Floods in Bangladesh

It is Never the Same Old Story

by M Wahiduzzaman

Needless to say that in the last fifty years we have done or not done, foolishly or callously or selfishly, to give free flow to floodwaters in Bangladesh, it has now become absolutely essential for us to mend our past wrong actions and inaction in all areas. We may ignore this imperative only by ignoring, again knowingly or unknowingly or callously, what consequences such action or inaction would have for us.

Por a proper understanding of floods in Bangladesh we should make a distinction between the two expressions: (1) floods are natural phenomena in Bangladesh and (2) Bangladesh is a flood-prone

The first expression is quite clear. It simply means that one should not be surprised if floods visit Bangladesh because it is only natural. And if so, it further means that we should always be prepared, not only to face floods but also take all measures to control floods—floods meaning destruction of property and loss of lives.

property and loss of lives. The second expression -Bangladesh is a flood-prone country - has a certain amount of susceptibility in it giving one the feeling that when floods visit Bangladesh, people there do not take them as natural phenomenon. Floods are taken as coming from unkind nature. Thus the second expression may be taken as an exception. For example, it may be said that Mr Asif is prone to fall asleep on long journeys while many others are not. So, the second expression may be discarded because nature always takes its own course - never and nowhere is it unkind.

Keeping the above-explained two conceptions of floods in mind we may proceed to explain the causes and measures that we should take to control floods in Bangladesh. The floods in Bangladesh are caused by the following factors: (1) Bangladesh is a deltaic land situated just about fifteen feet above the sea level; (2) Bangladesh has a small geographical area; (3) Bangladesh accepts the huge volume of the Himalayan ice-melt waters flowing through the rivers upstream in the neighbouring countries; (4) the rivers of Bangladesh are not deep enough, and are becoming more

so every year for not getting dredged; (5) tidal bore and (6) excessive rainfall.

Under the above conditions and depending upon the volume of upstream waters flowing into Bangladesh, the nature of floods in Bangladesh may vary from year to year. But whether the floods visit Bangladesh every year or not, it is never the same old story. particularly during the last fifty years when the people of the country made their own government to undertake development activities like infrastructure development, installation of industrial units and production of highyielding agricultural items. Even if not spectacular, development activities are undertaken every year. And what we have to remember is floods are more destructive to development activities than to lives of men and animals. In the last flood of 1998 the loss of human lives was 1050, while the loss in the agricultural and industrial sector the loss was colossus. Preliminary assessment of the 1998 flood damage compiled by the government, the UN agencies. NGOs and trade bodies give the following statistics:

Districts affected: 52; Thanas affected: 314; Deaths: 1050; Highways and Roads damaged: 15,000 kilometres; Embankments damaged: 2,000 kilometres; Crops damaged: 15,65,390 hectares; Houses damage: 5,50,000; Educational Institutions damaged; 24,000; Industrial Units damaged: 11,000; Bridges and Culverts damaged: 20,500; Tubewells damaged: 3,00,000

damaged: 3,00,000.

The above losses are certainly huge but the losses in the earlier floods of 1987 and 1988 were much less, and the losses of 1954 floods were still more less. It is because, at however slow pace of development we are Bangladesh of 1954 was much

less developed than Bangladesh of 1987 and 1988. More or less the same is true of Bangladesh of 1988 and Bangladesh of 1988 and Bangladesh of 1998. This only indicates that all development programmes should be implemented with adequate protection of development re-

The above statistics indicate only the quantitative side of the flood losses but these losses have also a qualitative side. The agricultural losses can be recouped much more quickly than industrial losses. Crops lost are definitely a loss forever, but crops can be grown again as soon as the floods recede because the floods do not damage the land. Rather they make the land more fertile. Quite often the floods are followed by bumper growth of crops. But industrial losses cannot be recouped (at least by Bangladesh) immediately after the recession of the floods because the industrial losses mean damage to the industrial

Total flood losses of 1998 has so far been estimated at \$4.3b by the government. The government has also released ministry-wise preliminary losses and requirement for recouping of those losses. Even if those statistics are on the higher side, they will enable us to make our own ideas of flood losses and take steps to avoid incurring such losses, particularly in industrial undertakings.

