



United Nations water conferences: reflections and expectations

Background

During the 1970s, the United Nations (UN) held a series of world conferences at high political levels on specific topics, to enhance global awareness of the magnitudes and extents of the problems and to formulate strategies to solve them. The topics of these conferences were complex and no single nation could solve them individually.

The focus of the first of this new type of major conferences was on the Human Environment, in Stockholm, in 1972. It was followed in rapid succession by similar high-level global meetings on Population (Bucharest, 1974), Food (Rome, 1974), Women (Mexico City, 1975), Human Settlements (Vancouver, 1976), Water (Mar del Plata, 1977), Desertification (Nairobi, 1977), Science and Technology for Development (Vienna, 1979), and New and Renewable Sources of Energy (Nairobi, 1981). One of the co-authors of this editorial, Professor Biswas, attended all these conferences, primarily as the Senior Scientific Advisor to the Executive Director of the United Nations Environment Programme.

Nearly all these conferences were initiated and then actively promoted by a government or governments and then ultimately approved by the UN General Assembly. For example, the Conference on Human Environment was suggested and promoted by Sweden. Later, it was approved by the UN General Assembly.

In this sense, the Water Conference was an anomaly. The idea of this conference did not originate from any government but from three remarkable senior employees who floated the idea and then managed to get countries to propose it and finally get it approved by the UN General Assembly. This unsung trio was Vladimir Baum, Enzo Fano and Alagappa Alagappan, senior officials of a now-defunct UN body, Centre for National Resources, Energy and Transport.

The Water Conference was officially first proposed in 1971 by the UN's Committee on Natural Resources. It was then approved by the UN's Economic and Social Council, in 1973. The UN General Assembly finally endorsed it in December 1975, under Resolution 3513 (XXX).

The main objective of the conference was to promote a level of preparedness nationally, regionally and internationally, which would help the world to avoid a water crisis of global dimensions by the year 2000. Its goal, undoubtedly, was ambitious: to ensure the world had an adequate supply of water, of good quality, to meet the needs of a world population that was increasing and urbanizing, but also to seek improved economic and social conditions for all people within a little over two decades.

The UN Economic and Social Council gave the conference some very specific tasks to accomplish. These included:

- exchange experiences on water resource development and water uses;
- review new technologies;
- stimulate greater cooperation in the water sector;
- discuss comprehensively the problems raised by growing water demands when the stock of water remains constant; and
- consider specific economic and administrative, as well as technical, aspects of water resources planning and development, primarily directed towards water policymakers.

The Water Conference was held at Mar del Plata, Argentina, 14–25 March 1977. It was attended by 116 governments. The overwhelming majority of the national delegations were led by the ministers responsible for water.

Inauspicious start

While such a major and comprehensive global deliberation on water was long overdue, the initial arrangements to organize the conference left much to be desired. Normally, all the world conferences that the UN held, between 1972 and 1981, had special Secretary Generals from outside the UN system, at a high political level. They were appointed by the UN Secretary General to organize such conferences at the level of Assistant Secretary General. The UN Secretary General when the Water Conference was approved was Kurt Waldheim. Unfortunately, he had no interest in water.

Shortly after the approval of the Water Conference, Waldheim faced a political dilemma. One of his Assistants Secretary Generals, responsible for the Personnel Division, had encountered major ethical problems. Waldheim found it politically expedient not to fire him but to move him sideways to become Secretary General of the Water Conference, even though he had no background in water.

All UN World Conferences had dedicated budgets. By early 1976, only a year before the meeting, it was quite clear to everyone, including Waldheim himself, that the Water Conference was shaping up to be a major failure because of poor leadership and lack of progress. Waldheim finally bit the bullet and had to select a new Secretary General for the conference.

Fortunately, the second time around, Waldheim selected a remarkable person, Yahia Abdel Mageed, who was at that time Minister of Irrigation and Hydropower Development in Sudan. He was appointed in late May 1976, a little over nine months before the major global meeting was about to take place at a high decision-making level.

After Mageed took over, he realized that the previous Secretary General had spent much of the conference's budget travelling all over the world and giving contracts to people who really did not have much knowledge about water. Thus, both financially and technically, the conference was in trouble, and there was very little time left for its organization.

That June, Mageed visited Dr Mostafa Kamal Tolba, who was then Head of the United Nations Environment Programme (UNEP), in Nairobi. One of the co-authors of this

editorial, Dr Biswas, was then the Senior Scientific Advisor to Dr Tolba, who invited him and Mageed to an extended lunch. During this lunch, Mageed explained his predicament, in terms of both budget and technical expertise, and the lack of preparation for the organization of the Water Conference. Tolba offered Mageed significant UNEP funding support and requested Biswas to advise Mageed as his Senior Scientific Advisor, and to help him with the technical preparation of the conference, including drafting of the Plan of Action (Biswas, 2021).

