

WORKING PAPER

Roadmap for engaging Non-Governmental Organisations in KSAPCC Localisation in Water and Agriculture Sectors

July 2023

Prepared by CEE South with support of Hanns-Seidel-Stiftung India

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Disclaimer

The study document has been prepared by the Centre for Environment Education (CEE) as part of the partnership with Hanns-Seidel-Stiftung India. It has attempted to represent the needs and gaps in the state of Karnataka pertaining to climate change, water and agriculture based on qualitative surveys and key stakeholder interviews, and the same should not be construed as accurate information for the entire population for any purposes whatsoever. The authenticity of the secondary research presented and information gathered as part of the study lies with the respective agencies. Certain elements of the Karnataka State Action Plan on Climate Change (KSAPCC) concerning the agriculture and water sector are beyond the scope of this study and hence are not taken into consideration. While all care has been taken researching, compiling, editing and reviewing this report, the accuracy of the data included cannot be guaranteed. Reproduction is authorised, provided the source is acknowledged.

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List of Abbreviations

UNFCCC	The United Nations Framework Convention on Climate Change
IPCC	Intergovernmental Panel on Climate Change
UNEP	United Nations Environment Programme
NAPCC	The National Action Plan on Climate Change
KSAPCC	Karnataka State Action Plan on Climate Change
SDG	Sustainable Development Goals
NDC	Nationally Determined Contributions
EMPRI	Environmental Management & Policy Research Institute
TERI	The Energy and Resources Institute
CEE	Centre for Environmental Education
CSO	Civil Society Organisations
NGO	Non-Governmental Organisations
UNCED	United Nations Conference on Environment and Development
UNECE	The United Nations Economic Commission for Europe

1. Introduction

Climate change has now emerged as one of the most critical global challenges. Way back in 1979, United Nations (UN) formally recognized it as a potential problem. That eventually led to a major breakthrough, when the United Nations Framework Convention on Climate Change (UNFCCC) was introduced as part of the Rio Earth Summit in 1992. The Fourth Assessment Report (2007) of the UN's Intergovernmental Panel on Climate Change (IPCC) unequivocally established the warming of the climate system and the fact that climate change is significantly a result of human activities and that delays in reducing emissions significantly constrain opportunities to achieve lower stabilization levels and increase the risk of more severe climate change impacts (IPCC, 2007).

In 2008, India unveiled its National Action Plan on Climate Change, in short NAPCC, to deal with climate change through multipronged mitigation strategies. The NAPCC provides for a clear set of actions in key sectors such as water, energy, and agriculture through its sectoral missions. Subsequently, states in India prepared their state action plans on climate change in line with the framework provided by the central government in that regard. Post the Paris Agreement and the NDC goals and targets, states are bound to assess their climate actions based on domestic priorities under the SAPCC and link them to key metrics that ensure alignment with India's goals under the NDC (KSAPCC, 2021).

Environmental Management & Policy Research Institute (EMPRI) and The Energy and Resources Institute (TERI) helped the Government of Karnataka develop Karnataka State Action Plan on Climate Change (KSAPCC). The KSAPCC focuses on those sectors that are important to the local economy and livelihoods, such as agriculture, water, biodiversity, health, transport, energy, industries, urban development, and forestry. The KSAPCC was the first policy document to tackle climate change in Karnataka comprehensively. It laid ground for crucial mitigation and adaptation action. But effective implementation of the action plan depends on the actions of the stakeholders, their perspectives concerning the suitability and feasibility of the action points of the KSAPCC, and the issues and challenges faced in execution. In this context, the role of civil society organisations particularly NGOs needs to be explored, and a roadmap for enabling their engagement in the effective implementation of the KSAPCC needs to be drawn up.

To take the measures of the government forward and to ensure the success of the development agenda at the national as well as state level, it is critical that the government collaborate with various partners, viz., private players, and civil society organizations, who have played a key role in pushing the SDGs in the international arena. In particular, it is important that key players such as NGOs be engaged at the ground level, as they have a strong penetration at the grassroots level and can contribute to achieving the SDGs. The NGOs working at the grassroots level must be capacitated well to have a better understanding of the SDGs and can work towards achieving the SDGs and targets that fall within their purview (Training Manual on SDGs for NGOs, 2022).