In this connection, it may be mentioned that in the agricultural sector probably much cannot be done individually to take flood control measures. Taking flood control measures for the protection of agricultural produce will mean taking projects like embankments, excavation of canals, dredging of rivers. These are big projects and can be undertaken by the

nised an opportunity to produce

and market it on a large scale

all over the country. The idea

via hybrid cotton seeds devel-

oped by CT Patel, a scientist at

the government-run Gujarat

Agricultural University. When

the hybrids hit the market, they

became a runaway success and

helped him succeed where Patel

could not as a government sci-

entist," says Navedita Prabhu, a

New Delhi-based expert on In-

to became chairman of the

Jalna People's Co-operative

Bank in 1965 and he served on

the Bombay's board of the State

Bank of India, the country's

the driving force behind Mahy-

co's success. It produces and

markets more than 300 hybrid

seed varieties of rice, wheat,

corn, and sorghum, as well as

a farmer and an entrepreneur.

Knowing that most Indian

farmers are unable to read the

instructions on seed bags, he

Barwale loves to call himself

oilseeds, fruit and vegetables.

Barwale, 67, continues to be

His business success led him

dian agriculture.

"Barwale's marketing savvy

Mahyco hasn't looked back.

His big breakthrough came

government alone. While these measures are major ones to control floods and will be beneficial to one and all, the owners of and investors in industrial units have to make their own arrangements to safeguard their industrial units. For example, while investing in industrial units, the first consideration will be the location of the units. Of course, the location of the industrial units should be the first consideration even for other reasons but it merits special attention in Bangladesh for its geographical situation.

To conclude, we may refer to the causes of floods in Bangladesh. We mentioned in the beginning, experts would have their own analysis of causes of floods in Bangladesh and the measures to control floods. We as laymen may say that if Bangladesh were three times larger than what it is now, the '98 flood water would have flowed over three times larger areas and would have been three times less destructive even in the present geographical features. Lastly, it may be said that water flows like a snake. Whenever and wherever its flow is obstructed. it turns either right or left for a free passage. If it finds a passage, well and good. If it does not, it goes on raising its head and bites any and every one who obstructs its passage. And needless to say that in the last fifty years we have done or not done, foolishly or callously or selfishly, to give free flow to floodwaters in Bangladesh, it has now become absolutely essential for us to mend our past wrong actions and inaction in all areas. We may ignore this imperative only by ignoring. again knowingly or unknowingly or callously, what consequences such action or inaction would have for us.

Prize Winner's Business Acumen Reaps Harvest

B R Barwale is the winner of this year's World Food Prize, a \$250,000 award considered the Nobel Prize of agriculture, normally given to people who've made research breakthroughs. But Barwale is known more for his marketing savvy than for scientific contributions.

A J Singh writes from Dharamsala

THE World Food Prize has in its 10-year history gone to people who have inspired and changed the lives of people in the developing world by improving the quality, quantity or availability of food. That's why some are wonder-

ing whether this year's winner of the prestigious \$250,000 prize belongs in the same league.

Badrinarayan Ramulal Barwale, nicknamed India's "seed man" is founder-chairman of Maharashtra Hybrid Seeds Company (Mahyco), the world's largest producer of hybrid cotton seeds and one of India's largest companies.

Mahyco came into existence in the sixties when India had just ushered in the Green Revolution. As foreign multinationals moved into India to capture the seed market. Mahyco stepped in to rival them as India's first private sector seed company.

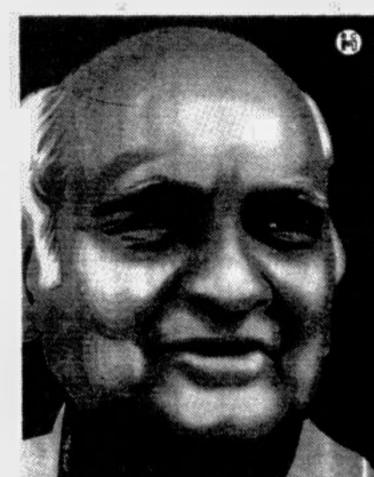
No one thought it would succeed in the face of the stiff outside competition. However, it thrived thanks to Barwale's business and marketing acumen and his foresight in recognising India's need for a strong seed sector to meet the tuture demands of its burgeon-

"But for Barwale's ability to understand and grab the opportunity 30 years ago, Mahyco wouldn't be what it is today," says Dr S S Dahiya, an eminent

TOM & JERRY

scientist at New Delhi's Institute of Agricultural Research

His detractors, however, are critical of Mahyco's recent tieup with Monsanto, the controversial chemical giant. A year ago, Monsanto and Mahyco launched a joint venture to grow genetically-engineered insect-resistant cotton in India.



