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Norway

Regine Andersen
Research Professor

Prajeesh Parameswaran
Senior Scientist

Pratheepa C.M.
Senior Scientist

E.D. Israel Oliver King
Director, Terrestrial & Agrobiodiversity Programme

Rengalakshmi R.
Executive Director, R&D and Policy

A Roadmap towards an Enabling Environment for Community Seed Banks in Odisha



Members of Raisar CSB, Nayagarh District, Odisha. Photo: Regine Andersen

KEY POINTS

- There are more than 300 community seed banks (CSBs) in Odisha conserving and making available a rich diversity of food crops and varieties. The number of CSBs is steadily increasing.
- Well-functioning CSBs contribute substantially to local seed-, food- and nutrition security among smallholder farmers while preserving crop genetic diversity *in situ* on-farm, together with associated valuable traditional knowledge, for future generations.
- Odisha has substantial potential to showcase how CSBs can be supported and strengthened through an enabling policy environment and how good CSB models can be scaled up and out.
- Such an example is urgently needed in India and globally, as there are few examples of truly enabling environments for CSBs worldwide.
- Through a participatory process, thoroughly derived from the ground, we here suggest a roadmap to guide the development of an enabling environment for CSBs in Odisha with the participation of relevant stakeholders.

1. Background

Community seed banks (CSBs) are on the rise in many parts of India, particularly in Odisha. This can be seen as a response to climate change and the need for more climate-resilient food crops, as well as the need to improve food and nutrition security among smallholder farmers. For many farmers, CSBs are also platforms for accessing preferred and often traditional varieties, achieving seed security and food sovereignty and reducing dependence on seed supplies from markets, external agricultural inputs and loans from moneylenders. Besides, CSBs play a critical role in safeguarding, improving and transmitting traditional knowledge among farmers at a horizontal scale and across generations and in empowering farmers. Thus, CSBs are not merely repositories of seeds; they are living local institutions that conserve, transmit, and revitalize the knowledge systems associated with those crops and their diversity. As many community seed banks are women-led and/or socially inclusive and gender sensitive, they often contribute to empowering women, which is in turn an important factor for equitable development. Not least, community seed banks are often effective measures for halting the rapid loss of crop genetic diversity occurring in farmers' fields and support maintaining the genetic resources in in-situ/on-farm conservation. The genetic properties of food crops are crucial to our ability to address the effects of climate change and other environmental factors, as well as the agronomic challenges and food and nutrition needs of the population now and in the future.

BOX 1: What is a CSB?

Community seed banks are local, informal or formal institutions/initiatives whose core function are to conserve, manage and share seeds and propagating material of diverse local crop varieties for local use. They comprise institutions and initiatives that are collectively governed as well as individual initiatives aimed at supporting local communities with crop diversity.

DIVERSIFARM-India

2. DIVERSIFARM-India: the project

The project Unfolding the Potentials of Community Seed Banks for Food and Nutrition Security among Smallholder Farmers in India through the Realization of Farmers' Rights (DIVERSIFARM-India) aims to improve smallholder farmers' food and nutrition security and livelihoods by strengthening farmer-managed seed systems through community seed banks. The project (2024–2026) is jointly implemented by the M S Swaminathan Research Foundation (MSSRF) and the Fridtjof Nansen Institute (FNI), Norway, with support from Norwegian Ministry of Foreign Affairs, through the Royal Norwegian Embassy in New Delhi. It is supported by an advisory committee comprising key stakeholders and chaired by Dr Trilochan Mohapatra, Chairperson of the Protection of Plant Varieties and Farmers' Rights Authority, Government of India.

The DIVERSIFARM-India team has mapped and surveyed community seed banks across India and developed an interactive Atlas of Community Seed Banks in India, which makes the resulting information publicly available: https://www.communityseedbanks.in/atlas-of-csbs. Although the map will include 652 CSBs by the end of 2026, the actual number of CSBs is considerably higher. India probably has the highest density of CSBs in the world. The DIVERSIFARM-India team has also developed typology of CSBs in India to help tailor measures to differing needs. The project has furthermore established a national online platform serving CSBs and their supporting organisations and networks: https://www.communityseedbanks.in.

