



Geneva Graduate Institute (IHEID) Preliminary Report

Local Nature-based Livelihoods and Local markets for Localized Climate Resilience

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This report is dedicated to all of you. To your resistance, resilience and struggle. We salute your strength and your courage.

Glossary

1. Satyagraha: Satyāgraha (Sanskrit: सत्याग्रह; satya: "truth", āgraha: "insistence" or "holding firmly to"), or "holding firmly to truth", or "truth force", is a particular form of nonviolent resistance or civil resistance. Someone who practices satyagraha is a satyagrahi. Mahatma Gandhi who practiced satyagraha in the Indian independence movement and also during his earlier struggles in South Africa for Indian rights, coined and developed the term satyagraha .

2. Sarvodaya: Sarvōdaya (Hindi: सर्वोदय sarv- "all", uday "rising") is a Sanskrit term which generally means "universal uplift" or "progress of all". The term was used by Mahatma Gandhi as the title of his 1908 translation of John Ruskin's critique of political economy, *Unto This Last*, and Gandhi came to use the term for the ideal of his own political philosophy. Later Gandhians, like the Indian nonviolence activist Vinoba Bhave, embraced the term as a name for the social movement in post-independence India which strove to ensure that self-determination and equality reached all strata of Indian society.

3. Swadeshi: The word 'swadeshi' is derived from the Bengali, svadesi, or from the Sanskrit, svadesin. Literally, it means 'from one's own country' (Leadbetter 1993, p. 95).

4. Swawalamban: This Hindi word means Independence (स्वतंत्रता).

5. Swaraj: Swaraj means "self-rule", but Gandhi gave it the content of an integral revolution that encompasses all spheres of life: "At the individual level Swaraj is vitally connected with the capacity for dispassionate self-assessment, ceaseless self-purification and growing self-reliance." (M. K. Gandhi, *Young India*, June 28, 1928, p. 772.) Politically, swaraj is self-government and it means a continuous effort to be independent. It is the sovereignty of the people based on pure moral authority. Economically, Swaraj means full economic freedom for the toiling millions. And in its fullest sense, Swaraj is much more than freedom from all restraints, it is self-rule. ("M. K. Gandhi, *Young India*, December 8, 1920, p.886 (See also *Young India*, August 6, 1925, p. 276 and *Harijan*, March 25, 1939, p.64.) Adopting Swaraj means implementing a system whereby the state machinery is virtually nil, and the real power directly resides in the hands of people. Gandhi said: "Power resides in the people, they can use it at any time." (Jesudasan, Ignatius. *A Gandhian theology of liberation*. Gujarat Sahitya Prakash: Ananda India, 1987, pp 251.)

Gandhi explained his vision in 1946:

Independence begins at the bottom. A society must be built in which every village has to be self-sustained and capable of managing its own affairs. It will be trained and prepared to perish in the attempt to defend itself against any onslaught from without. This does not exclude dependence on and willing help from neighbors or from the world. It will be a free and voluntary play of mutual forces. In this structure composed of innumerable villages, there will be ever-widening, never-ascending circles. Growth will not be a pyramid with the apex sustained by the bottom. But it will be an oceanic circle whose center will be the individual. Therefore, the outermost circumference will not wield power to crush the inner circle but will give strength to all within and derive its own strength from it. (Murthy, Srinivas. *Mahatma Gandhi and Leo Tolstoy Letters*. Long Beach Publications: Long Beach, 1987, pp 189.)

6. Panchayat Raj Institutions (PRIs): Panchayati Raj (Council of five officials) is the system of local self-government of villages in rural India as opposed to urban and suburban municipalities. It consists of the Panchayati Raj Institutions (PRIs) through which the self-government of villages is realized. They are tasked with economic development, strengthening social justice and implementation of Central and State Government Schemes. "Basic Statistics of Panchayati Raj Institutions". (Ministry of Panchayati Raj. 2019)

7. Self Help Groups (SHGs): A self-help group is a financial intermediary committee usually composed of 12 to 25 local women between the ages of 18 and 50 who work on daily wages who form a loose grouping or union. Money is collected from those who can donate and given to members in need. Members may also make small regular savings contributions over a few months until there is enough money in the group to begin lending.

Acronyms

ARP	Applied Research Project
BRCs	Bio-Resource Centres
COP	Conference of the Parties
CSOs	Civil Society Organizations
IHEID	Institut de Hautes Études Internationales et du Développement (Geneva Graduate Institute)
IPCC	Intergovernmental Panel on Climate Change
KJKS	Kerala Jaiva Karshaka Samithi
MJVS	Manav Jeevan Vikas Samiti
MRV	Monitoring, Reporting, & Verification
NPM	Non-Pesticide Management
NVE	Non-Violent Economy
PMKVY	Pradhan Mantri Kaushal Vikas Yojana
PRI s	Panchayat Raj Institutions
SCs	Scheduled Castes
SDGs	Sustainable Development Goals
STs	Scheduled Tribes
SHGs	Self-Help Groups
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change

Executive Summary

This report explores the relationship between climate change, inequality, and sustainability, with a focus on local initiatives in India that promote sustainable livelihoods and climate resilience. The research project examines three organizations: Manav Jeevan Vikas Samithi (MJVS), Kerala Jaiva Karshaka Samithi (KJKS), and Charaka, which have successfully implemented interventions to strengthen hand-based livelihoods, promote adaptive practices, and expand local market opportunities.

The report highlights the importance of addressing climate change at the local level, as effective strategies often fail to reach communities most vulnerable to its impacts. By showcasing the work of these organizations, the report emphasizes the potential of local initiatives in building resilience and addressing climate change. The organizations, facilitated by Ekta Parishad's Nonviolent Economy Network, exemplify sustainable, inclusive, and climate-resilient economies rooted in local markets.

The research question driving this project focuses on why local initiatives offer sustainable solutions for addressing climate change and inequality. The concept of localized sustainability, which values the environmental, economic, and social dimensions of activity, underpins the research approach. The report also discusses the interconnectedness of the three sustainability pillars and the importance of balancing their development to avoid negative externalities and foster a virtuous circle of sustainability.

Livelihood and enterprise development are crucial for India's economy, with agriculture playing a significant role. The report highlights the importance of rethinking current economic systems and practices to prioritize long-term sustainability over short-term gains. It discusses various sustainable practices, such as agroecology, micro resource harvesting, and the development of local and sustainable small businesses.

A decentralized and community-based approach is crucial in promoting sustainability and resilience. The report highlights the importance of giving decision-making and organizational power to local communities, leveraging their contextual knowledge and promoting inclusive development. The case studies exemplify the effectiveness of such approaches, with organizations empowering marginalized communities and promoting social and environmental adaptation systems.

The qualitative analysis of the sustainability intersectionality of MJVS, KJKS, and Charaka demonstrates their commitment to the environmental, social, and economic dimensions of sustainability. These organizations have successfully integrated sustainable practices, empowered marginalized communities, and fostered social cohesion. The report underscores the importance of bottom-up, decentralized, and participatory approaches in achieving sustainability goals.

The report concludes by emphasizing the need to scale up and build upon such initiatives while acknowledging the existing gaps and the urgency to work towards climate-related Sustainable Development Goals. It presents a compelling narrative of how local initiatives can play a crucial role in addressing the challenges of climate change and inequality and inspires further action and underscores the need for a holistic approach to sustainability that integrates environmental, economic, and social dimensions.

1. Introduction

1.1. Background and Context

“Be the change you wish to see”.
– M.K. Gandhi –

Climate change is a global challenge with heightened impacts on developing countries like India, where economic inequalities and rural neglect converge with environmental degradation. This research project focuses on approaches to building the resilience of local communities against these twin issues through livelihood interventions, emphasizing the role of localized climate resilience and adaptation strategies.

Despite significant national and international attention to climate change, there is a critical gap in the implementation of effective strategies at the local level. This project, therefore, seeks to document cases of localized climate resilience that have developed interventions to strengthen hand-based livelihoods, inculcate adaptive practices, and expand local market opportunities, thereby reducing the vulnerability of communities to climatic changes.

Our project spotlights three organizations: Manav Jeevan Vikas Samithi (MJVS), Kerala Jaiva Karshaka Samithi (KJKS), and Charaka, each contributing uniquely to this cause in India. We engaged with these organizations through our partner, Ekta Parishad, which is a people's movement aiding landless farmers and indigenous populations in their fight for land rights and transitioning from subsistence to market-focused surplus production (Ekta Parishad, n.d.). Ekta Parishad's Nonviolent Economy Network,² in which these three organizations are members, further advocates for sustainable, inclusive, and climate-resilient economies rooted in local markets.

MJVS, based in Madhya Pradesh, tackles a gamut of interconnected issues, from natural resource management to youth development. They have pioneered organic farming and sustainable livelihood generation mechanisms in over 1,600 villages, enhancing resilience against erratic weather and climatic conditions (MJVS, n.d.)

KJKS in Kerala is transforming farming practices by promoting organic farming, aiming to bolster environmental conservation, local food production, and farmer welfare. The NGO's network of over 10,000 organic farmers is a testament to their success in instilling sustainable practices in local communities (KJKS, n.d.).

Charaka, a cooperative run by Dalit³ women in Karnataka, has pivoted to weaving and the textile industry as an alternative sustainable livelihood beyond the agricultural sector. The cooperative has also been instrumental in promoting local markets and women's economic empowerment, forming a learning centre to foster rural and urban community interactions (Charaka, n.d.).

² A non-violent economic order is characterized by a set of economic activities that do not result in any kind of exploitation of human-beings or natural resources and promotes equality, justice and maintains natural balance in the economy. While many in the Global North have different associations and preconceived notions of “nonviolence”, it should be noted that the NVE is a vernacular choice that, in the South Asian context, sufficiently encapsulates this highly complex and multifaceted concept. Readers are therefore encouraged to perceive NVE in this vernacular light.

³ The term Dalit is a term for those called the "untouchables" and others that were outside of the traditional Hindu caste hierarchy, they form the lowest stratum of caste in the Indian society.

In rapidly deteriorating climatic conditions that further marginalises vulnerable communities, the work of these organisations in uplifting these communities and providing them with opportunities to engage in sustainable livelihoods provides an insightful examination of effective local resilience strategies, and in doing so, highlights the potential of local initiatives in addressing the giant of climate change through the simple Gandhian principle of *‘Becoming the change they wanted to see’*.

The Relationship between Inequality and Sustainability

The concepts of inequality and unsustainability are so intricately linked that the manifestation of one usually implies that of the other in human societies. However, comprehending their relationship requires an understanding of the dimensions of inequality — such as wealth, caste, gender, and geography — and how they relate to various aspects of sustainability, i.e. environmental protection, economic development, and social inclusion.

Economically, these two concepts operate in the dynamics of resource consumption which inevitably generates income inequalities. The affluent often have higher levels of consumption and it is the marginalized who bear the costs of overconsumption of the rich. This inequality applies not just at a regional level, but also on the larger global level between the developed and the developing world which stands at an unequal balance of energy, water, raw material consumption, and environmental degradations (Oxfam India).

Environmentally, inequality and unsustainability manifest in unequal exposure to environmental risks and hazards. Those living in poverty or in proximity to polluting industries, often face a higher burden of environmental pollution and degradation. This unequal distribution of environmental costs further entrenches the inequality cycle and hinders sustainable development. Marginalized communities are also more vulnerable to the effects of climate change as they often lack access to clean water and sanitation which is impeded by challenges of bad weather and food insecurity. This is a classic illustration of the tragedy of the commons, where resources are polluted by some and costs borne by all — unequally.

Socially, certain groups like — the constitutionally recognized Scheduled Castes and Scheduled Tribes⁴ in India, women, indigenous peoples, poorer communities, and other marginalized communities often face disproportionate burdens.

Traditionally, marginalized communities in India have faced multiple barriers to accessing common utilities. The dalit community especially was restricted from using common wells, rivers, and water bodies due to the discriminatory practices of the caste system, which deemed individuals from this community impure or polluted (Valmiki, Joothan 1997). Despite affirmative action and anti-discrimination laws enshrined in the Indian constitution, such practices persist in certain parts of the country, disproportionately burdening women in these households who face a double disadvantage. Rural women in multiple villages across India have to undertake long journeys to fetch water from distant sources for household use. With climate-induced challenges like drought and famine, the singlehanded burden of the household falls even harder on their shoulders (UN Women, 2018). Moreover, small and medium farmers in India, lacking adequate irrigation resources, have to rely on unpredictable rainfall for their crops. The unpredictability of the market further compels them to adopt unsustainable farming practices, degrading the quality of their soil and perpetuating an unending cycle of poverty.

⁴ The Scheduled Castes (SCs) and Scheduled Tribes (STs) are officially designated groups of people and among the most disadvantaged socio-economic groups in India. (Ministry of Social Justice and Empowerment. Government of India. Archived from the original on 13 September 2012.)

Hence, unsustainability represents a complex issue with interconnected social, economic, and environmental dimensions. Inequalities, including income disparities, gender discrimination, and cultural biases, contribute to the perpetuation of unsustainable practices, impeding the transition toward more sustainable models such as circular economies.

However, these three cases in India stand as an exception, where women grappling with traditional caste and gender inequalities and self-dependent farmers have successfully integrated sustainable livelihoods. Their approach prioritizes the creation of dignified working conditions and offers environmentally friendly employment by minimizing the use of machines and market dependency.

The research aimed to understand how inequalities manifest in the socio-cultural nuances of India, serving as drivers of unsustainable practices and having disproportionate effects on vulnerable populations. It goes a step further to disprove through three case studies to show how a sustainable livelihood and climate resilience despite stemming from a position of marginalization and inequality is possible.

This report therefore, presents an ideal that we should strive towards, to scale and build upon such initiatives while underlining the gaps present today and highlighting the distance between the goal and the reality. For climate-related SDGs are not a distant dream, they are a pressing reality that we need to work towards. Every day that we delay, the gap between the current state of the world and the pursuit for sustainability widens. This report is a story of those inclusions and exclusions that come into play on this journey toward a sustainable reality.

1.2. Research Question

In recent decades, environmental degradation and rising inequality have emerged as cross-cutting challenges, operating as a twin deteriorating process. According to the 2018 IPCC report, environmental change and climate variability are worsening existing poverty and exacerbating global and local inequalities: "The poor will continue to experience climate change severely, and climate change will exacerbate poverty (very high confidence)" (Roy et al. 2018). Conversely, rising levels of inequality accentuate environmental degradation and undermine efforts to mitigate environmental damage (Masron and Subramaniam 2019; Roy et al. 2018; NVE 2022). As the environment provides natural resources to meet human needs and greater social equality enables more sustainable management of the commons, both the preservation of the environment and of social equilibrium are key drivers of healthy, sustainable economic activity.

In our Applied Research Project, we are looking at a selection of local initiatives in India which, through their circular organization, have been able to disrupt the dynamics of the vicious circle that leads to environmental, social and economic degradation.

In other words, we seek to answer **"Why do local initiatives offer sustainable solutions for addressing the transversal challenges of climate change and inequality?"**

The concept of localized sustainability is central to this research question and approach of this project. Localized sustainability refers to an approach that equally considers and values the environmental, economic, and social dimensions for an activity (Purvis et al., 2019). In other words, sustainability refers to a livelihood system that is economically viable, community-driven, and founded on environmentally- and climate-conscious principles.

The environmental, economic, and social pillars that inform the sustainability-oriented explorations of this ARP are regularly referred to in discourses surrounding ecological themes, circular economies and broader sustainable development. These pillars have existed since at least 1987 (Barbier, 1987), and while its precise origins cannot be pinpointed to a single source, the concept of “pillars” (although various scholars choose different labels for the concept) is prevalent in contemporary discourse around sustainability. Basiago (1999), Pope (2004), Gibson (2006), Waas et al. (2011), Moldan et al. (2012), Schoolman et al. (2012), Boyer et al. (2016), Zijp et al. (2015), and Arushanyan et al. (2017) are but a few examples of scholars that approached sustainability through the lens of harmony between environmental, economic, and social considerations.

The underlying assumption is that for any sustainable organization, company, or community, each pillar is valued and developed equally so that one does not produce negative externalities on the others, enabling all dimensions to coexist in a harmonious and non-partitioned way. For example, giving priority to the economic dimensions over the environmental dimensions (a current global phenomenon) inevitably deteriorates nature and ecosystems, which can then impact the social pillar by harming human communities (who may experience food insecurity, illness, or other vulnerabilities) and, ultimately, the economy as well (loss of profit, increase in the costs of primary resources, etc.). An unbalanced interaction of these three dimensions leads to a vicious circle, whereas the preservation of their reciprocal dynamics fosters a virtuous circle.

The highly interconnected and interdependent nature of the three pillars with regard to achieving sustainability can be best visualized through a Venn diagram, which demonstrates how environmental, economic, and social activities interrelate and combine to create a truly sustainable system. However, it must be noted that the division of environmental, economic, and social considerations into three distinct components is a particularly Western approach to understanding sustainability. It is especially noteworthy that these pillars seek to demonstrate economic and social dynamics as being equal to environmental considerations, with the three-pillar approach initially being leveraged as a model for greater economic growth in developing countries (Barbier, 1987).

Non-Western schools of thought – particularly the Gandhian concept of Nonviolent Economy (NVE) – also emphasize the interconnectedness of the three pillars, but would not perceive economic considerations and actions as being equivalent in scope and importance to the environmental and/or social pillars. Instead, the NVE model perceives the economic and social pillars as being couched within the environmental pillar. In other words, the NVE school of thought advocates the notion that a healthy, resilient environment is foundational to the development of successful economic and social activities, and should therefore serve as the core of sustainable action. The NVE approach to the three pillars may therefore be better represented through concentric circles rather than a Venn diagram. The various manners in which the three pillars can be visualized and articulated has been highlighted in the figure below:

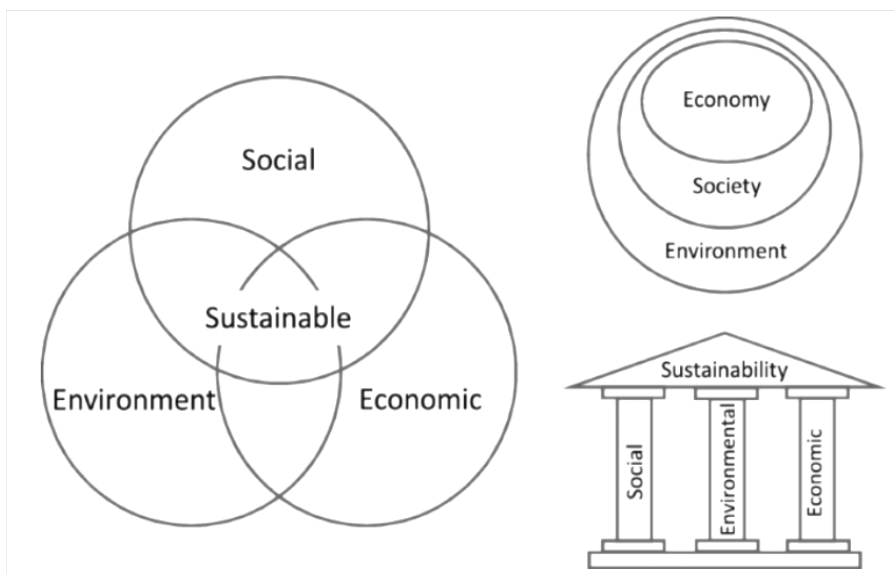


Figure 1: Left: typical representation of sustainability as the interaction between three equal pillars.
 Top Right: A concentric circle visualization that depicts the interactions between the pillars through the lens of NVE and other non-Western schools of thought.
 Bottom Right: An alternative depiction using literal “pillars” to highlight the components of sustainability.
 (Purvis et al., 2019)

While we have utilized the Venn diagram approach to articulate the dimensions and activities of organizations working towards sustainability, it is not necessarily reflective of the valuation – or perception – of environmental, economic, and social priorities in the regions of focus. By using such visual tools, the aim of this research project is also to articulate the highly complex and interconnected systematic approaches to Western audiences in a manner that is accessible and understandable to them. The methodology section will discuss how this approach based on sustainability and its interconnected dimensions has also informed the research approach and analysis of findings.

2. Methodology & material

This section discusses the overall planned approach and process for this Applied Research Project.

2.1. Selection of Case Studies

During preliminary and kick-off discussions with Ekta Parishad, both the project partner and our academic team agreed that the most valuable insights on alternative approaches to climate-resilient development could be derived from ongoing initiatives in various states in India. To this end, we were presented with various organizations affiliated with Ekta Parishad, and it was recommended that we engage in research on up to four (4) such organizations.

Given that these organizations are highly localized and rural in their nature and operations, it proved challenging to determine which ones would be studied through desk research alone. Such information about the case study groups and their background was central to the development of an appropriate research framework and literature review. This information was also essential for developing a project that is reflective of the needs and realities of the case study groups. To this end, we adopted a two-step approach to our research activities: an inductive research process to gather preliminary information, followed by a structured synthesizing of the information found.

2.2. Inductive Research

To gain a baseline amount of information and determine the number of organizations we could feasibly work with on this project, we first organized interviews and discussions with three (3) organizations suggested by Ekta Parishad.

These groups were MJVS, KJKS, and Charaka. As Section 3 of this report highlights, each organization works in a unique region (Madhya Pradesh, Kerala, and Karnataka) and sector (agricultural value chains, organic agriculture, and handloom weaving). For this purpose, we informed ourselves on the historical, environmental, and sociopolitical contexts that each group operates in.

