t is now recognised that water is a critical resource for economic and social development of nearly all developing countries. Increasing water demands; accelerating deterioration of water quality conditions and higher human costs due to recurring floods and droughts will make efficient water management a more challenging and complex task in the coming decades. Add to this the level of investments needed to develop new water projects and also to operate, maintain and manage the existing projects; management capacities needed in public and private sectors; globalisation

which will increasingly affect the water sector in numerous pathways and a widely prevalent business-as-usual mindset of water managers. Today's solutions, yesterday's management practices and day before yesterday's mindsets can no longer anticipate tomorrow's water problems, let alone solve them. If the future water problems of the world are to be solved, a revolution is needed in terms of their identification, assessment, analysis and solution.

The Centre and its philosophy

The Third World Centre for Water Management was established specifically to address how future water problems of the world can be solved efficiently and equitably. Among the problems it is addressing at present are the effectiveness of the current water management practices, appropriateness of the existing water management paradigms and the knowledge base in terms of their application to solve the water problems; identification of the water problems; identification of the water problems of the future and how these can be solved cost-effectively and in socially-acceptable ways; and objective assessment of the current global and regional water policy dialogues.

The Centre is a knowledge-oriented institute. It mainly focusses on knowledge generation, knowledge synthesis and knowledge dissemination. A significant raison d'etre for the establishment of the Centre in 2000 was that a world-class policy-oriented think tank on the water problems of the Third World simply did not exist. Thus, the Centre was conceived as a totally independent institution that will carry out objective and comprehensive studies on complex water-related issues, but without any hidden agendas, dogmas or political correctness. Its analyses are always based on facts and good science. It strongly believes that there are no universal solutions that are equally applicable to all parts of a heterogeneous world, since the countries are often at different stages of development and their physical, climatic, economic, social, legal, environmental and institutional conditions often vary sig-

Solutions also have a time dimension. For example, what may have been a good solution in the 1950s in India, China, or Japan, may not be an appropriate solution at present. Equally a solution that may be valid for one part of a large country like India or Brazil, may not be appropriate for another part of the same country. Thus, the water problems of the world are

A Unique Think Tank Offers Fresh Perspective

The Third World Centre for Water Management is an independent institute that is carries out objective studies on water-related issues. The founder of the Centre insists that many of the solutions to the water problems in the developing world today can be solved by local or regional experts, rather than expensive consultants from the west.

very diverse, and equally their solutions must be case-specific.

The Centre also believes that many of the solutions that work well for the western world may not be optimal for the developing world. Thus, direct technology and knowledge transfer from developed to developing countries can be dangerous, unless the boundary conditions in the areas concerned are carefully assessed and the necessary modifications are made before the specific solution can be applied.

This simple philosophy is often forgotten with disastrous consequences. A good example is a project in India which was funded by a major multilateral agency. Since India needs rapid advances in water quality monitoring, the American expert, who was in charge of the project, decided to import state-of-the-art automatic water quality monitoring van from Western Europe, at a cost of approximately quarter of a million U.S. dollars each.

When the President of the Centre reviewed the project, it was found that such expensive equipments were totally useless under the Indian conditions. To start with, the instrument system of the van was designed for a maximum temperature of 36°C, which is not a problem for the temperate climates of Western Europe. However, in the specific location of India, where the van was located, the average summer temperature was 42°C. Thus, in the first summer, most of the instruments of the van became non-operational. In addition, unlike the roads of Western Europe, which are even, the Indian roads are bumpy. Thus, the first time the van was driven to a monitoring site, the calibrations of all the sophisticated instruments went out of order.

To add salt to the injury, the system was so new and sophisticated that there was not a single person available in India who could repair and recalibrate the system. Thus, a specialist had to be flown in from Europe at a great expense to fix the



Special Feature

van, which again became non-operational during its next trip to a monitoring site!

This project alone bought instruments worth several million dollars which could not be used under the Indian conditions. There is no question that the instruments were the best available for the Western world, but they simply were unsuitable for the Indian conditions. The Centre has found numerous similar problems all over the developing world, where millions of dollars have been wasted because of the unwarranted belief that the western solutions are the most progressive, and thus the most appropriate for them.

Another important philosophy of the Centre is that it never uses what it calls "solution-in-search of a problem" approach. This refers to a solution that is used successfully somewhere, mostly in a developed country, and its supporters search for a problem in the developing world where the solution can be used. Currently "solution-in-search of a problem" approach is widely prevalent, even though all objective analyses indicate their failure rates are unacceptably high.

