

# Water and Sanitation - A Basic Human Right

Dr. V. Kurian Baby, an officer of IAS cadre, is the India Country Director & Senior Programme Officer, South Asia, IRC International Water and Sanitation Centre. Having significant WASH (Water, Sanitation and Hygiene) sector experience, both at Policy and programme levels in India and abroad, he has worked for national/sub-national governments, NGOs, public, corporate and donors (UNDP, World Bank, EU and JICA). Prior to his IRC assignment, he was Managing Director at the Kerala Water Board and Executive Director of the Kerala Rural Water Supply & Sanitation Agency (World Bank). He is Masters in Economics, a Ph.D in Regulatory Economics and specialisation in project management (IIM-A), Environmental Economics & Development Policy (WBI-USA). A reviewer for international journals, he has a number of publications to his credit. In an Interview to Sreeni K.R, Agriculture Today, Dr. V. Kurian Baby talks about the role of IRC in the Water and Sanitation Sector, India and how climate change will have a significant impact on agriculture development .

**IRC also address strategic cross cutting issues in the water supply and sanitation sector with professional approaches and responsibilities in India. Can you enumerate?**

Water is a highly complex subject and our approach is always holistic and cross cutting. Unfortunately, the sector is highly fragmented and institutional actors focus on isolated interventions. Fixing things at one point of the WASH continuum such as investing in hardware will not necessarily yield sustainable outcomes unless the entire water and sanitation security chain is improved. This entails cross-cutting concerted action on agreed common goals, approaches and measurements for collective impact. IRC with its highly professional and inter-disciplinary staff are working on improving processes and outcomes for sustainable services at scale. Making sure that services are scaled up and are sustainable is the central theme of IRC's work in India. Our vision is that every Indian enjoys access to safe, adequate and improved water, sanitation and hygiene services now and forever.

**In which way does IRC meet the challenges of rural development in a rapidly changing world?**



Innovation is deeply embedded in our DNA. Central challenge in rural development across the world is the unsustainability of investments and slippages in drinking water and sanitation service delivery. To ensure that every rural person has enough safe water for drinking, cooking and other domestic needs as well as livestock throughout the year, working with governments, civil society, communities and stakeholders by meeting the challenge is the way we think and work. We believe that water and sanitation is a basic human right and we work among the poorest communities in Asia, Africa and Latin America. I would like to mention that, in 2011, IRC ranked fourth

in Philantropedia's list of highly effective international NGOs in the water and sanitation sector.

**The challenge for global agriculture is to grow more food from lesser land, using less water. What is the scientific solution to address the problem?**

The key is technological advancement, especially in the areas of water use management and crop production. I believe that there could be a revolution in the use of saline water (bio-salinity) in irrigating agricultural crops and so also in genetic engineering in developing new variety of "climate smart" crops in the context of water stress. Water scarcity affects about 40 percent of the planet. By 2025, 1.8 billion people will live in regions with absolute water scarcity, and two-thirds under water stressed conditions. India has 16 per cent of the world population as compared to only 4 per cent of water resources. Various studies (Narasimham 2008) have shown that utilizable water 654 BCM is close to the usage of 634 BCM, which is alarming. Climate change and pollution will worsen the scenario. Agriculture accounts for 70 percent of the water use with average 3 000 liters required to produce food for one person per day.

Food security and water security are interlinked. The key is to produce more by less water, minimize water foot print by efficient and diversified management, agricultural practices, water conservation and control population growth. Multi Use Services (MUS), like traditional harvesting systems and open dug wells can also go a long way in supporting livelihood and to produce food at home.

### What are the methods used to transfer knowledge to local self-government on water reuse or water scarcity?

Our focus is always on decentralised governance. We strongly believe in the principle of subsidiarity - water could be managed best at the appropriate local level. We follow a two pronged approach of institutional integration with local governments and the grassroots level participatory water resource management for sustainability. Local government centric-community based water regulation and programme convergence achieved at local level are critical. As the decentralization process in India is in different degrees across States, we may have to adopt different approaches to Panchayati Raj Institution (PRI) centric convergence. Interdepartmental alignment can be effectively facilitated by grassroots level participatory process. Training and capacity building, networking and knowledge management are also effective means. However, one must be cautious that, in rapidly transforming socio-economic setting, conventional ideas of voluntarism and participation may not work. We need professionalism.