After this, we organized comprehensive interviews with each organization. Given that there was limited secondary information available for all of the organizations, the first round of interviews were organized to be deliberately broad and long-lasting. The format of the interviews was semi-structured, with our team preparing questions about the region and sector that each organization works in. After briefing the interviewees on the nature and expectations of this ARP, the participants were then permitted to discuss their organizations' activities at length, followed by any further questions or clarifications necessary. The objective of these interviews was twofold:

- To gain an understanding of the activities, institutional arrangements, and operational structure for each of the groups interviewed; and
- To acquire further primary information (including reports, presentations, organograms, media interactions, photographs, and any other form of literature) that may be useful for further desk research and context.

These interviews each lasted for an average of between 1.5 – 2 hours to enable the interviewees to provide as much information as they could about the various activities of their respective organizations. For each interview, we ensured that at least one member of our IHEID team present could speak in Hindi (to facilitate ease of conversation, in case this language was preferred by the interviewees). At least one our team member was tasked with diligent note-taking during the interviews, and by ensuring that each interview was recorded, we also conducted extensive transcription of the interviews after their conclusion. This mitigated the amount of information lost during the lengthy and detailed conversations.

This “bottom-up” inductive approach successfully enabled us to collect qualitative data from the case study groups, and was then followed by an analysis of this data to identify and structure any patterns observed. As Bingham & Witkowsky (2022) note, the inductive approach can prove especially valuable in understanding key themes that contribute towards answering the project research question and connecting them to identified theories and literature. Furthermore, the inductive approach was crucial for refining the research question and objectives for this ARP. After discussing the range of activities and experience each organization has in their respective fields, it became clear that it would be impossible for us as students in Geneva to provide recommendations to organizations and representatives that had decades of relevant experience. The potential for us – and the broader international academic and development communities – to learn from these organizations and their successes became a far more feasible and compelling direction to take this ARP in. As a result of the semi-structured interviews, we therefore adjusted our research question to the one stated in Section 1.2, and agreed to create this report as the final deliverable for the ARP.

2.3. Literature Review & Synthesis/Analytical Research

After collecting extensive amounts of information through the semi-structured interviews, we then sought to organize the data and extract any potential trends, patterns, or outstanding observations. The interview transcripts were first organized and edited to ensure coherence, and to serve as the primary source of information from which the interviews would then be synthesized, compared, and contrasted with one-another.

While undertaking the process of synthesizing the data collected, we now had sufficient primary and secondary information to begin developing a literature review that accurately captured the range of sources, disciplines, and themes that would be engaged with in this research project. To this end, the literature review was developed in parallel to the transcription and synthesis of the interview data. The literature review sought to (see section 3.1, *Sustainability Analysis*) to articulate our approach and research question and focused on three specific components of the UN sustainability model (UN, 1997): environmental, social, and economic. To better reflect the reality of the organizations we studied, we narrowed the field of study within each of these themes and settled on the following categories: *Climate Change and Adaptation* (environment), *Decentralized and Community-Based Approach* (social), *Livelihood and Enterprise Development* (economy). Each category served as a broad lens through which thematically similar information could be explored. The aim of this preliminary stage was to define and delimit the key concepts of our research question, and to carry out an overview of the associated literature.

Under the *Climate Change and Adaptation* Part, we apply an environmental lens to explore the drivers and manifestations of climate change vulnerability across several Indian states. In the section devoted to the *Decentralized and Community-Based Approach*, we utilized a historical and theoretical lens to gain a better understanding of decentralized and bottom-up approaches and the dynamics of community-based action for environmental and livelihood resilience. Lastly, in the *Livelihood and Enterprise Development* Part, we explored the dynamics and challenges surrounding market access for smallholders and vulnerable communities and the role of markets in facilitating sustainable agricultural practices, and successful livelihood-enhancing initiatives. Ultimately, the literature review sought to generate a system of references to situate our research in relation to the main theoretical currents, and to support our qualitative analysis with solid theoretical and empirical foundations.

The analysis of this data was achieved through a simple coding system, whereby key terms, concepts, and messages in each transcript were identified and grouped into various themes. Through this coding system, it became evident that all groups referenced environmental, economic, and social interventions and considerations as core components of their success. While none of the organizations necessarily explicitly referenced the synthesis of these three specific concepts, it was evident that each organization's activities were directly related to all these components (to varying degrees). This pattern emerged as the foundational theme and structure for the research project, with the environmental, economic, and social interventions serving as the three key pillars for sustainable livelihood development (as summarized in Section 1.2).

Based on the emergence of these three pillars as crucial in each organization, we created a table to identify and note the environmental, economic, and social interventions of each case study group, and how these interventions intersect with one-another. This table can be found in Appendix 7.1. In practice, therefore, we categorized the activities, values, and principles of action of each case study according to the three pillars of sustainability. Through this process, we aimed to provide a structured framework for organizing and assessing the diverse range of activities undertaken by sustainable organizations, measuring their respective weights, and identifying potential similarities and differences. The coding approach is complemented by synthesizing and juxtaposing the information found during the inductive research with information from other primary and secondary research and sources. As the coding system continued to be developed and

implemented, we sought to articulate the interconnected nature of the three pillars, and how the interventions of each organization managed to harmonize environmental, social, and economic dimensions. The first iteration of a Venn diagram used to represent this (for all organizations) can be found below:



Figure 2: Example of a Venn diagram representing the complementarity of the three pillars of sustainability (Hafizyar, Rustam & Dheyaaldin, Mahmood, 2019).

The information and structure that emerged from the coding system would inform the remainder of our research project and played a crucial role in arming us with the vocabulary, structure, and systemic approach that would facilitate a comprehensive comparison and analysis of the various groups and their activities. To this end, we then leveraged the information collected from the interviews, secondary research, and other sources to begin writing the analyses found in Section 3 of this report.

After developing a sufficient base of content, we then organized a second round of interviews with the representatives of the three groups. These interviews were much shorter (with a duration between 30 – 60 minutes), and were highly structured, with a series of pre-prepared questions forming the basis for the entire interview. This set of interviews sought to clarify any outstanding questions we may have had about the organizations' activities and outcomes, as well as to attempt to situate each organization's activities in the three-pillar context summarized above. In doing so, we sought to ensure that the information gathered from the interviewees was as complete as possible and that we accurately reflected the complex – and often imbalanced – interactions between environmental, social, and economic priorities and challenges within each organization.

During this period, we also conducted further interviews with other actors, including a member of the faculty at IHEID that is well-versed in rural Indian sociopolitics, Gandhian theories, and the nonviolent economic approach. We would also hold routine check-ins and discussions with Ekta Parishad to ensure that they fully understood our research approach and to enable us to incorporate any relevant feedback into the final deliverable.

The table below summarizes the individuals interviewed from each group and the various dynamics that had to be considered.

Organization	Representatives Interviewed (Position & Name) ⁵	Languages Used	Number of Interviews Conducted
Ekta Parishad (Partner Organization)	Lead Advisor & Facilitator (Jill Carr-Harris) Nonviolent Economy Coordinator (Karthik Gunasekar)	English	3
MJVS	Programme Coordinator (Nirbhay Ji)	Hindi, English	2
KJKS	Organization President (Iliyas KP)	English, Malayalam (for primary documents)	2
Charaka	Organization CEO (Terrence Peter Monk)	English, Kannada (for primary documents)	2
IHEID	Professor Milloon Kothari	English	1

2.4. Data Sources

This ARP was informed by a broad range of primary and secondary sources that included diverse perspectives and knowledge relevant to each of the three pillars of sustainability.

As stated earlier, primary data was acquired through interviews with representatives from Ekta Parishad and the case study groups through semi-structured and structured interviews conducted through video-conferencing tools. We engaged with these primary sources to gather information on the institutional arrangements and dynamics of the nature-based livelihood initiatives offered by each case study group. This includes information on the broad objectives and ideological underpinnings of each group, the mechanisms through which these objectives are realized, the outcomes of these interventions to date, and the climate-based challenges facing the initiatives.

Secondary Sources were anchored around the central three pillars of sustainability (and their respective parallels in Gandhian economics and South Asian contexts). To this end, we leveraged secondary sources in the forms of theoretical literature, current reports, international best practices, and community insights. The secondary sources consulted include, but are not limited to:

- Scientific reports on climate change vulnerabilities and impacts in each region (from the Intergovernmental Panel on Climate Change (IPCC), think tanks, and academic journals);
- Historical literature on the policy regimes, resistance movements, and sociopolitical contexts that have shaped livelihoods (and climate resilience) in each region;
- Theoretical literature on foundational concepts such as the non-violent economy and Gandhian economics;

⁵ All the individuals listed in the table have consented to their names and positions being featured in this report. All corresponding ethical considerations and implications have been fully explored and considered.

- Gender-disaggregated literature (including research reports, academic journals, and international case studies) exploring the role of women in the development of climate-resilient and nature-based livelihoods; and
- Environmental literature on the interface between climate change adaptation and agriculture (through UN Reports, international case studies, and theoretical literature on indigenous agricultural practices and the linkages between sustainable agriculture and the non-violent economy).

2.5. Risks, Challenges, Limitations & Mitigations

Given the unique nature of this ARP and the localized case study groups, there have been several risks, challenges, and limitations throughout the project cycle.

Most notably, the distance between us and the project partners (across various states in India) limited engagement with primary sources, and as a consequence, the amount of information we could collect. This distance has restricted the types of engagement possible, the information that could be shared by stakeholders, and consequently our understanding of what was happening on the ground, as well as our ability to capture the scale and complexity of phenomena, nuances, and meta-data. For example, virtual video-conferencing tools are not conducive to the engagement of large groups and cannot substitute in-person visits to the sites for physical learning. We sought to mitigate the consequences of this by designing interviews with 1-2 representatives of each case study group, developing context-specific questionnaires to guide conversations, and requesting multimedia resources (including photographs, reports, newspaper articles, and other resources) from the primary sources to widen the amount of information received.

Secondly, we had to grapple with a highly diverse set of case studies. MJVS, KJKS, and Charaka all conduct unique activities in different states across India. As the context, geographical focus, needs, practical difficulties of adaptation, and opportunities vary considerably from place to place, it becomes difficult to generalize our findings. By translating the holistic reality of our case studies through the academic prism of a predefined framework, we run the risk of distorting the complexity of the realities we study, or even ignoring their most fundamental elements. Experiences in the field can evolve, interrelate, and take on multiple facets that cannot be captured by a single research framework, making it difficult to develop a comprehensive synthesis of their experiences and expectations. It is in the very nature of conceptualization to overlook important details in relation to the reality on the ground. To limit the biases that such a translation from the field to the theoretical world implies, it was essential to situate our research, and any conceptual generalization had to be approached with caution.

It was important to recognize and name the elements that are retained and inscribed - or not - in our model, and present it as a representation of a certain part of reality, rather than its entirety. The complexity of the information presented in this research was dealt with by a coding technique applied following inductive research, which enabled us to synthesize, organize and process the data in a tangible and systematic way.

Lastly, we faced some ethical considerations surrounding interviews with primary sources. Discussions around climate change impacts, livelihoods, and community challenges can be sensitive for those who are intimately involved or affected. Gendered or caste-related perspectives may also be obscured depending on the interviewees. We therefore adopted semi-structured interview styles to allow the interviewee(s) to speak uninterrupted, and to share as much as they are comfortable with. Questions regarding the most vulnerable or marginalized groups (e.g. women or different castes) were also integrated.

3. Analysis

Our analysis is divided into two parts: The first establishes a descriptive analysis of sustainability by exploring the literature on the themes of Climate Change and Adaptation (environment), Decentralized and Community-Based Approach (social), Livelihood and Enterprise Development (economy). The second is a qualitative analysis of the intersectionality of the sustainability dimensions of the three project parties: MJVS, KJKS and Charaka.

3.1. Sustainability analysis

To set the context for our research question, we consulted and analyzed a selection of resources from the academic literature on the three pillars of sustainability, adjusted to the context under study: Climate change and adaptation (environment), Livelihood and enterprise development (economy) and Decentralized and community-based approach (social).⁶

3.1.1. Climate change and adaptation

Climate The environmental changes that the planet Earth is currently facing are generating substantial impacts and associated damages to biodiversity and ecosystems, health, food production, and human infrastructure (IPCC, 2022). Their effects, which include globalized temperature rise, ecosystem disruption, and increases in the frequency and intensity and extreme natural events (United Nations, 2023; IPCC, 2022) are most acutely impacting vulnerable populations, such as low-income communities and indigenous peoples, with fewer resources to cope (Timmons, 2001; Dunlap & Robert, 2015). India is not immune to environmental disruption: its propensity for floods, water scarcity, heatwaves, extreme natural events, and infectious diseases is particularly high (IPCC, 2022; Garg, Shukla & Kapshe, 2007). As climate is a direct factor in agricultural productivity (Sahu and Mishra 2013), farmers are one of the populations most affected by these phenomena in India (Nonviolent Economy Network, 2022). Since the Green Revolution, India's growing internal production needs have led to a transition from traditional agricultural practices to intensive farming methods (Kumar, 2019), which involve the use of fertilizers and pesticides, reduced (or even non-existent) soil resting time, increased cultivated areas, and the selection of high-yield, single-use crops (Food and Agriculture Organization of the United Nations, n.d.). These practices are accompanied by significant deleterious consequences for both the environment and mankind: soil acidification and contamination, land degradation, deforestation and desertification, decline in organic matter in soil, emission of greenhouse gases and nitrate pollution, erosion of biodiversity and health hazards for humans and animals (Alexandridis et al., 2018; Food and Agriculture Organization of the United Nations, 2017). To address this situation, numerous initiatives, both local and global, have identified sustainable agriculture as one key action to mitigate environmental deterioration (Government of India, 2008; Kumar, 2019). For instance, the localized application of agroecology – an agricultural practice that adopts sustainability to all parts of the production system: ecological, economic and social (Altieri, 2018; (Gliessman, 2018) – has demonstrated beneficial long-term effects, notably by improving productivity and soil fertility, reducing expenditure, maximizing water use and increasing resilience to climate change and natural shocks (Tripathi et al., 2015; Srivastava et al., 2016; Dorin, 2022). In 2018, over 164 organizations from 74 countries have taken a significant step in this direction by adopting the “United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas” to better protect the rights of peasants at the United Nations (Geneva, 2018).

The elements of the literature review we conducted are particularly relevant to our understanding of the most disadvantaged populations in our case studies (Dalit women, small farmers, indigenous communities). In particular, it shows how the effects of climate change will have all the more deleterious consequences for these populations, given their dependence on the environment and their limited resources, leaving them with few alternative means of coping with changes in their access to natural resources. Another element of this compilation of sources that resonates with the reality of our organizations is the new resurgence of

⁶ In the interests of conciseness and relevance, we present here a condensed version of the literature review. The full version can be found in the appendix.

initiatives promoting sustainable alternative approaches to mitigating environmental deterioration: each in their own way, our case studies too incorporate new, environmentally-friendly ways of producing and operating.

3.1.2. Livelihood and enterprise development

With India being the second largest agricultural land in the world and generating employment for half of the country's population, livelihood production plays a fundamental role in its economy (India Brand Equity Foundation, 2023). In light of the increasing difficulties in accessing and producing livelihoods engendered by climate change a growing number of voices are calling for the development of sustainable and equitable economic environments and opportunities to build resilience and adaptive capacity to these major environmental changes (Jin, Kuang, He, Ning & Wan, 2015; Sargani et al., 2022; Birkmann et al., 2023). This implies rethinking current economic systems and practices that prioritize short-term gains over long-term sustainability (Guardiola, 2019) and the development of practices such as agroecology, a sustainable farming model, micro resource harvesting, community-level social institutions and systems, rights protection, training and skills development, Development and support of local and sustainable small businesses, promotion of rural tourism, social development strategy, etc. (United Nations, Climate Change, 2023; Gunasekar, 2022; Jin et al, 2022; WBCSD, 2023; Nudurupati, 2022; MSME Annual Report 2013-14; KPMG 2015; Enel, 2023).

The literature review we conducted on Livelihood and enterprise development highlighted the economic importance of the agricultural sector in India - that of two of our three case studies. It points up the extent of the consequences that a disruption of agricultural models would have across the entire production chain to which our partners belong. We note in particular that MJVS and KJKS have already integrated each of the practices mentioned above (agroecology, a sustainable farming model, etc.). As for our main partner, Ekta Parishad, questions of sustainability and economic equity are at the heart of its Nonviolent Economy approach (see next point). Our literature analysis shows that the organizations taking part in our research are fully aware of alternative possibilities and that they figure at the forefront of their operationalization.

3.1.3. Decentralized and community-based approach

For several decades, initiatives have emerged in India to organize civil society around new principles of action and cooperation (i.e., community-based governance, local self-reliance, responsible government) (Gunasekar, 2022) and to establish “equitable, community-based and environmentally friendly livelihood programs” (Nonviolent Economy Network, 2023). The adaptation measures developed there are based on a nonviolent approach and include ecosystem-based adaptation, participatory decision-making, peer and community education, and protection of ethnic minorities (Gunasekar, 2022). Several research and practical applications illustrate how giving decision-making and organizational power to community and local organizations strengthens their resilience and adaptive capacity while leveraging their contextual knowledge (social, environmental, political, etc.) and knowledge, which are essential elements for developing solutions and adaptations (Gunasekar, 2022; Care, n.d.; Khanal et al., 2019). The origins of agricultural movements and protests in pre-independence India (Guha, 2017; Charlesworth, 2008), for example, illustrate the historical roots of movements fighting for freedom and self-sufficiency. Environmental social movements were already acting on the firm conviction that India's soul lies in its villages, and that the path to development therefore lies through agriculture and sustainable, inclusive, rural development (Patil, 2021; Shiva 2014; Navdanya, 2016). Feminist movements too constitute a fundamental contemporary trend in citizen mobilization and the fight against discrimination in India (Sidra 2020; Kalima, 1992). Women's economic self-help groups have been shown to have positive economic, political, gender and empowerment effects for the entire community. Women-led initiatives have also been shown to be effective in combating the effects of climate change: women's participation in decision-making processes, empowerment, access to training and resources enable them to implement social and environmental adaptation systems that benefit the whole community (Ravera et al., 2016). The Nonviolent Economy has emerged as a recent model that addresses environmental, economic and social challenges. It presents itself as an alternative to

traditional economic models considered structurally violent (increase in profit at the expense of life, exploitation of natural resources and ecological systems, systemic inequalities, deterioration in the quality of life of exploited populations, etc. (Jain et al., 2022), grounded in economic practices that are humane, inclusive and consistent with the laws of nature (Shiburaj, n.d.). In this, the vision of non-violent economics echoes Gandhi's thought that "true economics never militates against the highest ethical standards, just as all true ethics, to be worthy of the name, must at the same time be good economics. [It is synonymous with social justice, it promotes the good of all, including the weakest, and it is indispensable to a decent life" (Gandhi et al., 1967).

The part of the literature that ties in most directly with our case studies is most likely the Decentralized and community-based approach. Indeed, whether developing sustainable agriculture or fair trade enterprise, each of our partners have anchored their first principles of action in bottom-up, decentralized and participatory approaches. By exploring these sources, we were able to understand how Ekta Parishad, for example, mobilizes its Nonviolent Economy model to achieve a system where everyone has a place and can contribute to a healthy environment and economy. Although very much rooted in practice, the organizations we studied base their actions on well-documented elements of empowerment and social cohesion.

3.2. Qualitative analysis of the sustainability intersectionality of MJVS, KJKS and Charaka

To answer our research question, we have analyzed the 3 case studies - MJVS, KJKS and Charaka - in a two-phase process: firstly, we carried out a textual analysis of the environmental, social and economic dimensions of each of our case studies to set their context and summarize the information gathered during interviews⁷ and documentary readings. In a second stage, we conducted an individualized coding analysis using the same parameters (social, environmental, economic) to match them to the 7 dimensions of sustainability, as indicated in the model in Section 2.1. The purpose of this second step is to organize the information, determine the prevalences of the dimensions according to the case studies, and identify their main connections. The observations and analyses resulting from these processes are summarized below.

3.2.1. Manav Jeevan Vikas Samiti (MJVS)



⁷ In section 3.2. *Qualitative analysis of the sustainability intersectionality of MJVS, KJKS and Charaka*, all unsourced information is taken directly from interviews with our partner organizations.

Source: <https://www.mjvs.org/photo-gallery/>

Manav Jeevan Vikas Samiti (MJVS) is a social non-governmental organization based in north-eastern Madhya Pradesh. Founded in 2000, the organization focuses on the promotion of sustainable agriculture as a means of generating livelihoods for rural communities in the regions it serves.

The sustainable agriculture interventions of MJVS can be split into 5 components, each with their own distinct objectives, activities, and outcomes:

- Water conservation
- Land conservation/development
- Forest management
- Livestock development
- Seed conservation

MJVS ultimately aims to secure and promote sustainable livelihoods for 3,000 households in Madhya Pradesh. The organization leverages and promotes village-level institutions (such as panchayats) as vehicles for action, and works to connect eligible beneficiaries and marginalized communities to government benefit schemes.

Environnement

With climate change-induced water stresses and expensive chemical-based agricultural inputs hampering agricultural activities in Madhya Pradesh, environmental considerations have been a central feature of MJVS's sustainable agriculture approach. This includes the extensive promotion of non-chemical farming, through which farmers are trained in non-pesticide management (NPM) practices, such as fertilizers and pesticides. Through the creation of indigenous seed banks, MJVS also facilitates the endurance of local crop biodiversity and enhanced resilience to climate change. The organization further works on climate change adaptation through the promotion of water conservation interventions, including community ponds, check dams, open-well systems and irrigation technologies.