Through in-depth case studies of CSBs in Odisha, the team has examined why some community seed banks of different categories are particularly successful, identified their key challenges and drawn lessons to inform capacity-building priorities. On this basis, DIVERSIFARM-India has developed a comprehensive capacity building manual for CSBs. A capacity-building workshop based on the manual was held in Bhubaneswar in August 2026. The manual is available as a practical guide for CSBs and their facilitating organisations on the online platform, as will all other resources from DIVERSIFARM-India.

The next step was assessing the institutional, legal and policy environments surrounding CSBs in Odisha, and identifying ways to improve them in order to strengthen the long-term sustainability of CSBs and supporting the scaling of good models. Analyses of relevant instruments and individual stakeholder consultations were carried out, and a workshop with key stakeholders was conducted in Bhubaneswar on 9th September 2026. Here the participants were invited to identify the key elements of a roadmap towards an enabling environment for CSBs in the state. The resulting roadmap is presented in this policy brief.



Participants at the multi-stakeholder workshop 'Strengthening Community Seed Banks in Odisha: Enabling Environments, Bottlenecks and Pathways Forward' in Bhubaneswar 9th September 2026, developing the elements for this roadmap. Photo: MSSRF.

3. Odisha as a pilot state

Odisha was selected as a pilot state for our studies on CSBs because it combines supportive policies, emerging institutional arrangements and diverse CSB initiatives with rich crop genetic and cultural diversity.

Within the national legislative framework provided by the Protection of Plant Varieties and Farmers' Rights Act (2001) and the Biological Diversity Act (2002, amended in 2023), the state's Agriculture Policy (2020) and Organic Farming Policy (2018) create openings for supporting locally adapted varieties and CSBs. More directly, Shree Anna Abhiyan, formerly the Odisha Millets Mission, supports CSBs and farmer-managed seed systems, while Odisha's adoption of a standard operating procedure for landrace seed systems and the release of four finger

millet landraces illustrate efforts to connect farmer-managed seed systems with formal institutional arrangements.

Partnerships among farmer organisations, NGOs, research institutions and government agencies further strengthened the rationale for selecting the state for this pilot project. Nevertheless, the preparatory policy review identified constraints, including the absence of a comprehensive CSB-specific framework, uncertainties surrounding quality assurance and the entry of farmers' varieties into formal seed supply chains, fragmented institutional support and dependence on short-term funding. Odisha thus offered an opportunity to investigate both the potential of a conducive policy environment and the practical barriers to translating policy recognition into sustained support for CSBs.

4. What do community seed banks need ?

Based on the in-depth case studies of CSBs and DIVERSIFARM-India workshops in Odisha and supported by the mapping and survey of 617 CSBs in India, the DIVERSIFARM-India team identified a range of operational and strategic needs across different types of community seed banks, which require enabling environments:

Operational needs:

- Regular, needs-based capacity building for CSB managers and members, including seed selection, quality control, varietal and institutional support tailored to needs defined by the CSBs themselves
- Opportunities for peer learning, horizontal networking and knowledge exchange and exposure visits to other CSBs
- Suitable storage facilities and equipment for cleaning, drying, testing, packaging, labelling and protecting seed
- Access to up-to-date information on other CSBs, sources of preferred varieties, relevant schemes and promising approaches
- Support for the mechanisms/platforms that support obtaining, exchanging and replenishing diverse, locally adapted seed, including support for seed multiplication and distribution and also knowledge and networks (like community seed festival/fairs)
- Support for record-keeping, inventories and documentation of varieties, seed flows, membership and benefits
- Inclusive and accountable governance, with meaningful participation by women, Indigenous and tribal communities, and other farmer groups central to seed conservation
- Greater awareness among farmers, authorities and the wider public of CSBs' contributions to seed, food and nutrition security, climate resilience and crop diversity

Strategic needs:

- Formal recognition by local and district authorities, while respecting CSBs' diverse organisational models and autonomy
- Secure access to land for seed multiplication, regeneration, evaluation and demonstration fields
- Reliable financial support or income-generating opportunities to cover operating costs and ensure long-term continuity
- Connections to wider CSB networks, research organisations, guidance of NGOs and relevant government services for coordination and continued guidance
- Revisiting existing seed standards and quality frameworks to accommodate the unique characteristics of traditional varieties and landraces, thereby strengthening farmer-managed seed systems and community seed banks.



