The Women Who Restored Jungles
by Anuradha Sengupta

It is early morning in Dhepagudi, a sleepy hamlet nestled in the green hills of Odisha, India. Admai Kumruka is sifting millet in a traditional sieve made of bamboo strips. Children mill around, playing on a mud and sand mound. A few huts down, Rello Dindika is sorting through harvested corn. A group of women are chopping fresh pumpkin leaves and flowers for a stir-fry dish. They have finished morning chores and farming work and are now preparing breakfast. Some of the corn will be ground to a powder for a wholesome porridge. The rest will be popped in clay vessels for evening snacks.

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“We have mandya or kosla [varieties of millets] or maka [corn] porridge in the mornings sometimes with roots and tubers or gondri saag [a variety of greens] foraged from the jungles,” Kumruka says. “In the afternoons and evenings, we make rice with tubers, vegetables and legumes. Sometimes we add wild mushrooms or jhotta [okra] and holud [turmeric roots].”

The women belong to the Khond community, a large indigenous tribal group of India that has relied for generations on a rich and diverse variety of native millets and foraged jungle foods. That is, until the state forest department proposed that forest lands be cleared for cash crops like teak, eucalyptus, soy, and cotton.

About 70 varieties of vegetables, millets, legumes, and corn are grown using traditional methods.

Following years of extractive forest management practices established under British rule, India’s government began a paradigm shift in the late 1980s toward prioritizing ecological conservation and recognizing the rights of the tribal communities. Then, in July, it passed a controversial bill to govern how the country’s forests are razed, cut, and reforested. The new measure was strongly opposed by environmentalists and tribal advocates who argued it would ease government seizure of tribal forests.

“The forests were managed by community resource management under the Forest Rights Act,” says Hrusikesh Panda, former secretary of the Ministry of Tribal Affairs. Panda, who retired last year, has consistently criticized the present government’s attempts to tamper with tribal rights. “Now the forest department has become very aggressive,” he says.

Kumruka recounts how entire patches of forest were taken for plantations, and how much

of her tribe's green wealth disappeared. "We had so many different millets on our plates earlier, and jungle tubers, saags, mushrooms, and so many mahua trees," she says.

The ubiquitous mahua is central to the lives of adivasis—the aboriginal people of South Asia. The plant's waxy flowers infuse the jungle with a heady fragrance and are distilled into a traditional liquor. Its leaves are woven into cups and plates. Its oil is used in many ways: in traditional medicine, as hair oil, to massage newborn babies, in soap, and for cooking and lighting lamps. The seeds, fruits, and flowers are all cooked. The bark relieves itching and heals wounds and snake bites. But all this disappeared when forests were exchanged for plantations.

In adivasi villages, goats, in background, are a mainstay of traditional diets.

Traditionally, adivasis had grown mixed varieties of crops to maintain soil fertility. They stored and exchanged seeds after each harvest to ensure local adaptability and availability. Then they watched with dismay as industrial tree plantations converted a once diverse forest ecosystem into a single-species cash crop.

Miles southwest of Kumruka's hamlet, the people of Khalpadar village were going through a similar experience. Large swaths of surrounding forests had been leveled by the forest department to make way for plantations, disrupting the adivasis' traditional food ethos. When the villagers protested, they were told that cheap rice and wheat would be available under the public distribution system (PDS), the government food security program that distributes subsidized food to the poor.

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PDS meals consisted of rice, lentils, milk, and oil. Prices at the market were too steep for most villagers. Their diets suffered, and their children lacked nutrition. Young adivasis who travelled to towns for education or stayed in government boarding schools were exposed to a modern world of industrialized food. Once back home, they asked for soybean nuggets and Maggi, Nestlé's popular instant noodles that have been found to hold alarmingly high levels of MSG and lead. The women looked back to a time when their plates held a variety of millets, fruits, birds, animals, insects, seeds, roots, and tubers. As their culinary culture slipped away, so did their sense of identity and pride.