Society

MJVS seeks to achieve its interventions through societal capacity-building and organization. MJVS leverages existing local village institutions (such as the panchayat system) to identify and categorize beneficiary communities for further action. The organization has also created village-level committees that are led and organized by key mobilizers in each community. These committees are responsible for a range of tasks, including the participatory development of village development plans with MJVS, facilitation of farmer trainings, and the management of seed banks. The organization also facilitates the connection of farmers to the government's flagship Pradhan Mantri Kaushal Vikas Yojana (PMKVY), which offers grassroots-level training and discussion platforms to youth groups.

Crucially, MJVS also explicitly accounts for marginalized and underrepresented groups in its interventions. 60% of the total households that MJVS works with are in areas inhabited by Scheduled Tribes (STs). MJVS also has explicit interventions that support STs in forests with online land registration processes, and has also dedicated 1000 acres of land development and use by Adivasi farmers and communities. MJVS also emphasizes employment of women. It has facilitated the creation of women self-help groups, which operate Bio-Resource Centres (BRCs) that produce bio-inputs for sale to farmers. Women are also employed in value addition processes (such as branding, bottling, and packaging) for farm produce.

Economy

MJVS works with over 23,000 farmers in 2 districts. With an explicit aim of improving the livelihoods of these communities, MJVS has developed several interventions to increase the productivity and profitability

of organic agriculture in Madhya Pradesh. Aside from connecting farmers to government-led support programmes, MJVS supports the uptake of irrigation and water conservation technology, and trains farmers on the production and application of bio-inputs. The organization also offers broader trainings on agroecological agricultural techniques on crops (such as crop-rotation, multi-cropping, and line-sowing) and livestock (such as enhanced livestock, fodder, and animal health management). These interventions enhance the productivity and consistency of agriculture in the beneficiary communities, thus enhancing their livelihoods.

More directly, MJVS has also created several economic activities and opportunities along the agricultural production chain. This includes a trading and payment system for farmers to acquire and donate indigenous seeds to local seed banks, the creation of BRCs for women to sell bio-inputs, and the creation of value-addition through the processing and packaging of select goods.

MJVS is also seeking to create NPM-based agriculture and market ecosystems by facilitating the organic agricultural certification of its beneficiaries. With a pilot phase involving 500 farmers currently ongoing, such certification and value-addition interventions are expected to further reduce farmer dependencies on expensive market-based agricultural input purchases while retaining their productivity, profitability, and resilience.

Conclusion

MJVS is therefore a clear example of a robust, highly organized, and locally-organized initiative that has enjoyed high success in enhancing the resilience, wealth, and participatory power of farmers in Madhya Pradesh. Above all, it is clear that the sustainable agriculture interventions – across the entire value chain of the sector – have been designed with the intention of uplifting the livelihoods of marginalized farmers and communities in rural Madhya Pradesh. By leveraging sustainable agricultural practices – including the development and application of non-chemical inputs, the promotion of genetic diversity in livestock and crops, and water management technologies – as the foundation of its activities, MJVS has developed an entire economic ecosystem that enables local communities to participate in, and benefit from the entire agricultural process – from farming, to value addition of agricultural produce, to the sale of bio-inputs. In this manner, MJVS seamlessly combined the environmental, economic, and social dynamics into a single initiative (albeit one with multiple components). This can be seen in the Venn diagram at the end of this subsection, which highlights how the interventions by MJVS – despite being largely agricultural in nature – have extensive overlaps with, and implications for the economic and social dynamics of the participating communities.

A strong example of this intersection is the promotion of organic inputs such as fertilizers and pesticides. By training farmers on the use of such technologies, MJVS is mitigating the negative impacts of chemical-based inputs, while simultaneously enhancing the productivity of farms by promoting agroecological approaches that are non-invasive and potentially more resilient to extreme climate variability. MJVS has also developed BRCs that enable local communities to develop and sell their own organic inputs, thus improving the economic opportunities available in these rural areas. Lastly, MJVS has trained and empowered women self-help groups to be able to operationalize these BRCs, thus enhancing the social standing and status of women in societies where they are unable to participate in economic activities beyond homemaking.

While MJVS has evidently managed to balance the priorities of environmental, economic, and social interventions relatively equally, the organization certainly still grapples with trade-offs between the three. While sustainable agricultural practices are the core of the organization's work, for example, most of the interventions are undertaken with the aim of reducing farmer costs, and enhancing social participation and

access to resources. As a result, many of the sustainable agricultural practices may not have been developed with the explicit intention of climate resilience, but rather with the intention of developing highly localized, inclusive, and self-sustaining economies in rural communities. Indeed, MJVS continues to recognize that climate change is a substantial and growing threat which demands further responses and interventions.

Nonetheless, MJVS has developed an economic ecosystem that is substantially more environmentally-conscious and climate-resilient than contemporary industrial agricultural practices, while simultaneously empowering the livelihoods and social standings of several marginalized communities in Madhya Pradesh. With over 23,000 participating farmers (which include women and STs), the organization is a noteworthy success story in creating sustainability-oriented societies through environmental, social, and economic interventions in the agricultural sector.

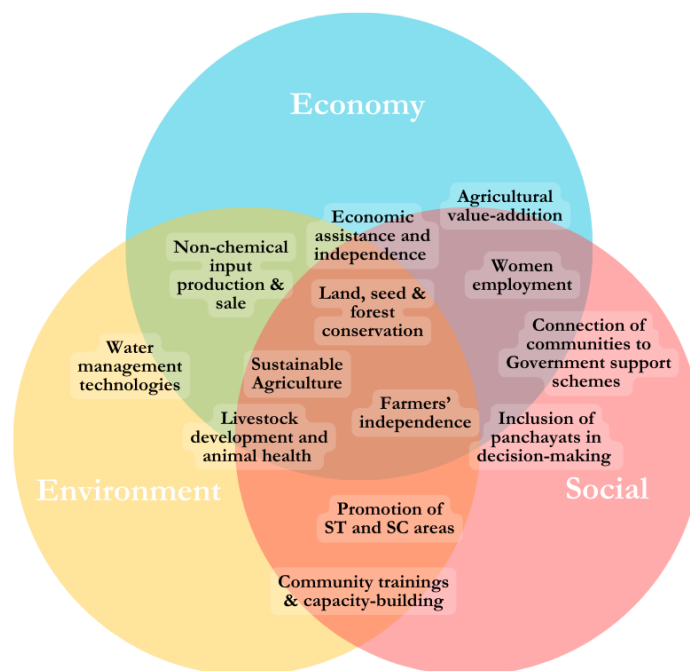


Figure 3: Venn diagram representation of MJVS activities in relation to the three pillars of sustainability

3.2.2. Kerala Jaiva Karshaka Samithi (KJKS)



Source: <https://www.facebook.com/people/Kerala-Jaiva-Karshaka-Samithi/100066405649596/?sk=photos>

Kerala Jaiva Karshaka Samithi (KJKS) is a group of organic farmers founded in 1992 by a group of ecologists under the leadership of eminent ecologist Sri John C. Jacob, naturopathic doctor C.R. R. Varma and organic farming expert Sri K.V. Dayal. KJKS is active in many fields, including organic farming, ecology, health, local food production, the promotion of fair prices and access to healthy, environmentally-friendly food. The association operates under a participatory democratic system and seeks to develop alternative models of living by advocating political change.

Economy

KJKS helps farmers to grow value-added products, for example by promoting the production of organic produce, which is relatively more cost-efficient in the long term. In so doing, KJKS creates economic opportunities for farmers while encouraging sustainable practices that benefit producers and consumers alike. At seminars on zero-budget farming, KJKS imparts practices that minimize external inputs and promote local resources to keep production costs to a minimum. Fund-raising is also organized between the various farmer-members, enabling them to finance joint activities (capacity-building, project development, etc.) and to hold an emergency fund in case of unforeseen circumstances. Even when inactive, this community cash reserve enables farmers to emerge from the vulnerability of economic shocks and invest without endangering their business. By promoting indigenous cattle breeds, the community meets both environmental and economic objectives: as these breeds are better adapted to local environmental conditions, they are more resilient and require fewer resources than imported breeds. This in turn increases production rates of milk and other by-products, promoting the economic stability of producers.

Environment

According to K.P Illiyas, our principal KJKS correspondent, environmental protection is at the heart of the organization's program: promotion of sustainable agricultural practices without the use of synthetic pesticides, preservation and teaching of traditional and indigenous agricultural techniques and varieties, close collaboration with specialists (ecological professors, organic farmers, etc.), public courses on responsible and sustainable practices and awareness-raising programs, etc. For example, KJKS is committed to safeguarding the region's traditional rice and vegetable varieties (eggplants, okra, green chillies, beans, etc.). The organization teaches farmers, as well as consumers and the general public, how these varieties contribute to the conservation of biodiversity and the maintenance of resilient agricultural systems. Other events and projects are organized to educate the general public on how to prepare organic food in a way that preserves nutrients, and on the value of traditional healing practices based on local medicinal plants. Traditional cultivation and healing methods help preserve native species well adapted to environmental conditions, while supporting local farmers. Finally, KJKS participated in a collaborative project aimed at implementing organic farming in one hundred district schools, organizing training sessions for students on organic food preparation.

Society

KJKS regularly organizes actions to raise awareness among the population about agroecology, the importance of maintaining healthy land and producing food rich in vitamins and trace elements. Occasionally, these actions also aim to draw the government's attention to these issues, encourage the implementation of supportive policies and advocate fair subsidies for farmers.

A distinguishing feature of KJKS is its democratic mode of operation, allowing farmers to actively participate in decision-making processes which fosters social integration and empowerment within the organization. Meetings start at the local/panchayat (see glossary) level and progress upwards, culminating in the annual general body meeting. Based on the discussions conducted at these meetings, the organizational structure is restructured and the membership renewed. The participation of women and

young people is deliberately encouraged, with at least one woman on the executive committee. The organization acknowledges still having difficulties in improving the representation of women and young people on its committees, but is working to improve their representativeness. Reports and decisions are made available to all. According to K.P Illiyas, such an organization is relatively unusual; most NGOs depend on centralized, top-down decision-making. Farmers, if they are consulted at all, will very rarely be placed at the forefront of decision-making, for example.

Conclusion

As a conclusion, we have again compiled the information gathered on KJKS into a Venn diagram representation of sustainability (see Figure 4 below). The visual representation we have generated has enabled us to focus our attention on some significant features: in particular, we note that all KJKS environmental and economic actions are carried out in such a way as to have an impact on the social sector as well (since the economy and environment parts of the non-intersecting circles do not include any elements). We also note that the totality of KJKS's environmental activities can be found at the intersection of the three pillars: this implies that, according to this representation, every area of action that relates to the environment also has repercussions on the economic and social spheres. This depiction is in line with KJKS's vision, which sees the preservation of the environment as the starting point on which it bases its organization to develop a local, equitable and resilient economy, and to build a collaborative and participatory network. By combining its farming practices with training in capital management and democratic governance, KJKS has organized its business by interconnecting the three dimensions of sustainability in a mutually reinforcing way. The promotion of indigenous cattle breeds is a good example of interconnection: favouring a species that requires fewer natural resources - and therefore has a smaller carbon footprint - (environment), also leads to lower livestock maintenance costs (economic). What's more, reintroducing native species promotes and enhances traditional culture and local heritage (social).

The challenges facing the organization (deteriorating environmental conditions, reduced rainfall, seasonality of Kerala's particular crops, unpaid participation in decision-making processes, etc.) can be overcome by building on complementary sustainability foundations. The diagram below provides a good illustration: for example, yield losses from *resilient/native crops cultivation* due to increasing drought (environment), can be mitigated by shared good practices (social) and/or by relying on pooled funds (economy).

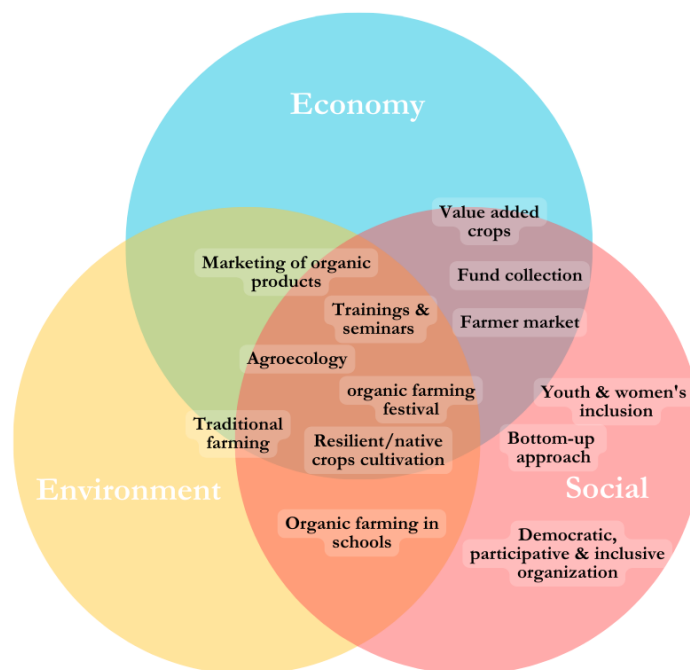


Figure 4: Venn diagram representation of KJKS activities in relation to the three pillars of sustainability

3.2.3. Charaka



Source: <https://www.charaka.in/about-charaka/>

Charaka is a self-sustaining and self-sufficient Dalit Women's cooperative based in Bhimanakone village on the Western Ghats of southern India that provides environment-friendly handloom employment to a large number of weavers — mostly women. While it specializes in weaving, dyeing, and sewing, creating exquisite textiles while uplifting the lives of these women. It also prioritizes the development of dignified working conditions, achieved by minimizing the use of machines and ensuring that 90% of investments are reinvested back into the cooperative — ensuring a circular ecological framework.

While Charaka is only a 25-year-old organization in the region, it has strived to provide education, employment, and skill enhancement to women across several village areas. Not only does it employ 90% women in their cooperative but also give them required trainings for skill development through their Common Facility Centres which are based on a self-sustaining, community-based learning. In the present day, 140 out of 170 women tailors under the Charaka cooperative did not have a stitching/tailoring background but learnt it through the training centres and are earning their livelihoods through it.

They give out stitching machines to women to work from home so they can take care of their families and also earn a livelihood at the same time. Most of their women workers, generally work from home where they do not have any restrictions on work timings and generally are very flexible.

In a region severely impacted by climate change, textile production is not a traditional practice for the Dalit community in Karnataka, but they have embraced weaving as a sustainable, viable and eco-friendly means of livelihood. By fostering the handloom sector, Charaka provides these women with a sustainable source of income while actively contributing to the local economy.

They also believe that having employed rural women has made a huge difference, as women are more nuanced in their approach to work and can be empowered to foster and support their families. However, a major challenge they face is that of creating awareness about their work among the rural populations which can be accessed primarily by word of mouth or door-to-door village outreach. But they are trying to mitigate this by providing a sustained, daily paid livelihood opportunity with the dignity of labor.

Environment

In a region severely impacted by climate change, textile production is not a traditional practice for the Dalit community in Karnataka. However, they have embraced weaving as a sustainable alternative to agriculture, and it has emerged as a viable and eco-friendly means of livelihood for them.

At Charaka, all weaving activities are accomplished in-house, with minimal importing. The cooperative specializes in producing a wide range of environmentally-friendly cotton handloom fabrics using exclusively natural dyes. These fabrics are dyed using locally sourced ingredients such as areca nut, eucalyptus, majistha roots (madder), pomegranate peel, and kasimkari (iron rust). While their color range is limited, they have mastered the art of creating color-fast dyes that prioritize environmental integrity.

The impact of seasonal changes and global warming has severely affected Charaka's growth of commercial crops. The region was once famous for paddy and rice production, but due to changes in weather patterns, areca nut has become the primary crop as it is less affected by climate change. Previously a seasonal crop, areca nut is now available year-round and serves as a major source of revenue for the women employed by Charaka.

The products of Charaka still rely on the sun, rain, and other environmental factors, which can affect the natural color of the yarn when it is dried outside. The cooperative consciously avoids using electrical equipment and keeps the process entirely natural. They make efforts to minimize wastage and have a zero-waste policy, utilizing every part of the fabric. They also use only one electric vehicle for local distribution, further reducing their environmental impact.

Economy

On average, each woman employed at Charaka receives a monthly income of approximately Rs 3,000. This amount holds significant value as it represents earnings gained through dignified work, clean technology, and fresh air. When comparing their earnings to those of their counterparts in city-based export-oriented garment factories, the women at Charaka perceive their income as much more valuable. All the women are members of the collective, allowing them to determine their own pay based on their performance and the collective's profits. Moreover, they enjoy various benefits, including access to creche facilities for toddlers, subsidized food, health insurance, and an annual bonus. Additionally, they have a six-hour work week, which ensures they have enough time to fulfill their household responsibilities.

Society

The women at Charaka experience a strong sense of belonging and respect. Despite facing double disadvantages of caste and gender discrimination, Charaka has empowered them and provided them with economic independence. The provision of social securities, including guaranteed minimum wages, meals, and a 6-hour workday to accommodate their domestic responsibilities, contributes to a livelihood that aligns with multiple Sustainable Development Goals (SDGs) for the benefit of society at large. Earning a steady income has also granted them self-confidence and respect within their community.

These women work from 9:30 am to 5 pm and are provided with a simple, hot lunch, which holds special significance as they have spent their whole lives serving others. Coming from humble backgrounds, these women have not only worked as laborers on areca farms but also shouldered the responsibilities of household chores, cooking, cleaning, and caregiving—without anyone doing that for them.

At Charaka, women are also decision-makers. They understand the needs and concerns of other women and offer solutions such as establishing childcare centers for infants or providing maternity leave. Interestingly, there is no hierarchy within the organization. The president of Charaka also works alongside other women, fostering an inclusive environment and strong bonds among the women, providing mutual support.

Through sustained work and improved wages, these women, who previously engaged in seasonal manual labor on areca nut farms for low pay, now feel empowered. Charaka has transformed their lives, improving their families' living standards with the additional income. These once impoverished rural women have

become self-assured individuals, often dressing in handloom sarees or salwar kurtas that they produce at Charaka and can now afford to purchase.

Conclusion

In conclusion, Charaka serves as an inspiring example of how a cooperative can address inequalities and promote sustainability simultaneously. As the diagram below suggests, Charaka's work lies at the confluence of an environmentally friendly village industry, a community-based learning method that empowers Dalit women through group education, dignity of labor, and provides them with a sustainable livelihood.

By providing sustainable livelihoods, empowering marginalized women, and prioritizing environmental integrity, Charaka creates transformative change. The impact on the lives of the women involved is profound, as they experience increased self-confidence, respect within their community, and improved living standards.

Charaka's success demonstrates the potential of integrating social justice and sustainability, offering a model that can inspire similar initiatives elsewhere.

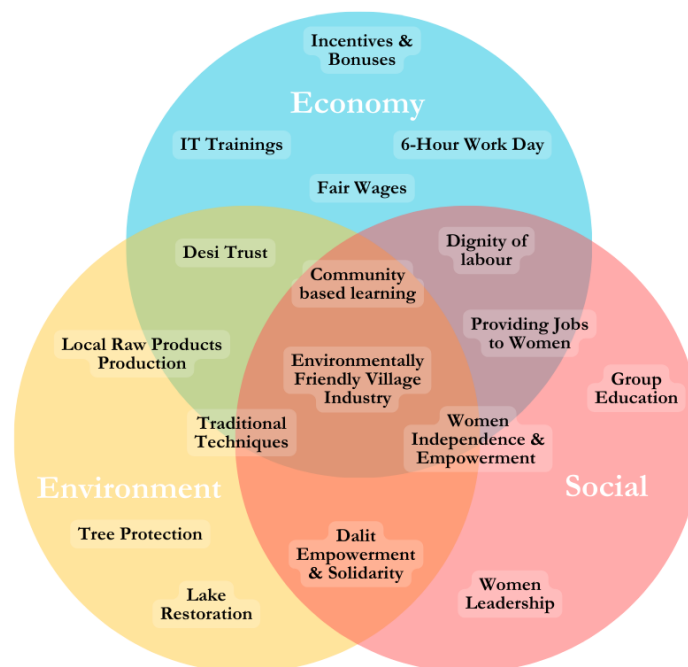


Figure 5: Venn diagram representation of Charaka activities in relation to the three pillars of sustainability

4. Findings & Results

Ultimately, MJVS, KJKS, and Charaka serve as three distinct, but highly complementary case studies on local initiatives in India intervening against climate change and socioeconomic inequalities. Having summarized and analyzed the respective activities of each organization, it is vital to view them collectively in response to the research question.

Environmentally friendly agricultural practices serve as the foundation for all three organizations' activities, with MJVS and KJKS focusing on organic agroecology, and Charaka relying upon locally produced products for handloom weaving and dyeing. All three organizations therefore leveraged environmental interventions as the starting point for developing their multi-sectoral local livelihood initiatives. This prioritization of environmental action as the foundation for further economic and social improvements is reflective of the concentric approach that is favoured by the NVE school of thought (as summarized in Section 1.2). Indeed, all three organizations also recognize climate change as one of the most significant threats facing their operations, and have promoted practices that are centred around localized

agroecological resilience. All three groups promote the diversification of crop varieties, the uptake of NPM interventions, and water management technologies. These activities are demonstrative of the rapid and relatively low-cost climate-proofing activities that these organizations continue to prioritize in the era of anthropogenic climate change.

Indeed, the groups go further by implementing activities that span across sectors and skillsets. MJVS is involved in farming, water management technologies, seed banks, input production, and crop value-addition. KJKS engages in organic agricultural training, consumer sensitization, student empowerment, and community fundraising. Lastly, Charaka is involved in textile crop production and acquisition, dyeing, processing, and sales. Evidently, each of these organizations seeks to create lasting interventions across the value chains that they work in. In doing so, these organizations enhance the resilience of their activities (as community members are not rendered dependent upon a single activity for their livelihoods), while also increasing the scope of community members who can participate in their activities. The diversity and complexity of activities that each organization engages in is certainly a crucial component in their growing resilience and success.

