty-two of these small island countries have banded together to form the Association of Small Island States (AOSIS). By hiring professional international legal advisers from a London based international legal NGO called the Foundation for International Environmental Law and Development (FIELD), they have succeeded in having an impact on the climate change negotiations that is far out of proportion to their size. Indeed it could be argued that the population at risk to sea level rise in the low-lying coastal zones of Bangladesh alone would be more than the total population of the forty-two AOSIS countries put together. However, AOSIS has been extremely successful in using their vulnerability to climate change to get their positions accepted in the negotiations where Bangladesh is not even a significant player.

It follows, therefore, that for Bangladesh to have any influence in the international climate change negotiations it needs to take a strategic view and build alliances within G77 and get other countries to agree to our positions -- first within the G77 and then outside it. This means having a clear understanding of all the highly complex issues being negotiated and then having

clear national stance on each issue. Thus, for example, we must choose a few (not more than two or three) issues which are of utmost importance to us while on other issues we may be willing to compromise. We should then use our willingness to compromise on those other issues as bargaining chips with those groups who feel strongly about them to get their support for our issues in exchange. This requires tremendous diplomatic and negotiating skills and establishing good personal relations with other negotiators (particularly the G77 negotiators). It also means that our delegation must have the back up of good scientific team who understand the technical and scientific issues and can both understand and explain where our interests lie. It also requires some level of consultation with a wider community of government and non-government representatives (including public representatives) prior to embarking on negotiations in order to determine our collective negotiating position. This will strengthen the hand of the negotiators when they are negotiating with other countries. It should be recalled that decisions in the climate change negotiations are made by consensus which means (in theory at least) that any single country can prevent consensus emerging by refusing to agree to some text. However, in practice no single country (except the US) really takes a contrary position if all the others have agreed. However, it does give each country enormous power to influence the negotiations, which it can use to its advantage, if it knows what it is doing. It is possible to use the threat of obstructing consensus to get something in return (but only by being clear about our aims).

Current issues

The most important issues currently being negotiated in the international climate change arena are to do with the following:

Emissions trading: The Kyoto Protocol has made it possible for the developed countries to buy and trade greenhouse gas emissions between themselves to meet their country targets. However, the details of how this is to be accounted for is still being worked out under the "Compliance" issue.

Clean Development Mechanism (CDM): The Kyoto Protocol also allowed trading of emissions between developed and developing countries under a Clean Development Mechanism (CDM). However, the mechanics of how this will be done is still being discussed and also when to allow it to start. This is an area of great interest for both developed countries (particularly for their private sector) as well as for some developing countries that can sell their excess greenhouse gas emission entitlements. Potentially this could be of importance and use to Bangladesh but there is every likelihood that we may miss out on the opportunities unless we get involved in CDM projects and negotiations around the issue.

