

LET'S DRAW LINES IN WATER

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Spiritual teachers tell us that if we stay calm in the face of a crisis, our response is more likely to be meaningful, effective and sustainable. Like good scientists, they also advise us to maintain a clear and steady view of the facts of the situation, and then act accordingly. Those trying to solve India's water crisis would do well to keep these pieces of wisdom in mind.

That will help avoid resorting to gigantic Stalinist projects like the interlinking of rivers or needlessly expensive options like desalination. For there is no future in desperately and endlessly trying to increase the supply of water. Luckily, there are simple solutions on the demand side, which have not even been looked at. The formation of the Jal Shakti ministry is, indeed, a promising step in the right direction. Hopefully, the prime minister will provide greater substance to this initiative in his Independence Day speech.

The single largest fact about India's water is that 90 per cent of it is consumed in farming. And that 80 per cent of this irrigation is for water-guzzling crops — rice, wheat and sugarcane. Reducing this number is the most effective way of solving India's water problem. But can we do this without hurting our farmers, who are already in so much distress? Yes, we can. Indeed, it turns out that the solutions to India's water crisis and that of the farmers, lie in the very same direction.

India's farmers, even in drought-prone areas, grow these water-intensive crops because these are the crops that have a steady demand. Governments, over the past 50 years, have primarily procured wheat and rice. And, sugarcane is bought by sugar factories. If we diversify our procurement operations, to include less water-intensive crops, like millets, pulses and oilseeds, especially in India's drylands, farmers would have the incentive to grow them. But what will we do with these crops after procurement? Again, there is a simple answer: Introduce them in the mid-day meal scheme and the integrated child development services, which are the largest child nutrition programmes in human history. This would create an enormous and steady demand for these crops and farmers in the regions where it is ecologically appropriate to grow them would be incentivised to shift away from water-intensive crops.

Official estimates indicate that around 3,00,000 farmers have committed suicide over the past 30 years. Although there is no doubt that the Green Revolution played a key role in India's food security in the 1970s and 1980s, in the 21st century, the returns from chemical fertilisers and pesticides have steadily fallen. Meanwhile, the costs of cultivation have risen steeply. This has sometimes resulted in even negative net incomes.

Responding to this situation by raising minimum support prices for these very same crops or through loan waivers or cash transfers completely sidesteps the deeper crisis of farming in India. It was heartening to see the finance minister, in her maiden budget speech, showing the courage to at least speak of the need to move towards nature-based farming, even though this was not backed up by any change in the budgetary allocations, which continue to flow in support of chemical agriculture with a whopping Rs 80,000 crore fertiliser subsidy.

The paradigm shift I am proposing would help secure multiple win-wins: Improvement in soil and water quality, higher and more stable net incomes for farmers, reduced malnutrition and obesity, and a simple solution to India's water problem through a huge reduction in the use of water in agriculture. As we diversify the cropping pattern, aligning it more closely with India's agro-bio-geo-ecological diversity, voluminous quantities of water would be released for meeting the drinking water needs in both rural and urban areas, and the demands of industry.

As we move towards non-chemical agriculture, the dependence of farmers on high cost external inputs will decline and even if there is a slight drop in productivity in the transition phase, this would be more than made up by the reduced cost of cultivation and the steady demand for these crops through government procurement operations.

What is more, if our children were to eat these "nutri-cereals" with much higher protein, iron and fibre, with a significantly lower glycemic index, we would be better placed to solve our twin problems of malnutrition and obesity. Diabetes has increased in every Indian state between 1990 and 2016, even among the poor, rising from 26 million in 1990 to 65 million in 2016. This number is projected to double by 2030. A major contributor to this epidemic is the displacement of whole foods in our diets by energy dense and nutrient-poor, ultra-processed food products. This has a clear relationship with the monoculture we adopted after the Green Revolution where farmers mainly grew wheat and rice.

In an intensely risky enterprise such as farming, it makes no sense whatsoever to adopt monoculture. With high weather and market risks, resilience (as in the stock market) demands crop (portfolio) diversification. But we have subjected our farmers to exactly the opposite by creating incentives against diversification. This has broken the back of Indian farming, even as it has engineered an artificial water crisis in a land where water is aplenty, if only we were to use it judiciously.

Allied to this paradigm shift in farming, we need to democratise water. Water, by its very nature, is a shared resource, which can only be nourished through participatory governance. Whether it is our rivers or India's most important resource — groundwater — we can protect them only if we recognise the integral inter-connectedness of catchment areas, rivers and rural and urban aquifers. Here again, there are countless examples all over India where stakeholders have come together to form democratic associations to manage their shared resource collectively, equitably and sustainably.

It is now for the government to take the necessary steps to learn from these pioneers and upscale their efforts through a respectful partnership with the primary custodians. This might be the hard part as governments tend not to find it easy to either respect, listen to or learn from practitioners on the ground. But, as a people, we have no choice left in the matter. Only a jan andolan on water can save us now.

(The writer is former member, Planning Commission. He has worked on water and livelihood issues for three decades)

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