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Let's Boogie

Side-stepping differences, the world's two largest democracies are warming up at the promise of a mutually beneficial economic partnership



Growing green with pride

Innovative farming transforms an arid region in Maharashtra

How can someone grow mangoes and coconuts in an arid region, 76-year-old Hilal Makha Patil wondered even as he made the trip from Sakri in Maharashtra's Dhulia district to the Jain Hills in neighbouring Jalgaon. But nothing that he had heard prepared him for what he saw: 1.5 lakh trees on 500 acres, including 55,679 mango trees, 13,000 teak, 2,000 guava and 450 coconut trees. The next thing he did was meet Bhau or Bhanvarlal Jain, the chairman of the Jain group, and invite him to his village in Sakri in the hope that Bhau would hear the 'whispers of the Mother Earth' as he did in Jalgaon years ago.

'We were the first to hear the whispers of the Mother Earth,' proclaims a board at the entrance to the hills that was devoid of even grass about 15 years

ago. Today it boasts a Research and Development Demonstration Farm and a unique gurukul for farmers.

"I first purchased seven acres, at the bottom of the hill. When I told people about my plans, they mocked the idea as not a drop of water was available," Bhau told *The Week*.

But the idea had taken shape in his mind one evening in 1962 when Jain was busy in his petrol pump. A message written on the vehicle of the Scottish mission caught his eye even as it was leaving after a refill. "Agriculture: Profession of the future", it said, recalls Bhau. That was it, Bhau had found his calling.

"When in 1987 we were worth more than a hundred crores, I decided that the time was now to transform that line into reality," he says. He bought another 55 acres and eventually the entire hilly terrain.

But despite contour bunding, terracing, soil treatment and selection of appropriate plants and crops the cost-benefit ratio was not working out. Water conservation was proving to be a major problem. "We began harvesting rain water and built a percolation

Learning from Israel

Baskets of mangoes and guavas from a once arid land may seem like a miracle. But for the Israelis, experts in making the desert bloom, it is the result of a blend of technology and human skills. The formula has worked wonders not just in Jalgaon but in states like Punjab and Haryana as well. Now Israel's



Drip, drip, drip: An aerial view of the drip-irrigated Jain Hills and R&D farm (left); Bhanvarlal Jain, head of the Jain group, at the barren Jain Hills

tank," says Bhau. It helped recharge the groundwater and water also seeped into a nearby well.

With enough water available, the next step was to green the terraced hills. Initially mango and onion were inter-cropped. Soon the hills were filled with grape, guava, custard apple, sweet lime, lemon, orange, amla, fig, pomegranate, papaya and banana, with drip irrigation taking care of their water needs. Cash crops like cotton and sugarcane, too, found a place on the hills.

Then came the two green houses, four small polyhouses and five tunnels. At present they are being used for tissue-cultured banana, hybrid to-

matoes, capsicum and strawberries.

Like Hilal Makha Patil, farmers come to the farm from all over India and every visit is an education for them. "Daily there is one bus service taking farmers to and from Jain Hills," says Bhau. What they are seeing is essentially the Israeli farming techniques adapted to Indian conditions.

"Drip and sprinkler irrigation not only save a lot of water but also increase productivity," points out Sudhir Bhongle, a researcher in irrigation and agriculture, who has popularised Israeli farming methods in Maharashtra. "It is a giant effort of revolutionising farming activity."

ambassador in India, Dr Yehoyada Haim, is offering to work such wonders in others states.

One of the states hoping to make use of Israeli farming techniques is Kerala. An Israeli farming expert was recently in the state to initiate a survey and held discussions with local experts and Chief Minister E.K. Nayanar. The survey, says Haim, will take all aspects of agriculture into account, including water management. Nayanar will soon be leading a delegation to Israel for a follow-up.

Of the 150 joint ventures that Israeli companies have in this country, a third are in the agriculture sector. "All the joint ventures in farming are for export—tomatoes, strawberries, flowers, mushrooms, etc. These companies are exporting their produce to Israel and are doing very well," says Haim.

He is confident that such success stories can be repeated in Kerala. "Joint ventures in Kerala will be much more successful because people in the state are educated and so it will be

Eminent Marathi poet and agriculturist N.D. Mahanor concurred with this view. "Once upon a time we could only find rocks and scorpions on this hill. Its transformation into an R&D farm and the cultivation of mango and coconut have successfully proved certain notions to be false," says Mahanor who has been farming on similar lines in his village, Palaskhed, in Aurangabad district.

What sets apart the Jain Hills from other similar ventures is the Jain Gurukul, a residential training school for farmers and agriculture officers of government and non-government institutions. It conducts training programmes in collaboration with CINADCO (Centre for International Agriculture Development) of the Israeli government. Nearly 2,500 farmers from Gujarat, Karnataka, Andhra Pradesh and Maharashtra have been trained at the gurukul since it came into being in 1994.

A typical three-day training session involves field visits to the farms of progressive farmers near by, to the vegetable farms in Nasik district and the Jain R&D farm for horticulture. There are also classroom sessions on developments in farming technology and irrigation systems, besides interactive sessions on solving problems.

One of the successes of the gurukul has been in giving farmers of the area high-yielding varieties of onion. "We developed several varieties and after tests in our lab selected six best suited for Indian conditions," says R.G. Patil, a member of the faculty at the gurukul. Tears of joy is what the farmers experience in the hills of Jalgaon.

Dnyanesh Jathar/Jalgaon

much easier to explain new technology to them," he says.

He is willing to be the bridge between the Israeli companies and Indian entrepreneurs. "Companies and farmers who want joint ventures with Israel should write to me or to the consulate in Mumbai," Haim says. "I promise them that if they tell us what they want we will put them on to companies that deal with similar products." That will be a good beginning, at least.

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