Sinks: A major issue of conten-

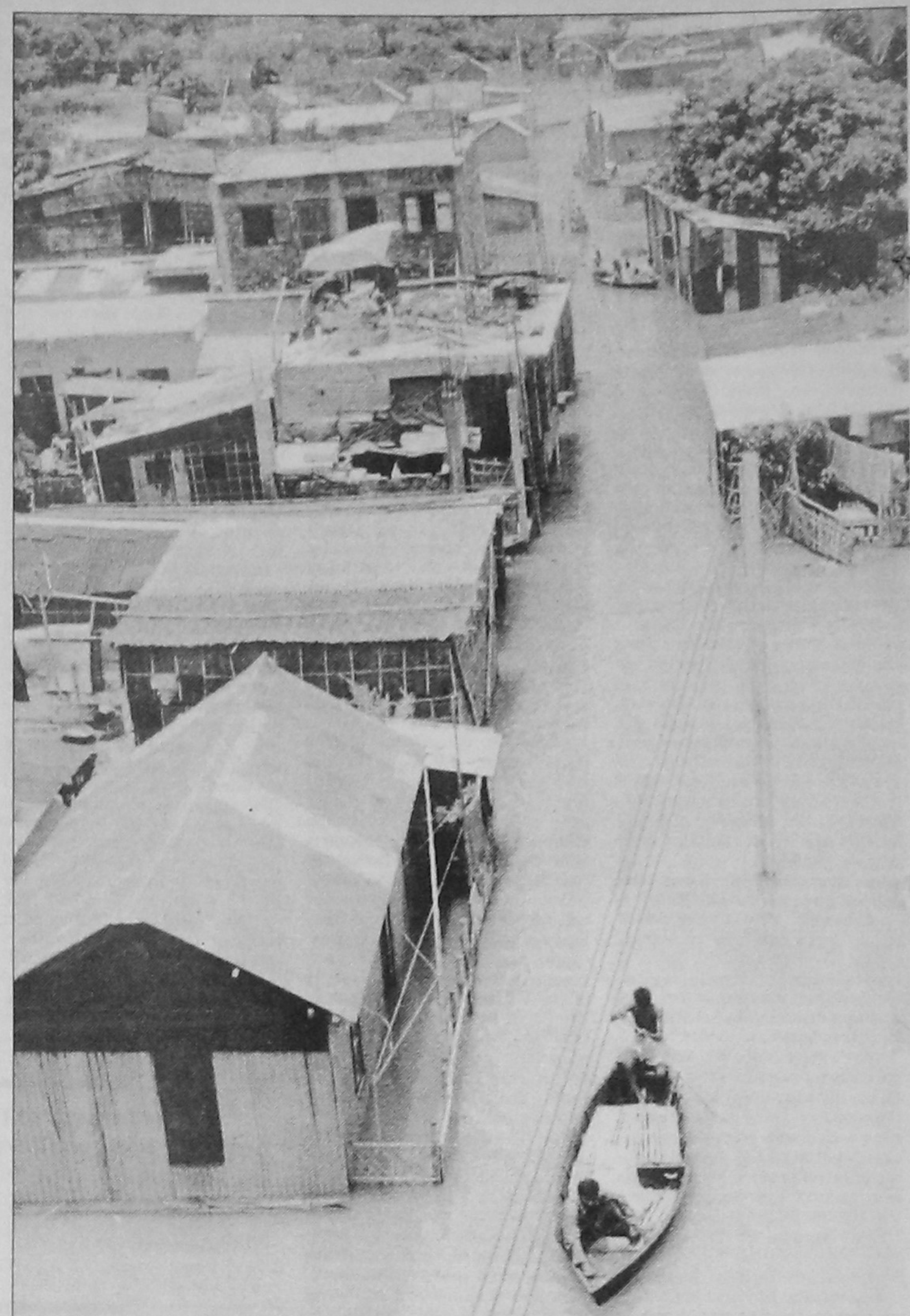
tion is whether planting trees should be allowed to be considered as reducing greenhouse gas emissions. While it is true that trees do absorb carbon dioxide they only do so while they are growing and release the carbon dioxide when they burn. So it is questionable whether they should be counted (and if so for how long?).

Adaptation: As stated above the previous negotiations on climate change have tended to neglect the issue of adaptation at the expense of mitigation. However it is now being realised that adaptation must also be addressed and that for the most vulnerable countries (such as Bangladesh) it is an issue of utmost importance.

Equity: The issue of equity is important in two senses. Firstly with respect to the right to emit greenhouse gases into the atmosphere. The UNFCCC makes reference to principles of equity but in practice they allow the countries who have been producing most of the emissions (i.e. the developed countries) to have a greater share of the right to emit more in future. This is clearly not equitable. A more equitable basis would be to allow every human being an equal right to emit into the atmosphere (i.e. calculating on a "per capita" basis). In practice, of course, a compromise will have to be struck, but where that is done is of enormous significance to a country like Bangladesh which has a relatively high population and very low per capita emissions. Theoretically it would give Bangladesh an enormous amount of emissions reductions to sell if even a relatively equitable basis for calculations were to be accepted. One good compromise scenario being suggested by a number of countries (including India) is the concept of "Contraction and Convergence" where all countries agree to converge on a maximum emission some time in the future (say by 2050) and then each country must meet its own target on a per capita basis. There is a second issue of equity, namely that the impacts of climate change will be worst on those countries (and communities) who are already the worst off. Thus the richer countries such as the Netherlands can afford to build higher sea walls to protect itself from sea level rise but Bangladesh cannot afford to do so. However the need to cope with climate change is not of Bangladesh's own making but rather the result of decades of greenhouse emissions primarily by the developed countries. It is therefore possible to argue that there is an element of compensation that may be due to the poor countries who will be adversely affected due to the actions of the rich. This is still a long shot in terms of getting general acceptance but nevertheless worth pursuing as a long-term goal.

