



Taste of India's Biodiversity

Dr. Vibha Varshney
Leveraging Agroecology for Livelihood
AAETI, September 29, 2026

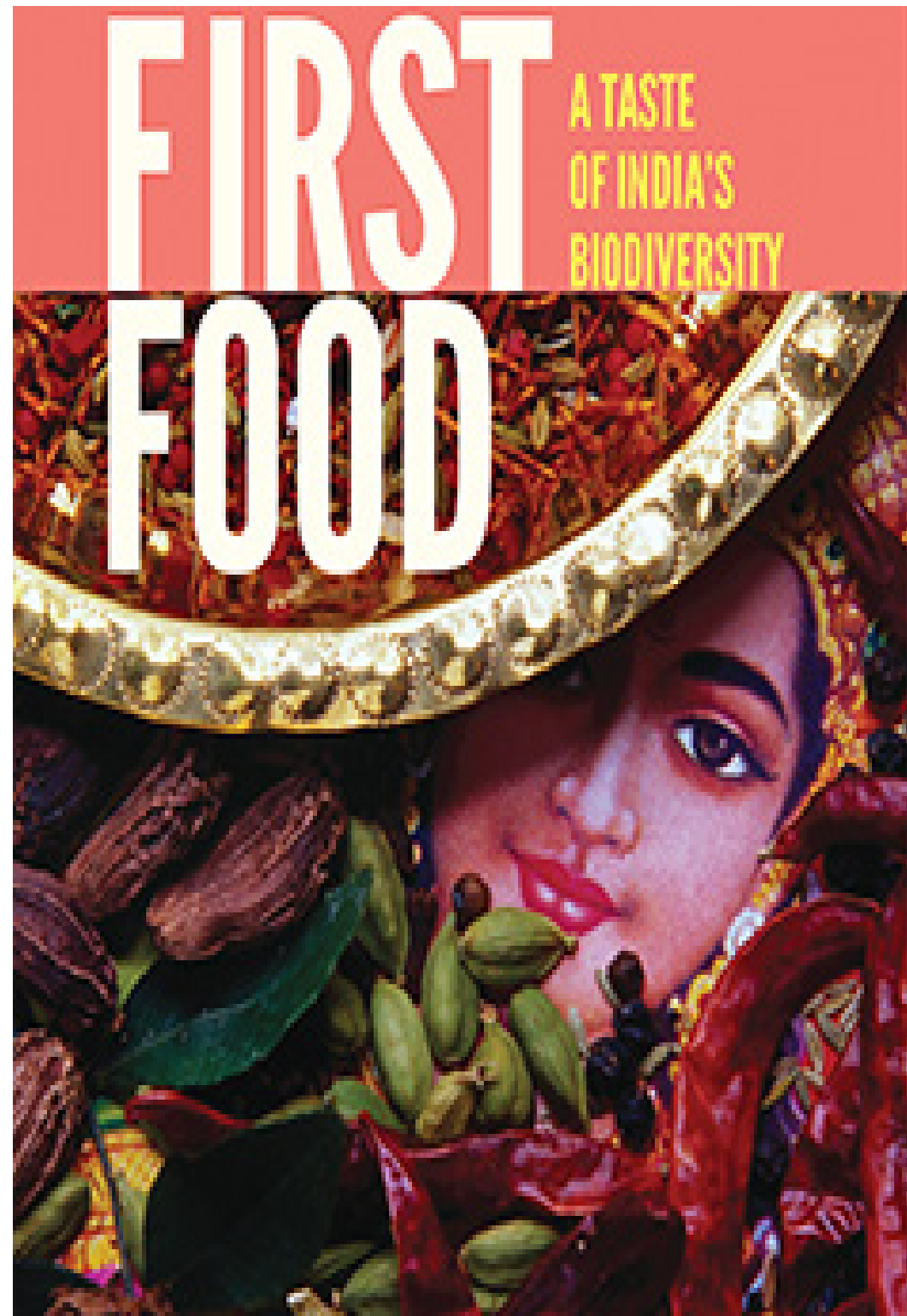
Context setting

- Centre for Science and Environment is a public interest research organisation set up in the 1980s
- We work on environmental issues such as air pollution, water and waste management, climate change, and food
- Conducted lab studies that found pesticides in bottled water and soft drinks; antibiotics in honey, chicken and fish; fat, salt and sugar in packaged food; potassium bromate in bread; GM ingredient in processed food
- Then what do we eat?