Increasingly, non-government organisations and other stakeholders have been coming together at the national level to form civil society networks in some of the countries that are most affected by climate change. These networks have been involved in a wide range of activities to raise awareness about climate change, support climate change adaptation activities that benefit the most vulnerable, develop low-carbon development

pathways to help mitigate climate change and improve local livelihoods, conduct research and disseminate results, build capacity on climate change and influence government planning processes at a variety of levels through a multitude of advocacy activities (SVCPC, 2012).

2. About the Study

2.1 History

Centre for Environmental Education (CEE) assessed KSAPCC in 2021 with a particular focuses on the water and agriculture sectors. Based on the recommendations from the study, CEE developed the Policy Brief which suggests a solution to strengthen the localisation of the KSAPCC during 2022. Recognising that Climate Action cannot happen in silos, CEE aimed to create a strong institutional network partnership to join the action and bring together multiple knowledge stakeholders including policymakers, service providers, scientists, academicians, professors, sectoral experts, youth, students, representatives from civil society, etc.

In this continuation, CEE also completed an exercise on “Briefly study on NAPCC (two missions- water and agriculture) and the linkages between NAPCC and KSAPCC” in 2022 which aims to strengthen the efficiency of the Karnataka State Action Plan on Climate Change (KSAPCC) with a particular focus on Sustainable Agriculture and Integrated Water Resource Management Sector, by reflecting on the implementation challenges as well as policy and communication gaps - with a special focus on stakeholder engagement in 2022.

2.2 The Present Study

The KSAPCC 2021 assessment report indicates that both temperature and rainfall have changed in the districts of Karnataka over the historical period, and future projections indicate increasing temperatures and summer monsoon rainfall. Heavy rainfall events are also expected to increase, impacting natural resources, socio-economic systems, and communities in different districts. These changes highlight the need to consider climate risks in state development plans and projects, aligning them with national goals and commitments such as the NDC to fulfil international obligations (KSAPCC, 2021).

To ensure the successful implementation of the development agenda, the government should collaborate with private players and civil society organizations, particularly NGOs at the grassroots level. NGOs have a strong presence and can contribute to achieving the SDGs. Capacitating these NGOs is essential for better understanding and working towards the relevant SDGs and targets (Training Manual on SDGs for NGOs, 2022).

In this regard, CEE has planned a study that mainly focuses on creating a “Roadmap for engaging Non-Governmental Organisations (NGOs) in KSAPCC localisation in water and agriculture sectors” under the project “Multi-stakeholder approaches for effective implementation of Karnataka State Action Plan on Climate Change (KSAPCC)”. This project aims to establish an institutional network partnership involving policymakers, scientists, NGOs, and other stakeholders for the effective implementation of the Karnataka State Action Plan on Climate Change. It emphasizes the role of NGOs in climate action through case studies and highlights the importance of multi-stakeholder collaboration, equity, transparency, and accountability.

Engaging NGOs in Karnataka's climate action ensures public awareness, policy development, joint action, accountability, and improved decision-making.

3. Civil Society Organisations (CSOs) and their Engagement in Climate Action

The IPCC defines Civil Society as “The arena of uncoerced collective action around shared interests, purposes, and values” (IPCC 2007:713) which includes trade unions, community-based organizations, social movements, faith-based institutions, charitable organizations, universities, foundations, professional associations and others. The importance of civil society has been recognised by the Intergovernmental Panel on Climate Change (IPCC) and the Fourth IPCC Assessment points out that climate policy emerges from the joint work of several different institutions, including non-governmental actors and civil society (IPCC 2007:708). CSOs are key stakeholders in national and international climate processes and play a crucial role in contributing to bringing ground-level vulnerabilities into decision-making processes, providing technical support and research, advocating for ambitious action, creating awareness, building capacities, and enhancing the resilience of the most vulnerable populations (Policy Brief, SLYCAN, 2020).

“The engagement of the public is vital for creating an environmentally sustainable future. Governments alone cannot solve the major ecological problems of our time. Only through building partnerships within a well-informed and empowered civil society, within the framework of good governance and respect for human rights, can this challenge be met”
(UNECE, 2002).

