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Editorial

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Over the last ten years *Municipal Engineer* has published three issues on international development. This is the second of two issues in 2008, demonstrating growing interest within the engineering community in this topic.

As I write this, recent events such as the widening and deepening implications of the credit crunch on both individuals and organisations, the demise of financial giants like Lehman Bros, and the fragile status of AIG, HBOS, Morgan Stanley and others has demonstrated once again that we live in a very small world and are not immune from international disaster, natural or man made.

It can be expected that globalisation will continue to be pervasive. The challenge for local municipal engineers will be to develop sustainable municipal infrastructure while becoming more globally aware professionals.

The issue of international development is likely to move from the periphery to the centre of an engineer's concern. Growth for development (and redevelopment) together with construction (and reconstruction) in an international context will remain key concerns within emerging economies and developing countries.

Most of the discussions revolve around the millennium development goals (MDGs) that I discussed in my September editorial[1] and that Paul Jowitt introduces in his briefing note in this issue.[2] While acknowledging the importance of ambitious goals, I am sceptical about an approach that makes numbers and targets the exclusive focus of international development. Examples of such target-chasing abound in the history of the water and sanitation sector.

The UN declared 1981–1990 as the international drinking water supply and sanitation decade, with the aim of providing safe drinking water and adequate sanitation systems for all people by 1991. In the 1980s, only one in five people had access to clean water.

The first water decade brought water to over 1·2 billion people and sanitation to almost 770 million. Other changes included increased

(*a*) community participation and involvement of women in water and sanitation projects
(*b*) adoption of affordable, appropriate technologies
(*c*) awareness of the importance of sanitation and hygiene education
(*d*) levels of operation and systems maintenance
(*e*) awareness of the importance of cost-recovery measures
(*f*) awareness of the importance of national annual coverage goals to facilitate annual monitoring.

Yet at the start of the 1990s there were an estimated 1·23 billion people in developing countries without access to adequate and safe water supplies, and 1·74 billion without access to basic sanitation, that is 31% without water and 43% without sanitation. However, a number of issues remained to be addressed.

(*a*) Do national governments and donors give water and sanitation high enough priority to get results?
(*b*) Are there resources available to meet the goals, for example manpower and money, to cover direct as well as transaction costs?
(*c*) How to ensure that sub-Saharan Africa in particular meets water and sanitation targets missed in the 1981–1990 international drinking water supply and sanitation decade?
(*d*) Should the focus on international goals rather than local and regional initiatives?

The launch of the second international water decade (2005–2015) was intended to sharpen focus on water-related issues and increase action to ensure the participation of women in water-related development efforts. It also recommits countries to achieving the water-related goals of the 2000 millennium declaration and the sanitation-related goals set out in the 2002 Johannesburg plan of implementation, that is to halve by 2015 the proportion of people who are unable to reach or afford safe drinking water and who do not have access to basic sanitation. In order to address the large sanitation deficit the United Nations general assembly declared 2008 as the 'international year of sanitation'.

The joint monitoring programme report reviews the current situation and assesses progress achieved in meeting the MDGs. The latest report found that in 2006 the world is on track to meet the drinking water MDG target.[3] However, there are still close to 1 billion people who do not have access to improved water sources. Improved drinking water coverage is still considerably lower in sub-Saharan Africa than in other regions, with 42% of people relying on unimproved water sources. This is the region that is also making the slowest progress.

The sanitation MDG is seriously off track. 2·5 billion people, or 38% of the world's population, do not have access to improved sanitation facilities. Almost 1·8 billion of these people are in Asia. The rate of growth is also slow in sub-Saharan Africa, where between 1990 and 2006 the percentage of people who gained access to improved sanitation facilities only increased from 26 to 31%.

The papers in this issue on international development build on those set out in the previous issues of December 2001 and September

2008. I hope that these and similar contributions can help set the post MDG agenda. In my humble opinion, we need to start thinking about post-MDG, and with bit of innovation and difference. Following is a brief introduction to the papers in the issue.

In his briefing note, Professor Jowitt puts municipal engineering in an international context. The issues of urban areas' need for infrastructure and the implications for municipal engineers are discussed. The MDG are introduced and associated challenges articulated.