The Centre eschews "solution-insearch-of-a problem" approach, and primarily works in countries where it is familiar with the prevailing conditions. Should it decide to undertake a study in an unfamiliar country, its first task invariably is to visit the country, and then do considerable work to identify the best institutions/ persons available to carry out the specific analyses. In other words, the national experts provide the local knowhow, and the Centre provides its international experiences. The final answer emerges from this marriage of national expertise and international knowledge-base. This has proved to be a highly successful recipe.

While the Centre is located in Mexico, its work now spans 16 countries, and nearly 90 percent of its activities are outside of Mexico. Initially the Centre focussed its work on water issues of developing countries, but it is now being increasingly requested by developed countries to assist them with policy-related work.

A recent example is the Spanish National Hydrological Plan, which was approved by the Spanish Parliament. The Centre was invited by the President of the State of Aragon, Spain, to conduct an independent assessment of this Plan. The analysis indicated that

the plan was technically unnecessary, economically undesirable and environmentally unacceptable. The finding was presented at a seminar in the European Parliament, as well as to the Commissioner of the Environment of the European Union (EU). Thereafter, EU declined to provide any funds for the implementation of the Plan, and the Spanish Prime Minister has just announced that the Plan will be cancelled in the current session of the Parliament.

The Centre is very active in international water policy dialogues. For example, during the Second World Water Forum in the Hague and the Third World Water Forum in Japan, it sponsored six sessions at each event, which is three more than any other institute from anywhere in the world. During the Third World Water Forum, it supported 26 participants from different parts of the world, making it one of the largest sponsors of the Third Forum. It is also a regular sponsor of events at prestigious global water meetings like the Stockholm Water Symposiums and World Water Congresses.

The Centre publishes International Journal of Water Resources Management, which is now acknowledged as the premier international journal on practical and policy aspects of water development. Published from U.K., the journal now has subscribers in 112 countries.

Even though the Centre was formally established in 2000, within four short years it has become one of the world's leading water policy think tanks. Its numerous books are now considered to be the most authoritative texts in their areas. Its work has already been translated into Arabic, Chinese, French, Japanese, Russian and Spanish. Some of its work will shortly be available in Bengali, Farsi and Portuguese languages.

The Centre is funded entirely by major international foundations, bilateral and multilateral aid agencies and donations from corporations and individuals.

Prime mover of the centre

The Centre is the brainchild of Prof. Asit K. Biswas. Born in India, educated in India and U.K., Prof. Biswas has taught in universities in U.K., Canada, Sweden and Mexico. One of the founders of International Water Resources Association (he is a past President) and also of the World Wa-



Prof. Asit K. Biswas and Dr. Cecilia Tortajada (Vice President of the Centre) with President Suleyman Demirel of Turkey. President Demirel, a renowned water expert, will open the Centre's international workshop in Istanbul, in October 2004, on the impacts of large dams. He will also present a case study of the Seyhan Dam.

ter Council, and a member of the World Commission on Water, he is regarded as one of the world's leading authority on water and environmental issues. He has been an advisor to six Heads of the United Nations Agencies, 18 governments and all the major multilateral and bilateral aid agencies. He has authored 65 books and well over 650 papers in major international journals. His work has been translated into 31 languages.

As the founder, he has insisted that all work undertaken by the Centre is extensively available to the interested public. In fact, the Centre does not undertake any work that cannot be made freely available to the public. Prof. Biswas has used his extensive international networks to find the best partners in the developing world, who are collaborating actively with the Centre.

Expertise in developing countries

"It is quite now common for the aid agencies to fly in experts from developed countries, who have often never even visited the developing country concerned," points out Prof. Biswas "They stay in five star hotels for a week or so, prescribe a solution, and then fly to another country to solve another problem! The solutions often do not work since the so-called experts have virtually no knowledge of the physical, climatic, economic, social, political, environmental, institutional and legal conditions of the country, nor do they have any commitment to the country," he says. "When the solution does not work, which is often the case, the standard response is that the solution was right, but the people in developing countries were not good enough to implement the solution properly. No serious evaluations of

these failures are carried out, and thus such failures continue ad nauseam".