At COP21 in Paris in 2015, it was agreed that mobilizing stronger and more ambitious climate action by all Parties and non-Party stakeholders is an urgent requirement for achieving the goals of the Paris Agreement. Decision 1/CP.21 recognised the commitments from all actors, including party as well as non-party stakeholders. Additionally, the UNFCCC Guidelines on National Adaptation Plans (NAPs) also highlight the need for multi-stakeholder engagement in climate adaptation and identify key stakeholders for engagement. Among these stakeholders, CSOs are highlighted as a key entity to be contributing to the process, at all levels, including the preparation, implementation, monitoring, and evaluation levels. As the National Adaptation Plans (NAP) activities are expected to align closely with the NDC commitments on climate adaptation at the country level, the inclusion of CSOs in the NDC process could be facilitated through the alignment of NDC and NAP activities (Policy Brief, SLYCAN, 2020).

Multi-stakeholder engagement in national climate change processes is vital and allows countries to strive to achieve ambitious, participatory, and inclusive climate action. Countries' commitments under the Parties Agreement and the new and updated NDCs of countries should be formulated through a multi-stakeholder-driven process, which will ensure that the voices of the most vulnerable are heard and facilitate evidence-based collaborative action to address climate change impacts.

4. Role of NGOs in Karnataka's Climate Action

NGOs in Karnataka can contribute significantly to implementing the water and agriculture sector action points of the KSAPCC on the ground, working towards sustainable water management, promoting climate-resilient agricultural practices, raising awareness, providing capacity building, and monitoring progress to ensure effective climate action in these crucial sectors.

The Centre for Environment Education (CEE) has identified specific action points in the water and agriculture sector, taking into account the capacity needs outlined in the Karnataka State Action Plan on Climate Change (KSAPCC). The roles of NGOs are briefly explained below in terms of their contribution to the effective implementation of the identified action points in the water and agriculture sector.

4.1 Agriculture Sector

- **Action Point (2):** Establishing a State Level Policy Body for Devising Cropping Shifts.

- **What KSAPCC says:** Enhance farmers' capacities to understand the risks of climate change on current crops and the advantages of the alternative crops being promoted. Such capacity building programme may be conducted at the district level with sessions on climate change, its impact, and the need to shift the cropping pattern. The capacity building programme may also include intrastate/interstate field visits to well-equip the farmers' on the implementation of shift cropping patterns (KSAPCC V1, p.167).



- **Role of NGOs:**

- A district-level capacity-building program can be conducted to educate farmers' on climate change, its impacts on agriculture, and the need to shift cropping patterns through workshops, training sessions, awareness campaigns, disseminating information, and building knowledge among farmers'.
- A workshop can be organized to transfer knowledge and expertise from experts to farmers' through demonstrations and providing practical insights into climate change adaptation and alternative crops.
- Offering technical support to farmers' in implementing new cropping patterns, including best practices, crop selection, farming techniques, and accessing resources for alternative crops.
- Facilitating farmer networks and collaboration among those transitioning to alternative crops, fostering knowledge sharing, experience exchange, and peer learning for collective adaptation to climate change.
- Organizing field visits for farmers' to witness the successful implementation of shifting cropping patterns, providing practical insights, inspiration, and confidence in adopting new practices through collaboration with progressive farmers', research institutions, and government agencies.
- Engaging in advocacy efforts to highlight the importance of climate-resilient agriculture and promote policies that support farmers' in adapting to climate change by working with local and national authorities to influence policy decisions, secure funding for climate change adaptation initiatives, and ensure that the voices of farmers' are heard in policy discussions.

- Monitoring and evaluating farmers' progress in shifting cropping patterns, measuring program effectiveness, identifying areas for improvement, and sharing success stories to inspire other farmers'.

- **Action Point (3):** Promotion of Dryland Farming

- **What KSAPCC says:** A capacity-building programme in line with the training needs identified above should include both government personnel and farmer communities. Such capacity building programme may also include intrastate/interstate field visits. Experts from different regions may be invited to share their experiences. Training programmes may also be conducted for Krishi Vigyan Kendra's (KVKs) and district-level officers (KSAPCC V1, p.169).



