

A photograph of a man, likely a tomato farmer, standing in a field. He is wearing a red long-sleeved shirt and a green and white plaid shawl draped over his left shoulder. He is holding two handfuls of ripe, red and yellow tomatoes. The background is a dense field of green tomato plants.

Bounty A tomato farmer in Punjab

BUSINESS INDIA

A New Crop Of Consumers

To keep its economy booming, India must enrich its farmers. Businesses eager to sell in rural areas are helping do just that

BY JYOTI THOTTAM/MUZAFFARPUR

Photographs by Olivia Arthur for TIME

IT'S MID-MARCH IN MUZAFFARPUR, and the lychee trees are almost in bloom in this remote corner of northern India. When the flowering begins, beekeepers like Manoj Kumar Singh will take their hive boxes to the edges of the nearby orchards, leaving their bees to produce the region's renowned lychee honey. Beekeeping is a tradition in Muzaffarpur, and for decades, so was poverty. "If you had guests, you'd wonder, How are we even going to offer them a cup of tea?" he says. But honey prices have tripled in the past few years, and that's afforded Singh, 33, enough income to hire a full-time employee, purchase new plots of land, build an addition to his brick house and buy a new motorbike to ride around his village.

Singh's reversal-of-fortune story is all the more remarkable because it is set in a village, not in one of India's urban centers like Bangalore, Mumbai or Delhi. It's a sign of change as the nation's development experts and multinationals turn their attention to rural India. It's there that the income gap between Rising India and the Other India is most pronounced. From 2005 to 2010, India's consuming class grew even faster than expected, to more than 216 million people. But so did the ranks of the desperately poor—a population more than twice that size, most of it in rural India—whose incomes aren't enough to buy much of anything.

This gap became plain during a surge in food prices earlier this year. Spikes in the prices of onions and other vegetables sent thousands into the streets to protest, a reminder that despite India's 8% growth, it is also home to 64 million malnourished children, nearly half the world's total. India produces enough food for them, but not all their families can afford to buy it. "There is a very vulnerable section who may not have seen any change in their income levels," says Kaushik Basu, India's chief economic adviser. "If income does not change and if prices rise, you're being hit badly."

These numbers tell a hard truth: India's economic epic has reached the end of Act I and can't continue unless the rural poor join in. Leaving them behind undermines the health of the whole economy, says K.M. Chandrasekhar, India's Cabinet Secretary. The consumption and spending of a small but thriving urban elite cannot sustain growth or generate enough jobs for the 840 million people in rural India. "We cannot afford to exclude the rural population," he says. If India can double growth in the farm sector to 4%, he estimates, it could add as much as 2 percentage points to GDP growth and finally close the



gap with China. That realization has led to a deeper engagement with the so-called bottom of the pyramid; forward-thinking companies and development groups are trying to raise the incomes of the rural poor by connecting them with the rest of the economy and transforming them into a new base of consumers.

It won't be easy. Traditionally, climbing the social and economic ladder has meant leaving one's village and heading to the city. Over the past 20 years, India's urban population has grown by 120 million, to 30% of the population; over the next 20 years, it is expected to grow by 250 million, to 40%. That's not sustainable or realistic, says Abhijit Banerjee, an economist at MIT's Abdul Latiff Jameel Poverty Action Lab, a project that examines the data on the world's poor to analyze what works and doesn't work in alleviating poverty. Before China's megacities took off, the Middle Kingdom invested in agricultural reform and rural education and then urban infrastructure to handle the massive influx of new workers. India has done none of these things, and its urban centers are already overburdened with unskilled rural migrants. MIT's early data show that there are very few ways for the rural poor to participate in India's thriving economy. They can leave their farms and go to work as construction laborers or domestic servants or else stay in their villages and collect subsidies. Their wages might go from about \$1 to about \$3 a day, but that's not enough to alter their standard of living.

"That's where it will stop," Banerjee says. "It's not transformative for their lives."