Mar del Plata Conference

In his opening address to the conference, Mageed (1978) noted that 'For the first time, the range and complexity of the problems of water development confronting mankind will be taken up in their totality by a world forum in a systematic and comprehensive manner'. He perceptibly ended his speech with the statement:

Let not history say that a golden opportunity for arranging an orderly developmental progress of mankind presented itself to this generation but was not grasped in time. For, in the ultimate analysis, the success of this Conference will be measured not here at Mar del Plata, not by us, but by posterity over the sweep of history and by the measure to which our deliberations during the next two weeks influence the course of events over the next two decades. (Mageed, 1978, p. 7)

Impacts of Mar del Plata

A retrospective, comprehensive and objective global assessment of the impacts of the Mar del Plata Conference (Biswas & Tortajada, 2009) on the world as a whole indicates that it was significantly more of a success than most of its ardent supporters may have expected when the meeting was held.

First, surprising though it may seem, Mar del Plata put water firmly in the international political agenda of that time (Biswas, 2019). This is something no other subsequent water meeting has managed, though many apologists have claimed otherwise.

An important output of this conference was that it generated a wealth of new knowledge about different aspects of water, as well as country- and region-specific analyses. For the very first time, many developing countries produced detailed national reports on the availability and use of water and comprehensive assessments of planning needs and management practices. Countries were encouraged to prepare papers for the conference on their water problems and potential solutions. These massive documents were later published internationally (Biswas, 1978). This is in sharp contrast to all other UN world conferences where most of the knowledge generated and documents produced disappeared soon after the conferences were over.

Many developing countries, encouraged by the conference, put in motion-appropriate processes to monitor and assess the availability and distribution of their surface and ground waters, as well as existing and future patterns of water demands and use. The majority of these countries have not only continued to carry out these activities after the conference but also have progressively strengthened them.

Another impactful output was that the period 1981–90 was declared to be the International Drinking Water Supply and Sanitation Decade (IDWSSD). Its objectives were to forcefully remind the world that hundreds of millions of people did not have access to clean water and sanitation, and that accelerated political will and investments were needed to significantly improve this situation. The IDWSSD significantly changed the quality of life for hundreds of millions of people all over the developing world on these issues. This was a direct impact of the conference.

Post-Mar del Plata developments

Global conditions have changed remarkably since the Water Conference. In 1977, the global population was 4.2 billion. Now it is 8 billion. The global population growth rate in 1977 was 1.8%. By 2020, this rate had declined to 1.05%, and is likely to decline even further in the future. In 1977, 38% of the people lived in urban areas. By 2020, this figure was 57% and is likely to increase even further in the coming decades, especially in most developing countries. Global gross domestic product (GDP) in 1977 was US\$7.35 trillion. By 2021, it had risen to US\$96.1 trillion. Global GDP per capita similarly increased from US \$1747 in 1977 to \$12,663 in 2021.

Similarly, many social indicators have changed dramatically between 1977 and 2022. For example, the number of people in the world living in poverty has declined significantly since 1977. In 1981, 43.6% of the global population was living in poverty. By 2019, this had fallen to only 8.4%. China had completely eradicated absolute poverty. In addition, the global adult (ages 15 and above) literacy rate in 1977 was 67%. By 2020, this had increased to 87%. The infant mortality rate (deaths per 1000 live births) declined from 86.7% in 1977 to 27.3% in 2021.

In addition, human knowledge, including advances in science and technology, has made remarkable progress during the past 45 years. These include advances in water management practices and processes, as well as in water-related technological developments. Thus, even though in terms of impacts, Mar Del Plata was a remarkable global conference, the world of water and the global conditions have changed markedly. This means the world and also individual countries need to make new future-oriented plans to assure water security in the coming decades. Also, in 1977, climate change was not an issue. Now it is evident that it poses a major challenge to national and global water security.

Thus, ideally, another UN global water conference at high policymaking levels should have been organized at least some 20 years ago so that a new and updated action plan could have been formulated and applied to account for the world's changing water problems.

However, there has not been any serious discussion about organizing a second UN Water Conference over the past 45 years. This is unfortunate, since after 20 years, major UN world conferences on Population, Food, Environment, Women, and Human Settlements were organized and updated action plans formulated.

The fact there has been no follow-up to the Water Conference clearly indicates a neglect of water in the international political agenda. To some extent, this is due to the mistaken thinking by the developed countries that their water problems were solved more than half a century ago: only developing countries have water problems (Biswas & Tortajada, 2008). This mindset is changing, albeit very slowly.

Many water institutions and professionals are currently excited by the fact that the UN will be organizing a 2nd Water Conference during 22–24 March 2023, in New York. Unfortunately, unlike Mar del Plata, the conference will not assess holistically the world's current and future water problems and agree on an Action Plan to alleviate them over the next 20 years. The primary objective of this proposed meeting is much more limited to carry out a 'Midterm comprehensive review of the implementation of the International Decade for Action, "Water for Sustainable Development", 2018–2028'.

