

Central Government (ministers, politicians and senior officials) and local government mayors and officials

Water makes a critical contribution to all aspects of personal welfare and economic life. However, global water resources are coming under increasing pressure from growing human demands and climate change. Protecting water resources, optimizing the use of water across personal and socio-economic activities, and ensuring an equitable distribution of benefits from water-intensive activities needs to be set at the heart of public policy and regulation. Failure to deal strategically with these issues, resulting in a fragmented approach to water management, will jeopardize the future sustainability of water resources and is likely to reduce economic and social welfare below attainable levels. Conversely, investment in water infrastructure, its governance and management, can be a driver of growth and a key to poverty reduction.

Everywhere, the demand for water is growing. Four sectors make up the bulk of water use: production of energy agriculture, industry and human consumption:

- All sources of energy and electricity require water as part of the process of production. Energy is itself a component part of making water available to human and economic uses, whether through pumping, transportation, treatment, desalination and irrigation. Population growth and increasing economic activity are expected to cause a surge of energy consumption, particularly in non-OECD countries.
- Production of crops and livestock is water-intensive: agriculture accounts for 70 percent of all water withdrawn. Best estimates of future global agricultural water consumption is that this will increase by about one fifth by 2050.
- Water is an integral part of many industrial processes and demand will increase in line with increasing economic activity.
- As regards human consumption, the main source of demand is urban communities for drinking water, sanitation and drainage. The urban population of the world is forecast to practically double over the first half of the current century.

Water is also required for the natural environment (in wetlands, minimum river flows for ecosystems, aquifers, estuaries, etc.). If this is not satisfied, it will very soon affect the quantity and quality of water available for human and productive use.

Climate change is expected to have a major impact on the availability of water. The main effects will be felt through an increasing variability of water supplies and growing extremes of climate. The frequency and impact of water-related disasters is likely to increase, including a greater incidence of floods and droughts.

Dealing with these growing pressures is complicated by the fact that water cuts across all social, economic and environmental activities. Its proper management and governance requires cooperation and coordination across diverse stakeholders and sectoral 'jurisdictions'. Only governments can do this, and the task is urgent.

At present, in most countries, competing demands for water are dealt with in isolation from each other, rather than as part of an overarching strategy to make the best use of water throughout society and the economy. Typically many water-using sectors of the economy have no direct involvement with water authorities or water policy making. National and local governments, working with water authorities and regulators, need to provide strategic guidance over the management of water, and coordinate the actions of the separate stakeholders.



Integrated Water Resources Management is a tool which can help to align water management issues across all relevant sectors, policies and institutions. It enables different uses of water to be considered alongside each others, and provides a structure within which competing interest groups can agree coherent strategies for managing water resources.

Through education, advocacy and policy instruments, national and local governments can promote an appreciation of the social and economic value of water, and reverse the low priority which water typically has in public debate. Water tends to lack effective governance in areas such as regulation, tariff setting, environmental controls, groundwater monitoring and abstraction licensing, and monitoring and policing of pollution. Some of these government functions can be self-financing, for example through abstraction and pollution charges.

In many countries, responsibility for water matters is delegated to state or municipal levels of administration. Where this is the case, central governments should ensure that the responsible agencies have the necessary human and financial resources to carry out their statutory duties, otherwise delegation will not succeed. Local water providers should be encouraged to pursue sustainable cost recovery through tariff revenues, budgetary allocations, and external donor grants, where these are available.