Seeds of many different crop varieties are stored at Raisar CSB, Nayagarh District, Odisha. Photo: Regine Andersen

5. Objectives for an enabling environment

The objective for this roadmap is to establish a simple, inclusive, and feasible policy and institutional framework that recognises diverse CSBs and enables them to access needs-based support, while respecting their autonomy and strengthening their long-term sustainability.

Such an enabling environment will give CSBs greater recognition and more predictable access to technical, institutional and financial support through relevant policies/ schemes tailored to their needs. This would help existing CSBs improve their operations, sustain their seed collections and services, and strengthen their contributions to seed-, food- and nutrition security, crop diversity and climate resilience, besides knowledge management. Such a framework would also enable the scaling of effective CSB models across Odisha without imposing a single model or undermining local autonomy.

6. The rationale behind this roadmap

This roadmap takes an inclusive approach, covering all types of CSBs in Odisha and all stages of development. It also recognises the limited capacity and resources of promoting organisations (often NGOs) and public authorities. The proposed enabling environment must therefore be simple, efficient and practical to implement.

CSBs in Odisha differ in their values, norms and operating models. Some work on a semi-commercial basis, while most use non-monetary seed-loan systems and serve as local service hubs for seed conservation, exchange, multiplication, knowledge and farmer support. Some may favour registration against a common standard, whereas others seek the legal and policy space to operate according to local customs and preferences. To accommodate this diversity, the roadmap proposes recognition based on a small set of common criteria, enabling recognised CSBs to access monetary and non-monetary support tailored to their own priorities.

A decentralised approach, coordinated at the state level and implemented mainly through district authorities, would allow support to respond to local needs. Procedures should remain straightforward and transparent so that district authorities can fulfil this role without creating an excessive administrative burden.

7. A roadmap for CSBs in Odisha

1. ESTABLISHING A SEMI-EXTERNAL SECRETARIAT TO SPEARHEAD THE WORK: Establish a semi-external Secretariat associated with the Department of Agriculture and Farmers' Empowerment, tasked with developing, spearheading, coordinating and monitoring the enabling environment for CSBs in Odisha, as set out in this roadmap. It will also establish a web portal for CSBs in Odisha to facilitate communication and information sharing. The Secretariat should operate for five years, with a clear transition and exit strategy, after which its functions will be integrated and mainstreamed into the schemes and operational structure and plans of the Department of Agriculture and Farmers' Empowerment. The costs of the Secretariat's work during the initial five years should be covered by extra-budgetary funding, while the costs of implementing the roadmap should be covered through a dedicated budget line. Following the transition, all costs should be covered through a budget line of the Department of Agriculture and Farmers' Empowerment.

2. ESTABLISHING AN ADVISORY COMMITTEE OF KEY STAKEHOLDERS TO GUIDE THE SECRETARIAT: Establish an advisory committee to guide the work of the Secretariat. The committee should comprise one representative from each major organisation in Odisha working with community seed banks and at least five representatives from the management committees or boards of different types of CSBs. Members should have substantial practical experience with community seed banks. The advisory committee should meet once or twice a year, or as required, to review progress, advise on implementation and help ensure that the roadmap remains responsive to the needs and diversity of CSBs across Odisha.

3. DEVELOPING A DRAFT POLICY FOR GOVERNMENT APPROVAL TO ENSURE LONG-TERM COMMITMENT: The Secretariat should develop a draft policy, based on this roadmap, for approval by the Department of Agriculture and Farmers' Empowerment. This will ensure that the proposed measures are anchored in state policy. The policy should provide clear recognition to CSBs for their contribution to seed-, food- and nutrition security among smallholder farmers in Odisha and set out objectives to promote and enhance them. It should further provide criteria for recognition of CSBs, a procedure for how CSBs can apply for recognition, a set of non-monetary and monetary support measures that recognised CSBs can apply for and define the division of responsibilities between the different governance levels, in particular the district and state levels. Importantly, it should provide dedicated budget lines for implementation.