What India really needs are more Manoj Kumar Singhs, who prosper without leaving the village. For that to happen, old power structures and traditions will need to change. Creative solutions are coming from big organizations and small ones, in the public and private sectors. One example is EDA Rural Systems, a consultancy with a nonprofit arm that works with farmers all over northern India. The key to changing rural India, says EDA's Bihar director, Ashok Kumar, is deceptively simple. "All of our interventions are around the individual, trying to increase their income," he says. EDA did exactly that for Singh and his fellow beekeepers in Muzaffarpur, where India's largest honey maker, Dabur, had effectively cornered the annual harvest, buying through middlemen who would pay only about 50¢ a kg. "We realized we had to break that system," says Kumar. Dabur spokesman Byas Anand says it uses

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—ANUJ KUMAR, SAMRIDHII



Supply chain In Punjab, picking okra, far left, and a village collection center; Walmart is setting up centers to reduce travel time

consolidators because “it would be difficult to get the same quantity from individual beekeepers.” Kumar brought in new buyers and encouraged them to deal directly with the beekeepers, who formed groups of their own. The effort raised prices, gave the beekeepers leverage over all the buyers, including Dabur, and broke the monopoly.

Several hundred kilometers west, in Malerkotla, Punjab, the world’s biggest retail company is also digging deep into India’s villages. Walmart supplies about 140 stores in the region through its joint-venture partner, Bharti Retail, and wants to expand nationally. To do that, it must turn its small network of 800 farmers, half of them in Malerkotla, into a reliable, efficient supply chain of 35,000 farmers by the end of 2015. Walmart agronomists are working with Malerkotla’s vegetable farmers to improve yields with basic techniques like soil testing and germinating seedlings in trays. They have also reduced costs by using Walmart-negotiated discounts for seeds and pesticides. Walmart set up village collection centers to shorten travel time, uses digital scales to ensure fair weights and replaced burlap bags with plastic crates to minimize waste and damage in transit.

The target is a 20% increase in farmers’ incomes in five years. Raj Jain, head of Walmart India, says this is the only way to build a sustainable business. If incomes rise, farmers will sell their produce to Walmart first; if incomes rise enough, they will also become its customers. That’s

about to happen in Malerkotla, where Bharti Walmart will open a new store later this year, Jain says. “The only way that we can make a difference to a country like India would be to close that circle.”

This approach may work better than the conventional Indian government solution—subsidies. As it has in so many years past, India declared a focus on agriculture in 2011, announcing a 3% interest subsidy to farmers and a target of extending \$105 billion in credit. Finance Minister Pranab Mukherjee promised, again, to reverse the damage caused by lagging investment in rural infrastructure and reform the archaic regulations and subsidies that contribute to water scarcity, distorted prices and overuse of toxic chemicals and fertilizer. Yet in the past, such efforts have done little to improve rural markets, in part because of rampant corruption and inefficiency.

In the absence of better policies, hyperlocal, market-based solutions can still have a big impact. Gulabchand Singh, 52, a vegetable farmer in Yusufpur, Bihar, stands inside one of them—a low-cost greenhouse covered in layers of polyethylene rather than glass. “In the poly house, you can see the flowering happening,” he says, and the seedlings started there are hardier because they’re not exposed to the cold when they’re young and fragile. Outside, he shows off his eggplant—purple-tinged stalks, heavy and luxuriant with fruit—and

the remains of four tomato plants, which yielded 40 kg of tomatoes with the help of some bamboo stakes. Singh says these and a few other changes have increased his income to about \$13 a day, compared with \$9 a few years ago from the same hectare. He has even started selling seedlings to his neighbors. “For a little bit of land, I’ve gotten a lot of benefit.”

Singh is one of 5,000 farmers in Bihar whose vegetables are sold in the state capital, Patna, by a three-year-old start-up called Samriddhi. Founded by Kaushalendra Kumar, an idealistic M.B.A. from Bihar, with a \$133,000 bank loan from Punjab National Bank, Samriddhi trains farmers in its network to increase their productivity and pays them about the same as they would get in their village wholesale market. Its business model is straightforward: take the existing, unwieldy supply chain—in which vegetables move through layers of middlemen—and improve it. Samriddhi buys directly from farmers, reducing travel time and waste, and carefully sorts and grades its produce.