Based on its experiences so far, the Centre has concluded that considerable expertise on most aspects of water management exists in developing countries, but regrettably the policy-makers do not take their advice seriously. Instead, they prefer foreign experts, even though they have very limited knowledge of the specific problems they are expected to solve, and also very little knowledge and understanding of the boundary conditions within which such problems have to be solved. The old proverb that a prophet is not honoured in his own country is very appropriate in this context.

"This colonial mindset is difficult to justify, especially when one considers that the best implementable solutions for water management in developing countries are no longer coming from the western world but from the developing countries themselves," asserts Prof Biswas. "This is not surprising, since in the Western world (with the exception of Japan), very few major water development projects have been constructed during the past several decades: new projects are now primarily in developing countries. Thus, the best practical expertise on water management can now mostly be found in developing countries, and not necessarily in the western world. Regrettably, this fact is still not universally recognised," he reveals.

It is thus a curious irony that water professionals in India have no real knowledge about the latest developments that are coming from Brazil, Chile, Morocco, Turkey, Singapore or Sri Lanka, and vice versa. Yet, they are familiar with the latest developments from the United States or the United Kingdom, even though, in all probability, the solutions offered by one developing country to another are likely to



Prof Biswas and his Royal Highness the Prince of Orange at the Netherlands discussing global water issues. Both were members of the World Commission on Water.

be more relevant because of somewhat similar social, economic, climatic and institutional conditions. The Centre thus makes a special effort to nurture, mentor and promote experts from developing countries, who are often not taken seriously in their own countries. Some of these experts have now already become international figures.

Programmes of the Centre

Since at present the good water management experiences from developing countries are mostly unknown, the Centre has a programme to collect and synthesise the best practices from certain specific regions of the developing world. Because of its location, initial emphasis was given to Latin America. The synthesised knowledge of best practices and current experiences have now been widely disseminated through books by prestigious international publishers, as well as papers in reputable journals. Among the books already published by the Centre under this programme are: Women and Water Management: The Latin American Experience, Integrated River Basin Management: The Latin American Experience, and Water Policies and Institutions in Latin America. Among the books that are now under publication are: Water Pricing and Public-Private Partnership in the Americas, Water Quality Management in the Americas, and Integrated Water Resources Management for South and Southeast Asia. All these are publications by Oxford University Press.

In addition, a global analysis of how water is being successfully used as an engine for economic development in underdeveloped areas has also been just published by Oxford University Press: Water as a Focus for Regional Development. When new water development projects are under sustained attacks by activists, this global analysis show

how water has been successfully used as an engine for economic development that has lifted millions of people from the poverty trap.

The Centre is active in developing new methodologies, and critically assessing the applicability of existing methodologies. Its work on Conducting Environmental Impact Assessment for Developing Countries was published by the United Nations University Press. It has already been translated into Chinese and Japanese, and special ASEAN and Indian editions of this book are

now available. Similarly, its work on Water Management in Islam (United Nations University Press) has now been translated into Arabic, French and Farsi. Among its forthcoming books in this area is Appraising Sustainable Development: Water Management and Environmental Challenges (Oxford University Press).

A major problem of water resources management is the availability of reliable data. The World Commission on Water, of which the President of the Centre was a member, identified it as a serious constraint during its early deliberations. To overcome this shortcoming, and with the support of the Nippon Foundation, the Centre initiated a project to provide objective data and reliable analyses of water-related issues in specific countries. Its work on Water Resources of North America. which critically reviews the water situation and management practices in Canada, USA and Mexico has recently been published by Springer-Verlag, A similar book on the Water Resources of the Indian Sub-Continent (Bangladesh, India and Nepal) is now under publication by Oxford University Press. Analyses of water situations in countries like Argentina, China, Chile and Egypt can now be found in its website www.thirdworldcentre.org.

Among the other priority areas in which the Centre is currently active are:

- Addressing increasing complexities of water management;
- Challenging prevailing wisdom;
- Integrated water resources management;
- Integrated river basin management;
- Assessment of the impacts of large dams;
- Evaluation of large water development projects;
- Water management in urban areas;
- Women and water management;
- Public-private partnership in the water sector;
- Management of international rivers; and
- Impacts of global water forums:

Detailed information on these activities, and also other information on the Centre, can be found in its website. **AW**

For further information about The Third World Centre for Water Management, please write to the editor of Asian Water at vikass@singnet.com.sg or visit the website www.thirdworldcentre.org.