Some immediate steps

If the above arguments are convincing to the government of Bangladesh then there are some immediate steps it can take to begin the process of engaging in the international climate change



We are extremely vulnerable to the detriments of climate change and, therefore, hold the moral right to be heard at the international forums.

negotiations seriously. Following steps can be taken.

Set up a negotiating team comprising people from the relevant line ministries, government agencies, non-government research institutes and members of parliament. This team would meet prior to each session and discuss the issues being negotiated and decide what Bangladesh's position on each issue should be and more importantly what our negotiating strategy should be. The negotiating team should be led by a person of credibility and capability who would continue in this position for a long time (see below) and would include some technical people who would specialise in different aspects of the negotiations. Many countries also include NGO representatives on their official delegations.

Appoint a special envoy on climate change who would be a person of good national (and also international) standing and personal credibility. He (or she) should preferably be a diplomat, or have diplomatic skills, as those are more important than technical skills (which can be provided by the other technical team members). The person appointed should preferably have the support of all the political parties in Bangladesh. It would ensure a relatively uninterrupted tenure that will be necessary to build the kind of links and alliances needed in the international negotiating arena.

Develop long-term in-country capabilities to work on climate change related issues. This would include things like reduc-

ing our own greenhouse gas emissions as well as taking adaptation measures and also developing our scientific capabilities. There is currently a strong interest in both the developing as well as developed countries in funding national capacity building on climate change and if Bangladesh can put together a well thought-out plan for its own capacity strengthening then the international funding would not be a problem. This would, of course, include capacity building of the climate change negotiating team to build their diplomatic and negotiating capabilities as well. It would also include a long-term plan to develop younger people in both government as well as academia who could specialise on different aspects of the negotiations.

Commission specific research in support of our negotiations by first identifying what are the most important issues for us and then finding out which research organisations (both within Bangladesh and abroad) have the necessary capabilities to carry out the research on our behalf. This could include issues such as adaptation specific for Bangladesh or the issue of equity in the international negotiations (from Bangladesh's standpoint). Again it would be relatively easy to find international funding to support such research if the government could show that it had a well thought out plan for what it wanted.

Identification and pursuit of climate change related funding opportunities. Climate change arena is opening up more and

more opportunities for raising funds which are not part of official development assistance. However the countries which are able to seek out and get these funds will be those that are better prepared about the issues as there will not be any specific quota for any country. These opportunities include the Global Environment Facility (GEF); the World Bank's Prototype Carbon Fund (PCF) and the Clean Development Mechanism (CDM), as well as others. If Bangladesh is able to develop a proper strategy for tapping these funds they could potentially reach very significant sums in a few short years. However we must learn to play the game if we wish to take advantage of these funds.

Raise public awareness about climate change issues by including members of the public in the negotiating team and also by regularly ensuring feedback to a larger set of people about the international negotiations. However the awareness raising should go beyond just the status of the international negotiations and include many other issues regarding how climate change will affect Bangladesh and how we need to respond. Ultimately it is a problem related to our very survival as a nation and all our citizens should be aware and be part of the process of dealing with the problem, whether it be the international negotiations or taking actions at home.

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Cleaner technology for pollution prevention and sustainable development

by Dr. Jagadish Chandra Saha

Industrialization has traditionally been considered to be the fastest route to economic development. The high level of economic growth and property of the industrialized countries has been attributed to their rapid industrialization. However, at the same time one of the major indicators of the level of development of a country is its quality of environment.

Environmental pollution is increasing very fast due to the rapid urbanization and development. Such activities naturally create hazardous waste which is threat to human as well as all living beings. Most of the planners perhaps are not considering or are ignoring the holding capacity of nature. Due to this non-matching factor development activities are often not sustaining or generating harmful effects in future. For a short period of time though it is working but in the long run it may face disaster. Sustainable development will occur only when the design of the project would match with the holding capacity of nature. On the other hand development activities also cannot be stopped due to this pollution effect. So any development activity should be so undertaken that it does not hamper the ecological equilibrium or its impact on environment is minimised by providing pollution control measure.

There is a popular saying that prevention is better than cure. Recently the focus has been diverted more to the prevention of pollution rather than on its curative treatment. All industries should install pollution control equipment to prevent and abate pollution for their better growth, development and competitiveness to enter into the international market. Industries would obviously benefit if they adopt the idea of cleaner technology (CT).

