Water mismanagement leads to water insecurity in our country

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Ms. Malvya Chintakindi from Sehgal Foundation visited Dr. Deshpande at the ISEC Campus in Bangalore and had an in-depth discussion on his views on agriculture and water management in rain-fed arid areas of South India, specifically the water-stressed districts of Kolar (Karnataka) and Anantapur (Andhra Pradesh). Below are the excerpts from the conversation.

How would you trace the history of water sources in the region?

Kolar is certainly one of the critical groundwater stressed regions due to ill-conceived policies. Beginning in the early eighties, the water table receded to deeper levels every year. We used to have a *pilbhavi*, which literally translates to "a well inside a well." This allowed people to draw water from lower depths. Pilbhavis were quite popular in the region.

Ever since the technology to dig and operate borewells came into being, borewells took over during eighties with great speed and were encouraged and supported by the National Bank for Agriculture and Rural Development. One after the other, farmers dug borewells, learning from their counterparts. Just as Kannada poet, Nissar Ahmed, says, *"Kurigalu sir kurigalu, nau yellaru kurigalu"* (humans are like goats and follow each other irrationally). Commercial borewell digger companies also set up units in the area.

A borewell was considered an efficient solution for areas dependant on rain-fed agriculture. Karnataka minister, Abdul Nasser, spearheaded this view. However, Anantapur and Kolar now face extreme deterioration of groundwater since recharge zones have shrunk considerably. Water bodies that were once densely located in these two regions have disappeared. As an immediate action, Kolar should not continue growing crops that are water intensive. Focus should be shifted toward those crops that don't consume water.

How would you describe water rejuvenation efforts by the government and other agencies?

Once upon a time, each village had three to four open tanks to collect and rejuvenate groundwater. This rainwater through tanks percolated into the ground and enriched groundwater levels. In Kolar, these tank-beds have become agricultural fields or transitioned into residential colonies. The number of tanks has come down significantly. World Bank funded projects in '80s, '90s, and again in 2006, were adopted to rejuvenate the traditional tanks. However, these initiatives brought little success, and the water level did not recoup. I would say that money went into the tanks but not water. Farmers concentrate on drafting groundwater, but they never bother about recharge, and why would they? Policymakers should concentrate on recharge. The draft recharge ratio is an important determinant that dictates water availability in a well. The ratio is derived by dividing draft with recharge. The

remainder should be ideally between one and zero, which indicates healthy or manageable exploitation. Monitoring should be done to see that each recharge zone has such a manageable limit.

It appears that not enough government action has been taken with regard to securing rainwater. What policy options exist to manage water resources more diligently in this water-scarce area?

I would classify policy options into three types. First, look at the symptoms of the problem and try to offer a solution; irrespective of the intensity or quality of the problem. Addressing the symptom is exactly the sort of approach that Planning Commission's programs and schemes have followed.

One such example of symptomatic intervention is providing rain-fed regions with water. But farmers do not need water, per se. They need income sources to improve their livelihood options. It is our interpretation of the problem that it can be solved through providing sources of water. This will further support livelihood. The farmer may or may not think their major problem is water. So we should not assume.

By providing farmers with money or direct monetary allowances, they become dependent on the State. This feature is referred to as "governmentality" in Kalyan Sanyal's book, *Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post-Colonial Capitalism*. French philosopher, Michael Foucault, believes that governmentality is a technique and strategy by which a society is governable and thereby gets into every aspect of people's welfare.

I do not think government should be obliged to run the households of people, because that would lead to intervening in the household economy, which is not sustainable. This is how the entire drought policy went wrong.

Another approach to policymaking that I call "systemic change" understands the system of degeneration, decline, or growth in development and provides policy corrections for a systemic impact.

Offering micro solutions through micromanagement is yet another approach to policymaking that looks and addresses problems at one place and at one point in time.

National Rainfed Area Authority of India (NRAA) has been set up to provide policies for rain-fed areas in the country. This powerful department is placed under the Ministry of Agriculture. I have written extensively on the futility of such a department as it only hops from policy to policy and, for the issue of addressing drought in the region, people have to depend on State support every time. I argue that we need a sustained or continued policy that follows a systemic approach.

I do not think India is water insecure; water scarcity in India is in fact a myth. The mismanagement of water is the exact problem. The crux of the story is that India has sufficient rainwater. For example, Kolar receives sufficient rainfall to grow crops, even with scattered intervals. Recently, the new CM of Karnataka proudly announced that Karnataka would follow Israel's model of water management. The average rainfall of Israel is not similar to that of Kolar. The highest rainfall in Israel is the average rainfall in Kolar, so we are far better off than Israel in natural water availability. If Israel can conserve water, so can we. India's annual rainfall is at least 1,100 mm. If we can conserve 75 percent of that water, we

wouldn't need water for the next five years. However, we predict water wars. We are very good doomsday tellers.

What specific policy recommendations would you like to see in action?

I vehemently advocate for micro-policy initiatives. Swaminathan Commission was appointed to suggest long-term agriculture policies of the country (by the Union Government). The architects of the constitution have significantly debated that agriculture should be a state subject and not a concurrent subject. It should not be on the central list, and central government should not have any say in agriculture matters of a state. The central government does not and cannot understand contextual differences in agriculture practice and development. Agriculture was listed purposefully under the state subject. Agriculture is a "culture." The "training school" is on the farm. Learning takes place by understanding through observation. The State department must understand that it is a State's prerogative to put policies in place. The central government should not try to superimpose an alien culture on everyone. I have time and again advocated against Swaminathan Commission not to impose such a blanket policy to agriculture development in Karnataka.

During 1985–86, agro-climatic regional planning for fifteen regions across the country was initiated through a collaborative effort by the government, universities, and NGOs. Sub-regions were made, and contextual policies were made. Each subzone had its own strategy, development initiatives, and institutionalization. Many other countrywide efforts were made where plans were prepared for each district, but none of them have seen the light of the day. India is too good at planning, too bad at implementation. Where we fail is in framing, implementation, and appropriateness of the agriculture policies.

(Interview by Malvya Chintakindi, research associate, and Saurabh Sood, social scientist, Development Research and Policy Initiatives, S M Sehgal Foundation, Gurugram)