Corruption—what it is, its extent, why construction is perceived to be so corruption friendly and, more importantly, what can be done about it, are the topics of Hamish Goldie-Scot's briefing. This follows the briefing from Professor Rose-Ackerman in the September issue.[4]

The paper by Chris Champion *et al*. on global issues in public works and municipal engineering provides an introduction to the work and experience of the International Federation of Municipal Engineers (IFME). The context explored in the paper is of globalisation, localisation and knowledge revolution. They argue that with the current and possible technological innovations, sharing of information and knowledge and international partnerships can hugely benefit both the profession and wider communities. The challenges of sustainable management of infrastructure, issues related to asset management and risks arising from climate change are discussed.

Julie Fisher explores the fundamental links between the third MDG ('to promote gender equality and to empower women'), the seventh ('to ensure environmental sustainability') and the tenth ('to halve the proportion of people without access to safe drinking water and sanitation by 2015'). A synthesis of evidence in the paper suggests that if women's interests relating to water and sanitation provision are at the centre of programme planning and implementation, this has a direct impact on their life experience, potential and opportunities. Examples are provided of the benefits to women when they themselves are involved in the planning, implementation and operation of water supply, sanitation and hygiene programmes. This is an important paper on how to address gender issues in the context of municipal engineering

Duncan Mara and Jeff Broome take us back to basics. Sanitation in most developing countries is unsatisfactory. Countries in general are way behind their sanitation-related MDG. Around 2·5 billion people, mostly in developing countries, currently lack adequate sanitation. Approximately half live in urban areas, where the most appropriate sanitation solution is commonly simplified sewerage. This paper presents the rigorous hydraulic design basis of simplified sewerage and compares this design approach with that used in the UK for conventional sewerage. It reviews simplified sewerage construction and how this achieves major cost savings and also avoids the problems commonly experienced with manholes. The paper is likely to feed the appetite among some professionals for numbers and equations.

Kevin Tayler argues for strategic approaches to solve the problems of water supply in India and Pakistan. Ground realities of intermittent supplies, low pressures, bad water quality and lack of proper utilities management need to be considered for the development of strategies. An attempt to apply a more strategic approach in one medium-sized town in Pakistan is described and assessed. Based on this example, the paper argues that improvements in service delivery require basic changes to the structures and systems for urban water supply provision. The paper argues for an approach to urban water supply that is rooted in a realistic assessment of the constraints and opportunities to service delivery as a more promising way forward and gives examples of such option.

Julian Jacobs and Richard Franceys draw best practices in supplying water to the poor in global public–private partnerships. In lower-income countries there has been little consideration of the successes and failures of the international private operators in serving the urban poor, a subset of the overall task in any concession contract. This paper reports on research undertaken over a number of years on the techniques and approaches used to serve slums with clean water. The authors argue that 'better practice' in PPPs should be made accessible and used by public sector operators for whom serving the poor is a key justification for their existence.

Chola Mbilima addresses the issue of water and sanitation regulation. The role of private sector participation in water and sanitation may be contentious but most sector professionals are sympathetic about the need for an appropriate regulatory regime. This paper describes an experience of Zambia, where water sector reforms have been undertaken over the past decade. The new, autonomous water supply and sanitation regulator, the national water supply and sanitation council, has tools for improving sector performance. As with any reform, citizen confidence in the new arrangements depends on their perception of sector improvements, including water quality and network expansion. This study shows that performance monitoring (and associated rewards) has begun to have a positive impact, although much remains to be done.

Afroza Ahmed and Muhammad Sohail's paper advocates taking into account children's views and perceptions about their playing spaces. The context is Dhaka, Bangladesh, but the issues is global—lack of spaces for children to play, especially poor children. The so-called 'play and recreation facilities' provided by the authority cater for only a fraction of the children in Dhaka city. Girls are almost totally excluded from using these facilities, while boys from the high-income group and children living on the streets (street children) seldom use these facilities. Lack of security, poor maintenance and inadequate play facilities and accessories are the main reasons why these facilities are inaccessible for most children in Dhaka city. It is recommended that further studies are undertaken on the existing provision of play spaces for children in order better to understand the impact of such spaces on their well being.

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