It is also noteworthy that the operational structure of all three organizations is embedded in grassroots-level participatory decision-making. All three groups leverage the panchayat system to include farmers, women, STs, and SCs in decision-making activities. MJVS leverages village-level committees to co-create village development plans and manage seed banks; KJKS leverages the panchayat system to organize members to participate in all decision-making related to the organization; and Charaka actively engages with women from across rural Kerala to empower them and build their capacities. The incorporation of village-level institutions into the operational structure and decision-making processes of these organizations can be argued to be a crucial factor contributing to their success. By actively engaging with the local communities and involving them in decision-making processes through institutions they are already familiar with, these organizations not only gain a better understanding of the needs and capacities of the communities they work in, but also enhance the local ownership of such projects, as the local community is directly involved in activity design and implementation.

Another crucial similarity between the organizations is the explicit incorporation of marginalized members of society in their action plans. MJVS actively works to empower women and SCs/STs in the forest areas of Madhya Pradesh, KJKS actively seeks to ensure that women and youth are represented in their highest-level decision-making bodies, and Charaka has sought to provide women with dignified working opportunities and conditions since its inception. By deliberately accounting for, and supporting marginalized communities, these organizations not only recognize the social inequities that exist within rural Indian communities, but also actively seek to rectify these inequities through the empowerment of the least represented.

Aside from these multiple positives, it is also interesting to note that all three organizations have expressed sustained challenges with regards to financing and fundraising. MJVS is seeking accreditation and value-addition for farmers' crops to increase their market access; KJKS has identified fundraising as a persistent challenge; and Charaka had to temporarily close operations and lay-off staff due to challenges associated with the COVID-19 pandemic. While this represents a potential opportunity for groups to explore mechanisms for enhancing their access to finance, it is also indicative of an economic challenge that none of the groups have been able to fully overcome: the need to expand the markets for their communities, and to be able to finance their ambitious objectives independently. One could contend that this is a consequence of various political decisions in India that have prioritized globalization and neglected rural community empowerment. However, it could also be contended that the access to finance for rural communities remains a persistent shortcoming that hampers the capacity for these local initiatives to be successful and scalable.

Nonetheless, it is clear that the successful balancing and consideration of environmental, economic, and social considerations in an inclusive, participatory, and context-specific manner is what has made these local initiatives so successful in enhancing resilience to climate change, while simultaneously uplifting the livelihoods of rural communities in a diversified and truly sustainable manner.

5. Conclusions & Recommendations

Having analyzed the dynamics of all three local organizations with respect to the research question, it is also vital to explore potential avenues for further action that could enhance the success of such initiatives in facilitating climate-resilient and sustainable livelihood generation. This section will briefly discuss general recommendations through which several stakeholders – including the three organizations, Ekta Parishad, the Indian Government, academia, and the broader international development community – could upscale the successful nonviolent economic models and activities explored in this report. Exploring these broad areas for further action is crucial given India's persistent (and growing) climate change and inequality challenges; with several already-ongoing successful initiatives at the local level, it is imperative to determine how these solutions can be mainstreamed and scaled up to the national level - and beyond.

1. Knowledge Sharing and Dissemination

As has been discussed in this report, one of the greatest challenges with understanding the work of local initiatives towards sustainable interventions is the lack of readily available and accessible information. To this end, the improvement of knowledge sharing and dissemination practices by several stakeholders represents a major opportunity for enhancing both the visibility of these initiatives, and, by extension, the access to resources and support from a broader audience.

One potential mechanism through which knowledge-sharing could be enhanced is through increased communication amongst local initiatives across India. As this report has demonstrated, there are strong alignments in the foundational activities and objectives of MJVS, KJKS, and Charaka. Such organizations – potentially with the support of broader umbrella organizations like Ekta Parishad – could therefore engage in inter-organizational discourse to facilitate the transfer of lessons learnt, skills, and other valuable resources that could only be provided by such local initiatives. Civil Society Organizations (CSOs) in the Caribbean region, for example, have considered the development of climate change knowledge hubs through which various grassroots organizations can share resources, engage in dialogue, and organize themselves in a more collective manner towards shared goals (Crawford et al., 2021). The development of similar platforms that leverage online communication tools could facilitate greater communication between local initiatives across India.

In a similar vein, it therefore also becomes important for organizations such as MJVS, KJKS, and Charaka to develop internal knowledge production mechanisms. Through the strategic and sustained documentation of their experiences, lessons learned, and success stories, these organizations can already begin contributing to the creation of a broader knowledge base and facilitate replication and scaling up of their effective interventions.

2. Mainstreaming of Local & Indigenous Knowledge

The grassroots actions of all the organizations explored in this report are highly representative of local and indigenous knowledge and practices. In particular, the agroecological interventions leveraged by all three groups (such as multicropping, NPM, and indigenous seed banks) are commonly perceived as successful indigenous responses to climate change (Secretariat of the Convention on Biological Diversity, 2010). Indeed, in the era of anthropogenic climate change, there is considerable discourse on the marginalization, trivialization, or outright dismissal of localized and indigenous solutions to climate change within the UNFCCC architecture (Ford et al., 2016).

In this respect, it is the responsibility of the Indian Government and the broader international academic community to facilitate the integration and utilization of such valuable knowledge in their actions. The former should explore avenues for enhancing the participation of local initiatives like MJVS, KJKS, and Charaka in state-level or national-level climate change and development decision-making. This could include participation in the development of government climate action plans, or even promoting the representation of local initiatives as part of government

delegations to annual UNFCCC Conferences of the Parties (COPs). In doing so, the knowledge and needs of these organizations would better inform governmental actions, while simultaneously providing local initiatives with the platform to demand greater support – financial or otherwise – from their respective governments (Crawford et al., 2021).

Similarly, the latter group (international academic community) – especially in so-called “developed countries” – should place a greater emphasis on the development of research outputs that are focused on local initiatives. As climate change and sustainable development continue to become central components of development discourse, it is vital to showcase local initiatives as already-existing proofs of concepts for interventions that are simultaneously climate-resilient and positive for the livelihoods of beneficiaries. Given the urgency of the deteriorating global environment, the research and visibility of ongoing initiatives is crucial for the development of rapid and relatively low-cost modalities of action. The international academic community has a vital role to play in uplifting local and indigenous knowledge, and in ensuring that their invaluable interventions are also recognized as viable solutions. While this report can be seen as a positive step in this direction, significantly greater research is required to further understand the role that nonviolent economic models (and the local initiatives that adopt them) could play in global climate and sustainable development action.

3. Monitoring, Evaluation, & Reporting

MJVS, KJKS, and Charaka all expressed challenges in accessing sufficient financing for the maintenance and upscaling of their initiatives. This is a challenge that could be overcome through international development funders, who have significant resources and the potential to mainstream novel approaches to development through their considerable international clout.

However, accessing resources from such funders can be challenging, and is often accompanied by extensive proposal and reporting requirements that are often beyond the capacity of local initiatives (Crawford et al., 2021). Nonetheless, organizations such as the three discussed in this report could enhance their eligibility for accessing such financing modalities through the development of comprehensive monitoring, evaluation, and reporting (MRV) processes. The establishment of robust monitoring systems to track and document the progress and impacts of interventions is not only essential as a proof-of-concept for international funders, but would also enable the organizations to undertake adaptive management approaches and the sharing of best practices for future projects. The Indian Government could also play a substantial role in supporting local initiatives with building their capacities for MRV and accessing international finance. This could be achieved by connecting local initiatives with emerging multilateral financing instruments, such as the Green Climate Fund (GCF) or Adaptation Fund (AF), which specifically aim to finance transformative climate projects that have strong national and local ownership.

4. Doing research differently: Holistic approaches, convergences and action

In order to study the innovative approaches of local initiatives, to laud their operations and visions, and to recommend their approaches in a coherent way, it is necessary to adopt these same approaches in our academic methods, to implement in practice what we introduce abstractly. This involves adopting a more holistic research framework that explores the convergences and interdependencies between different prisms of the same subject, as well as embracing a bottom-up approach that places subjects at the center and the researcher and his or her academic perspectives on secondary stages. Furthermore, research must not be limited to observation and analysis, but must also involve active engagement with the participants in the study, and work closely with local initiatives. If it is to grasp the reality of the world, research must strive to bridge the gap between academia and the field, involving more actors in research, accepting new sources of knowledge and epistemological constructs, and disseminating knowledge in a way that is accessible and exploitable to the greatest number. In brief, this implies that, if the researcher wishes to learn from the participants and the context he is studying, he must be ready to integrate what he learns into practice, to guarantee a rich co-learning process.

In conclusion, the analysis of the dynamics of the local organizations, MJVS, KJKS, and Charaka, reveals the importance of exploring potential avenues for further action to enhance the success of climate-resilient and sustainable livelihood generation initiatives. Their work, ideas and real time achievements are a testament to Gandhian ideas that advocate for an economic constitution of India where no one suffers from a lack of food and clothing. Gandhi believed in providing sufficient work opportunities for individuals to meet their basic needs, promoting an economic order that does not exploit human beings or natural resources, and fostering equality, justice, and a natural balance in the economy. It was in the neglect of this principle that he believed is the cause of destitution, not just in India but in other parts of the world as well (M.K. Gandhi, Young India, 15-11-1928, p. 381).

It is through these three examples that we see today that a sustainable livelihood that prioritizes the environment and people is not only possible but also successful. These case studies serve as a powerful model for other regions and industries, showing that it is possible to simultaneously address inequalities and promote sustainability. Further studies could examine how to adapt and scale this model in different contexts, further integrating the principles of social justice and sustainability. Their stories serve as an inspiration, urging us to bridge the gaps and bring the dream of sustainability closer to reality. By supporting initiatives like MJVS, KJKS, Charaka and working collectively towards climate-related SDGs, we can create a more inclusive and sustainable world, where inequalities are addressed, and the aspirations of marginalized communities are realized.



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Images bibliography

Images from the cover page from 1 to 7, in reading direction from left to right, top to bottom.

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Image 2: Gayatri. 2021. “No Farmers. No Food.” Unsplash. Retrieved (<https://unsplash.com/photos/xFy6BNRT11s>).

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7. Appendix

7.1. Table of the three dimensions of sustainability (environment, society and economy) relating to the activities of MJVS, KJKS and Charaka

This table represents the main activities and values of our three partner organizations, classified according to areas of sustainability. In particular, it has enabled us to position the organizations' activities along the economic, social and environmental continuums, and to complete the Venn diagrams of sustainability.

	Environment	Economy	Social	Intersection
Ekta Parishad	<ul style="list-style-type: none"> - revive already existing local and ancestral livelihoods - Promote local and organic production 	<ul style="list-style-type: none"> - Getting groups above subsistence level - raising the economic level of the most disadvantaged populations 	<ul style="list-style-type: none"> - mobilizing people into leadership roles to - Assist and empower indigenous communities - Empower youth, women, cast communities - land distribution to the landless 	<ul style="list-style-type: none"> - Nonviolent Economy - Mass empowerment - Gandhian principles
MJVS	<ul style="list-style-type: none"> - sustainable agriculture - Land, seed & Forest conservation - Animals - water/irrigation facilities creation - Livestock development and animal health 	<ul style="list-style-type: none"> - Economic assistance and independence (e.g. leases for Adivasi farmer communities) - Develop livelihood production + independence over process, control and decision - Women employment - Conducting value-addition 	<ul style="list-style-type: none"> - Farmers' independence - Education, trainings and capacity buildings for famers, villages and institutions - Promotion of village-level institutions - promotion of tribal areas - Child rights - Women employment 	<ul style="list-style-type: none"> - Panchayat system - Promotion of financial, institutional independence - Government schemes - Strengthening village-level institutions - Promotion of Rural tourism - Strategy of Social Development

KJKS	<ul style="list-style-type: none"> - Organic and traditional farming - Mobilisation and strikes for the environmental or against GMO issues - Conserving traditional and resilient varieties of seeds and cattle - Environmentalist professors & teachers 	<ul style="list-style-type: none"> - Local, sustainable and independent farming - - growing value added crops & marketing of organic products - farmer markets 	<ul style="list-style-type: none"> - Training workshops (farming) - democratic formation - bottom-up approach, organization at the village level - increasing awareness of farmers and consumers on organic farming - youth & women's inclusion 	<ul style="list-style-type: none"> - Programme for creating public awareness on the benefits of traditional food and lifestyle - Nattupolima (organic farming festival) - Meeting of organic farmers
Charaka	<ul style="list-style-type: none"> - local raw products (mainly) and environmental integrity prioritized - Tree protection - sustainable and plant-based dying - Lake restoration 	<ul style="list-style-type: none"> - Providing jobs to 800 women 	<ul style="list-style-type: none"> - group education/resource sharing to tailoring work - promote women independence and empowerment - IT training - cooperative structure 	<ul style="list-style-type: none"> - Women only cooperative Charaka - Created Desi trust

7.2. Interviews 1 to 9

All interviews were recorded. Given the length and open-ended discussions of the interviews, the preparation of concise transcripts was not possible. Instead, we present below the notes taken during the interviews.

7.2.1. Interview 1 : 02.03.2023 –Ekta Parishad (Jill Carr Harris & Karthik Gunasekar)

- Date: 02.03.2023
- Participants:
 - o IHEID: Eva Luvisotto, Ishan Kaur Khalsa, Raghuveer Vinay Vyas, Denis Ruyschaert, Shirin Barol, Nina Kiderlin
 - o Interviewees: Jill Carr-Harris, Karthik Gunasekar
- Main purpose of the interview: preliminary understanding of Ekta Parishad and its work

Questions:

Background, Context, & Scope

1. The project brief discusses how MJVS and CESCO are supporting the implementation of the pilot program in Madhya Pradesh and Tamil Nadu. Could you provide us with some more information on the nature of their activities in the two states, and the role that they might play in our project?
2. Envisioned scope and methodology of the project — Case study method/ FGDs/ Comparative study/ Policy Analysis
 - a. What is the envisioned scope of this project? The brief refers to case studies and focus groups discussions, as well as the identification of 8 districts in India. To this end, does Ekta Parishad envision the project to focus solely on the 8 districts (and therefore entail research surrounding them and their activities), or would the scope be more national/regional/international (and therefore require the exploration of similar approaches across the world)?
 - b. Focus area — sole focus 8 districts outlined in Madhya Pradesh and Tamil Nadu or a more national/regional/international scope requiring exploration of similar approaches across the world?
 - c. Role of MJVS and CESCO in the implementation of the pilot program
3. Expected outcomes — policy recommendations or best practices?
4. Inclusion of social mobilisation in our research: We noted that Ekta Parishad works through climate action, youth engagement, the nonviolent economy network, and nonviolent civil protest (ahimsa). Is there room for us to include social movement issues in our research, or would you prefer us to focus primarily on the link between local production and commodification and climate resilience?

Overall Objectives & Deliverables

5. Intended audience for the project — International organizations, national/state governments, civil society, etc?
6. Who is the intended audience for this project? Is there any stakeholder group in particular (international organizations, national/state governments, civil society, etc) that Ekta Parishad would like to communicate the project outputs with?
7. The expected outcomes mentioned in the project brief give us a relatively large leeway: is there a type of topic/format that you favor?

Methodology

8. Modality of the grassroots consultations/focus group discussions mentioned in the project brief — virtually through zoom or Webex or in-person visits to field locations?
9. The project is clearly deeply rooted in grassroots, community-level action in the specific sites in Madhya Pradesh and Tamil Nadu. This poses unique challenges
10. Challenges posed by language barriers, internet access (if connecting virtually) in certain areas.
11. It seems likely that the project will require some level of engagement with relevant stakeholders in Madhya Pradesh and/or Tamil Nadu. Does Ekta Parishad have any suggestions on how we

can conduct these consultations/discussions effectively? For example, would the use of virtual video conferencing tools (like Zoom) be feasible? Or would we be required to conduct these consultations in-person (either personally, or through partners already based in the 2 states)?

General organization & Timeline

12. Could you indicate your general availability for this project (how often can we expect to meet with you? What is/are the preferred contact(s) related to which specific issue?
13. At what frequency or stage of the research would you like to be informed of the status of the project?
14. Will you be able to provide us with relevant contacts to conduct interviews for the empirical phase of this research project? More generally, could you precise what you could provide us with (documentation, access, contacts, referrals, etc.)?

Timeline

15. General client availability and schedule for the project
16. Frequency of status updates
17. List of potential interviewees and more documentation, access, contacts, referrals, etc. pertaining to the project.

Interview notes:

Introduction

- Ekta Parishad & the Graduate:
 - o was known by the Graduate for 3 years at least -> long relationship on Trust
 - o 2 projects with the Graduate
 - impact of WTO on local livelihoods (discrepancy between international agreement and local applications)
 - Agriculture localization
- Ekta Parishad moto, visions & Actions
 - o Ekta Parishad offers a new form of development, focus less on the competition and more on the cooperation (practical & philosophical)
 - o Works in mobilizing people into leadership roles to fight for natural resources taken away - especially Adivasi communities that had been pushed out of their land, etc
 - o Marches, political actions etc. aren't not sufficient
 - o Getting groups above subsistence is the intention/objective - saving grains, and other objectives were initiated, but EKTA PARISHAD realized that work was needed on livelihoods
 - Livelihood and land ownership are closely interlinked
 - o Providing MJVS and other groups with input - one of the target audiences of the project?
 - o How to revive already existing local and ancestral livelihoods' way of production
 - o Local communities act in manners that are sustainable and environmentally sensitive - the objective is also to attain effective adaptive capacities while also generating mitigation co-benefits
- Needs:
 - o Needs to identify models, social enterprises, etc. successful with livelihoods productions, sustainability practices etc. -> not only models promoted by government entities, big multinationals etc.
 - Over 300 groups and entities identified and brought together under the Non-Violent Economy (NVE) model
 - o Needs to help at the grassroots level to develop adaptive models and systems -> growing multiple species of seeds e.g.
- Jill and Karthik Presentation:
 - o Karthik Gunasekar: Nonviolent Economy Network Coordinator
 - o Jill: from Canada, came in India in 1985 with UNDP (stayed more than 45 years)
 - working with grassroot level - found a disconnect between her work at UNDP and the people on the ground
 - Interested in Lands rights, environment, and gender issues

Background, Context, & Scope

- Information on the nature of MJVS and CESCO activities in Madhya Pradesh and Tamil Nadu, and the role that they might play in our project:
 - o Climate impact/environmental impact of these grassroots projects (organic farming, local production and material creating etc.)
 - o Cases studies (3-4 cases) of different initiative of rural livelihoods, on how it impacts climate adaptation and mitigation, bringing the global narrative (using groups such as IPCC, etc) into the picture to a more concrete level
 - o A few organizations that Karthik has in mind, and we can be connected with them to ultimately develop some timelines
 - MJVS: Manav Jeevan Vikas Samiti- Part of Ekta Parishad; working in MP on Land Rights and organic farming. Already have some work done on the links between their action and mitigation/adaptation. MJVS works with 600 organic farmers in 2 districts; women are involved in the production of bio-pesticides
 - Tamilnadu Women's Collective (CESCI ?)- women working on collective farms, individual agriculture. Multi-location organization; working in groups on leased land to grow crops
 - many women are landless; works in 14 districts; the organization is primarily oriented towards subsistence (food for themselves and their family) and EKTA PARISHAD aims at elevating them above this level to transition towards livelihood
 - Kerala Jaiva Karshaka Samithi -> 10'000 farmers in Kerala (mostly dominated by the state)
 - > self sufficiency + decent living wages
 - Farmers' association in Kerala, running counter to the incentive structures of Kerala (Kerala brought an organic policy for agriculture in 2010)
 - Main challenge for this group is marketing to expand their production and earn a decent living
 - Charaka Women's Multipurpose Industrial Cooperative and Desi Trust, Shimoga: Handloom/handicraft org - involved in natural dyes (a novel area in the realm of adaptation); set up in Karnataka - 800 dalit women; dyes produced in an environmentally sustainable manner; report 9 crores in revenues annually, with 90%+ going back to the women
 - Millet - promotion and marketing of millet, and procure it from different farmers (e.g. Kadiri from Andhra Pradesh)
 - → Some of the cases we could study aren't from EKTA PARISHAD but may be easier because available in English
 - Mostly qualitative work but some quantitative as well

Overall Objectives & Deliverables

- Envisioned scope, outcomes and methodology of the project
 - o Case study method/ FGDs/ Comparative study/ Policy Analysis
 - Multi-case study approach might be best from a research approach
 - Ideally 3 cases
 - Focusing on 1 case only would require to be on the field
 - If we were to work on 1, advice to choose Agricultural groups because the scope is higher (or eventually Seraka because innovative)
 - Women's collective would be a little bit more challenging; organic farmers collective in Kerala would also be doable but lack of infrastructure, etc is a challenge
 - Secondary sources should be used for most research, with primary sources being leveraged purely for clarification
 - Groups that would be the easiest to host us are Ekta Parishad, MJVS, and Charka
- Focus area — sole focus 8 districts outlined in Madhya Pradesh and Tamil Nadu or a more national/regional/international scope requiring exploration of similar approaches across the world?
 - o Focus area = related to each specific project
- Expected outcomes — policy recommendations or best practices?
 - o Each case study would have different contexts, and therefore different deliverables
 - MJVS might need a lot of help in the climate change adaptation side

- Any poverty reduction initiative in India ends up getting caught up in economic/livelihood issues, neglecting environmental considerations
- Need to build narrative and discourse around this topic
 - CECSI: Tamilnadu's Collective
 - Important to underscore provision back to the family
 - Might be looking for best practices: Intermediary steps needed to develop best practices to enhance production and move beyond subsistence
- KJKS:
 - Policy recommendations surrounding chemical-based agriculture vs organic agriculture
 - Market policies
- Charka
 - Decentralized quality control for certifying organic products by the company (to avoid certification by an external organic entity) -> cheaper and better
 - Description of each case study/activities is definitely one component of the project
- Intended audience for the project — International organizations, national/state governments, civil society, etc?
 - o Who is the intended audience for this project? Is there any stakeholder group in particular (international organizations, national/state governments, civil society, etc) that Ekta Parishad would like to communicate the project outputs with?
 - o Dig deeper in comparison to the document sent by EKTA PARISHAD
 - o Convergence -> each of the projects have a community structure and requirements that we would need to look at

Methodology

- Modality of the grassroots consultations/focus group discussions mentioned in the project brief — virtually through zoom or Webex or in-person visits to field locations?
 - o The project is clearly deeply rooted in grassroots, community-level action in the specific sites in Madhya Pradesh and Tamil Nadu. This poses unique challenges
 - Challenges posed by language barriers, internet access (if connecting virtually) in certain areas.
 - It seems likely that the project will require some level of engagement with relevant stakeholders in Madhya Pradesh and/or Tamil Nadu. Does Ekta Parishad have any suggestions on how we can conduct these consultations/discussions effectively? For example, would the use of virtual video conferencing tools (like Zoom) be feasible? Or would we be required to conduct these consultations in-person (either personally, or through partners already based in the 2 states)?
 - Will you be able to provide us with relevant contacts to conduct interviews for the empirical phase of this research project? More generally, could you precise what you could provide us with (documentation, access, contacts, referrals, etc.)?
 - They will be able to provide data/info of some of these projects
 - Holistic approach
 - We should mainly use secondarily material
 - for gaps and missing information -> go for primary material because we cannot come

General organization & Timeline

- General availability for this project (how often can we expect to meet with you? What is/are the preferred contact(s) related to which specific issue?
 - o Let them know what our needs are (every week, 2 weeks, monthly etc.)