- **Role of NGOs:**

- Contributing to designing and implementing capacity-building programs, aligning them with the training needs of government personnel and farmer communities in collaboration with stakeholders to develop comprehensive training modules and activities for dryland farming.
- Delivering training programs for farmer communities, Krishi Vigyan Kendra's (KVKs), and district-level officers on dryland farming techniques, sustainable practices, water conservation methods, and soil management strategies through their expertise and resources.
- Inviting regional experts in dryland farming to share valuable insights, practical tips, and success stories during the capacity-building program to enhance the learning experience of the participants.
- Organizing field visits as part of the capacity building program, enabling participants to observe successful dryland farming practices, and water-efficient techniques, and learn from experienced farmers' by collaborating with relevant stakeholders to arrange these field trips and ensure meaningful learning experiences.
- Organizing workshops, group discussions, and knowledge exchange sessions, to enable participants to share experiences, challenges, and innovative solutions related to dry land farming.
- Mobilizing resources for the capacity building program by seeking funding, grants, and partnerships to support training activities, ensuring effective implementation and sustainability.

- **Action Point (4):** Rendering Theft of Sprinkler Pipes Unviable

- **What KSAPCC says:** Propagate micro-irrigation through creating farmers 'awareness at Taluk and Gram Panchayat levels on the benefits of micro-irrigation, available financial assistance, and government support programmes. Local NGOs may play an important role in such awareness-creation programmes (KSAPCC V1, p.171).



➤ **Role of NGOs:**

- Conducting awareness campaigns through workshops, training sessions, and information dissemination programs to educate taluk and gram panchayat officers and farmers' about the benefits of micro-irrigation, including water conservation, increased crop yield, improved soil health, and reduced costs.
- Providing farmers' with information about the financial assistance and government-supported programs available for adopting micro-irrigation by assisting in explaining the eligibility criteria, application processes, and documentation requirements for accessing these resources.
- Conducting capacity-building programs to enhance farmers' understanding and skills in micro-irrigation techniques, providing training on installation, operation, and maintenance of micro-irrigation systems for effective implementation and management.
- Collaborating with government agencies to design and implement awareness campaigns, share information, and advocate for supportive policies and programs in promoting micro-irrigation.
- Monitoring the progress and impact of micro-irrigation adoption among farmers', assessing awareness campaigns, tracking practice uptake, and evaluating outcomes in terms of water savings, crop productivity, and economic benefits. This helps to identify successes, challenges, and areas for improvement.
- Facilitating knowledge sharing and networking among farmers' practicing micro-irrigation, organizing platforms for them to exchange experiences, share best practices, and learn from each other's successes and challenges, promoting peer-to-peer learning and innovation.

• **Action Point (5):** Creation of a Market for Indigenous Crops

- **What KSAPCC says:** Training programmes for farmers' on the benefits of conserving indigenous varieties. Department of Agriculture may conduct such training programme at block and Gram Panchayat level through Krishi Vigyan Kendra/ Agriculture Extension (KSAPCC V1, p.172).



➤ **Role of NGOs:**

- Creating awareness among farmers' about the importance of conserving indigenous varieties through workshops, training sessions, and awareness campaigns. This will help to educate farmers' about the value of indigenous crops in terms of biodiversity conservation, climate resilience, cultural heritage, and nutritional diversity.
- Supporting farmers' in developing sustainable livelihood models focused on indigenous crop conservation by providing training on value addition, marketing strategies, and accessing niche markets, incentivizing farmers' to conserve and cultivate indigenous varieties.
- Facilitating knowledge exchange, seed sharing, and collaboration while connecting farmers' with markets and consumers who value indigenous crops, creating economic opportunities.
- Documenting indigenous crop varieties by collaborating with farmers' to record local seed varieties, farming practices, and associated knowledge. Also can research to understand the unique characteristics and adaptability of indigenous crops, contributing to their conservation and promotion.

- Conducting capacity-building programs to enhance farmers' knowledge and skills in conserving indigenous varieties, providing training on seed-saving techniques, sustainable farming practices, and traditional agricultural knowledge, and empowering farmers' with the necessary tools for effective conservation and propagation.

4.2 Water Sector

- **Action Point (9):** Enforcement of Karnataka Groundwater Act.

- **What KSAPCC says:** Training of relevant officials may be conducted on the Act and its implementation i.e. clause, rules, actions, penalty, prohibited activities, etc. A nodal officer/cell at the state level may be appointed for 1st year to resolve and address issues that emerged at the field level in implementation (KSAPCC V1, p.177).