In addition, unlike other UN world conferences, it will be for only three days and not for two weeks. This means it will not have enough time to discuss current and future water-related issues. The conference does not have a special independent Assistant Secretary General to guide the process. The New York meeting is being co-hosted by Tajikistan and the Netherlands.

Many important water-related issues are unlikely to be discussed seriously. For example, in many developed countries such as Australia, Canada or the United States, there are millions of Indigenous people who still do not have access to clean water or proper sanitation. In the United States, over 2 million people do not have indoor plumbing, and the quality of water they receive leaves much to be desired. This is also the situation in major developing countries such as Brazil, India, Mexico and South Africa. However, such issues are unlikely to receive much attention in New York.

Nor is it likely that the New York meeting will focus much attention on the quality of global data on access to clean water or proper sanitation, as well as international communities' preference for amorphous, and sometimes meaningless definitions. A cynic might say it gives the institutions considerable latitude to be economical with truth. They also often change definitions (Grafton et al., 2023) which means data are not compatible.

The New York meeting is not likely to discuss other emerging issues such as a steady erosion of trust in the quality of water that is being provided by the utilities in developed countries. A steadily increasing number of people in developed countries such as Japan, the United States and several European countries are no longer drinking tap water directly because they have progressively lost trust in the quality of water they are receiving. In nearly all developing countries, households have had no confidence in the quality of water they receive, and thus they have been using point-of-use treatment facilities for drinking water. This lack of trust is now becoming an important global issue.

Another important aspect that is unlikely to receive adequate attention is how the water utilities can become carbon neutral between 2050 and 2070 in both their capital investments and operational activities. We are not aware of utilities in developing countries that are giving carbon neutrality serious attention. Even in developed countries, while some actions are being taken to make operational activities carbon neutral, it will be an extremely difficult task to make their capital expenditure activities carbon neutral until new and cost-effective technologies are developed for carbon capture, sequestration and possible use. This is unlikely to happen for at least another 10–15 years.

A major problem the water profession has been facing is that, for decades, it has been making incremental advances in water management, and this is likely to continue for another 10–20 years. Yet, water management is becoming increasingly more complex for which it is necessary to have out-of-the-box thinking and new and innovative solutions. The gulf between the solutions that are needed and what is likely to be used is increasing steadily (Figure 1). Yet, the profession still is clinging to the ideas of 70–80 years ago, such

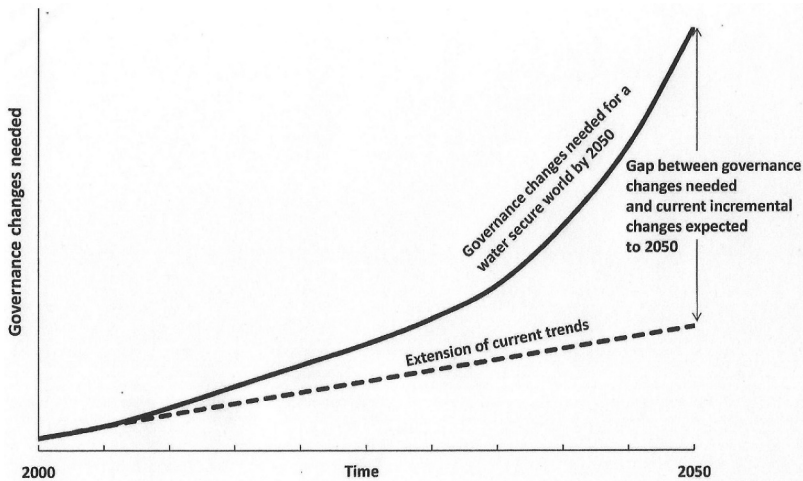


Figure 1. Increasing gap between incremental advances and changes needed to ensure water security. Source: Authors' own elaboration.

as integrated water resources management or integrated river basin management, which are not relevant anymore, especially for macro- and meso-scale projects. Sadly, it is highly likely that such obsolete concepts will receive another boost from the New York conference because of vested interests.

After the New York meeting is over, we plan to publish an objective assessment of the results, and likely future impacts of the event.

Papers in this issue

As in all our issues, there are excellent papers on several aspects of water management from different parts of the world on important and topical issues. Water safety management during COVID-19 is discussed by Bichai et al. (2022). From Africa, there are two important papers on increasing Sub-Saharan smallholders' resilience to drought (Nzeyimana et al., 2021) and willingness to pay for fluoride-free water in Tanzania (Gutierrez et al., 2021). There are three papers from Asia: water access and household insecurity in rural Nepal (Fleming-Muñoz et al., 2021), the politization of science in the Lancang–Mekong basin (Grünwald et al., 2021), and improving household water supply in Indonesia and Nepal (Setiawan et al., 2021). One paper from Australia on the roles of decision-making behaviour of irrigation water supply authorities (Meempatta et al., 2021), and another from Europe on flood-risk policies in Italy (Vitale & Meijerink, 2021) complete the issue.

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