

Guest Editorial

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The Fourth World Water Forum is approaching, and while this triennial global summit never fails to generate a buzz of excitement, some key actors are starting to show signs of ‘forum fatigue’. The Forum is unique as a global stock-taking of progress made in policy and research, but to what extent does it serve as a trigger for concrete action?

Despite important international policy declarations and a whole Water Decade in the 1980s, water easily slips from the policy agenda. Therefore, in the 1990s, a number of leading authors (most famously Gleick) have attempted to wake humanity and initiate action to tackle impending water crises and wars. Others, rattled by the alarmism, have pointed out that there is no real water shortage; but that it is a matter of managing and distributing the resource better. This is a reassuring thought, but sadly, without a sense of acute crisis, the general public and politics will find many excuses not to act. In Tony Allan’s *bon mot*, the optimists are right but dangerous, the pessimists are wrong but useful, as they keep us alert.

After all, while in a physical sense fresh water is abundant, most of that water is stored in (for the time being) inaccessible ice caps, very deep aquifers, etc., while a major part of the easily accessible water is polluted and/or badly managed, resulting in food shortages, floods, disease and ecosystem degradation. Apart from these limits to the size of the ‘cake’, there are also head-spinning allocative issues—the ‘cutting of the cake’. While misallocation and mismanagement are widespread, rational allocation of water is also hampered by a bewildering variability in the ways the resource is valued. While water provides the goods and services derived from photo-assimilatory processes (food, fibre, flowers and many other products), this vital task of feeding and quenching the planet competes with other highly valued physical missions, such as hydropower production, industrial processing and household use; socio-cultural missions, such as tourism, spiritual life and aesthetic enjoyment; and sustenance of the world’s ecosystems, that will intrinsically affect the health and functioning of ecological processes and components, which, when neglected, jeopardizes the continued provision of goods and services to satisfy human needs.

The multiple values of water correspond to a complexity of uses and a diversity of users. Rationally balancing water allocation among these various functions therefore calls for the valuation of water goods and services beyond economic values, i.e. also accounting for social and environmental services and hence for the valuation of non-marketable functions and products, as these yield benefits to climate and nature and thus to society at large. The competing claims on the same resource can easily bring about intractable conflicts, the resolution of which requires an approach that collates the needs, knowledge, ideas,

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aspirations and positions of all relevant stakeholders. Novel institutional arrangements and governance structures have to be put in place to facilitate effective operation of such multi-stakeholder platforms.

More satisfactory allocation of water, which would be witnessed by a higher value of ‘integrated utility’ of all stakeholders, a characteristic that is impossible to quantify and better strategies to cope with risks are likely to more fully satisfy immediate needs and therewith alleviate social tensions, and might, to some extent, result in more efficient (although that also, in view of the multiple objectives, is impossible to quantify explicitly) use of water, which are necessary but certainly not sufficient conditions for solving all water-related problems. The growing demand for water is far too high for that and technological innovations are therefore indispensable to increase the (relative) size of the cake.

With this special issue, we want to contribute to the international debates on the looming water crisis that manifests itself in many forms, from fatal droughts to deadly floods and the possible solutions. We draw upon lessons learned from our research programme on Water for Food and Ecosystems, carried out by scientists from Wageningen University and Research centre, in cooperation with partners from many institutions in the north and south. These lessons are supported and supplemented by on-going ground-breaking fundamental work at Wageningen-UR and other institutions worldwide.

The impetus for the research programme was given immediately after the Second World Water Forum in 2000 by the Dutch Minister of Agriculture, and ties in with the Dialogue for Water, Food and Environment led by the International Water Management Institute (IWMI). The programme was made possible with the financial support from the Partners for Water Program, which combines the efforts of the Dutch Government and private sector towards worldwide sustainable, integrated water resources management. Our special thanks go to Plant Research International, which kindly took the lead on behalf of Wageningen University and Research centre, in providing material support to help realize this Special Issue.