7.2.2. **Interview 2: 11.03.2023 –Ekta Parishad II (Jill Carr Harris)**

- **Date:** 03.03.2023
- **Participants:**
 - o **IHEID:** Eva Luvisotto, Ishan Kaur Khalsa, Raghuveer Vinay Vyas
 - o **Interviewees:** Jill Carr-Harris, Karthik Gunasekar
- **Main purpose of the interview:** follow-up discussion after submission of terms of reference

Questions

1. Could you please provide your overall impressions and feedback on the preliminary Terms of Reference (ToR) document we have submitted? Are there any specific areas that require further clarification or modification?
2. In Section VI of the ToR, you mentioned the risks associated with conducting research from Geneva. Could you elaborate on these risks and suggest potential mitigation measures to address them?
3. How do you envision the scope and approach of the project aligning with the objectives outlined in the ToR? Are there any adjustments or additions you would recommend to better capture the aims of the project?
4. The email mentions the status of Charaka, specifically the conflicting information we found regarding its insolvency in 2020 versus its reported operational state in 2023. Could you provide us with more information on the historical context and current state of Charaka?
5. Considering the evolving status of Charaka, how do you think it will impact the case studies and research questions we plan to develop? Are there any specific aspects or focus areas we should consider?
6. What are your expectations for the project's deliverables and timeline? Are there any specific milestones or deadlines we should keep in mind?
7. Are there any additional resources, contacts, or stakeholders we should consider engaging with during the course of the project?
8. How would you define success for this project? What outcomes or impacts would you consider to be the most significant?

Interview notes:

- Could you please provide your overall impressions and feedback on the preliminary Terms of Reference (ToR) document we have submitted? Are there any specific areas that require further clarification or modification?
 - o understanding of the project's background, context, objectives, research question, tentative methodology, and expected deliverables
 - o scope, approach, measures required to ensure that the proposed project outputs are feasible and high-quality
 - o K: looks good
 - o J: Leave it to our advisor in terms of tools and methodology -> their roll = contact with the field / like the 3 org choice
 - o J: MJVS/KJKS are both deeply connected to the climate issue, but Charaka is not. It is an emerging issue for them, but are more focused on livelihood, gender, and poverty interventions
 - Previous history related to environmental issues & CO in the 80-90 (UNCC summit and CO)
 - Very few organization on sustainable agriculture in India at the time
 - Intellectuals (not only grassroots movement) -> are able to reflect the climate history and complex
 - o MJVS
 - 6 main institutions and 12 smaller institutions in EKTA PARISHAD (non registered people org) -> when go for nonviolent action march e.g. they don't get compresses
 - one of them is MJVS -> began with NVE -> called it the Arctic Month
 - 2004-2005 set up
 - Workshop on nonviolent economy -> people in France e.g. realize that this "green economy" was quite a greenwash
 - o Charaka situation
 - historical context, current state of the different organizations
 - o KJKS website? (Kerala Jaiva Karshaka Samithi)
 - o Discuss research methods - what are some recommended resources and approaches for facilitating desk research before we start consultations?
 - Three different levels of climate sensitivity

- The diversity of organic farmer motivations and livelihoods in the Global South – A case study in Kerala, India
 - o Seek clarity on the specific needs for each organization (so that we can begin conducting appropriate literature reviews)
 - What would be the focus for Charaka?
 - Set up by a Director/Playwright/Actor in the National Theatre
 - Went to Karnataka and was inspired to create a women’s cooperative in response to poverty and lack of women empowerment
 - Especially focused on the Dalit community
 - Only recently began working on the climate issue due to a realization of how their business is changing
 - o Paan (Araca nut) planting through clearance of forests
 - o Water scarcity issues
 - o These aren’t really perceived as climate issues, but the focus is clearly there
 - Many women were not initially weavers
 - o The area that Charaka is based in is hugely Brahminical - with lots of discrimination. This might be a core factor in why Charaka’s focus is on Dalit women
 - o But we have to be careful in mentioning/focusing on these topics - they may divert from the real issues/focus. Nuance is critical when conducting stakeholder engagement
- What would be the focus for MJVS?
 - o Part of Ekta Parishad
 - EKTA PARISHAD is a non-registered people’s organization and is therefore immune to oppression/targeting during non-violent marches
 - Mahila Manch, and other wings (including Economic wing)
 - French partners proposed a workshop on nonviolent economy in 2004/2005
 - Nonviolent economy is Gandhian alternative to green economies - which are perceived as greenwashing by those who proposed nonviolent economies
 - 2022 - non-violent market
 - Work mainly on Non pesticide management (similar to organic)
 - work with farmers, water management and infrastructure, localised water resilience, plantation, protection of water, work with women, local village-level development committees, local bodies
 - Focused on working on organic agriculture, and setting up “ALIVE” - a marketing arm for collecting handicrafts, handlooms, etc and selling them
 - Climate change has not been a major component of MJVS for a long time
 - Focus was on poverty, which was not perceived as a priority because it wasn’t raised by beneficiaries
 - Our role is to strengthen the climate components of MJVS
- What would be the focus for KJKS?
 - o From a movement called 1 earth, 1 life - created by Shiva Prasad Master (physician with concerns about health issues in the 70s and 80s, and began to expand to the environment after)
 - o Created an intersection between environment and health through school teachers in Kerala, and this led to organic agriculture
 - o These teachers then formed KJKS
 - o KJKS was involved in initial UNFCCC meetings, CBD dialogues, etc
 - o They have a strong biodiversity, climate, and health intersection - using teachers as their target audience/facilitators
 - o KJKS includes intellectuals and academics as well - who could reconcile the history with climate issues

- What are your expectations for the project's deliverables and timeline? Are there any specific milestones or deadlines we should keep in mind?
 - o combination of learnings
 - o Central: Identify patterns, anti-patterns, broader part of climate resilience
 - o NVE network -> framework, commonalities -> brings them together
 - o What to focus on each project: KJKS -> Policy / Charka -> Market-readiness / MJVS -> livelihood focus (transition from land right to livelihood production)
 - Charka: difficult to compete on the market of Handloom (in addition to climate questions)
 - MJVS: Climate March villages -> support to understand the scheme better and how MJVS can be helpful
 - o Jill's inputs:
 - Study 3 different cases, make a rich description of them without trying to fit them into a mold -> make the literature speak for each case in order to bring them together in a new but holistic approach
 - Description: Interesting and rich description in the broader sense (what are these people doing, how they perceive their action)
 - Different framing for each case: Do not try to have a common questionnaire but rather look at each specificity
 - Literature: Framing from Gandhi's literature -> bring a lens of climate, Gandhi development plans etc.
 - Analysis: look at the macro-narratives of each actions -> having disaggregated data will be difficult to have a common narrative at the end. Need to frame it as how livelihood and climate adaptation come together (look at different examples at this stage)
 - Conclusion: Trying to think in a novel way, the experience of these different cases interplay with each other

- Are there any additional resources, contacts, or stakeholders we should consider engaging with during the course of the project? Which kind of literature would you advise to use?
 - o Jill will provide preliminary literature on Gandhian economics to get us familiarized
 - o The diversity of organic farmer motivations and livelihoods in the Global South – A case study in Kerala, India
 - → general understanding of what's the handloom practice is in India, what's India's workers situation etc.
 - o A general understanding of the state politics, dynamics, etc are essential for understanding why each group is engaged in their respective practice

- How would you define success for this project? What outcomes or impacts would you consider to be the most significant? How can we establish good enough practical contact given the distance between us and our partners?
 - o MJVS:
 - Not a problem because under Ekta Parishad
 - o KJKS and Charka are not under Ekta Parishad → difficult to ask people for a lot of their time
 - o KJKS: they can help in terms of connecting us
 - Potential intermediary/facilitators/point persons for interviews:
 - Ashok (good at English) could be an intermediary -> chairman of the board
 - Shibu (journalist) knows the org pretty well
 - Main couple
 - o Charaka: have a call/chat with them
 - Production side: women primarily speak Kannada
 - Factory side: Peter (speaks good English)
 - Marketing end: many women speak English

7.2.3. Interview 3: 20.03.2023 –MJVS (Nirbhay Singh)

- Date: 20.03.2023
- Participants:
 - o IHEID: Eva Luvisotto, Ishan Kaur Khalsa, Raghuveer Vinay Vyas
 - o Interviewees: Nirbhay Singh, Chandrapal Kushwaha
- Main purpose of the interview: preliminary understanding of MJVS and its work

Questions

- Overarching questions:
 - o Briefly describe all of the organizations to the stakeholder. How does your organization's work have parallels with these two groups?
 - o What are the main challenges your group is currently facing? This can be with regards to climate change, regulation, education - any major hurdles they are facing
 - o What kind of research would you benefit from through this project? Is there any policy and/or development-related information that you are currently in need of?
- Questionnaire for MJVS
 - o Can you tell us about the history and mission of Manav Jeevan Vikas Samiti?
 - o What are the main programs and initiatives that the organization is currently working on?
 - o How does the organization measure the impact of its work on the underprivileged communities in rural areas?
 - o How does the organization engage and involve the communities it serves in the planning and implementation of its programs?
 - o What are the organization's plans for the future, and how does it envision its work evolving in the coming years?
 - o How can individuals or groups interested in supporting the organization get involved and contribute to its mission?

Interview notes:

Presentation: Chandrapal, Nirbhay and Nirbhay

- Introductions
 - Nirbhay - worked in the social sector for the past 30 years, and has worked as the secretary of MJVS for the last 20 years
 - 20 November 2019 - MJVS was registered
 - Working in 5 main areas of a sustainable agriculture — Land, Water, Forest, Seed, Animals (Land conservation, water/irrigation facilities creation, forest conservation, Seed conservation and Poultry promotion)
 - Working mainly in sustainable agriculture
 - Poultry promotion
 - Non-pesticide farming
 - Soil and water conservation
 - Encouraging farmers to create their own open wells
 - Irrigation is a big component of achieving sustainable agriculture
 - 3000ha irrigation facility set up, with over 200 open wells, several ponds, etc
 - helping farmers shift from flood irrigation to drip irrigation technologies
 - Forest rights
 - Adivasi farmer communities living in forests are often denied leases by the government to continue engaging their livelihoods. MJVS assists in facilitating liaison towards this
 - 1000 acre land has been put aside for dedicated development and use by adivasi communities
 - Promotion of village-level institutions
 - Training and capacity building of villages and institutions
 - Sustainable Agriculture

- Water conservation
- Land conservation/development
- Forest management
- Livestock development
- Seed conservation
- Government schemes and connecting eligible beneficiaries to them
- Considered the core components of sustainable agriculture
- Non-pesticide based farming is their main practice
- Working with 23,000 farmers in 2 districts
- Damon District
 - Tendu-Kheda block (60 villages, 25 gram-panchayat, 9000 households)
 - Javera block - (25 villages, 7 panchayats, 2500 households)
- Katni District
 - Barwada block
 - 50 villages, 20 panchayats, 5000 households
- Dhimar Kheda block
 - 10 panchayats, 30 villages, 3000 households
 - AIMING: To secure livelihood and promote livelihood of 3k households
- Mainly working in tribal areas, 60% of total households worked with are tribal
 - Livelihood promotion is considered key in their work
 - They achieve it through different themes
- Madhya Pradesh, Jharkhand, Bihar, Chhattisgarh are the main areas of focus
- Katni and Damo districts are where their sustainable agriculture interventions are most prevalent
 - Sustainable agriculture
 - Belief is that by working on those 5 components with farmers is essential for achieving sustainable agricultural livelihoods
 - Work extensively in forest development (engaging farmers to have plantations in their environs)
 - Give farmers training in the production of bio-inputs, fertilizers, etc
 - Land Development: Protection of those inputs in the forest from which supplements and other agro inputs can be derived
 - Livestock development and fodder management practices (Use of cow dung and urine)
 - Livestock - ownership is reducing, and animal health is reducing. They engage in interventions related to animal health (vaccines, etc), care, etc
- Consider it a part of sustainable agriculture because of the utility of animals for bio-inputs
 - Seeds - many farmers have become market dependent today. In order to try to reduce that, MJVS has created seed banks to preserve and promote indigenous species.
- They have village-level organizations/ reps, who store traditional seeds
- Work with small farmers mainly - provide them seeds for free, with the expectation that they will return a similar amount back later. (Give 5k seeds, farmers return 6k)
- Give farmers training in seed conservation and preservation (things like moisture levels, dressing, etc)
- Bio-inputs - training farmers to make fertilizers, pesticides, that are non-chemical based. Train in tonic management and creation for different kinds of insects
 - Different chemicals for different pests, etc
 - Mainly train the farmers to make it themselves

- But they also have Women Self-Help Groups of 10/12 women that operates in a BRC (Bio-Resource Centre), of which there are 8, where women make bio-inputs to sell to farmers
- They support these women in terms of employment and also enable handholding support for farmers by ensuring branding, bottling and packing of their products and therefore creating a value addition for their products so that they can get good prices when their products are taken to consumers.
- 4 BRCs in Damon, 2 in Katni Districts - they have been successful and there are plans to expand them
 - The intention is for every 2 panchayats to have a BRC. (One panchayat has ~5-6 villages so 6-7k households)
 - 42 Seed banks and link their benefits to the community
- Government schemes - Agricultural Department of India has several schemes for sustainable agriculture
 - MJVS works to bring and link these schemes to the people that need them on the ground - to the committee level
 - Using things like earthworm fertilizers, etc
 - MJVS mobilizes a committee between every 3-4 villages through a community mobilizer
 - KVK - Krishi Vigyaan Kendra - platform for training and knowledge sharing for farmers and farming practices
 - Facilitate the connection between government and state-level actors all the way to local/rural villages and farmers
 - While villagers (esp small and marginal farmers) benefit from reducing their input costs and practical training.
 - Also ensure that farmers benefit from the various government schemes that operate in the area and provide either subsidized farming inputs or products or generate employment. For Ex: Kissan Sammaan Nidhi, Ujjwala, Widow Pension, Old Age Pension, MGNREGA.
 - They made a village development plan - understanding the problems, availabilities, etc - to inform the interventions made in the village
 - Create an understanding of what is available and what is needed. Get it approved later with the Gram Panchayat.
 - Agricultural certification support is an area they now work as well
 - To ensure that these farmers can sell their produce at market with distinctness and meeting the standards
 - Any farmer engaged in organic farming can be distinguished
 - Capture crop wise information
 - Trial phase of 500 farmers ongoing now
 - The aim of the certification is really to identify/prove that certain products come from farmers
 - Involving a third-party certification group, which does crop-based certifications through internal and external audit and records all information about the land size, seeds used, inputs used, crop rotation, buffer zones etc.)
 - Made 50 groups, each consisting of 10 farmers. These farmers then consolidate data about all their information - land, family, types of farming, types of seeds, crop rotation, etc
 - Conducting value-addition
 - Millet, spices, coriander, chillies
 - ALIVE - the entity that does the processing and packaging for the farmers to give them value addition

- Challenges:
 - o Work with limited farmers
 - o Better demonstrations needed - currently unavailable due to lack of funding
 - o Soil and Water conservation done in collaboration with Gram Panchayats but also through their own funds.
 - o Difficulties in communicating with farmers initially
 - o Water - issues with water levels reducing and general scarcities
 - They have made various interventions, including developing wells, and other water management efforts
 - o Caste-wise differences in agricultural activities
 - Poultry - mainly by tribal communities (SCs and STs)
 - Vegetable production - OBC, general castes Patels, etc
 - Irrigation is considered the most popular, especially in areas with reliance on rainfall
 - They work in the most drought-prone areas of MP, with several water scarcity issues and migration that happened due to it. The interventions around irrigation, well-digging, and land rights have facilitated people to stay
 - o Irrigation:
 - o Have created 10+ community ponds, check dams, open wells as within sustainable agriculture irrigation seemed to be the main problem due to which farmers had to migrate or engage in seasonal farming
 - o With their intervention there is a 3-4 hectre increase in the irrigation facility
 - o Have also created awareness about facilities other then flood irrigation such as drip irrigation or sprinkler systems and used govt schemes to promote those facilities
 - o Vegetable promotion: 4-5 Lakh of income increase has taken place for farmers from 1 Acre Land
- To conclude: MJVS has explored multiple avenues to secure the life and livelihood of small and marginal farmers through sustainable farming. as well as promote sustainable less-chemichally induced development of lands which have been given by the government.

7.2.4. **Interview 4: 30.03.2023 –KJKS (Illiyas KP)**

- Date: 30.03.2023
- Participants:
 - o IHEID: Eva Luvisotto, Ishan Kaur Khalsa, Raghuveer Vinay Vyas
 - o Interviewees: Illiyas KP
- Main purpose of the interview: preliminary understanding of KJKS and its work

Questions

1. Briefly describe all of the organizations to the stakeholder. How does your organization's work have parallels with these two groups?
2. What are the main challenges your group is currently facing? This can be with regards to climate change, regulation, education - any major hurdles they are facing
3. What kind of research would you benefit from through this project? Is there any policy and/or development-related information that you are currently in need of?
4. Can you tell us about the history and mission of the Kerala Organic Farmers' Association?
5. How did the organization react when genetically modified brinjal was introduced by the Central Government in 2009?
6. How has the organization been involved in advocating for the effective implementation of the Paddy Land and Wetland Conservation Act in Kerala?
7. Can you discuss the organization's concerns about the new agricultural laws introduced by the Central Government in September 2020?

8. What are some of the potential impacts of these new agricultural laws on small farmers and agricultural diversity in India?
9. How does the organization promote organic farming and encourage farmers to adopt sustainable agricultural practices?
10. What are some of the main challenges that the organization has faced in its work in Kerala?
11. Can you discuss the organization's efforts to preserve indigenous seeds and promote the use of non-GMO crops?
12. What are the organization's plans for the future, and how does it envision its work evolving in the coming years?
13. How can individuals or groups interested in supporting the organization get involved and contribute to its mission?

