

## Towards Gender-Responsive Interventions in Climate Change-Induced High-Tide Flooding in Coastal Regions of Kerala

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### Abstract

*Climate change policy and interventions are deeply gendered, reflecting hegemonic masculinity and often overlooking the nuanced, gender-specific impacts and knowledge systems. This paper critiques the current technocratic approach to climate change, emphasizing its roots in neocolonialism and its exacerbation of gender inequalities, particularly affecting women in the Global South. Highlighting the need for gender-sensitive methodologies, the paper discusses a gender-responsive field intervention in Central Kerala's coastal panchayats, addressing high-tide flooding through community mapping, video production, and theatre. These participatory methods empower local women, leveraging their situated knowledge to create counter-narratives and data sets that challenge dominant, top-down climate policies. The project underscores the importance of integrating gender perspectives in climate action, advocating for a transformative, inclusive approach that redefines climate discourse and practice.*

**Keywords:** Climate Change; Gender; Women; Kerala; Equality

### 1. Introduction

The present policy discourses and operational interventions on climate change, mitigation, and adaptation are heavily gendered. Today, the environmental crisis is being treated merely as a technically manageable, measurable, and controllable problem that requires scientific, diplomatic, and military interventions; entirely consistent with hegemonic masculinity. The alarmist climate security discourse was embedded in a broader project of masculine-coded scientific rationalization of climate change-related threats driven by a network of largely male, white scientists (MacGregor, 2010). This masculinized image of global scientific control was

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challenged by the gendered epistemology of 'women's day-to-day work and knowledge' (Leach, 2007).

Climate change is a political problem, rooted in exploitative models of neocolonialism, power asymmetries, and global hierarchies, which exacerbate existing gender inequities owing to existing gender norms, social structures, gendered division of roles, and unequal power relations among different genders. Climate change, as a "threat multiplier," escalates social, political, and economic tensions, leading to multiple forms of gender-based violence that are informed by normative, structural, capacity, and decision-making barriers. The impacts of climate change are inequitable and gendered, with women in the Global South, especially those who are poor and disadvantaged due to different intersectional vulnerabilities, bearing a disproportionate burden of the climate crisis. This is rooted in their colonial histories, which established their rule on extractive relations and capitalism, and introduced laws that impacted women, especially those from marginalised communities like indigenous women, further widening gender relations. The approaches to tackling climate change have largely been top-down, one-size-fits-all, overlooking the differential realities, contexts, and vulnerabilities that demand approaches, that are differentiated, embodied, bottom-up, and grounded.

Today, when the neo-liberal governance and governmentality de-politicize the public sphere, and de-sensitize the popular imagination, both gender and climate change - two of the most important, and relevant thematic verticals- are embedded with inequities, inequalities, disparities, discriminations, - historically, spatially, socially, temporally, need a re-imagination of the social structures with gender equity; need co-learning and co-producing an epistemology and body of knowledge with gender justice; and to co-own the shared responsibility for climate change with a gender lens that could turn climate change discourses into gender-sensitive epistemologies, policies, practices and actionable interventions. Despite growing recognition of the differential vulnerabilities as well as the unique experiences and skills women and men bring to development and environmental sustainability efforts, women still have less economic, political, and legal clout and are hence less able to cope with— and are more exposed to—the adverse effects of the changing climate ( UNDP, 2021). Hence, it is important and most needed in the gender-climate interventions to reimagine the philosophical, ideological, and epistemological moorings and to revisit the existing gender-blind practices in the climate change interventions.

This article informed through the lens of critical praxis, facilitates the reclaiming of the pedagogical practices to reframe the methodologies, redefine the very concept of data, and reimagine the body of knowledge around climate change. By recognizing gender as a key variable of power inequality, it is critical to unravel the transformative findings presented in the Intergovernmental Panel on Climate Change (IPCC) Report VI, which challenged the epistemological hegemony of natural science in climate change. The report's focus is on social vulnerability, which

highlights the need to understand the nuanced ways in which gender and climate change intersect and influence governance, policies, and practices.