- **Role of NGOs:**

- Organizing workshops, seminars, and campaigns to educate communities, farmers', and stakeholders about groundwater conservation and the Karnataka Groundwater Act. They can create and distribute informative materials to raise awareness about the Act's provisions and penalties for non-compliance.
- Training government officials on the Karnataka Groundwater Act, focusing on provisions, rules, and implementation strategies. This enhances their knowledge and skills for effective Act enforcement.
- Engaging communities through meetings, workshops, and dialogues to promote participation in groundwater management. This will help communities to understand their rights, and responsibilities, and encourage sustainable water practices. Also, assist in setting up community-based monitoring systems for tracking groundwater levels and quality.
- Monitoring the Act implementation, reporting violations, and collaborating with government agencies for enforcement by providing feedback and suggestions for improving penalties and enforcement mechanisms.
- Establishing pilot projects and demonstration sites to showcase sustainable groundwater management practices in action. These serve as practical examples for learning and replication by farmers', communities, and officials by providing technical support, guidance, and training for project success.

- **Action Point (10):** Creation of a Policy body for Restricting Groundwater Use

➤ **What KSAPCC says:** Training and awareness programmes for large consumers (industries, farmers’) on the importance of groundwater, introduction to water use efficiency and conservation, government’s support for groundwater recharge including rebate and incentives. Local NGOs may be important partners. The numbers and contents of these training programmes may be finalised in close consultation with relevant departments and stakeholders (KSAPCC V1, p.178).



➤ **Role of NGOs:**

- Collaborating with large consumers (industries, farmers’) to design tailored training programs for addressing specific groundwater management challenges and opportunities.
- Developing informative content for the training programs on water efficiency, conservation, and sustainable groundwater management. They incorporate practical examples and case studies to highlight the benefits of adopting efficient practices.
- Empowering large consumers (industries, farmers’) through workshops and training sessions on groundwater importance, water use efficiency, and conservation strategies, equipping them with knowledge and tools for sustainable practices.
- Fostering dialogue and collaboration among large consumers (industries, farmers’), through interactive sessions, networking, and forums, facilitating the exchange of ideas, experiences, and innovative solutions.
- Advocating policies for promoting groundwater recharge and sustainable water use, collaborating with government agencies to raise awareness and propose evidence-based recommendations.
- Monitoring and evaluating training programs for large consumers (industries, farmers’), collecting data, assessing impact, and evaluating the effectiveness of the programs in promoting behavior change and adoption of sustainable practices.

- **Action Point (11):** Introduction of a Groundwater Cess.

➤ **What KSAPCC says:** Since water has been treated as a private resource the cess on groundwater will need to be accompanied by large-scale media campaigns and necessary capacity-building activities. A nodal agency may be appointed to develop adequate capacity-building strategies in this regard (KSAPCC V1, p.180).



➤ **Role of NGOs:**

- Collaborating with the nodal agency and other stakeholders to design and implement media campaigns, by developing compelling messages and awareness materials to promote water as a shared resource through communication networks and media expertise to amplify campaign impact.

- Supporting the nodal agency in capacity building by organizing training programs, workshops, and seminars for stakeholders through technical assistance, sharing best practices, and facilitating knowledge sharing to promote sustainable water resource management.
- Actively engaging with various stakeholders, including local communities, industries, farmers', and civil society organizations through dialogues, workshops, and community meetings to promote awareness and collaboration in water resource management for sustainable use.
- Monitoring and evaluating media campaigns, collecting data, and providing feedback for program effectiveness.

- **Action Point (14):** Revision of Pricing Policy for Irrigation Water

➤ **What KSAPCC says:** With the help of local NGOs, awareness programmes for farmers' to demonstrate the need for water tariffs may be conducted at block and Gram Panchayat levels. Participatory capacity-building programmes for farmers' need to be effectively planned (KSAPCC V1, p.184).



➤ **Role of NGOs:**

- Collaborating with farmers' and gram panchayats to raise awareness about the benefits of water tariffs, such as promoting responsible water use and ensuring equitable distribution through effective communication materials, community meetings, and dialogue.
- Implementing capacity-building programs for farmers', providing training, workshops, and demonstrations on water management, efficient irrigation, and the benefits of water tariffs. Also, empower farmers' to make informed decisions and adopt sustainable practices.
- Engaging farmers' and local stakeholders in facilitating dialogue and participation in water tariff implementation to bridge the gap between farmers' and authorities, ensuring their perspectives and needs are considered in designing and implementing water tariff systems.
- Advocating for water tariff policies by collaborating with government departments, and providing evidence-based recommendations. Also, work with other organizations to build a collective voice for equitable water pricing.