B.R.Barwale India's seed science supremo

Then in April, Monsanto purchased 26 per cent of Mahyco for 1.8 billion rupees.

But even Barwale's severest critics have a reluctant admiration for him. Many agricultural scientists and researchers envy his ability to successfully commercialise agricultural research.

In the late sixties, IIAR developed a hybrid seed called pusa savani, a virus-resistant okra seed. The moment he learned of it. Barwale recogbet demonstrations on how the seed is to be planted and looked after.

He also tries to bridge the gap between his company and the

He also tries to bridge the gap between his company and the farmers by guaranteeing bank loans to help farmers produce his company's seeds.

Although the World Food Prize is considered the Nobel of agriculture, Barwale is garnering far less attention than his countryman who recently won the Nobel for economics. Amartya Sen.

Three Indians have previously won the World Food Prize in its ten-year history: the father of the Green Revolution. Dr M S Swaminathan; the architect of India's National Dairy Development Board, Dr Verghese Kurien; and the founder of Bangladesh's microcredit Grameen Bank, Mohammed Yunus, who was born in Chit-

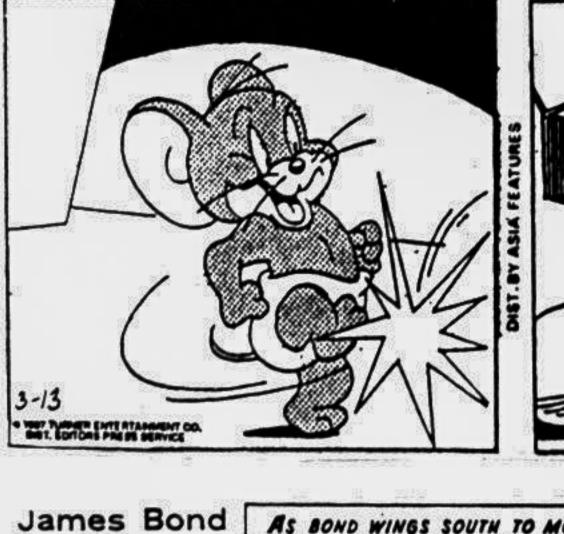
tagong before India's partition.

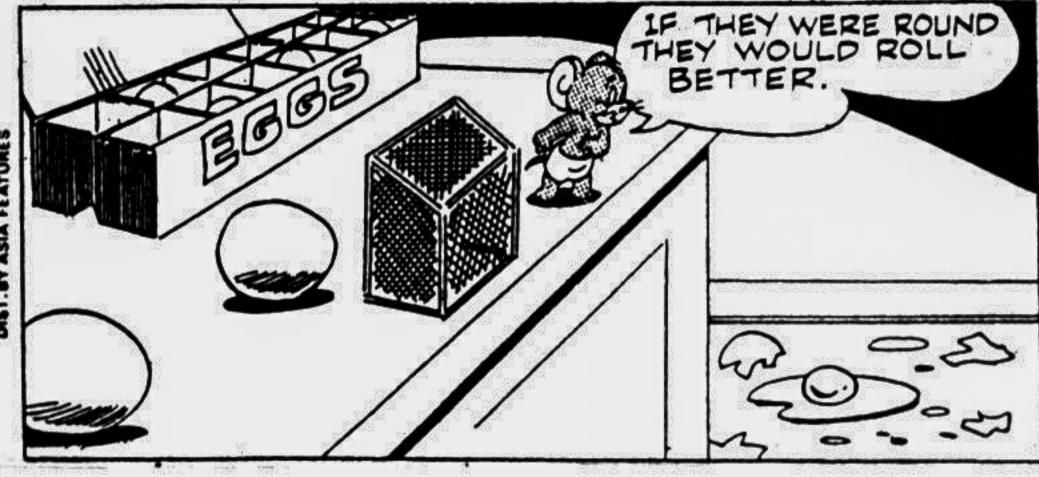
The prize was instituted by Dr Norman Borlaug, an American microbiologist and agronomist who won the Nobel Peace Prize in 1970. Borlaug had developed high-yielding varieties of wheat and crops usually grown in developing countries and also coined the term Green Revolution.

