

## Deficient developmental planning leading to water conflicts across political borders



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 $August,\,2_{nd}\ \ 2020,\, The\ Middle\ East\ Water\ Publications$ 

Deficient development planning of water resources in river upstream areas and its implications to conflicts with downstream countries

In general, upstream countries of river basins develop much of the basin's water resources for agricultural uses, which mostly suffer of leaky water conveyance systems and outdated irrigation practices. Herewith they create cheap job opportunities in agriculture, alleviate poverty and produce food which lessens hunger. That is then reflected in social and economic comfort and hence political stability. Creating job opportunities in the agricultural sector to alleviate poverty and to produce food is of low capital cost, compared to job opportunities in other sectors such as industry. Hence, upstream countries resort to developing agricultural projects depending on the available water resources in the upstream area of river basin using old and, in certain circumstances, outdated methods, even if the extracted water is a rightful share of a downstream country. They develop the water resources jeopardizing herewith others' rights in these waters and that is instead of using advanced technologies which save much water.

Technological advancement in the water sector is positively changing the lifestyles of people and societies and the socio-economics and political comfort of countries, especially those countries of the dry climatic zones of the Globe.

More water in such countries means more human comfort and increasing agriculture and industrial production which result in increasing employment and decreasing poverty. These are socioeconomic factors which enhancement is badly needed in many developing countries of the world.

Application of technological advancements, especially in what concerns agricultural water use can make the agricultural sector more robust and resilient and can save much water by increasing water productivity.

Smooth metering, control systems, soil moisture devices, cameras, tele-measurements, leakage detection and monitoring and drip and other more efficient irrigation systems and agricultural practices, such as mulch and greenhouses result in more efficient water use, saving water, higher agricultural productivity of a water unit, improved product quality, higher returns to farmers and improving export potentials, improved food security, more secure jobs, and higher personal qualifications' requirements to operate such systems. The questions arising here are: Can the application of advanced water and agricultural technologies in the upstream areas of river basins save water so that downstream areas



receive their fair shares of that water? What trade-offs among basin riparian countries can be worked out to achieve fair sharing of water resources? Can such trade-offs lead to fair use of water and win-win situations in a basin? What can donor agencies do? In my opinion, the only way out of the transboundary water dilemma of many regions in the world is seen in applying advanced water technologies to save water (generate additional water) by using water more efficiently. That is in addition to applying "Integrated water resources management" on a river basin wide scale using recent advancements in water technology which are very promising and can be technically, economically and socially afforded by the different societies. Timely application of such technologies is expected to foster social and economic stability in a country and to achieve political comfort and cooperation between countries of a river basin.

In my opinion also, most conflicts among river basin countries are the result of, generally, failing of upstream countries to introduce technologies in water conveyance systems and in the efficient application of water in the agricultural sector leading them to deprive downstream countries of their fair share in the basins water. What such upstream countries are doing can be best described by "Deficient planning and development". Solutions to transboundary water conflicts cannot be easily achieved by "business as usual". New thinking must be there. Integrated river basin wide management, considering all social, economic and introduction of technological advancement with trade-offs can be the only basis to build on to achieve fair sharing of basin's water resources and cooperation to wards win-win situations.