“The most important thing was to find the right kind of produce for the right customer,” says Anuj Kumar, Samriddhi’s head of operations in Bihar. The best produce is sold to picky housewives at 40 ice-cooled carts, while grade-B vegetables go to bulk buyers. The farmers get a premium for quality, but Samriddhi can still earn a good margin. It expects to break even this year and has a goal of raising farmers’ incomes 50% over the next five years. “It’s going to benefit us also, because once the farmers start getting better prices, they’ll be in a position to produce vegetables in a better way,” Kumar says.

If it all sounds strikingly similar to what Walmart is doing, that’s no coincidence. Big or small, any company working in rural India must deal with the same challenges: piecemeal landholdings, inadequate roads, no water or electricity for cold storage and a lack of training in even the most basic techniques of modern farming. Training is the low-hanging fruit. So the advice that Walmart’s agronomists give farmers in Punjab is the same as what they would get from a tiny start-up—the soil testing, the



Enlightened self-interest Retailers turn farmers into future shoppers at their stores

stakes, the polyethylene greenhouses. “You don’t need a breakthrough in technology to double your output,” says Mukesh Madhukar, head of merchandising for Walmart’s Direct Farm program.

Even companies involved in high-tech agriculture realize they won’t have a market in India unless farmers’ incomes and basic skills change first. Bayer CropScience, for example, is a partner in the demonstration farm set up by Walmart on the land of Mohammed Nazir Khan in Malerkotla. Bayer hopes Khan will be a regular buyer of its newest pesticides, but for now, it is showing Khan how to correctly dose and document the chemicals he already uses on his bitter melon. Many tribal farmers in Orissa have never used hybrid seeds, which means they are a tantalizing virgin market for DuPont. But they can’t afford them unless their incomes rise, so DuPont and the state government have joined together to train 25,000 of them in crop-management techniques to increase their yields without overusing toxic chemicals. It’s a shift from the days when agribusiness and biotechnology companies in India may still be criticized for pushing chemicals and

genetically modified seeds without regard for their environmental consequences.

But increasingly, multinationals realize the benefits of aligning their economic interests with those of Indian farmers. For example, compensation for Walmart’s agronomists is tied to the increase in incomes of the farmers they work with. If Walmart can build a national supply chain, it will try to reach the Indian consumers who are already in the habit of shopping for fruits and vegetables every day. Of the 190 million tons of produce Indians consume every year, 95% is bought from street vendors. Walmart would like to get those customers into their stores, where they might pick up a few other things as well.

For their part, the beekeepers of Muzaffarpur have found a partner in Bihar’s largest milk cooperative, which will start selling branded lychee honey in several thousand outlets this year. A handful of gourmet retailers in Mumbai and Delhi have already started selling “single flora” specialty honey, and their customers pay a premium for the subtle pleasures extracted from the lychee blossoms.

Samriddhi, too, has big ambitions for

the vegetable farmers of Bihar. Kumar believes they will serve as an alternative model to industrialization. Bihar is in the heart of the Gangetic Plain and enjoys extraordinarily fertile soil, Kumar notes, so why not make the most of it? He hopes that Bihar can join the Indian economic miracle through its farms. Who needs shopping malls, call centers or car factories? “Bihar has tremendous potential in agriculture,” Kumar says. “But it needs to be tapped.”

The farmers’ lives are changing as well. Gulabchand Singh’s 12-year-old son has slicked-back hair and wears jeans, not his father’s plain cotton dhoti and kurta. When they go to the market together, he sometimes asks for a soft drink or chocolate—luxuries his father has no use for. But Singh’s hopes have been altered more profoundly than his son’s tastes. A few years ago, the greatest ambition of any farmer in Bihar would have been for his son to get out of farming. The bounty inside the poly house has changed that. “I want only that he should do better than me,” Singh says. “If he wants to stay on the farm, that’s fine. But he should think bigger. I want him to build on what I’ve done here.”