Interview notes:

- Introduction: Organic farming organization in Kerala - KJKS
 - o Formed in 1992
 - o By 3 people famous in the organic farming space
 - o Began as a gathering of farmers (10 years ago)
 - Farmers would meet at someone's place in their respective districts to share seeds, knowledge, training, etc
 - Training programmes are also conducted through this
 - 200-300 farmers would gather
 - 2012-2013, rationale formed to spread awareness of these groupings
 - They made district, taluka, panchayat level committees
 - These committees now organize events monthly at their respective levels
 - Active in 10 districts
 - o They also engage in strikes occasionally against environmental or GMO issues
 - o Seed, tuber, edible leaf festivals, etc
 - o Conduct a festival (Nyatuvela?) where saplings are distributed during the relevant season
 - o Training workshops - take the fees from students/farmers (1,000-2,000 Rupees per class, with each class having 20-30 students) where students are practically shown how to engage in cultivation
 - Taught by farmers
 - Develop syllabi on organic farming, vegetable gardening in houses, etc
 - o Success of these initiatives has been good
 - State secretary of Kerala is an alumni of KJKS training
- Scope of KJKS
 - o 14 districts in Kerala
 - 10 District-level committees
 - After COVID, there was limited activity (many committees lost their connection in the period)
 - Currently in the process of reactivating these committees
 - o Kerala is food deficient - about 20% of its rice is produced within the state
 - In the last 40 years, 80% of land cultivation went down, and paddies have been converted to other things
 - About 30 varieties of rice
 - 100-200 acres of red rice cultivation
 - o Mainly work on the technical side of things
 - Homestead farming promotion
 - Started with awareness-raising on organic farming and trying to attract new farmers into practices like permaculture, ecofarming, etc (the broad umbrella of sustainable farming) and teach them about it
 - Conserving traditional varieties of seeds and cattle
 - Livestock Improvement Act 1961 - white revolution

- Local cattle/bulls are more suitable for their environment (and more resilient to climate change), but hybrids like Desi cows or HF cows are less productive and live less
- But the government does not permit them to raise local bulls - while the law still stands, it's openly violated now
- Giving training and awareness on traditional cattle and chicken rearing
- Value chain
 - Provision of technical knowledge to be tailored according to respective climatic needs
 - Purreda (?) - Kerala traditional seasonal cropping and multicropping methods (e.g. coconut trees, pepper plants, tubers grown together) - growing up to 40 crops together
 - KJKS takes traditional knowledge and methods and disseminates them as part of the trainings given
- Main Challenges
 - o People are very aware of organic farming, but Kerala-wide farming culture is getting lost
 - Partly because of government policy
 - Government does not give any recognition to organic farmer groups in the State
 - o Other support also needed - for making a lawful organic market, etc. Subsidies and other assistance mechanisms would be good
 - o Things are better at the panchayat level, where all stakeholders do attend meetings and are active. But at the state level, there is minimal policy-level discussion. This is despite constant invitations of agricultural ministers and other key officials
 - o Involvement of civil society in decision-making is therefore a key issue
 - KJKS is only consulted for technical advice/input, but not consulted for policy development, etc
 - o Climate change
 - 2018 - after 70 years, there was a huge flood in Kerala, many of the farms were lost
 - Rice long-term varieties were not lost, and tubers were not lost
 - Most hybrid varieties used are university-developed
 - Using hybrid seeds and traditional crops/culivation methods can survive climate change effects and guarantee some extent of yield
 - o Market issues
 - Lack of storage, processing facilities
 - Organic farming would have different types of processing units, milling infrastructure, etc
 - Processing/milling is currently expensive - an extra 10-20 rupees per kilo costs
 - Startups are facing challenges in getting support, licensing, etc from the government. Also lacking in infrastructure
 - Need support for the preservation and conservation of traditional seeds
 - KJKS takes farmers to feed festivals, markets, etc to promote them and their organic practices/products
 - Paddy Land and Wetland Conservation Act
 - 2 lakh acres of fallow paddyland still persists in Kerala
 - Climate change also contributed to the decline of paddy cultivation
 - Government provides minor subsidies to facilitate canal cleaning, paddy maintenance, etc
 - Engaged in major paddyland revival activities to restore the productivity of fallow land - in different areas with the support of UNDP and other NGOs; 1000-2000 ha aimed to be restored
- Future evolutions of KJKS
 - o Also in the process of figuring this out
 - o Built a small office, accommodation, and training facility
 - o Receiving loans from farmer participants/supporters - 10,000 rupees
 - Also received support to build the facilities and infrastructure they need - very contribution oriented
 - o Providing support to SMEs in the organic entrepreneurship sector

- o Issues around licensing, expansion, etc
- o Seeking to tap into support systems with the government and others to build processing centres, milling, and other systems (especially an organic-specific supply market system)

7.2.5. Interview 5: 06.04.2023 – MJVS II (Nirbhay Singh)

- Date: 06.04.2023
- Participants:
 - o IHEID: Eva Luvisotto, Ishan Kaur Khalsa, Raghuveer Vinay Vyas
 - o Interviewees: Nirbhay Singh, Chandrapal Kushwaha
- Main purpose of the interview: further understanding of MJVS and its work

Interviews:

- Before starting any work with communities, MJVS does a baseline assessment of the state of certain farmers, and then measures this baseline again every 4 years to determine project impacts
 - o If farmers don't have land, then other activities/trainings (like handicrafts, fishing, and other livelihood activities) will be promoted and trained
- Sustainable Agriculture model - made up of 6 components
 - o Water
 - o Forest (important for traditional medicines, plants, herbs, etc) - engaged in plantations, nurseries, etc
 - o Land - especially land development and registration for farmers, etc
 - o Livestock - natural farming is only possible when organic animal byproducts (e.g. cowdung) are leveraged
 - o Traditional seeds - promote indigenous seed varieties, which are less dependent on market forces, less prone to diseases
 - 58 seed banks established and maintained by the village-level committees
 - So far successful in all the trial sites
 - Started receiving support
 - o Modern agricultural techniques
 - Crop rotation, multi-cropping, line-sowing,
 - o NPM (Non-Pesticide Management)
 - The insistence that farmers should not use chemical fertilizers or pesticides at all on their fields
 - MJVS offers their alternative solutions, trains farmers on how to produce them, and promotes them - or farmers can buy them from the bio-research centres (BRCs)
 - o Just recently began a certification programme - because farmers struggle with accessing, distinguishing, and selling their products in the market
 - Started a process of crop certification with 500 farmers - they will receive a certificate that declares that their crops are pesticide free
 - o Rights & Entitlement
 - FRA (Forest Rights Acts)
 - 1000s of ha have been received by farmers in tribal areas
 - Support tribal communities and farmers with online land registration processes, etc
 - Child Rights
 - Help students enroll in school, support them with medical processes, nutrition, etc. They provide training about this to different communities
 - They have a child-line in which they monitor things like child labour, needs for support, etc
 - Government Schemes
 - Any initiative by the government should benefit members at the end levels - this is an MJVS priority
 - They have noticed that there is a gap between government initiatives and the village communities that they are meant to benefit

- MJVS knows which families and groups are eligible for some support, and help through the entire process to facilitate reception of the benefits from the government
- The linkage of farmers to government schemes remains one of the core priorities of MJVS
- Sustainable Livelihood - the aim to secure the livelihoods of whatever communities they work with
 - NPM-based agriculture and market linkages
 - Reduce the dependency on market-based agricultural input purchase
 - 30-45% reduction in okay
 - Poultry
 - Gave 1 family 45 chicks? Giving them a salary of at least 30,000 rupees per month?
 - Pretty automated system - the chickens live in the open as well, and require minimal care/interference
 - 350 + 320 farmers have been given support for this sort of intervention at the grassroots level
 - Goatery
 - Gave farmers goats, or connected owners to animal husbandry dept. officials, who can help them with increasing the milk productivity of their goats
 - Fisheries
 - Worked with the fisheries department to introduce fisheries to a place where they were totally not used
 - Livestock management
 - Fodder management practices, sanitation, animal vaccination, and interventions to increase milk production (azolla grass)
- Forest produce
 - Collects and supplies forest produce for sale at an appropriate market and price
- Soil and Water Conservation
 - Create a village-specific plan
 - Work in
 - Land development
 - Plantation
 - Awareness about soil and water conservation
 - Construction of water harvesting structure
- Training and Skill Development
 - Go Rurban
 - Cultural exchange
 - Panchayatiraj Institution
 - Strengthening village-level institutions
 - Training to farmers on modern agricultural techniques, poultry, goatery, fisheries, and NPM-based agriculture
 - Link to people with PM Kaushal Vikas Yojna (KVK)
 - KVK gives farmers trainings, and it has good linkages with MJVS - they collectively organize grassroots-level training, as well as discussions at their facilities
 - Also a focus on youth - KVK provides trainings on all kinds of professions/trades/activities for younger people
- Promotion of Rural Tourism
 - Supported by a french organization (Tamati?)
 - MJVS has a plot in the village where tourists and visitors can stay - there is a 8-10 day plan for activities for the tourists, they are engaged in everything from food production/prep to management to other things
 - Chandrapal states that the advent of tourism in their regions has improved quality of life significantly - because the government took attention (and built infrastructure),

teachers and schools were revamped, student knowledge increased (by speaking english, etc),

- They do village stays, home stays
- Engage in social and economic development, and village development through tourism
- MP Tourism Board has received funding and support to develop a homestead for tourists to catalyze development elsewhere
- Strategy of Social Development
 - Baseline survey
 - Identification of Problems
 - Formation of village-level organizations
 - and more [see presentation by Nirbhay and Chandrapal - this is important]
- Areas we can help MJVS
 - o Tuer dal and spices are the only things that can be marketed at the moment by the farmers
 - o MJVS is keen to facilitate the reach of its products (with packaging, appeal, marketing, etc) to reach stores and end-users
 - o Farmers can now plant/farm twice per year rather than once

7.2.6. **Interview 6: 01.05.2023 – Charaka (Terrence Peter Monk)**

- Date: 01.05.2023
- Participants:
 - o IHEID: Eva Luvisotto, Ishan Kaur Khalsa, Raghuveer Vinay Vyas
 - o Interviewees: Terrence Peter Monk
- Main purpose of the interview: preliminary understanding of Charaka and its work

Questions:

1. Briefly describe all of the organizations to the stakeholder. How does your organization's work have parallels with these two groups?
2. What are the main challenges your group is currently facing? This can be with regards to climate change, regulation, education - any major hurdles they are facing
3. What kind of research would you benefit from through this project? Is there any policy and/or development-related information that you are currently in need of?
4. Can you tell us more about the history and background of Charaka?
5. How has Charaka contributed to the economic empowerment of Dalit women in the handloom sector?
6. Can you explain the significance of the dignity of labour as a key value for Charaka?
7. What role does the Shramjeevani Ashram play in the functioning of Charaka?
8. Can you describe the production process of Charaka's textiles, particularly the use of natural dyes and traditional techniques?
9. How has Charaka been affected by the effects of climate change in the Western Ghats region?
10. How does Charaka work with other organizations or individuals in the community to promote community building and cultural events?
11. Can you tell us more about DESI, the trust that supports Charaka, and how it works in tandem with the cooperative?
12. How does Charaka ensure fair wages and working conditions for its members?
13. What are Charaka's plans for future growth and expansion, both in terms of production and community impact?

Interview notes:

- Can you tell us more about the history and background of Charaka?
 - o Started in 1996
 - o Mr. Prasana - founder of Charaka - was a playwright and activist, and director at a theater college
 - o At the time (30 years ago), agriculture was the mainstay in the village, with crops being commercially oriented - especially betel leaves
 - o Women were largely employed in the fields for these farms. To work on this, Mr. Prasana and some friends started a foundation
 - o Initially a social movement, that evolved from group education/resource sharing to tailoring work
 - o With popularity increasing, they decided to produce the fabric rather than purchasing it
 - o Initially, there was little knowledge or capacity on weaving handlooms
 - Eventually channeled this capacity into a cooperative named Charaka
 - evolved the in a women only cooperative society (Amul = example of a successful cooperative - Milk filtration)
 - Charaka currently has 8 board members, all of which are women
 - o The area Charaka is in is naturally high-moisture and rainfall, with rain falling 4-6 months per year
 - Rainy area (4-6 months) -> marks of rain, looms started to deteriorate -> lot of energy and additional work. That's why the founder directed his idea in the North area
 - Looms and traditional weavers are usually found in drylands or coastal areas, forcing many to move
 - As a result, Mr. Prasana redirected to North Karnataka (districts of Gaddar, etc)
 - In these areas, traditionally half of the community was focused on weaving. This has changed with increased access to dams, etc
 - Very skilled people there
 - o Operational structure
 - Weaving has been decentralized, by dying has been centralized to Haraka (?), where Peter is currently
 - Up to 80% of people in Charaka are currently women
 - Tailoring units in every district - where cuttings are delivered to, and women tailors are hired go to work on stitching/sewing
 - Wood-block printing facility and design centre has been set-up and provides some 15 jobs
 - Charaka is installing computers to train the women on IT literacy
 - Many of the women are illiterate, or undergraduates. Few graduates present in the Charaka setup
 - o Recognized a need/gap around marketing and market access
 - Mr. Prasana and his intellectual friends opened up the "Desi Trust"
 - It took all the marketing responsibility in Bangalore and other areas - using mouth-to-mouth marketing, and other efforts
 - o 10 years ago, some 800 people worked for Charaka
 - Providing jobs for all of them, mainly women
 - Profit of 36 lakhs
- Can you describe the production process of Charaka's textiles, particularly the use of natural dyes and traditional techniques?
 - o Minimal importing was done and encouraged, with localized products and environmental integrity prioritized (avoiding to cut trees as well)
 - o This includes plants like eucalyptus, pomegranate skin, etc (for dye colours)
 - o Indigo is a signature colour of Charaka
 - It is not indigenous to Karnataka, but to Tamil Nadu
 - Frequent visits are conducted to the site to determine organic standards, etc
 - Created using betel-nut juice, which are boiled and processed to create the indigo colour
 - Demand is high - 30% of products are made up betel-nut juice, and some >1000L is needed every year (?)
- How has Charaka been affected by the effects of climate change?
 - o Climate change impacts

- Season predictability has diminished, temperatures have risen to almost 40 C in Karnataka
- High temperatures can affect the colour of the dye - one of the disadvantages is that natural dye processes do not always lead to the same colour, which is aggravated by climate change
- High need for water - 10,000L of water needed every day. But to date, Charaka hasn't paid for water - they have the lake they are restoring, and leveraging well-drawn water for the same
- More people around Karnataka are also entering agriculture, with betel-leaf plants being quite water-intensive
- o damaging to a huge amount -> use to predict the seasons but it's not possible anymore (reaching 40 degrees) and cannot tolerate extreme temperatures (changes the colours -> indigo goes dark e.g.)
- o Heavy raining season last year -> Charaka doesn't need to pay for water (thanks to the lake provisionement) but they do not know if it will always be possible
- o It was just a forest land but the land is being modified, changing the water connection there
- Operational structure and Impacts beyond weavings (IT training, lake restoration etc.)
 - o Operational structure: board of director (Chairman woman)
 - o One nominated secretary -> cooperation and implementation of day-to-day operations
 - o Total operation: division in 2 phases
 - Pre-loom: yarn is not produced, but bought from the mills. There are some mills throughout India that are tapped into. Charaka has a yarn store where inventory is maintained, and then distributed to dyeing stores
 - Before dyeing, there is a process called scouring (washing in high-temp water over several hours. There is a machine for it called a scouring machine)
 - After this, it will be released to yarn store (?), 75% will go for colour dyeing, while the rest for white colour
 - Dyeing process is extensive/complex, and takes time and space. Once it is done, the yarn is sent to the weaving centres
 - Weaving - decentralized weaving process
 - Arrangements that weavers have designated days to pick up the yarn, and have a list of the products that need to be made with the yarn (all kind of products are accounted for) based on orders
 - After weaving, the fabric store receives the products. Here, a quality check is conducted
 - Fabric is segregated into various categories - handloom is not 100% perfect, so prices for sale are adjusted according to quality
 - Post-loom: dedicated department to determine what should be made with the fabrics submitted
 - Fabric cutting section will adjust according to the designer's order
 - Then goes to garment quality section, ironing section, and then to marketing/sales department
 - From here, it is moved to Desi Trust for marketing - until when
 - o Terrence therefore serves as the COO, who handles these day-to-days, and meets once every 3 months with the board to gauge direction
 - o Charaka will, as of this year, take over the marketing responsibilities from the Desi Trust
 - This will increase the level of women (and income) in the marketing area
- How has Charaka contributed to the economic empowerment of Dalit women in the handloom sector?
 - o Until recently, Desi Trust profits did not go to Charaka. Any profits made would be shared as a bonus to artists
 - o No profit was made during COVID. So, to reduce costs, Charaka will take over the activities and lead marketing activities from existing facilities
 - o Majority of workers at Charaka are compensated on a piece-rate basis (paid for what they make)
- will provide it to us (not in any official website yet), including a flowchart
 - o Charaka.in - website -> <https://www.charaka.in/>
 - o A lot of the resources are in Kannada

7.2.7. Interview 7: 03.05.2023 – Miloon Kithari

- Date: 03.05.2023
- Participants:
 - o IHEID: Eva Luvisotto, Ishan Kaur Khalsa, Raghuv eer Vinay Vyas
 - o Interviewees: Miloon Kithari
- Main purpose of the interview: Having an academic and practical understanding of the context of non-violence and bottom-up movements in India and of the pre-dominant issues.

Questions:

1. In your experience, what are some examples of successful non-violent economic initiatives that have been implemented in vulnerable communities to build resilience to climate change?
2. How can non-violent economic interventions be designed to support the livelihoods of vulnerable communities while also promoting sustainable development and addressing the root causes of climate change?
3. What are some key research gaps in the field of non-violent and circular economies, particularly in the context of building resilience to climate change in vulnerable communities?
4. What are some of the most important sources of information and databases that researchers should consult when studying non-violent and circular economies? Are there any particular research methods or approaches that are particularly effective in this field?
5. How do you see the concept of a non-violent economy and circular economy intersecting with Gandhi's work and ideas?
6. Based on your experience, what are some of the biggest challenges that organizations and communities face when trying to implement non-violent and circular economic initiatives, and how can these be overcome?

Interview notes:

- Expertise
 - o Gandhi
 - o Development in the Indian context
 - o Displacement Studies
- What we are looking for
 - o Insights and information on Topics:
 - Non-violent Economy
 - Circular economy
 - o Guidance, advice, recommendations
 - Identify key research gaps and locate relevant studies
 - Input on the most important sources of information, databases
 - Methodology
 - Themes
 - Contacts, organizations, stakeholders, etc.?
 - Resources or references
 - o Miloon's comments
 - o Are these groups tied up with national or state-level initiatives on biodiversity/the environment
 - And if so, how have they contributed to the perspectives of the larger networks, and how have the larger networks helped them
 - Small groups in India often get isolated and lack the support needed to survive
 - How has Ekta Parishad helped MJVS, KJKS and Charaka with their activities

- Has this work influenced the policy landscape?
 - Uttarakhand case study - organic agriculture taken up at a political level and became a state-wide movement and initiative
 - And a “boomerang effect”: how do these movements boomerang into the policy scene and then ultimately return back as institutionalized policy?
- Consider adding a 4th pillar: human rights
 - Role of marginalized communities (like dalits) and women in these initiatives? Themes of empowerment, people claiming rights, etc
 - How did women or dalits enter leadership roles?
- Important to mention that these models are challenging the national and global neoliberal economic model
 - If we only measure progress through macroeconomic indicators, these kinds of groups get missed out - despite their offering of unique and novel indicators
- Do these models promote the decentralization of decision-making, or not?
- Do these groups see their activities as political as well? What are their political or ideological inclinations?
 - Tied to history/tradition, and tied to survival - the reduced dependency on external inputs, and the development of unique and economies and marketing systems
- What is the role of technology in promoting these livelihoods? Like using tech and apps to market their produce
- These groups set out to achieve something - what obstacles did they encounter, and how did they overcome them?

7.2.8. **Interview 8: 24.05.2023 – Ekta Parishad III (Jill Carr Harris)**

- Date: 24.05.2023
- Participants:
 - IHEID: Eva Luvisotto, Ishan Kaur Khalsa, Raghuvveer Vinay Vyas
 - Interviewees: Jill Carr-Harris
- Main purpose of the interview: follow-up discussion after submission of the preliminary report

Interview notes:

- Feedback
 - Economy and Social Enterprise
 - The bottom-up is not just a social action of Ekta Parishad. Not just coming from a movement that interacts with local communities. Bottom-up is a self-organizing movement
 - In the second part, it is important to show that these are self-organizing communities. They are creating a bottom-up economic process or self-organizing, and that is profoundly rich
 - Suggests that we talk about Kumarappa (in relation to Vandana and Nadvandy)
 - The idea that when a community starts to make a surplus
 - Model of a self-organized economic group - these groups are not just selling, but creating new relationships. For example, organic supply chains are all about bringing the consumer and producer together more easily, and doing good for the planet in the process
 - Basically - talk more about self-organization, and the notion that these groups are being motivated by a new model of economic organization
 - Third section on bottom-up is profound and important, but feels a little rushed and insufficient so far

- o Bringing the word “Livelihood” into the document
 - The term was underutilized and underplayed - there is a big difference between “livelihood” and “wage-based job”
- o Requesting a bit of an inclusive approach - one where we discuss nature and humans (and other components) as not separate, but fundamentally connected. So the use of holistic terms vs “western, academic terms”. Essentially engaging in the argument that holistic terminology needs to be adopted/considered going forward
 - The idea of self-organizing units and organisms building economies from the bottom-up vs the top-down
 - Swaraj - autonomy (of individual and community)
 - Sarvodiye - Inclusion and Wellbeing of all
 - -> need to show that we read and reflected about indian theoretical principles, and then go back to our table
- o Linkage between the three sections needs to be more explicit
 - Gandhi’s words = holistic
 - Environment is not seen as an external entities, but the center, the base of existence
 - Modern ecological economic -> moving towards this
 - Theoretical approach -> looking at entities and trying to find their relationship
 - A different way to do that is to use inclusive terms
 - Holistic <-> academic
 - -> see the relationships and looking at which entities in involved
- o Economy of Permanence
 - An economy that is human and not just about money
 - Marginalized communities - the need to think about and include the poorest
 - Mapping our nature

7.2.9. **Interview 9: 03.07.2023 – KJKS II (Iliyas KP)**

- Date: 03.07.2023
- Participants:
 - o IHEID: Eva Luvisotto, Ishan Kaur Khalsa, Raghuveer Vinay Vyas
 - o Interviewees: Iliyas KP
- Main purpose of the interview: Specific interview on sustainability issues in KJKS actions and their interactions

Questions

1. Interactions with the Environment
 - a) To what extent do environmental variations impact your organization? Are you already seeing and being impacted by climate changes?
 - b) What specific environmental interventions or practices does your organization implement to address climate change impacts in these communities (could you provide examples)?
2. Interactions with Society
 - a) How does your organization engage and involve the local community to enhance human development and community resilience?
 - b) Have you observed any social co-benefits or challenges resulting from your organization's interventions? If so, please provide examples.
3. Interactions with the Economy

- a) How does your organization ensure the economic viability and sustainability of livelihood interventions?
 - b) How does your organization measure the economic impacts of its interventions?
 - c) What are the biggest challenges facing your organization's attempts at building resilient economies and livelihoods?
4. Intersection:
- a) How does your organization combine environmental, societal, and economical factors in its overall strategy?
 - b) What mechanisms or tools does your organization use to ensure the three pillars are treated equally and no negative externalities are produced?
 - c) Have you encountered any trade-offs or conflicts between economic objectives and environmental or social considerations? How do you navigate such situations?
 - d) Can you provide examples where your organization successfully balanced and integrated the three pillars in its projects or initiatives?

