The demand for changes in the financial sector to enable and strengthen the transition to sustainability has been unequivocal over the past couple of decades. Agroecological approaches recognize that agrifood systems are coupled social–ecological systems from food production to consumption and involve science, practice and a social movement, as well as their holistic integration, to address food security and nutrition (HLPE, 2019; Pp. 39). This study focuses on the extant arrangements and potential prospects for financial transfers by Public Development Banks (PDBs) for agroecological transformations in developing countries like India. It builds on the recent rationale from PDBs, for financial services to account for investment externalities and work towards developing sustainable financial services and products; ones that result in sustainability of social and natural systems.

Objectives and research questions

Do prevalent innovations in financial services and products from PDBs have the potential to address the complexity of social and ecological systems involved in agroecological transformations? How can evidence, principles and lessons from financial innovations in and for agroecological systems that have proven successful over time and some, at scale, be used to inspire and build capacities for agroecological transformations?

Methods

Following a social-ecological economics framework, the study has drawn its analysis on secondary literature and data, stakeholder interviews and case studies.

Results

Contrary to agriculture’s contributions to economic growth and development, agroecological agri-food systems are framed in and guided by the principles of environmental, social, economic wellbeing, and are politically correct and just. Financial flows to agriculture from PDBs, apex institutions and state agencies in the post-Green Revolution period have often ignored the linkages between agricultural production, the environment, consumption and household access to health and nutrition. They have been driven by the dominant paradigm of product, market and factor contributions of agriculture to the economy. Higher growth rates in production and productivity have been indicators of success. Finance has been handy in the palliative political agenda of quelling farmer dissent and managing short-term production disruptions. on the other. Apart from a few initiatives by the National Bank for Agriculture and Rural Development (NABARD) in watershed and wadi (orchard) development, mainstream agricultural credit has destroyed location specific farming systems, diversity in seeds, cultivars, and livestock, heterogeneity in markets, food cultures and valuation systems.
Critical concerns:

- Neglect of agroecological principles in approach to financing: Both PDBs and the government lack a cohesive and comprehensive approach to financing nature-positive transition based on the core operational principles of agroecology - improve resource efficiency, strengthen resilience and secure social equity/responsibility.
- Poor budgetary allocation: The budget estimates for 2019-20, show that expenditure on schemes for agro-ecologically transforming agriculture accounted for only six per cent of the total expenditure under the centrally sponsored category and just 0.8 per cent of the total expenditure on agriculture. Despite the constitution of the nation-wide network, the National Coalition on Natural Farming (NCNF), there is limited government funding for agroecology. The latest budget announced for 2023-24 has provided meagre public investment for local sustainable infrastructure through allocations to establish 15,000 Bio Input Resource Centres.
- Trend towards financialisation: The agri-finance vocabulary has expanded widely over the past few years to include terms like crop and weather insurance, value chain financing, inventory financing, receivable financing, price hedging, and partial credit guarantees. As food production and consumption activities are organized increasingly as part of highly capital-intensive industrialized systems, shareholders' voices have become critical while making food system decisions.

Recommendations

Building capacities to finance agroecological transformations:

- Focus on sub-national actors: State Government mainly Andhra Pradesh, Sikkim, Karnataka and Himachal Pradesh, and Civil Society Organizations (CSOs) like the Timbaktu Collective and Centre for Sustainable Agriculture, and networks like the Revitalization of Rainfed Agriculture have tried out innovative approaches to mobilizing financial resources towards redesigning agri-food systems. These include innovations that combine the funds available under central assistance and state plan to forge innovative financing arrangements, along with mobilization of grants from PDBs and philanthropic organizations.
- Expand and deepen the blended finance model: The unique blended financing partnership built on the philosophy to 'leverage private finance for the public good', the Sustainable India Finance Facility (SIFF), under the leadership of the United Nations Environment Programme (UNEP), with participation from BNP Paribas and the World Agroforestry Centre, offers key lessons for capacity building. Similar experiments with Farmer Field Schools, BioFarms, Integrated Farming Systems, and watershed development with international donors (like BMZ - through GIZ in India) also offer lessons for capacity building.
- Build small holder targeted financing capabilities: Though some impact investors and new age lenders promote the idea of structured financing through private-public partnerships to address the peculiar agricultural challenges, there is little capacity to support smallholders who do not have the capacity to bear the short-term risks, to design and fund the development of local food chains with decentralized processing, transporting and marketing infrastructure. Hence, a long-term structured financing arrangement that accepts initial loss in expectation of higher realization, later on, is considered an ideal solution. Such low-cost, longer-term funding necessitates setting up mechanisms like a consortium of philanthropic, commercial, and soft capital providers.
- Address regulatory and policy challenges: While NABARD has developed a list of indicators for financing agroecological/natural farming (the JIVA project, 2021), the policy void and regulatory challenges regarding supporting small-scale, regionally distributed financial players remain. As per the regulatory framework, all development-centric funds must go through the apex development finance institutions. Despite significant human and material capital capabilities, and pioneering work in natural resource management and renewable energy (say, NABARD, Syndicate bank/ Canara Bank since the early 1980s) PDBs lack agility and are bound by cumbersome processes.

There is an urgent need for institutional reform of PDBs in India along agroecological principles, with decentralized database, indicators of sustainability transitions, and healthy regard for local food cultures and agroecological knowledge vested with communities.