4. DEVELOPING A SET OF SIMPLE CRITERIA AND APPLICATION PROCEDURES FOR THE DISTRICT-LEVEL RECOGNITION OF CSBs: In collaboration with the advisory committee, the Secretariat should develop a simple set of recognition criteria that is inclusive of all types of CSBs and all stages of development. The criteria may be based on the definition of CSBs above and co-developed with relevant stakeholders. Where necessary, differentiated criteria may be applied to recognise CSBs at different stages of development. The Secretariat should also develop a straightforward application procedure for recognition by district authorities across Odisha.

5. DEVELOPING A DIVISION OF LABOUR AND MODE OF COLLABORATION BETWEEN THE DISTRICTS AND THE STATE FOR THE IMPLEMENTATION OF THE STATE-LEVEL CSB POLICY: Importantly, the designated district agricultural authority should be responsible for recognising CSBs, registering them on the state-level CSB portal were authorised by the CSBs, and coordinating the provision of monetary and non-monetary support to recognised CSBs at the district level, in accordance with the measures and procedures set out below. The state should be responsible for the coordination of the policy and providing the input required for the districts to implement it, particularly in terms of coordinating non-monetary and monetary support.

6. DEVELOPING A TOOLBOX OF ACCESSIBLE NON-MONETARY SUPPORT MEASURES FOR RECOGNISED CSBs: In consultation with the advisory committee, the Secretariat should develop and coordinate a practical toolbox of support tailored to the needs of recognised CSBs. Measures may include technical guidance on seed selection, quality control, varietal characterisation, storage, documentation and governance; access to suitable equipment, land, diverse locally adapted seed and relevant information; links to research organisations, NGOs and government services, such as extension services; peer learning, exchange visits and networking; and greater awareness of CSBs' contributions. The toolbox should draw primarily on existing expertise, facilities and schemes. Designated district agricultural authorities should provide recognised CSBs with access to appropriate support, while the Secretariat coordinates providers and ensures that all participating actors understand their roles.

7. DEVELOPING A TOOLBOX OF ACCESSIBLE MONETARY SUPPORT MEASURES FOR RECOGNISED CSBs: In consultation with the advisory committee, the Secretariat should develop and coordinate a simple funding framework, while designated district agricultural authorities should receive applications, assess needs and provide recognised CSBs with access to appropriate support. Wherever possible, CSBs should be linked to existing state and national schemes. Where such schemes do not cover priority needs, the proposed state CSB policy should provide a dedicated, flexible grant window for modest start-up and recurring costs, including storage improvements, essential equipment, seed regeneration and multiplication, documentation, local exchange activities and other agreed operational needs. Support should be proportionate to each CSB's stage of development, based on a brief costed plan, and released in instalments against simple milestones and expenditure records. The framework should also include access to appropriate insurance or other risk-

protection mechanisms to help CSBs recover from losses caused by natural disasters. District authorities should verify delivery and outcomes, while the Secretariat compiles monitoring information, supports coordination across schemes and identifies gaps requiring state-level action.

8. DEVELOPING AND IMPLEMENTING CAPACITY-BUILDING MEASURES FOR ALL ACTORS INVOLVED IN IMPLEMENTING THE CSB FRAMEWORK: The Secretariat should coordinate a practical capacity-building programme for designated district agricultural authorities, state-level officials, support providers and other institutions involved in implementation. Initial joint training should establish a common understanding of the policy, recognition criteria, application and support procedures, roles and responsibilities, and monitoring and reporting requirements. Additional role-specific training should enable district authorities to assess applications and coordinate support efficiently, while technical institutions and other providers should be prepared to deliver accessible, needs-based assistance to recognised CSBs. Refresher sessions, simple guidance materials and regular opportunities for peer learning should be developed and provided as the framework is implemented, with training adjusted in response to experience and identified gaps.