Interview notes:

Introduction

- Interactions with the Environment
 - o To what extent do environmental variations impact your organization? Are you already seeing and being impacted by climate changes?
 - Sun-time calendar is no longer useful and cannot be promoted as a viable mechanism for planning
 - There has been a 70% decline in rainfall in this rainy season alone
 - Only 1 season of rice cultivation is being done in places where there were 3 seasons
 - Difficult to predict the intensity of rainfall at certain times or places - causes labour issues as well, because it is difficult to enter machines into the fields for harvests, etc
 - o What specific environmental interventions or practices does your organization implement to address climate change impacts in these communities (could you provide examples)?
 - KJKS works on the block-panchayat and village-level grassroots level organic agriculture
 - KJKS is fundamentally an environmental organization - it was started in 1986 by John C. Jacobs (famous environmentalist in Kerala) alongside Kevin Dayal (?) - organic farmer - and C.R.R Varma - who focused on health. Environment, health, and agriculture are therefore the main components and priorities for the organization
 - Sun-time calendar that aligns with rainy seasons and helps farmers plant and plan
 - Adimali region - very few rice farmers left, in part because of governments promoting cash crops. Only 500 ha were used for food crops/rice cultivation
 - Found that short-term crop varieties (4-month long) were doing less in these rainfall-intensive regions than long-term duration varieties (7-month long). It was found that these were more resilient and resistant to floods. The leftovers can also be used as cowfeed
 - Varieties were also found to outperform weeds
 - Millet only grows now in the western areas of KJKS operations
 - 6-7 month duration varieties have also been lost
 - Other varieties are animal-resistant and can grow on other trees (in the case of climber tubers)
- Interactions with Society
 - o How does your organization engage and involve the local community to enhance human development and community resilience?
 - o Increasing awareness of farmers and consumers on organic farming opportunities
 - o Bringing the government attention (no lobbying) but to raise awareness on agroecology
 - Campaign and strikes for preserving lands
 - Policies and subsidies from government ->
 - o Democratic decision-making system

- Every year, there is a general body meeting. These start at the local/panchayat level, and progress upwards. Discussions are held on progress reports, and the election of around 21 committee members per district (there are 10 active districts)
- Then a state sambhalam (?) is held based on these discussions. State committee also determined an executive committee (which consists of 7 members).
- Balance sheets and other documents are collected and made available for all to view. Discussions are also held on future plans and actions
- Based on peoples' attendance at meetings, it will be determined who is most active. Based on this, a panel will be made by the state committee, which must then be approved by the general body. Some 40 people from the state panel selected this year's executive committee.
- Quite an unusual structure - most NGOs are based on trust, and are reliant on top-down, centralized decision-making. You cannot expect to see farmers, for example, as leaders in NGOs.
- o Have you observed any social co-benefits or challenges resulting from your organization's interventions? If so, please provide examples.
 - Farmers, women, and youth are deliberately targeted, with at least one woman required to be in the executive committee. KJKS still has challenges in improving representation of women and the youth in such committees, but it is making efforts.
 - Their actions with farmers shouldn't be perceived as charity or beneficiaries. They are viewed as a core component of the decision-making infrastructure.
- Interactions with the Economy
 - o How does your organization ensure the economic viability and sustainability of livelihood interventions?
 - o Important for farmers to market their produce and connect with consumers directly
 - o How does your organization measure the economic impacts of its interventions?
 - o What are the biggest challenges facing your organization's attempts at building resilient economies and livelihoods?
- Challenges
 - o cannot compensate people that come to meeting etc. -> KJKS has limited resources, people are voluntary (trying to find the funding for administration, documentation, fundraising, etc.)
 - o cannot force people to follow KJKS values and activities
- Intersection:
 - o How does your organization combine environmental, societal, and economical factors in its overall strategy?
 - o What mechanisms or tools does your organization use to ensure the three pillars are treated equally and no negative externalities are produced?
 - o Have you encountered any trade-offs or conflicts between economic objectives and environmental or social considerations? How do you navigate such situations?
 - o Can you provide examples where your organization successfully balanced and integrated the three pillars in its projects or initiatives?

7.2.10. **Interview 10: – Charaka II (Terrence Peter Monk)**

- Date: 03.07.2023
- Participants:
 - o IHEID: Eva Luvisotto, Ishan Kaur Khalsa, Raghuveer Vinay Vyas
 - o Interviewees: Illiyas KP
- Main purpose of the interview: Specific interview on sustainability issues in KJKS actions and their interactions

Questions:

1. Interactions with the Environment

- a) To what extent do environmental variations impact your organization? Are you already seeing and being impacted by climate changes?
 - b) What specific environmental interventions or practices does your organization implement to address climate change impacts in these communities (could you provide examples)?
2. Interactions with Society
- a) How does your organization engage and involve the local community to enhance human development and community resilience?
 - b) Have you observed any social co-benefits or challenges resulting from your organization's interventions? If so, please provide examples.
3. Interactions with the Economy
- a) How does your organization ensure the economic viability and sustainability of livelihood interventions?
 - b) How does your organization measure the economic impacts of its interventions?
 - c) What are the biggest challenges facing your organization's attempts at building resilient economies and livelihoods?
4. Intersection:
- a) How does your organization combine environmental, societal, and economical factors in its overall strategy?
 - b) What mechanisms or tools does your organization use to ensure the three pillars are treated equally and no negative externalities are produced?
 - c) Have you encountered any trade-offs or conflicts between economic objectives and environmental or social considerations? How do you navigate such situations?
 - d) Can you provide examples where your organization successfully balanced and integrated the three pillars in its projects or initiatives?

Interview notes:

- Introduction
 - o Interactions with the Environment
 - o To what extent do environmental variations impact your organization? Are you already seeing and being impacted by climate changes?
 - Unseasonal weathers - very hot and humid in 2023
 - Deforestation is a major issue - people are replacing it with betelnut (sopari), because it has a commercial value
 - Because it is more resilient to climate change
 - Initially, the region had a large rice paddy and mill industry - the few left are struggling
 - Growing acacia, neem, and rubber trees are having substantial impacts on the local environment
 - Production impacts
 - Extreme heat or extreme precipitation has led to production declines - yarn and dyes can change colour substantially based on the weather
 - Fungal infections
 - o What specific environmental interventions or practices does your organization implement to address climate change impacts in these communities (could you provide examples)?
 - Charakha is trying not to introduce electrical equipment in their campus
 - Leveraging handmade products
 - Not much of a challenge during winter
 - Constructed open shades, etc

- Interactions with Society
 - o How does your organization engage and involve the local community to enhance human development and community resilience?
 - 50-20 villages covered in the area
 - In the beginning, there was extensive poverty and people were simply attracted to it by word of mouth
 - 50Rs salary per day in the past, risen to Rs 400 per day
 - Cannot generate all the employment for educated/competent people
 - The artisans who do the handmade work are considered labourers, no major formal education
 - Provided 3-month trainings on Charaka products - under the condition that the trainees work for them for at least a year
 - Even then, only some trainees actually stay bac
 - Given trainings on handlooms in their homes
 - Objective is to support women in taking care of their families while still earning a livelihood
 - 3 campuses - 650 members working with Charakha, most of them from home (where they dont have restrictions on their timings)
 - This allows groups like farmers and women to participate too
 - o Charakha provides different kind of social securities to the job (including guaranteeing minimum wages); provides lunch to workers so they don't need to prepare that before arrival
 - This makes other jobs like working in araka-nut farming more lucrative in the short-term
 - Agreed to increase minimum wages; 6-hour workday to accommodate for other needs
 - o Have you observed any social co-benefits or challenges resulting from your organization's interventions? If so, please provide examples.
 - Dyeing department is male-dominated
 - Allegedly because of the need for physical power
 - Until 2 years ago, it was totally male-employed
 - After COVID, when Charakha closed, these men started finding alternative jobs
 - Now, there are only 3-4 men in dyeing, and the quality has improved
- Interactions with the Economy
 - o How does your organization ensure the economic viability and sustainability of livelihood interventions?
 - Product prices increase annually to match rising costs of living
 - SOme agencies help Charkha with grants through CSR initiatives
 - Government has different schemes to help the residents out, but the challenge is that not everyone is connected to these schemes
 - Charakha helps register people for accessing these schemes
 - o How does your organization measure the economic impacts of its interventions?
 - Profit of 36 lakhs
 - Will be distributed amongst the artisans, because if Charakha tried to keep it, they would be taxed
 - o What are the biggest challenges facing your organization's attempts at building resilient economies and livelihoods?
 - Charakha holding a protest and hunger strike against a District Officer who has failed to transfer relevant grants
 - National Handloom Development Corporation - set up by central government, get 15,000 Rs. rebate for registration with them
 - 15% of raw material costs are returned under this registration
 - Production is not matching demand, which is high in such a strong market
- Intersection:
 - o How does your organization combine environmental, societal, and economical factors in its overall strategy?
 - The founder's idea was entrenched in sustainability, and the desire to create self-leaders
 - Wanted to uplift society, but not in an industrial or profit-oriented commercial manner, which is considered harmful to the environment

- He chose handloom - because it minimizes impacts on the environment
 - Limited materials - 4 looms are being used now, and they only need replacing every 20-30 years
- Charakha created the Desi brand, which started growing, and was joined by other environmental activists
- Introduced experts from India and abroad to train the population on how to sustainably practice the handloom business
 - A lot of water is used per day for creating natural dyes, but is retreated and reused for sustainability
- Zero-policy wastage, all pieces of fabric strictly have to be used
- Electricity is not heavily used - even the campus is running on solar (given by the central government's schemes), and use electric car (only 1)
 - No official vehicles otherwise - created a network of tuk-tuk drivers and others who can facilitate transport when needed
- o What mechanisms or tools does your organization use to ensure the three pillars are treated equally and no negative externalities are produced?
- o Have you encountered any trade-offs or conflicts between economic objectives and environmental or social considerations? How do you navigate such situations?
 - Many workers were the slave category
 - Landlord class who owned massive territories of land
 - When Charakha started, there were major issues with landlords who resisted its introduction with misinformation, harassment, etc
 - When the founder started a cooperative society, he made women as board members and gave them complete authority to face these landlords. This worked out effectively
 - Another 6 acres were taken to expand Charakha, but the government had given all the land around to (Hissi?) communities
 - The organizer of Charakha created a community involving all these landlords who surrounded Charakha, to create a road to pass through - so clear community/stakeholder engagement
- o Can you provide examples where your organization successfully balanced and integrated the three pillars in its projects or initiatives?

7.3. Full literature review

A. Introduction

The story of Indian Agriculture dates to 3300 BCE where ancient India was once known as the cradle of human civilization (Mark Twain) exporting home grown tea, jute, spices, textiles around the world and was home to the Indus Valley Civilization developing some of the world's finest agricultural practices.

However, with the inception of colonial rule in India in 1800s, Indian agriculture bore the most brutal brunt of British exploitation. According to Santanu Basu, with several types of land revenue systems – all intended to earn and collect the highest possible revenue, the peasants' interests were always ignored and denied, and there was no space for negotiation or understanding local problems like droughts & crop failure. (Tharoor, 2016).

The Indian Freedom Struggle under Gandhi's leadership however, restored much of the country's focus on Swaraj and self-dependance with a firm belief that the soul of India lives in its villages, and that the path of development, therefore, goes through agriculture and rural development. (Balamurali Balaji) The farmer, for him was the central point for development, and the only sustainable social order was a rural society, as a farmer's life was one of cooperation, not competition. The crux of *Eka Parishad's* work through its affiliates *Manav Jeevan Vikas Samiti (MJVS)* and *Kerala Jaina Karshaka Samithi (KJKS)* is centred around this very theme of a non-violent economy.

But it was not until the eve of Indian Independence in 1947, that a dramatic policy shift in the country's agricultural policies took place. The first challenge of nation building that occupied center-stage in the years immediately after Independence was that of reviving Indian agriculture.

The First Five Year Plan addressed the agrarian sector including investment in dams and irrigation.” (Sarma, 1958, IMF E-library). Huge allocations were made for large-scale projects like the Bhakhra Nangal Dam. (Sarma, 1958, IMF E-library) The Plan identified the pattern of land distribution in the country as the principal obstacle in the way of agricultural growth. It focused on land reforms as the key to the country's development. However, it was not easy to turn all the well-meaning policies on agriculture into genuine and effective action. The agricultural situation in India worsened in the 1960s. Already, the rate of growth of food grain production in the 1940s and 1950s was barely staying above rate of population growth. Between 1965 and 1967, severe droughts occurred in many parts of the country and led to an absolute food crisis. (Madalgi, 1968)

The government had to import wheat and had to accept foreign aid from the US. The priority of the planners therefore turned to attaining self-sufficiency in food and paved way for the Green Revolution where the government adopted a new strategy for agriculture to ensure food sufficiency. Instead of the earlier policy of giving more support to the areas and farmers that were lagging, it was decided to put more resources into those areas which already had irrigation and those farmers who were already well-off (Politics of Planned Development, National Council of Educational Research and Training). The argument was that those who already had the capacity could help increase production rapidly in the short run. Thus, the government offered high-yielding variety seeds, fertilizers, pesticides, and better irrigation at highly subsidized prices.

The rich peasants and the large landholders were the major beneficiaries of the process. The green revolution delivered only moderate agricultural growth (a rise in wheat production) and raised the availability of food in the country, but increased polarization between classes and regions. (Politics of Planned Development, National Council of Educational Research and Training) It had two other effects:

one was that in many parts, the stark contrast between the poor peasantry and the landlords produced conditions favorable for leftwing organizations to organize the poor peasants. Secondly, the green revolution also resulted in the rise of what is called the middle peasant sections. These were farmers with medium-sized holdings, who benefited from the changes and soon emerged politically influential in many parts of the country. (Politics of Planned Development, National Council of Educational Research and Training)

Since the Green Revolution in India, the country's agriculture has undergone significant changes resulting in increased food grain production and rural prosperity. However, this has come at a cost to soil and environmental health due to the excessive and indiscriminate use of agrochemicals, which has led to reduced profitability in agriculture. Even with the development of high-yielding varieties and advanced agrotechnology, farmers are experiencing widening gaps between expected and actual yields, leading to urbanization (Giovannucci, 2005). This is due to deteriorating soil structure and texture, deficiency in soil microflora and – fauna, and nutritional imbalances. To address this situation, there is now a focus on managing nutritional and biological stresses through organic, cultural, and biological means and moving towards sustainable agriculture. (Kalra and Khanuja)

By utilizing on-farm agronomic, biological, and mechanical methods while avoiding synthetic off-farm inputs, organic farming takes a comprehensive approach that can enhance the health of the agro-ecosystem. However, there are concerns about its ability to be adopted on a large scale and maintain land productivity in the face of the world's growing population and food security challenges (Giovannucci, 2005). Nevertheless, due to increased consumer demand for safe and healthy food, organic farming is becoming more attractive and lucrative for farmers. Patle, Kharpude, Dabral, and Kumar have explored the status and potential future of organic farming both in India and globally, examining the internal and external factors that impact the entire organic system, from production to marketing of organic commodities. (G. T. Patle, S. N. Kharpude1, P. P. Dabral and Vishal Kumar, 2020)

This literature review aims to articulate our approach towards answering the research question posed by this project. As was underscored in the ToR, this project demands the synthesis of information from a range of disciplines, themes, and sources. To this end, the literature review and methodology identify the core components and themes that will be applied throughout the duration of the project.

The research question aims to explore the convergence between climate change adaptation, livelihood resilience, and nonviolent economies in a localized context. The literature review – and future research activities – have therefore been segmented into three broad corresponding categories:

- **Climate Change and Adaptation (Part 1)**
- **Livelihood and Enterprise Development (Part 2)**
- **Decentralized and Community-Based Approach (Part 3)**

Each category serves as a broad lens through which thematically similar information can be explored. Under **Part 1**, we apply an environmental lens to explore the drivers and manifestations of climate change vulnerability across several Indian states. From early consultations with Ekta Parishad and the case study groups, the agriculture sector has emerged as a priority area for interventions. Therefore, the interface between sustainable agriculture and adaptation, and the role of nonviolent economic models in developing climate-resilient communities are also explored under this category.

In **Part 2**, an economic development lens is applied to gain a better understanding of the dynamics and challenges surrounding market access for smallholders and vulnerable communities. This issue emerged prominently during early consultations and desk research activities, and therefore warranted distinct focus.

Under this category, researchers explore the role of markets in facilitating nonviolent economic models, sustainable agricultural practices, and successful livelihood-enhancing initiatives.

Lastly, **Part 3** will utilize a historical and theoretical lens to gain a better understanding of the nonviolent economic model, and the dynamics of community-based action for environmental and livelihood resilience. Under this category, the theory and successful practice of nonviolent economic models is explored, alongside the role of farmer-based social movements in influencing agricultural practices and policies in India. Furthermore, the role of women movements and self-help groups for vulnerable communities is explored to gain an understanding of the unique challenges facing women and marginalized communities.

Through these broad categories, the researchers have been able to engage in a cross-disciplinary literature review that synthesizes the topics of climate change adaptation, livelihood resilience, and nonviolent economies in local contexts. The information collected under these categories – including future stakeholder consultations and research – will inform the inductive research approach (detailed in the Methodology section) of this project, and serve as the foundation for answering the research question.

B. Main body

Part 1: Climate change and adaptation

I. Climate Change and Vulnerability

The environmental changes that the planet earth is currently facing are generating substantial impacts and associated damages on biodiversity and ecosystems, health, food production and human infrastructure (IPCC, 2022). Their effects, which include globalized temperature rise, ecosystem disruption, and increases in the frequency and intensity and extreme natural events (United Nations, 2023; IPCC, 2022) are most acutely impacting vulnerable populations, such as low-income communities and indigenous peoples, with fewer resources to cope (Timmons, 2001; Dunlap & Robert, 2015). India is not immune to environmental disruption: its propensity for floods, water scarcity, heatwaves, extreme natural events, and infectious diseases is particularly high (IPCC, 2022; Garg, Shukla & Kapshe, 2007). This is of particular concern as these phenomena are occurring with increasing regularity and future estimates predict increasing occurrences (Gunasekar, 2022).

Among the populations most impacted by these phenomena are small farmers, artisans, home-based workers, and women whose wages provide a bare minimum for survival (Nonviolent Economy Network, 2022). For instance, a large part of the population depends on the usability of land for their livelihood (Minhas, 2023; NVE, 2022). It is estimated that "over 650 million Indian people depend on climate sensitive sectors like agriculture and forestry for their livelihood" (Garg, Shukla & Kaphse, 2007). These vulnerability factors are then exacerbated by environmental change, leading to a vicious cycle of environmental degradation and social and economic insecurity. As environmental conditions deteriorate, people are forced to expand land clearing and intensification of tillage to ensure an equal level of subsistence. Water and forest resources are being exploited even more extensively and ecological systems are declining (NVE, 2022).

Only a detailed understanding of complex social and environmental systems and how they interact will enable the development of adaptation measures tailored to the specific needs of communities and ecosystems. For several decades, initiatives have emerged in India to organize civil society around new principles of action and cooperation (i.e., community-based governance, local self-reliance, responsible

government) (Gunasekar, 2022) and to establish "equitable, community-based and environmentally friendly livelihood programs" (Nonviolent Economy Network, 2023). The adaptation measures developed there are based on a nonviolent approach and include ecosystem-based adaptation, participatory decision-making, peer and community education, and protection of ethnic minorities (Gunasekar, 2022).

II. Agriculture-adaptation interface (including organic agriculture) and/or sustainable agriculture

Agriculture has become a central sector in the fight against climate change. It is one of the key sectors identified by the IPCC and is expected to face adverse impacts (both positive and negative) because of climate change (IPCC, 2022). Other critical texts, such as the analysis by Gomiero, Pimentel, & Paoletti (2011), explore the environmental impacts of current agricultural practices, which themselves are contributing to planetary crises including pollution, biodiversity loss, and greenhouse gas (GHG) emissions (Stockholm Resilience Centre, 2023).

Agriculture is also highlighted as a priority area of action in most Nationally Determined Contributions (NDCs), including that of India, which aims "to better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture..." (Government of India, 2022). India's National Action Plan for Climate Change, or NAPCC also identifies sustainable agriculture as one of the central national missions for climate action (Government of India, 2008). This type of literature is essential for understanding the impact of climate change on agriculture, and the national policy targets and interventions that this project can be aligned with to ensure relevance.

In international discourse, agriculture is the only sector to have its own negotiations track in the UN Framework Convention on Climate Change (UNFCCC), with COP27 seeing the adoption of a draft Koronivia Joint Work for Agriculture (KJWA) text. Among other key outcomes, the draft agreement recognizes the need for climate action in the agriculture sector to be implemented in a participatory manner. It explicitly recognizes the need to include "farmers, pastoralists, indigenous peoples, local and vulnerable communities, women and youth," as well as the importance of "...local, and indigenous knowledge" to increase resilience and sustainable production in agricultural systems (UNFCCC, 2022). Elsewhere, the text noted the "importance of the continued involvement of scientific and technical knowledge in transforming the agriculture sector" (UNFCCC, 2022). To this end, both India and the broader international community are beginning to mainstream inclusive and alternative approaches to agriculture that are responsive to climate change.