"Traditionally, adivasis have had a very rich cultivated and uncultivated food biodiversity, but the younger generation is out of touch with that," says Salome Yesudas, a nutrition researcher who has been documenting the food systems of indigenous tribes in southern India since 1995.

"There is a law saying all [Integrated Child Development Services] meals should be cooked, served hot, and made from locally sourced foods, but it is tough to keep a check to see that this is being implemented," she says of the powder-packet canteen meals served by ICDS, a government welfare program that provides food, preschool education, and primary health care to children under 6 in mostly rural areas.

Adivasi women meet to discuss food sovereignty.

The state of nutritional affairs is avoidable, says Debjeet Sarangi, founder and director of Living Farms, a nongovernmental organization that works on issues related to food and nutritional security in Odisha. “Forest foods are great sources of micronutrients and are easily available and accessible to these communities.”

Living Farms has documented more than 350 high-nutrient forest foods harvested by adavasis in the region—foods, researchers say, could provide a solution to micronutrient deficiency, a condition termed “hidden hunger.” Sarangi says it is unfortunate that adivasis, who have sustainably harvested forest food for generations, are being displaced and their knowledge lost as forests are cut down for agriculture and industrial purposes.

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Resisting that fate, the women of Khalpadar have risen to block destructive development. They have held meetings with officials and other villages to find consensus to save their forests. When officials repeatedly refused to listen, villagers cut down the cash crops and planted their own traditional crops.

“We planted dates, mangoes, jackfruit, tamarind, jaamkoli [a berry],” says Balo Shikoka, a Khalpadar villager. Forest officials notified the police, who soon came to arrest the villagers. “We said, Fine, we will go to prison for this. But you will have to take all of us—women, children, elders, everyone. We will all go to prison for the jungle. We’ll stay in your jail, but we won’t eat your city food. The officials just left,” Shikoka laughs.

“When they came to persuade us to plant eucalyptus and teak, we refused,” recounts Timoli Kurunjelika, another villager. “Even though they said, You will get more money.”

The soil, damaged by plantations, took time to replenish. The trees took years to regrow. But their efforts paid off, and today, after much work, the hills around Kumruka are flourishing with indigenous trees, plants, and flowers.

An adivasi woman chops greens from her fields.

“This year, from June to July alone, we have regrown jungles in 35 villages in Muniguda block,” says Sukhomoti Shikoka, a resident of Muniguda. “About 6,000 families have got involved, each planting 10 to 15 trees. Now the nutrition needs of our children will be well met, even when rains are gone.”

Living Farms conducts qualitative dietary diversity studies every six months to measure access to food variety and assess dietary nutrition in Odisha. Since 2014, it found that the number of families with poor diets had decreased from 58 to 18 percent.

The organization has also recently launched a school project in which children learn from farmers to identify, grow, and cook traditional foods. In many districts, newly established tribal food festivals bring together adivasi communities to exchange ideas, information,

and seeds. And several adivasi schools have introduced holidays celebrating local harvest festivals and rituals, in contrast to the current holidays largely based on mainstream Hindu festivals.

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Young adivasis are now joining the movement. Jagannath Majhi, who belongs to the Khond community, works in villages to raise awareness about the importance of locally available foods, traditional seed conservation, jungle diversity, and the need for protection. He says he decided to do this when he saw the deep sense of inferiority his people had developed.

“They felt their food wasn’t good enough because outsiders—city people and the government—would reiterate that what they ate wasn’t ‘real food,’” he says. It is astounding to him now to see the recent trend among industrialized societies of adopting his traditional foods. “Everyone in the world is running after millets, and chefs on TV are talking about red ant chutney.” He thwacks his palm to his forehead when he hears city residents pay as much $2 for a half-pound of millets.

In the villages of Odisha, adivasi women sing songs that articulate their dependence on the hills and forests, pointing out that the forest doesn’t just provide their families with food—it also helps them heal.

Admai Kumruka of Dhepagudi village sifts ragi (a variety of millet). Indigenous villagers grow a variety of wild nutrient-rich millets