— Gemini News

The writer is a freelance journalist based in Dharamsala, northern India, who specialises in Tibet, Nepal, Bhutan

travels to the villages, meets farmers and gives on-the-spot and India's northern states. By Hanna-Barbera IF THEY WERE ROUND THEY WOULD ROLL BETTER.







Tribute to Syed Badrudduja

by Raisuddin Khondoker

T is a day, just a day. And yet. November 18 is a day A pregnant with thoughts of what could have been, had it not, twenty-four years ago, caused the sun to set in the life of a man who meant so much to the Muslims of India. In the passing of Syed Badrudduja, his people - call them adherents if you will - lost more than a corporeal being. For Syed Badrudduja, in the state of politics, transcended the political, and informed his fellow Muslims that glory was to be had in a combination of principles and a consciousness of reality. He brought the erudite into play, and with that came the naturally eloquent. When the sun set the Syed Badrudduja's life on November

When the sun set the Syed Badrudduja's life on November 18, 1974, it was the coming of twilight in the career of a man who had, in humility and yet with grit, struggled all his life for a people he felt deserved a better place under the sun. Today, it is time — from the vantage point of history — to observe the essence of the man called Syed Badrudduja.

No one who knew Sved Badrudduja would attempt to describe him in a mutshell. He was miny-sided complex full of conflicting enthusiasms and burdened by many sorrows. Yet there has seldom been a public hero who was more open with his problems and his thoughts, in private letters and public prints, in speeches and conversations with friends. He always seemed to talk fully and freely, to say just what he thought or lelt, to make every effort that his natericis anderstood his thew-point, resultings of what

Great as an maio. Crare eloquence, great as an administrator of unimpeachable integrity, great as a parliamentarian with remarkable wit and acumen, great as a politician with unshakable conviction and selfless dedication, greater still as a fearless champion of truth and justice, his was indeed a career of outstanding services. of great achievements, of great struggles and acute sufferings. and of great devotion to a cause the legendary but perilous life-long endeavour to voice the sufferings and miseries, pains and anguishes of the then Muslim minority of India. A review of his career reads like a

vout Muslim. But a true Muslim as he was, he never criticised other religions nor tolerated any aspersion on their revered celebrities. In 1940, an Anglo-Indian councillor had cast wanton aspersions on the great personality of Sri Kirhsna. The said councillor was a nominee of the Muslim League and Editor of an English daily. "The Star of India". It not only created a first class crisis in the political and social life of Bengal but also threatened the delicately balanced coalition of Ne-

Syed Badrudduja was a de-

taji Subhas Chandra Bose and the Muslim Leaguers formed only a few days earlier. When Netaji demanded an unconditional apology, the councillor unwisely stated that he had done nothing wrong and that he was apologising only at the request of his friends. The situation was grave, the atmosphere absolutely combustible. Badrudduja rose to the occasion and defused the tension through his inimitable eloquence. He not only opposed the nefarious remark tooth and nail but also pointed out that no true follower of the holy Prophet Muhammad (pbuh) could ever encourage or tolerate any attempt at maligning the great and noble celebrities of other religions. The historic speech was powerful enough to force the councillor to tender an unconditional apology. Netaji himself along with Dr Bidhan Chandra Roy and Naresh Nath Mukherjee thanked Badrudduja and paid a glowing tribute to his

A Muslim with unflinching faith in God, Badrudduja never hesitated to call a spade a spade even in the teeth of violent opposition. In 1958, he refused to sign a document which claimed