Sustainable agriculture is a broad term that can encompass a range of interventions in the agricultural sector. Velten et al. (2015) provide a valuable systematic review of sustainable agriculture, and comprehensively summarize the environmental, social, and economic goals and strategies that form a part of sustainable agriculture. This multidisciplinary and cross-thematic perspective on enhancing the sustainability and resilience of the entire agricultural chain is shared by several other schools of thought, including agroecology, which is defined as "...the integration of research, education, action and change that brings sustainability to all parts of the food system: ecological, economic, and social" (Gliessman, 2018). Others still have adopted similar objectives through the concept of climate-smart agriculture (Chandra, McNamara & Dargusch, 2017). Indeed, scholars even discuss the explicit connection between sustainable agriculture and the fundamental Gandhian tenets of self-reliance, non-violence, and biological egalitarianism (Sanford, 2013). Such resources point towards the importance of perceiving sustainable agriculture as a range of multidisciplinary sociopolitical, economic, and environmental interventions, rather than those solely pertaining to the production of food. This perspective will prove essential when developing this project's final deliverable(s) that will seek to synthesize the realms of agriculture, non-violence, climate change adaptation, and livelihood resilience.

There is a wealth of information on sustainable agricultural practices and related international good practices. Broad reports, such as those by the FAO (2021) provide analyses of climate-smart agricultural case studies around the world, and the key lessons that can be learnt from them. Williams, Pelsler & Black's (2018) explore lessons learnt through working with smallholder farmers in South Africa in their report *Agroecology Is Best Practice*. The text explores the role of food diversity, soil/water/seed interventions, and advocacy in developing successful sustainable agricultural practices. Others, such as Yadav et al. (2013) have explored sustainable agricultural practices in the Indian context – particularly in relation to organic farming, which has already emerged as a key theme for MJVS, which is one of the case study groups for this project. Srivastava et al. (2016) also offer interesting insights into mechanisms through which sustainable agro-ecosystems can be harmonized with the commercial needs and trajectory of India. Such texts will prove valuable in determining the key areas of intervention and action within the sustainable agricultural frameworks that can maximize climate and livelihood resilience.

Lastly, it is also worth noting the ongoing international discourse surrounding indigenous and traditional knowledge, and its role in climate action, because many of the case study groups are focused on traditional and indigenous agricultural practices that diverge from modern industrial agriculture. Ford et al.'s (2016) text, *Including Indigenous Knowledge and Experience in IPCC Assessment Reports* discusses the role of indigenous knowledge in multilateral climate change research and decision-making, and how this affects solutions offered at the international stage. Netting's (1993) text *Smallholders, Householders* is another vital text that explores several case studies to explore indigenous and traditional agricultural practices and refute the notion that these were unproductive or technologically backwards. These theoretical perspectives will be essential for situating this research project within the context of international climate action, and the marginalization of traditional knowledge systems as potential solutions in the agricultural sector.

Part 2: Livelihood and Enterprise Development

III. Introduction: Livelihood and Enterprise Development

With India being the second largest agricultural land in the world and generating employment for half of the country's population, livelihood production plays a fundamental role in its economy (India Brand Equity Foundation, 2023). Although it succeeds in providing a primary source of livelihood for about 55% of India's population, the Food and Agriculture Organization of the United Nations (FAO) recalled the various issues that arise from its current practices: production is resource-intensive, regionally biased, and often unsustainable (Food and Agriculture Organization of the United Nations, s.d.). More critically, several authors are raising concern that problems of access to livelihoods and their marketing venues as well as the capacity to produce goods and services in the poorest communities is exacerbated by climate change (Jin, Kuang, He, Ning & Wan, 2015; Sargani et al., 2022). As the IPCC's *Climate Change 2022: Impacts, Adaptation and Vulnerability* report states, "those with climate-sensitive livelihoods and precarious livelihood conditions are often least able to adapt, afforded limited adaptation opportunities and have little influence on decision making" (Birkmann et al., 2023).

A growing number of voices are advocating for the development of sustainable and equitable economic environments and opportunities to build resilience and adaptive capacity to these major environmental changes. This would require rethinking current economic systems and practices that prioritize short-term gains over long-term sustainability (Guardiola, 2019) and involves the development of practices such as Sustainable Agriculture model agroecology, micro resource harvesting, community-level social systems and institutions, rights protection and Entitlement, training and skill Development, promotion of Rural Tourism, strategy of Social Development, etc. (United Nations, Climate Change, 2023; Gunasekar, 2022)

Within the agriculture sector, for example, smallholders can be helped to adopt non-invasive regenerative agricultural practices that have a low carbon footprint and preserve soil health, which increases their resilience to climate change impacts such as droughts and floods (Gunasekar.2022). Jin et al. and MJVS have documented that combining this practice with community-based decision-making principles, enhancing cross-community knowledge sharing and improving accessibility to local markets benefits all parties involved in the process - including the environment (Jin et al., 2022; Gunasekar.2022; WBCSD, 2023).

Similarly, in his article *Transforming sustainability of Indian small and medium-sized enterprises through circular economy adoption* Nudurupati develops how the development and support of small, local, and sustainable enterprises helps to ensure the income of smallholders - usually with low margins and incomes - while building resilience and strength of the local system (Nudurupati, 2022). This impact is not only qualitative because it involves a significant portion of the Indian population: according to the *MSME Annual Report*, In India, the Forty-eight million Micro, Small and Medium Enterprises (MSMEs) employ 106 million people across agricultural, manufacturing and services sectors and contribute 40% to the total national manufacturing outputs (MSME Annual Report 2013-14; KPMG 2015; Nudurupati, 2022). Because of their contribution to the production and distribution of goods and services, but also because of their flexibility to adapt to technological and environmental changes, they represent a potential to stimulate economic development and promote the transition to a circular model (Enel, 2023) .

IV. Agriculture and Market

A survey by the FAO and INRA from 2013 to 2015 identified 15 cases from around the world that demonstrate how small-scale initiatives using sustainable production practices are supported by market demand, and how they create innovations in institutions governing sustainable practices and market exchanges. These initiatives address both local and distant consumers' concerns about food quality and rely on social values to adapt sustainable practices to local contexts while creating new market outlets for food products. Private sector and civil society actors' partner with the public sector to build market infrastructure, integrate sustainable agriculture into education and extension programs, and ensure transparent information exchange about market opportunities. The public sector provides legitimate political and physical spaces for multiple actors to jointly create and share sustainable agricultural knowledge, practices, and products.

Organic farming has the potential to be a beneficial prospect for India and its farmers, particularly those who are small or marginal and reside in dry/rain-fed areas or areas where low-input farming has been traditionally practiced. But to fully capitalize on the potential agricultural, economic, and social advantages, a market plan is necessary to establish a technically proficient and commercially viable "Production to Consumption System" in the organic farming industry. The lack of technically advanced and prosperous business models at an economic level is a challenge in the organic agribusiness sector. It is important to establish designated areas for agribusiness development throughout different regions of the country.

Until recently, the organic development in India has primarily concentrated on the welfare of farmers and localized benefits, rather than market expansion. While several organic products are informally traded, the domestic market for certified organic products is limited to a few million US dollars. As per official estimates, India's organic exports were around USD 15.5 million in 2003.

Part 3: Decentralized and Bottom-up Approach

VI. Introduction: Decentralized and Bottom-up Approach

Through its various projects and reports, Ekta Parishad has been able to demonstrate that disaster risk reduction and improved ecosystem management require a multi-level and cross-sectoral approach involving a range of different stakeholders (Gunasekar, 2022). Several research and practical applications illustrate how giving some decision-making and organizational power to community and local organizations strengthens their resilience and adaptive capacity while leveraging their contextual knowledge (social, environmental, political, etc.) and knowledge, which are essential elements for developing solutions and adaptations (Gunasekar, 2022; Care, n.d.; Khanal et al., 2019). These communities are then able to federate decisions based on their specific priorities, needs, knowledge, and capacities to co-create an organization that is adapted, flexible and resilient to their context (Reid, Alam, Berger, Cannon, Huq & Milligan, 2009).

According to Ekta Parishad's latest report, *Land reform meets climate action* (2022), "Community level organizing plays an important role in mobilizing large numbers of people for their struggles. The community-level structures empower the community and help them undertake coordinated efforts at the time of crisis." (Gunasekar, 2022).

The importance of the concept of empowerment of individuals was already reflected in Gandhi's writings, introduced under the term "Swaraj" (self-rule). It is portrayed as "the rule of all people", as "the sum total of the Swaraj of individuals" (1967). He explains that "real Swaraj will come, not from the acquisition of authority by a few, but from the acquisition by all of the ability to resist authority when it is abused" and emphasizes that Swaraj can only be achieved by education and raising awareness of people's ability to regulate and control authority." (Gandhi, 1967). Anthony Parel elaborates in his book *Pax Gandhiana: The Political Philosophy of Mahatma Gandhi* that "swaraj guarantees the collective freedom of the nation and protects and promotes the rights of every individual living in the country; swaraj as self-governance helps to create a self-disciplined citizenship. A good society needs both types of swaraj." (2016).

VII. Farmer's Protests and Movements in India: National Level

India has a long history of agricultural movements and protests. The Government of India has certainly been a major driving force behind this at both the national and state levels. Foundational historical texts provide some accounts of this. Ramchandra Guha's (2017) *India After Gandhi* provides a broad overview of the major agricultural transformations in the country, from the Green Revolution of the 1960s to the liberalization of the sector in the early 2000s. Guha has also extensively written about Gandhi, including an essay on the impact of Gandhian non-violence principles on environmental social movements in India (Guha, 1995).

The fact that environmental social movements are the focus of prominent Indian historians such as Guha is reflective of its rich and longstanding presence in India. Agricultural movements precede the independence of India, as is seen by events such as the Deccan Riots of 1875, where peasants in Maharashtra revolted against increasing agrarian distress due to British agricultural and credit policies (Charlesworth, 2008). Most recently, India was in the limelight for large-scale farmer protests in New Delhi in 2020. Baviskar & Levien (2021) provide a useful introductory overview of the history of farmer protests and movements in India – and crucially, their ideological and political underpinnings. Other sources, such as the Sierra Club, have also discussed the link between contemporary protests and climate change (Patil, 2021). The literature on farmer protests in India will provide us with an understanding of key issues and needs in the agriculture sector, and the role of public action in addressing them.

There is also a rich body of literature on alternative agricultural interventions by Indian thinkers. *Ecofeminism* is a book by Maria Mies and Vandana Shiva (2014), the latter of whom is also one of the leading proponents of the ideology by the same name. The text offers valuable insights into how sustainable and localized agricultural practices can – and have – resulted in the empowerment of women, and the transformation of

their roles in the contemporary capitalist and patriarchal society. Shiva is also a leading figure of Navdanya, which is a nationwide collective that engages in climate, agroecology, seed bank, and soil action (Navdanya, 2016). The collective has several parallels with the case study groups of this project and will therefore serve as a vital reference point for the scalability of several sustainable agriculture interventions.

VIII. Women Self Help Groups

Feminist movements constitute a fundamental contemporary current of citizen mobilizations and the fight against discrimination in India (Sidra 2020; Kalima, 1992).

Among the structures that have organized themselves to demand women's rights, one finds women self-help groups (WSHGs), which can be defined as "a self-governed, peer-controlled information group, of individuals similar socio-economic backgrounds [and] characterized by the collective desire to achieve a common purpose" (Sengupta, 2022). It has been shown that "women's economic SHGs have positive effects on economic and political empowerment, women's mobility, and women's control over family planning" (Brody, 2017), with significant improvements in terms of financial and decision-making independence, strengthened social ties and solidarity, increased income, and respect from other community members (Brody, 2017; Tesoriero, 2006; Suguna, 2006). In her book *Empowerment of Rural Women Through Self Help Groups*, Suguna states that "the empowerment of women through Self Help Groups (SHGs) would lead to benefits not only to the individual woman and women groups but also to the families and community as a whole through collective action for development" (2006). ("Empowerment of Rural Women Through Self Help Groups")

While women are more affected by environmental disruptions (Alfthan et al., 2023; Godden, Macnish, Chakma, & Naidu, 2020), women-led initiatives have been shown to be effective in combating the effects of climate change: women's involvement in decision-making processes, empowerment, access to training and resources allows them to implement social and environmental adaptation systems that benefit the community as a whole (Ravera et al., 2016).

D. Conclusion

Throughout this literature review, the IHEID researchers have explored how local and sustainable initiatives can contribute to building resilience and adaptability to climate change. The main body of this study draws on three pillars of sustainability, namely environmental, economic and social: the first section presents the environmental impacts and strategies currently being developed in India, with a particular focus on adaptive agriculture and sustainable agricultural practices. The second depicts the vulnerabilities and progress of the agricultural production and business sectors to ensure livelihoods, particularly in terms of market access and sustainable and ethical business models. The third part depicted the importance of bottom-up and decentralized social movements in promoting climate change resilience, including developing the specific role of farmers and women in social activism and illustrating their historical progress.

In the last instance, they developed a methodology, mobilizing both primary and secondary data. Given the context of data collection - remote and involving partners with uncertain technological access - they developed the risk factors associated with an approach and described mitigation efforts.

The exploration of the main body elements has not failed to highlight the environmental difficulties and contingencies, the economic repercussions, and major social upheavals that India is going through and whose evolution is alarming. It is in view of these trends that space should be left for the development of alternative solutions. To pursue sustainable growth and produce quality goods and services while pursuing these objectives, organizational and institutional structures need to be revisited and adapted, i.e., decentralizing distribution channels, establishing systems of institutional support to guarantee means to producers during periods of transition, federating local farmers' associations and encouraging good practices (Giovannucci, 2005).

7.4. Overview of risks and mitigations

Given the unique nature of this project and its constraints (which have been outlined in the Project ToR), there are a range of considerations that must be undertaken regarding the methodology for the proposed project.

One of the biggest challenges we faced in this project is the sheer **breadth of topics that can be covered**. Between Ekta Parishad’s non-violent economy movement, and the unique activities, approaches, and contexts of each case study group, there are multiple variables that could be explored in response to the research question. Indeed, the preliminary interviews with case study group representatives have revealed a multitude of interventions along the sustainable agriculture value chain, from seed banks and organic inputs to community training and government support access. This is further complicated by the varying nature of deliverables that could be produced – and that have been suggested by Ekta Parishad – under this project. We will address this breadth of information through the inductive approach. By analyzing the information gained from primary sources, we will identify key thematic patterns that will create the framework for the structure and content of the final project deliverable.

The research involving the various sources and approaches described above will also **take place at different timescales**. The information about the case study groups – and their respective nature-based livelihood interventions – is foundational to this research project but cannot be achieved through a literature review or any meaningful secondary sources. Therefore, the engagement with primary sources will take place earlier, with the intention of developing a sufficient base of information for inductive analyses to begin. Indeed, these engagements are already ongoing. Conversely, most secondary sources and research will be conducted after gathering sufficient information from the primary sources, and while developing the final research deliverables for this project. As stated earlier, this is because the secondary research is intended to be informed by the preliminary findings from the inductive analysis of information provided by primary sources.

Furthermore, as the Project ToR highlighted, the distance between our IHEID team (in Geneva) and the project partners (across various states in India) is anticipated to hinder engagement with primary sources. **This distance has restricted the types of engagement possible, and the information that can be shared by the stakeholders**. For example, the virtual video-conferencing tools are not conducive for the engagement of large groups and cannot substitute in-person visits of the sites for physical learning. To this end, we have taken steps to maximize the utility of primary source engagements despite the hindrances. This has included the utilization of interviews with 1-2 representatives of case study groups, the development of context-specific questionnaires to guide conversations, and the requesting of multimedia resources (including photographs, reports, newspaper articles, and other resources) from the primary sources to widen the amount of information received. We are also leveraging texts such as Urvashi Butalia’s *The Other Side of Silence* (1998) [2], which provide insights into how researchers can maximize the utility of interviews with vulnerable and affected populations.

Lastly, we face some **ethical considerations surrounding interviews with primary sources**. Discussions around climate change impacts, livelihoods, and community challenges can be sensitive for those who are intimately involved or affected. Gendered perspectives may also be obscured depending on the interviewees. To this end, we will ensure that well-researched and sensitively posed questions are created prior to an interview. We have also adopted an approach of utilizing guiding questions to allow the interviewee(s) to speak uninterrupted, and to share as much as they are comfortable with. Gender-based questions will also be integrated to ensure that this information is sufficiently covered. Crucially, we will clearly communicate the objectives of the research project, and the capacities and limitations of our research team to develop certain deliverables for each case study group. We aim to avoid any misunderstandings

about the outcome of the research project by managing expectations about the final deliverables that can be expected from the project.

Other risks and challenges surrounding this project – alongside the proposed mitigation measures – are summarized below:

Risk	Summary of Challenges Anticipated	Mitigation Intervention(s)
Language Barrier	Several key stakeholders may only speak Hindi and/or the dominant language of the state. This could hamper communication with stakeholders, and risks misinforming the outputs for the project.	<ul style="list-style-type: none"> - Wherever possible, we will leverage the ability of two members to speak Hindi. - During consultations with stakeholders, we will also seek to ensure the presence of an intermediary party who can translate (if the stakeholders do not speak Hindi or English) or verify the inputs of participants.
Virtual Communication Barrier	We are based in Geneva and will therefore have to undertake most communications with the partner and key stakeholders online. Given that some communities may not have sufficient internet access, this could result in key stakeholders being excluded or misinterpreted. The limitations of online communication may also hinder the effectiveness of consultations.	<ul style="list-style-type: none"> - All consultations will be conducted with the free, prior, and informed consent of the stakeholders (FPIC). We will ensure that there is evidence of FPIC for each consultation conducted. - We will conduct stakeholder mapping exercises at the beginning of the project to ensure that the most relevant (and vulnerable) stakeholders have been identified and included in consultations. - To compensate for the shortcomings of virtual video conferencing tools (e.g., Zoom) and potential internet accessibility issues, we will leverage various mediums to conduct remote stakeholder consultations. These could include surveys, in-person engagement by the project partner, and other mechanisms. - We will actively seek financing to travel to India and conduct in-person consultations and information verification.
Political Ecology Considerations	Rural communities in India have diverse socio-economic, cultural, and political contexts, which can make it challenging to research and implement effective livelihood interventions that can address the needs of specific communities.	<ul style="list-style-type: none"> - We will conduct extensive primary and secondary research into the sociopolitical and cultural contexts of the project case studies and locations. Local contexts will be appropriately incorporated into background research and project outputs.

<p>Coordination of In-Person Engagement</p>	<p>If the project partner conducts in-person stakeholder consultations on our behalf, there may be risks associated with executing and communicating these activities. There may be challenges in interpreting collected data, facilitating the translation of engagements, or a misinterpretation of information.</p>	<ul style="list-style-type: none"> - We will ensure that in-person consultations by the project partner are conducted through tools that can easily be communicated and analyzed (e.g., surveys). - We will meet with the relevant project partners in advance to discuss potential engagements (alongside any challenges they may face).
<p>Lack of reliable data</p>	<p>Given the highly local nature of the project, it may prove difficult to acquire sufficient information about the structure, practices, and outcomes of the relevant organizations. This could hinder the comprehensiveness of remote research, and the quality of the final project outputs.</p>	<ul style="list-style-type: none"> - We will leverage the contacts and experience of the partner (Ekta Parishad) to ensure access to relevant resources. Routine discussions will be held with the partner to minimize any information bottlenecks. - Where possible, we will explore international case studies and good practices to fill remaining information gaps. - We will clearly identify statements or information that could not be independently verified. - We will routinely review its progress to determine any persisting challenges. If limited information, or the project scope poses a significant threat to the overall project outputs, we will discuss narrowing down the scope of the project.
<p>Feasibility of Case Study</p>	<p>There is a risk of project case studies becoming unfeasible with time. This could be due to insufficient information on the case studies, or due to unforeseen risks that increase the difficulties of conducting the necessary research. For example, some sources suggest that the Charaka Society was declared insolvent in 2020, while others indicate that the group is operational and expanding in 2023. The status of the Charaka group today could alter the feasibility and nature of research, stakeholder engagement, and deliverables. Such challenges with case studies could negatively impact the overall project outputs and render it challenging to synthesize the lessons learnt across all case studies to answer the research question.</p>	<ul style="list-style-type: none"> - If deemed necessary, we are prepared to narrow the number and/or scope of the case studies. - The above decision will be made by the literature review period to determine the feasibility of chosen case studies (through engagement with stakeholders, followed by supplementary desk research). These feasibilities will then be discussed and communicated in a timely manner. Doing so will allow us to appropriately reorient the project activities and prevent the decision from affecting outputs at a later period. - We will regularly engage with the academic tutors to discuss progress against the proposed timeline, and to identify any challenges surrounding the feasibility of the case studies

<p>Unforeseen risks</p>	<p>External factors could delay or weaken the completion of project outputs. These could range from climate or natural disasters in project focus areas, to the reduction in our own capacity and/or those of the project partner.</p>	<ul style="list-style-type: none"> - We will meet on a weekly basis to provide updates on progress and challenges being faced, so that they can be addressed in a timely fashion. Similarly, we will maintain routine communication with the project partners to ensure the alignment of capacities and support. - We have also proposed a detailed timeline for the project. Using the timeline for reference, we will determine whether they are on-track to complete the project or are facing challenges that need to be identified and addressed.
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