Forgotten foods

- We went to villages and forests to find out about the foods that we used to eat and we documented these local and seasonal foods
- India has a rich tradition of using local biodiversity as food. Many times this did not cultivated but grew there as a weed
- This food is not only full of nutrition but also has medicinal benefits
- As the world moves towards a sustainable food system, we want to ensure that it also moves to a biodiverse food system
- If we can get the biodiversity on the plate, we will protect it in the wild

CSE's First Food series of books



Ground realities

- Biodiversity is under threat. Main culprit is land use change: buildings, farmlands. This is exacerbated by climate change
- 1 million species could become extinct in the coming years
- The solution is to change what we grow and eat
- Many questions
 - Can farmers make the shift?
 - Will this impact livelihoods?
 - Do we still hold the knowledge on how to use local biodiversity as food?
 - Is there a market for these foods?
 - What is happening on the ground?



Mahua/Madhuca indica



Makhana/ Euryale ferox



Bael/*Aegle marmelos*

Phalsa/*Grewia asiatica*





Harsingar /*Nyctanthes arbor-tristis*

Guar/*Cyamopsis tetragonoloba*



Imli/ *Tamarindus indica*



Chilbil/ *Holoptelea integrifolia*



Jakhiya/*Cleome vlscosa*

Peepal/*Ficus religiosa*





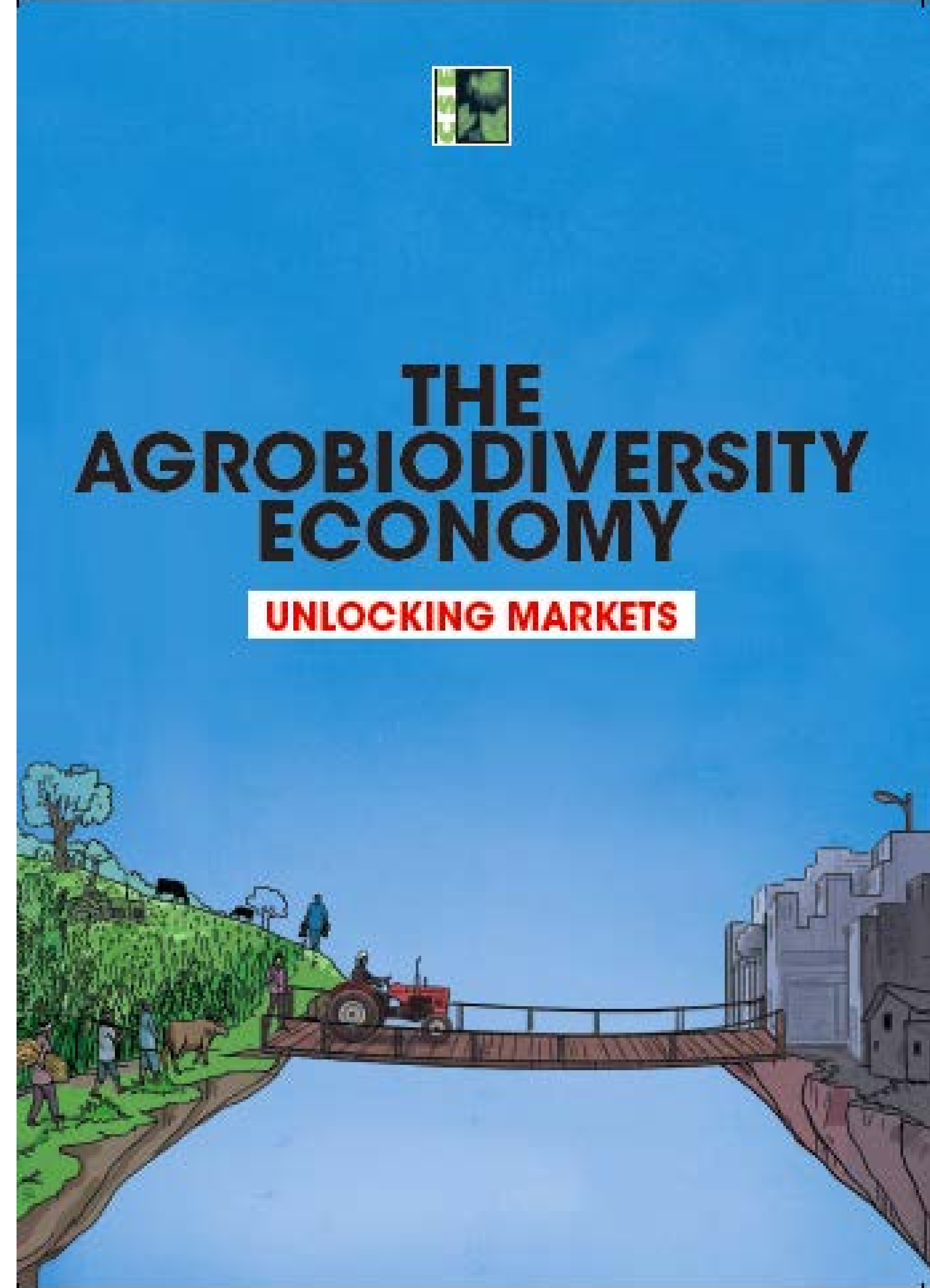
Sikiya/ *Digitaria sanguinalis*

Ragi/ *Eleusine coracana*



New report

- Climate change makes conventional agriculture difficult, so exploring alternatives is imperative
- Using local biodiversity as food is one option, but turning India's rich agricultural biodiversity into fair, sustainable livelihoods for rural producers and smallholder farmers is a challenge.