5. Mapping of NGO Community in Karnataka

In Karnataka, several NGOs are actively engaged in the fields of water and agriculture, addressing critical issues and promoting sustainable practices to combat climate change impacts. The table below provides an overview of priority areas of the 10 select NGOs in Karnataka. The NGOs listed are actively involved in addressing various issues and implementing sustainable practices in the region.

No.	Non-Governmental Organisations	Priority Area in the direction of Climate Change
1	ARGHYAM, Bengaluru	<p>ARGHYAM with partners across the country builds a blueprint to achieve safe, sustainable water for all of India. They operate with three core principles in their engagements: Community-led approach; design for scale; and generate trusted data (Provide open data to community).</p> <p>(https://www.arghyam.org/)</p>
2	Ashoka Trust for Research in Ecology and the Environment (ATREE), Bengaluru	<p>The ATREE's Water, Land, and Society (WLS) program aims to generate actionable insights to address India's water issues by identifying the causes of inequity, unsustainability, pollution, and vulnerability of water resources and proposing social, technological, and governance solutions.</p> <p> (https://www.atree.org/programmes/water-land-society)</p>
3	Centre for Sustainable Development (CSD), Bengaluru	<p>Center for Sustainable Development (CSD) conducts research with a focus on developing principles and practices of sustainable development, aiming to integrate them into mainstream developmental models. Their research and diagnostic studies primarily revolve around resource management in areas such as energy, water, and waste. They also prioritize climate change impacts and strategies at the local level, along with addressing environmental issues including air and water quality monitoring, rainwater harvesting, and promoting cleaner production.</p> <p>(https://www.csdindia.in/research-and-development/)</p>
4	Environmental Synergies in Development (ENSYDE), Bengaluru	<p>ENSYDE focuses on reducing the environmental footprint of organizations in India through efficient resource use (energy, water, waste) and promoting environmental awareness to drive behavioural change.</p> <p>(https://www.ensydeindia.org/)</p>

5	Manuvikasa, Sirsi, Uttara Kannada	<p>Manuvikasa mainly focusses on Environment Conservation (Farm ponds, Soak pits in hilly land, Lake rejuvenation), Sustainable Agriculture (Technology transfer, SRI, Promotion of Farmer Producer Organization), Livelihood (Promote SHGs-JLGs, training, financial inclusion, MFI for livelihood activities), Educational and Social Support (Educational kit, scholarships, Support to vulnerable / distressed).</p> <p>(http://manuvikasa.letsendorse.org/)</p>
6	SankalpTaru Foundation, Bengaluru	<p>SankalpTaru’s mission is to promote sustainable development, preserve the natural environment, and empower local communities through community engagement, education, and innovative techniques. Their project, “HasiruSankalpa,” focuses on planting fruit-bearing and native plant species in the lands of marginal farmers’ in Karnataka. This project aims to sustain rural livelihoods, address biotic pressures, improve agricultural practices, and raise water table levels.</p> <p>(https://sankalptaru.org/project-hasiru-sankalpa-karnataka/)</p>
7	Sehgal Foundation, (Kolar, Nelamangala, Chikkaballapur)	<p>S M Sehgal Foundation’s Water Management Program supports communities in rainwater harvesting, groundwater replenishment, and wastewater disposal. They promote safe drinking water and collaborate for low-cost water management interventions. Their Agriculture Development Program enhances livelihoods through capacity building, improved agricultural practices, and technologies for increased crop yields, water conservation, and soil fertility. They work with small-holder farmers’, focusing on sustainable practices, technology adoption, and information and communication technology (ICT) in agriculture.</p> <p>(https://www.smsfoundation.org/agriculture-development/; https://www.smsfoundation.org/water-management/)</p>
8	SELCO Foundation, Bengaluru	<p>SELCO Foundation works with core Agriculture stakeholders to develop Sustainable Energy driven solutions across the Value Chain and their focus is to improve prosperity and resilience of small and marginal farmers’.</p> <p>(https://selcofoundation.org/agriculture/)</p>