It was due to the dynamic leadership and foresight of Netaji Subhas Chandra Bose that the infamous Holwell Monument in Calcutta testifying (?) to the so-called "Black Hole Tragedy" was removed. But very few of us know that the Muslims took a very active part in this historic struggle. What is more. when Netaji was arrested on July 2. 1940 (on the eve of his proposed march to the Holwell Monument), the mantle fell on Syed Badrudduja, Netaji's close confidant. Day in and day out did Badrudduja organsie meetings at various places including the Islamic College campus, and also led a mammoth procession to the monument in protest of Holwell's heinous conspiracy against Nawab Sirajuddoulah the revered hero of Bengalee's historical memory. It was again the untiring efforts and constant persuasion of Badrudduja which were instrumental in persuading Sher-e-Bangla to declare on the floor of the house that the Holwell Monument would be removed and the ar-

rested agitators released.

An intimate friend of Comrade Muzaffar Ahmed and Kazi
Nazrul Islam as he was.
Badrudduja played a key role in

An orator of the first order, Syed Badrudduja is remembered in every nook and corner of this subcontinent for his scintillating, matchless command of eloquence in Urdu, Bengali and English. He could breathe fire, when the occasion demanded, like an avenging angel, and warble, when the mood seized him, like a refreshing, sparkling mountain stream.

that Kasl mir was an integral part of India Only the Muslim members of Lok Sabha, Rajya Sabha and Bidhan Sabha were asked to sign the document. He pointed out that true secularism could never single out only Muslim members and ask them to prove their allegiance by signing a document. While refuting the charge of anti-state activities raised against him by the then Law Minister Siddharta Shankar Roy (who became the Chief Minister of West Bengal later on) he had the courage and conviction to declare: "If love of my religion, my community and my culture is a crime. I am a criminal. And I am proud to be branded so. Siddharta Shankar Roy succumbed to the fire and fury of Badrudduja's oration and tendered unconditional apology on the floor of the house.

In 1962 an Indian record was set when Badrudduja was elected simultaneously to both Lok Sabha and Bidhan Sabha. In 1962 he declared in Lok Sabha that nearly one million Muslims were killed in India since 1947. "The Blitz", the powerful weekly of Mumbai, denounced the speech as 'reactionary' but eulogised Badrudduja's oratorical skill, hailing him as the "Mark Anthony of India."

the treatment of the repel poet. It was through his sincere solicitude, that the treatment of the great poet progressed unhindered at the Lumbini Park Hospital in Calcutta in the forties. It was also his sincere gestures which brought Abdul Alim to Calcutta for the first time, enabling the bud with the golden voice to bloom into a full blossom. Pallikavi Jasimuddin, then drifting aimlessly also found a decent footing in life when Badrudduja graced him with a respectable job. Justice Abdus Sattar, later on the President of Bangladesh, also had the rare privilege of being elevated to the post of the Chief Executive Officer in Calcutta Corporation through the affectionate help of this salt of the earth. No wonder, Bangabandhu Sheikh Mujibur Rahman himself eulogised this dauntless crusader as a "great leader" and very graciously arranged foreign exchange for his last rites (Challisha) in December, 1974.

In 1969, a broad-based committee was formed to pay a befitting tribute to Mirza Asadullah Ghalib, the legendary doyen of Urdu literature, on his 100th Birth Anniversary. The star-studded Ghalib Centenary Committee comprised stalwarts from vari-

ous walks of life like Salyajid Ray. Dr Suniti Kumar Chatterjee Tarashankar Bandopaddhaya. Prafulla Ghose. Humayun Kabir. Vivekananda
Mukhopaddhya. Indrajit Gupta.
Annada Shanker Roy. Hiren
Mukherjee and Ashoke Sen. On
the joint proposal of
Tarashanker Bandopaddhaya
and Salyajit Ray. the towering
personality of Syed Badrudduja
was unanimously chosen to
head the prestigious and historic committee.

