Grassroots innovations need to be brought into the limelight

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Sarcity of resources often makes people despondent. People learn to adjust, adapt or just succumb. But, sometimes they transcend the adversity through a creative innovation. Let me share one story in which the scarcity of water triggered a very interesting innovation in cotton.

Vikas Shinde and his wife Pramila own nearly half a hectare of land in a village named Pingalwada in dry part of Jalgaon, Maharashtra. The water table is low and they cannot afford a submersible pump. Vikas has many innovations. To his credit, one of which was a very interesting way of extracting groundwater from a bore of eight inches. He made a stand, attached a pulley and developed a contraption using a motor cycle. A pipe of 6 inches diameter will descend in the bore and with the help of motorcycle based pulley system it will be lifted up containing 15 litres of water. The pipe had a one-way valve such that when it was lifted the water will not drain out.

He designed an arrangement having a hook on which a pipe will rest, the valve will open and water will drain into the irrigation channel for irrigating cotton crop. There was one problem which this method did not address. In the month of May, when water is very scarce, Pramila got an idea. She took nursery bags and grew cotton seedlings in those bags. These cotton seedlings were irrigated with limited water. When the rains came in June, every farmer will sow the crop at that time, but in Pramila and Vikas’s field cotton seedlings will be transplanted. Not only water requirement went down, but the productivity of the crop increased. Complementary innovations by husband and wife generated a new hope for overcoming uncertainty of rains, shortage of water and increasing production.

In the wake of climate change uncertainties are going to increase. One would need many more innovations of this kind, all over the country, to widen the choices despite limited resources. Innovations borne out of constrained environments are not only frugal, affordable but also sustainable. But, neither this Copenhagen summit took note of grassroot innovations, nor the Indian government’s climate study team thinks of learning from such creative people and communities. While governments can remain indifferent, local communities will develop their own ways of dealing with climate complexities and uncertainties. Honey Bee database has a huge reservoir of such coping strategies waiting to be tapped.