### Agriculture is extremely vulnerable to water use. How you interrelate both?

The interplay of water and food security is very strong; one cannot be separated from another. Water is an essential production factor in agriculture and for livestock. Climate change will have a significant impact on ag-



riculture in terms of water quantity and quality, exacerbated by the increasing demand for food as population and real incomes increase. For centuries, farmers have controlled the water cycle locally, either through irrigation or drainage. As an integral part of the climate system, the hydrological cycle can be positively influenced by using adapted agricultural practices. Solutions allowing greater production using less water are a critical future priority. In India, evidences show that, ground water exploitation has reached a level of unsustainability. Competing extraction by around 30 million structures have been depleting ground water by 3-5 cm per annum in recent years. We have to also understand closely, the energy water nexus. In a regime of agricultural power subsidy and weak regulation, farmers have no incentive to economise energy use on the one hand, and incentivise over-extraction of ground water on the other. Corroborative and scientific evidences are rare to establish significant positive correlation between localised water saving practices the overall water balance, which means we need deeper insight into the environmental flow and to work at large scale, possibly at basin level.

### In India what are the major projects that you are associated with?

IRC is not a funding agency. We catalyse change through innovation and software support. IRC has been active in India for more than four decades in the form of support for projects managed from IRC headquarters in the Netherlands. On account of a growing portfolio of activities in India and also due to strategic opportunity to work at scale for large impact, we are planning to set up an office in India. Recently, in India, we have been involved in Bill and Melinda Gates' Foundation-funded large impact multi-country action research in Life-Cycle Cost Analysis (LCCA); a high level international training programme for Water and sanitation professionals in three batches in the Netherlands on sustainable services at scale funded by Government of India and UNICEF; designing the sanitation component of the upcoming World Bank funded Rural Water Supply and Sanitation Programme for Low Income States and the "Community plus" project funded by Australian Aid to investigate successful, community-managed rural water supply programmes and approaches across India. IRC has signed an MoU with National Institute of Administrative Research - Lal Bahadur Shastri National Academy of Administration (NIAR - LBSNA) - for developing specialised WASH curriculum for various phases of IAS training programmes,



and actively pursuing knowledge management and capacity building in Water resource management in India with the National Water Mission. In order to have collective impact, we have recently organized a successful round table on sustainable services at scale in India involving policy makers and key stakeholders. With good policies, large impact programmes and huge investments, we believe that India can achieve a level of services at par with developed countries.

**Climate Change is distressing. Do you think India needs a water protection Bill as similar to food security bill to protect safe drinking water for future?**

As you know, India has sound policies, what is required is operationalization and enforcement, both are governance issues. Of course, we require a fresh look into the inventory of policies and legislation in a climate vulnerable - changing world to identify policy gaps and develop a living- dynamic legal framework. Archaic laws are to be revamped; delink water rights from land rights and establish a mechanism for continuous policy vetting for harmonisation making water as central theme. Water governance in India is "purposive designed chaos" perpetrated by an intricate play of perverse incentives,

bounty hunting and short run rationality. Indian water sector is characterised by millions of informal atomistic operators. Agricultural practices are set by choices of millions of farmers, guided by regressive and distortive subsidies. We need adaptive legislations recognising the dominant role of political economy.

**Sustainable development is both a global and local challenge. Indian government has started many projects such as IWMP, Western Ghat to preserve and prevent water for future use. How do you see this initiative?**

I believe that environment and development are complementary, as evidenced by many positive commitments in environmental conservation and improved management. Development, if positive can bring in new technologies that are environment friendly and leverage financial resources for investments in environment. The above initiatives are certainly positive building blocks towards sustainable development. However, we need further progress in issues of convergence, transparency, inter-generational equity and create demystified scientific awareness. On a macro perspective, "we have enough in this world to meet our need but we don't have enough to meet our

greed". In watershed management, there are limited opportunities for cross learning and the achievements are isolated and leadership driven. We need to work at scale, for which rapid institutional change management is a pre-requisite and to re-define development, making equity and sustainability its central themes.

**In which way IRC helps members to propose and tackle problems in sanitation, human rights, the environment, social development and the economy?**

As stated, we approach water and sanitation as basic human rights and key drivers of sustainable economic growth. This can be achieved only through informed choices and empowered communities. We empower the poorest, the vulnerable and the excluded across the world to demand WASH services as basic right and support Governments and agencies to deliver commitments of sustainable quality services at scale.

**Forecast of IRC for water security by 2022?**

IRC has not made a separate water resource atlas or forecast. Our focus is primarily on drinking water and sanitation with its cross cutting interplays. In drinking water and sanitation, the picture globally is positive. The numbers of rural people being served are growing and India has achieved the Millennium Development Goal (MDG) in water ahead of schedule. The task in sanitation is of course daunting for many countries including India; however the trends are also positive. Global rural population will peak at around 2020/2030 (UNDP) and that if the functionality rates of drinking water and sanitation systems can be maintained at high levels, full coverage can be reached within a generation. Coverage alone is not sufficient; IRC is now involved in supporting the design of Post MDG indicators to measure service quality and sustained benefit.