The whole industrial production process depends upon nature for inputs (source) as well as for disposal of waste (sink). Environmental problems are created either when inputs are demanded beyond the regenerative capacity at the source, or waste absorption capacity of the sink. The effect at the source and sink is determined by the efficiency of the process, which depends, among other things, on the kind of technology applied. Efficiency improvement in technology can lead to reduced pressure both on the source and sink sides, and result in increased production of goods and services.

The need to encourage adoption of cleaner technology is, therefore, self-evident. Prioritization of cleaner technologies can be done on the basis of

- pollution potential and environmental impact of the resultant products
 - service during and after use
 - energy usage and
 - raw material usage
- Promotion of cleaner technology is facilitated by
- inventory of available cleaner technology and
 - performance evaluation rating (PER) of the technologies.

To provide these inputs to the industry, an organization like centre for promotion of cleaner technologies (CPCT) should be established with a large number of agencies operating in a network with access to database within as well as outside the country. If CPCT is established it will be able to serve the industry by providing necessary technical guidance and assistance for waste management purposes.

These services will specifically be related to: recovering waste; treatment and disposal of waste; waste exchange to identify users for potential recyclable waste.

Pollution prevention is the maximum feasible reduction of all types of waste generated at production site. It involves the judicious use of resources through source reduction, energy efficiency, reuse of input materials during production and reduced water consumption. There are two general methods of source reduction which can be used in a pollution prevention programme. These are change of product and change of process of production.

To achieve cleaner technology the following items are important

- Changing process
- Changing raw material
- Changing equipment / machinery
- Adopting re-use of waste
- Adopting recycling

While the industry in general recognizes the need for environmentally sound technologies, which prevent pollution and make different

use of raw materials to meet the challenge of competition and quality of goods, not much work is done to address this concern. The approach should be giving more focus on visualizing the problem. Recently consumer awareness has increased due to industrial as well as ground-water pollution. Given the current trends in industrial growth and sustainable development, clean technologies have assumed important role in 'producing without polluting' the environment.

In response to rules and regulations for the control of pollution, industries adopted the end of pipe (EOP) treatment technology wherein all the waste is brought to a common place for treatment before discharge into the environment. But the EOP treatment method of achieving environmental compliance suffers from major drawbacks. The inherent deficiency of this approach is that it is curative in nature and not based on more appropriate methods of preventing pollution. There is no guarantee that EOP treatment would be undertaken in a proper manner. Skilled manpower and management package are equally important inputs for successful conduct of waste management programme. In addition to the high cost of treatment, methods like EOP just transfer pollution from one form to another.

The cleaner production or waste minimization concept differs from EOP approach in that the former attempts to simultaneously conserve the input resources by increasing the production efficiency while meeting the environmental standards by adopting cleaner technologies. In this cleaner production/preventive approach, the cost of waste treatment system gets substantially reduced and the overall resource utilization factor improves, leading to business profitability and competitiveness.

So advantages of Clean Technology are clear: It reduces pollution, provides control over the process involved, reduces the risk of accident or breakdown.

Strict monitoring of environmental conditions is required at the time of giving clearance to a project for management and/or improvement of the sustainable environment. Environmental Impact Assessment (EIA) is now mandatory. But it should be done at the right time during pro-

ject formulation. Then it is less expensive to make required changes or scrap a proposal for another.

In this perspective the United Nations Environment Programme (UNEP) also launched a cleaner production programme in 1990, which defines the concept as "the continuous application of an integrated preventive environmental strategy to process and product to reduce risk to humans and the environment".

The fifth five-year plan has recognized the need to promote development, and incentives regarding investments in clean technology, including resource conservation and recycling of inputs. It should be stressed that linking research and development mainly to help the small-scale industries to adopt clean technologies and prevent pollution is essential.

But all this sustainable development becomes more pertinent when the question of energy arises. With the increasing demand for non-renewable resources the energy sector is at the crossroads, since it is being exhausted so fast. To encourage the people otherwise, government has taken various strategies in the fifth five-year plan. Now all the industries should think collectively as well as individually for survival in the future competitive world of open market economy. And this is the right time to start producing with clean technology.

Though there is legislation, which provides protection to environment, but at present the enforcement mechanism is very weak. Due to this weak enforcement the whole process suffers. The liabilities of the polluter have to be assessed when deciding on punitive measures. In order to carry out this programme an efficient and expert evaluation committee/authority should be set-up.

To implement the Cleaner Technology concept, too, it requires legislation and a strong enforcement mechanism for maintaining the various environmental parameters as well as enforcing legal action, if necessary.

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