An orator of the first order, Sved Badrudduja is remembered in every nook and corner of this subcontinent for his scintillating, matchless command of eloquence in Urdu. Bengali and English. He could breathe fire, when the occasion demanded, like an avenging angel, and warble, when the mood seized him, like a refreshing, sparkling mountain stream. Sir Wedgewood Benn compared his oratory with those of Edmund Burke and Winston Churchill. In 1962, V K Krishna Menon and Raja Gopalachari eulogised him as the "Edmund Burke of India". In Urdu, he was second to none. Even a giant like Maulana Abul Kalam Azad gracefully acknowledged him as his equal. Incidentally, he was the only Bangla-speaking person who had the rare honour of becoming the President of Anjuman-e-Taraqqui-e-Urdu. His speeches in Bengali moved and mesmerised all. Netaji Subhas Chandra Bose, Bidhan Chandra Roy. Jyoti Basu and Vivekananda Mukherjee considered him to be the "Bipin Chandra Pal of Modern Age". Tagore's appraisal of Badrudduja's inimitable oration was brief but eloquent. He called it "Bhagabaner Daan". He was indeed one of the greatest orators the world has ever seen. "His song will always remain," in the words of Sarojini Naidu. "as fresh as the first flowers of the springtime and as enchanting as the music of moonlit streams."

Syed Badrudduja took leave of the temporal world, as he had come to it, in all the manifestation of simplicity and sufferings. Lucrative and prestigious offers failed to deviate him from the right path. He was offered Central Cabinet Membership, Governorship of West Bengal, and even the coveted post of the president of India through personalities like Bidhan Chandra Roy, Humayun Kabir, Gulzarilal Nanda and Ashoke Sen. But the indomitable crusader preferred to keep his head high and refused to compromise. Worldly possessions he had none, and of hidden treasures there was no trace - for he did not leave any be-

"Here was a man! When comes another?" The Shakespearen is apt, for it explains the life and times of Badrudduja.

A Pest of a Problem

Cross-border trade in hazardous chemicals and pesticides threaten the ecology with dire consequences. Sixty-one nations get together to ward off the threat, especially in developing countries which lack resources to tackle this lethal problem.

by Achila Imchen

International trade in unwanted hazardous chemicals and pesticides is now a serious global concern, especially in developing countries that lack resources to monitor the pesticides' safe application, storage facilities, and adequate training for their applications. To deal with this, 61 countries have signed a new convention to prevent trade in hazardous chemicals.

Two years after negotiations

began under the auspices of the United Nations Environment Programme (UNEP) and the UN Food and Agriculture Organisation (FAO), the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade was signed in Rotterdam in September, 1998.

In a world where 1,500 chemicals are introduced every year, developing countries have little control over which chemicals cross their borders and cause environmental and health hazards.

the results of a survey examining the extent to which governments, industries, pesticide users were sticking to guidelines established in 1985. Only 25 of the 74 countries responding to the survey were collecting statistics on pesticide import, local formulation and use. Shockingly, 89 per cent of developing countries stated that they have not studied or have only partly studied the environmental effects of pesticides.

The PIC convention covers 22 pesticides and five industrial chemicals. For a chemical to make it to the PIC list, it should be banned or severely restricted in at least two countries. The convention will not stop production of hazardous chemicals across the world. It is just a mechanism to manage chemicals in a more sustainable.

Industrialised countries are the major exporters of banned pesticides to developing countries. According to Global Pesticide Campaigner, in 1995-1996, around 21,026,794 pounds of pesticides, which were banned in the United States, were exported from US ports. The total, which includes never-registered products, represents an average rate of more than 14 tonnes

Produced for export only, the products are not evaluated by the US Environmental Protection Agency (EPA). US exports of never-registered pesticides, at nearly 9.4 million pounds, have increased by 40 per cent from the figures noted in the

three-year period of 1992-1994.
The convention is specifically significant for developing countries, many of whom do not have the infrastructure to manage and monitor dangerous chemicals. A Pesticide Action Network (PAN) press release states, "In many African countries, poisoning control centres have not even been established, and collecting information on incidents is virtually impossi-

The three significant clauses adopted in the convention are: export of a chemical can only take place with the agreement of the importing country; an exporting country planning to ship a chemical banned for domestic use will be legally bound to inform importing country; an exporting country planning to ship a chemical banned for domestic use will be legally bound to inform importing countries about it, prior to the first export and for the first export every year; and, countries will have to make national bans on chemicals known to other signatories, inform each other of the harmful effects of the chemicals prior to shipping. and ensure that labels on chemicals carry adequate informa

India, who has actively participated in the negotiations for the last two years, has been unable to sign the PIC convention due to procedural delays. It did sign the final act of the convention in Rotterdam, signifying the country's compliance with the text of the treaty. However, the final approval of the cabinet is key to India signing the PIC treaty.