9. ENSURING EFFECTIVE OUTREACH ON RECOGNITION AND SUPPORT OPPORTUNITIES: The Secretariat should coordinate a clear communication strategy to ensure that farmers and CSBs across Odisha are aware of the recognition process, available monetary and non-monetary support, eligibility requirements and how to apply. Designated district agricultural authorities should disseminate this information through local agricultural extension services, Panchayati Raj Institutions, farmer organisations, NGOs, CSB networks, meetings and locally appropriate media and languages. Information should also be available on the state-level CSB portal and through simple printed guidance, with designated district contact points assisting CSBs that need help to access the opportunities.

10. MONITORING, REVIEWING AND ADAPTING THE ENABLING ENVIRONMENT AND ROADMAP: The Secretariat should establish a simple monitoring and learning framework to assess whether recognition, support measures and implementation arrangements are reaching diverse CSBs and operating effectively and efficiently. Designated district agricultural authorities would report annually to the advisory committee and recommend practical adjustments to procedures, support measures, capacity building and outreach. A broader participatory review should be undertaken at suitable intervals, including before the Secretariat's functions are transferred to the Department, to update the enabling environment and roadmap in light of experience and changing needs. Lessons and effective approaches should be documented and shared within Odisha and with interested actors elsewhere.

8. Scaling up successful CSB models

The Secretariat should actively promote and facilitate the scaling of successful CSB models by identifying well-functioning approaches through monitoring and participatory review, documenting their key features, and sharing them through the state portal, peer learning, exchange visits and targeted outreach. It should connect interested farmer groups, CSBs, support providers and district agricultural authorities, and coordinate access to the technical, institutional and financial support needed to adapt effective approaches to local conditions.

Successful CSBs could serve as local learning hubs, with experienced seed custodians, including women seed savers, supported to mentor emerging groups through practical demonstrations and farmer-to-farmer training. District agricultural authorities should facilitate implementation at the local level, helping groups test and adapt practices before expanding, and develop realistic plans for recurrent costs and continued access to advice. Scaling should be voluntary and gradual, preserve the diversity and autonomy of CSBs, and focus on replicating effective functions and practices rather than imposing a single organisational model.

9. How to use this document

This document may serve as a shared framework for turning the roadmap into coordinated action at different levels. The Odisha Government and district agricultural authorities may use it to develop policy, assign responsibilities, establish recognition procedures and allocate resources; the proposed Secretariat and advisory committee may use it to plan, coordinate, monitor and refine implementation; and CSBs, farmer organisations, NGOs, research institutions and other support providers may use it to identify their roles, contribute expertise and connect recognised CSBs with appropriate support. Stakeholders may adapt the proposed measures through consultation and phased implementation, while retaining the roadmap's core principles of simplicity, inclusion, local responsiveness and respect for CSB autonomy.

About the authors

Dr Regine Andersen is a Research Professor at the FNI, specialized in the international, national, and local governance of plant genetic resources for food and agriculture and the realization of farmers' rights to seeds. She is project leader of DIVERSIFARM-India.

Dr Prajeesh Parameswaran is a Senior Scientist at MSSRF in Chennai, India, specializing in plant genetic resources governance, farmers' rights and participatory biodiversity management.

Dr C.M. Pratheepa is a Senior Scientist at MSSRF in Chennai, India, and is a professional social worker specialising in community development, institutional capacity building, and participatory, gender-responsive policy research on agri-food systems.

Dr E. D. Israel Oliver King is Director of the Terrestrial and Agrobiodiversity Programme at MSSRF in Chennai, India, and an expert in ethno-botany, with a focus on biodiversity conservation, environmental sustainability, rural livelihoods, and policy advocacy.

Dr Rengalakshmi R. is Executive Director, R&D and Policy, at MSSRF in Chennai, India, and an interdisciplinary researcher working at the science-society interface of technologies, institutions, and policies for sustainable and gender-transformative food systems.

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Fridtjof Nansens vei 17
1366 Lysaker, Norway

(+47) 47 48 06 80
post@fni.no
www.fni.no