- Drawing on ten real-world case studies of enterprises commercializing underutilized ingredients—ranging from native rices and camel milk to wild mahua flowers and Himalayan produce—this report illustrates how localized processing, consumer education, direct-to-consumer storytelling and equitable profit-sharing bridge the gap between primary producers and urban markets.
- The report demonstrates how market innovation can drive both biodiversity conservation and economic resilience.



Leveraging Agroecology for Livelihood

- The role of FPOs in conserving and promoting agrobiodiversity
- The role of FPOs in managing soil and seed
- The role of FPOs in boosting business



Expected outcomes

- Understanding what is happening on the ground vis-a-vis agrobiodiversity markets
- A set of recommendations for civil society, FPOs and government on how to leverage agrobiodiversity
- Create a network for supporting each other





BUILDING FPO CAPACITY TO ENTER THE BUSINESS OF AGROBIODIVERSITY



India is home to an extraordinary wealth of healthy and unique food ingredients, supported by centuries of traditional knowledge. As consumer demand for nutritious and natural foods continues to grow, this presents a significant market opportunity to India's farmers and entrepreneurs. However, small and marginal farmers—the custodians of many of these ingredients—often lack market access, resources and the support needed to benefit from this growing demand and enhance their livelihoods. Farmer Producer Organizations can be of use here.



THE BUSINESS OF AGROBIODIVERSITY

Tapping Farmer Producer Organizations



MISSING FROM THE PLATE

Edible Plants in Wetlands Lose Favour



CELEBRATING COMMUNITY SEED BANKS OF INDIA

**CONVERSATIONS ON
CLIMATE-RESILIENT SEEDS**



Thank you!