Both Vinod Vaish, special secretary of the Ministry of Environment and Forests (MEF), and R R Khan, director of the hazardous substances division, MEF, are of the opinion that this treaty will not have a difficult time getting cabinet approval as there were no major objections raised during the national inter-ministerial discussions.

In fact, a conflict of interests dominated the international decision-making process. Even an official report of the International Institute of Sustainable Development (IISD) states, "While many references were made to the fact that this convention was to benefit developing countries, the main protagonists were the Organisation of Economic Cooperation and Development (OECD) countries."

Khan acknowledges that though many western countries wanted to come across as the "protectors of the environment

in a big way", their views sometimes conflicted with developing countries. At one point, india, along with some African countries, was an active proponent for a clause on liability which would have provided compensation related to accidents involving chemicals.

"Initially the liability clause was featured in the negotiations, but was later dropped. Countries like Canada had objections. They refused to be held liable for the weak infrastructure of an importing country." These demands were "fended off" in the later part of the negotiations.

According to Barbara Dinham of PAN, the UK, during the PIC negotiations, "The Indian position was mixed as it is both an importer and an exporter, and should therefore comply with all the requirements of being an exporter. As India is one of the few countries exporting dichlorodiphenyl trichloroethane (DDT), it faced

a bit of a dilemma.

"Our over-riding concern is that we are a big exporter of chemicals. We are the 15th in the list of exporters, not only in developing countries but also in the developed countries," admits Khan.

Both Khan and Vaish, however, emphasise that they did not encounter any problems with either the departments of chemicals or agriculture, with whom they worked in conjunction during the negotiating process.

The issue of controlling the trade of a "lucrative" industry, estimated at \$30 billion worldwide in 1996, and of its potential conflict with the World Trade Organisation (WTO) did feature prominently. During the drafting of the text, there were concerns among some delegates that the PIC trade rules might provide a country with a trade disadvantage.

However, the convention

However, the convention clearly attempts to maintain a

balance between the PIC and other international agreements such as the WTO. It make its position clear in the preamble where it states, "Trade and environmental policies should be mutually supportive with a view to achieve sustainable development."

The vital issue of the convention seems to be related to financial assistance for developing countries. According to Vaish, the convention had been documented along with the understanding that developing countries required financial assistance to carry out the PIC procedures in their countries. The issue has not been incorporated into the main body of the treaty.

As was pointed out by many African countries, lack of funds would directly affect the capacity of a country to implement the procedures of the convention. Though a provision was made in the text for providing technical assistance by countries with a superior system of chemical management, many developing countries also require money for building testing facilities, mechanisms for safe disposal of obsolete chemicals, and develop risk assessment capabilities.

To be tested as a severely hazardous pesticide on the PIC criteria, a country must compile information of specific incidents related to the use of the chemical, its adverse effects, and the manner in which its formulation was used. It would be hard for a country to comply with the "extremely stringent" criteria, without testing facilities which provide the relevant data, says Khan.

If the convention is to function as a tool to check crossborder trade in dangerous compounds, nothing short of a global cooperation — not only of information exchange, but also of resources — is required.

CSE/Down To Earth Features

Chips, Anyone?

A radical new approach to the timed release of drugs is being patented by the Massachusetts Institute of Technology (MIT), USA. It uses a silicon microchip etched with thousands of tiny pits, each filled with a dose of the drug to be administered and covered with a thin conductive film that acts as an electrode.

Transistors present on these chips selectively open these reservoirs by feeding a tiny amount of current from a mi-

nuscule battery to the electrodes. These then break down, thereby releasing the drug. The release can be controlled by either a timer in the chip or by radio signalstransmitted from a computer. The chip, which is implanted under the skin, can continue operation for years. MIT says the system is ideal for animals and for patients who forget to take their medicines frequently.

CSE/Down To Earth Features