

## **Regional Water Cooperation and Peacebuilding**

Unlike conventional concepts of peace, which are often armistice or arms control agreements, to prevent a war, the comprehensive and integrated management of water resources by countries in any region proposes a proactive process of cooperation over water, which is the most crucial element in socio-economic development for the poor. If countries in a given neighbourhood are actively engaged in cooperation for conserving fresh water and harnessing benefits from water resources, rather than merely allocating shares of water resources, they will have little or no incentive to go to war.

In some ways, the role played by coal and steel in Europe in the 1950s is somewhat comparable to the role that water and the environment will play in the 21<sup>st</sup> century in the emerging and developing economies. Coal and steel were important ingredients of the process of industrialisation, characterised by factories, machines, railways, automobiles and roads. Once France and Germany agreed to create a Coal and Steel Community, they could leave behind several centuries of hostility. Water and environment will be critical components of the new economy characterised by food products, renewable energy, nano-technology, and industries driven by research and knowledge. If countries can agree to promote their water and environment sectors together, they will have no option but to preserve their relationship because of the stakes involved.

Cooperation in fresh water goes beyond dams and canals. The marriage of water with the knowledge industry is important. Experiments being carried out in different parts of the world demonstrate that new irrigation techniques and computerised monitoring of water flow to crop plants can reduce water use by more than half of current rates. It is possible to treat wastewater using nanotechnology and to regenerate it to drinking-water standard. Changes in urban planning can also lead to the conservation of water resources. Thus, the availability of water will have more to do with nanotechnology, bio-mimicry, urban planning, efficient production of food grains and industrial materials, and less to do with the formula for determining how much water an upper riparian country should allow to flow to lower riparian countries. The countries that miss this point are the countries that are failing to see a revolution in the making. Any society which closes its eyes to a revolution taking place around it does so at high risk.

European countries have led the way in developing a regional approach for the sustainable management of water resources. The European Union has agreed on common goals and standards for the restoration and preservation of water bodies across the continent. Such a shared policy framework is not dependent on countries sharing water resources, however. There are no common water resources between Britain and Bulgaria, or between Ireland and Italy. Yet they have all agreed to the EU Water Framework Directive. In addition, there are separate agreements by riparian countries focused on specific water resources or basins.

These include the famous Danube Commission and the joint management of Lake Geneva by France and Switzerland.

The regional approach implemented in Europe can be applied in many other regions of the world. African countries have been the first to realise this. They have established the Southern African Development Community and a common water region for all member countries, even though several of them, such as Madagascar and Malawi, do not share common water resources, but find a value in sharing a common policy framework. There are separate basin-specific arrangements, either negotiated or in the process of negotiation.

The wisdom demonstrated by countries in Europe and Southern Africa can be relevant for those in the Middle East and Asia. In fact, they need it even more as they need to choose between two paths since they constitute the mega-arc of hydro-insecurity.

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