9	The Deshpande Foundation India, Hubballi, Karnataka	<p>The Deshpande Foundation India’s agriculture initiatives are designed to understand the primary needs of the farming community and bring together best practices to enhance farmers’ livelihoods. The initiatives include</p> <ul style="list-style-type: none"> • Farm Ponds, Better Cotton Initiative and Farmer Producer Organizations (FPOs). The program works with national and international organizations, with an aim to contribute significantly towards rural transformation. (https://www.deshpandefoundationindia.org/agriculture/index)
10	TREND - Trust for Rejuvenation of Environment and Nature Development, Bengaluru	<p>Trust for Rejuvenation of Environment and Nature Development (TREND) is a non-profit organization dedicated to the preservation of the environment and providing social and philanthropic services. Their focus areas include the rejuvenation of lakes, integrated water management, and raising awareness about water consumption and the impacts of climate change. TREND actively engages stakeholders in their efforts through trainings and workshops.</p> <p>(http://www.trendforsociety.org/)</p>

Among the above-listed organisations, few are working towards enhancing water management by implementing rainwater harvesting techniques, restoring traditional water bodies, and constructing water storage infrastructure. They also focus on promoting water conservation, improving water use efficiency in different sectors, and ensuring the safe disposal of wastewater. While some organisations collaborate with farmers’, including women farmers’, to enhance their livelihoods through capacity building and the adoption of improved agricultural practices.

These NGOs provide training on climate-smart interventions, water-efficient irrigation techniques, soil health management, efficient input use, and small-scale mechanization. They also promote the use of information and communication technology (ICT) in agriculture to improve productivity and sustainability. Additionally, the NGOs raise awareness about climate change’s impacts on agriculture and the importance of adopting climate-resilient cropping patterns. Through workshops, training sessions, campaigns, and knowledge dissemination, they empower farmers’, government officials, and stakeholders with the essential information and skills to adapt to changing climatic conditions.

All these NGOs are working closely with local communities, government bodies, and other stakeholders and these NGOs aim to achieve long-term sustainability in water management and agriculture. Their efforts contribute to building resilience, improving livelihoods, and promoting environmentally friendly practices in Karnataka’s water and agriculture sectors.

6. Discussion

Climate change is the biggest threat plaguing humanity, and is garnering attention from key decision-makers globally. Through the process of formulating and implementing policies, regulations, and development priorities basis sustainable development, governments play a crucial role in building community resilience to withstand the effects of climate change. Climate governance through the informed participation of multi-actors including NGOs reduces climate change risks.

Globally, NGOs are driving policymaking, research, and evidence generation for climate action, bridging the knowledge gaps. They collect and disseminate information, advocate inclusivity, and monitor policy implementation. Indian NGOs have been no different and they also remain engaged in dealing with climate change and its effects.

In the run-up to and at the United Nations Conference on Environment and Development (UNCED), many Indian NGOs played a significant and sometimes critical role in shaping the Indian Government's position and contribution towards the UNFCCC. Since then, there has been a gradual marginalisation of NGOs in climate change policy-making and negotiations. However, NGOs are actively pursuing a range of issues related to climate policy, mitigation, and adaptation. It is to their credit that they bring to the fore a variety of justice and equity issues and keep focusing on alternatives and a low-carbon path of development for the future.

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About the Organisations

About CEE

Centre for Environment Education (CEE) is a national institute established in 1984 as a Centre of Excellence under the Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India (GoI). The Centre's primary objective is to improve public awareness and understanding about environmental issues to promote the conservation and wise use of nature and natural resources. CEE's Climate Change programmes are visioned to engage decision-makers, support vulnerable communities, and empower interested stakeholders to build a low-carbon, climate-resilient society, and sustainable living. To know more; <https://www.ceeindia.org/>.

About HSS

The Hanns Seidel Foundation, founded in 1967, is a German political foundation, working “in the Service of Democracy, Peace and Development”. It has been active for more than 40 years in the field of political development cooperation and is currently taking an active part in 80 projects in 60 countries worldwide. In India, the Foundation started its work in the year 1996 and undertakes projects to support India's federal democratic structure, strengthen geopolitical relations, water governance, and improved access to justice. The projects are implemented with government and non-government partners at regional, national, and state level, aiming at increased systemic efficiency. The Foundation seeks to contribute to India's sustainable development by strengthening peace, democracy, and rule of law. More information on the work of Hanns Seidel Foundation India can be found at <https://india.hss.de/>.



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