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BRINGING THE SCIENCE BACK INTO WATER – A NEW PARADIGM FOR 21ST CENTURY INDIA

India faces a major crisis of water as we move into the 21st century. This crisis threatens the basic right to drinking water of our citizens; it also puts the livelihoods of millions at risk.

Why have we reached this point? I suggest that it is our approach to water, which has lost its necessary anchoring in the best science, that is mainly responsible for what is palpably a man-made crisis of water. 21st century India calls for a new paradigm of water management based on the principles of multi-disciplinarity and balance.

I argue the following propositions and based on this understanding, propose the kinds of institutional and policy reforms urgently required to be undertaken in India today:

- a) We cannot continue to try to control and manipulate rivers without understanding the science of river systems, as also the monsoon cycle;
- b) We cannot continue to extract groundwater without understanding the science of hydrogeology;
- c) We cannot continue with hydro-schizophrenia, divorcing groundwater from surface water and drinking water from irrigation;
- d) We cannot afford to continue to destroy river catchments ignoring the relationship between health of watersheds and river flows.

MIHIR SHAH

From 2009 to 2014, Dr. Mihir Shah was Member, Planning Commission, Govt. of India, when he was chiefly responsible for drafting the paradigm shift in the management of water resources enunciated in the 12th Five Year Plan. In 2015, the Govt. of India invited him to chair a Committee on Restructuring the Central Water Commission and Central Ground Water Board and also to chair a Committee to draft the National Water Framework Law and the Model Groundwater (Sustainable Management) Bill. These are currently under the active consideration of the Government of India.

Shah completed his Ph.D. in Economics at the Centre for Development Studies, Thiruvananthapuram, and in 1990, formed Samaj Pragati Sahayog (SPS). Inspired by the life and work of Baba Amte, SPS is today one of the largest grass-roots initiatives for water and livelihood security, working with its partners on a million acres of land across 72 of India's most backward districts. Dr. Shah has spent three decades living and working in central tribal India, forging a new paradigm of inclusive and sustainable development.

Dr. Shah is a Founding Signatory of the Geneva Actions on Human Water Security, 2017. He is Distinguished Visiting Professor, Shiv Nadar University, where he has designed a globally first-of-its-kind Masters Program on Water Science and Policy.



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