## 2. Why is Gender Important in Climate Change Interventions?

It is widely acknowledged that the negative effects of climate change are likely to hit the poorest the most. 60% of the world's poorest and most vulnerable one billion people are women and girls (UNFPA, 2021). Vulnerability depends in large part on access to resources and assets (physical, financial, human, social, and natural). Assets and vulnerability are inversely related. The following reasons make women more vulnerable to climate change adaptation and mitigation interventions:

- Women have lesser access to resources, including land, credit, education, technology, etc;
- Men and women have differential levels of access to resources;
- Men and women have differential preferences and consumption patterns of resources;
- Men and women have different decisions on the allocation of resources;
- Gender inequality intersects with climate risks and vulnerabilities
- Gender-blind laws and regulations;
- Gender gap in the availability and accessibility of information (Access to climate information shapes climate change perceptions and responses.)

## 3. Gender Responsive Field-based Intervention to Climate- change Induced High Tide Flooding in Coastal Panchayats of Central Kerala

Gender-responsive intervention was made to address the climate- change induced high- tide flooding in Central Kerala through a field action project on three coastal panchayats of Ernakulam—Ezhikkara, Puthenvellicara, and Kumbalingi— under the guidance of scientists from Tata Institute of Social Sciences, Mumbai, M.S Swaminathan Foundation, and Equinoct, and with the support and involvement of Kudumbashree networks and LSGIs.

There was a time when tidal flooding recurred once a year in coastal panchayats of Ernakulam district, Kerala. But today, the area is facing a water-logging problem throughout the year. Life in these spaces is in the grip of climate change and collateral damage. Nearly twenty thousand houses, spread across 23 villages, are facing this problem. Many houses have collapsed, and many people have abandoned their houses. Livelihood options are becoming extinct. Wetlands are landfillled and converted for other uses. Water gets more and more polluted. Added to that is the issue of drainage water. Water-borne diseases are increasing. More and more people leave the island.

It is in this context that the project aimed to coordinate rights-based information campaigns through a gender-sensitive approach to climate change decision-making and implementation of activities, challenging market-based

solutions and mobilizing women as leaders to create counter maps. Using the framework of the IPCC VI report on social vulnerability, the project engaged with the situated knowledge of the people and their day-to-day lives. This helped to unravel their embedded hegemonic social consciousness, which most often positions them as passive, defenceless victims of climate change.

A participatory project was designed to empower local people to initiate, control, and take corrective action. A series of workshops and training sessions were designed as a semi-structured process of learning from, with, and by the people about their life conditions. The participatory nature of these trainings and workshops enabled and capacitated the local community to monitor, map, model, estimate, and rank their vulnerabilities and climate change issues, equipping them to plan for tidal flooding. Through these trainings and workshops, the value of popular collective knowledge and wisdom is recognized, and the production of knowledge by people is legitimised. The Rights-based information campaign of this Project enabled the following:

- Made the community members informed citizens of the climate change-induced high tide issues;
- Made the community members producers of the participatory community-owned data sets, rather than passive recipients of the top-down technocentric data analytics;
- Made the community members a part of the collective critical consciousness by being a member of the Coastal Community Resilience Network;
- The binding, bonding, and bridging capital coming from the solidarity economy bettered the adaptation and mitigation interventions of the community members;
- Made them less vulnerable and initiated a counter-hegemonic consciousness of micro-data analytics, where the lives of the community members, their experiences, and their situated knowledge become the data set to analyse the climate change discourses that challenge the hegemony of natural science in environmental discourses.

Thus, this project, at a micro-level, attempted to explore the politics of counter-consciousness and its exercises at various local levels to pool in the micro-politics of resilience and resistances as gender counter maps, challenging the gender-blind climate policies and interventions.

#### **4. Gender Counter Maps in this Project through Rights-Based Campaigns**

Three Ways of Gender Counter Maps were prepared in the field using the Kudumbashree Network through Rights-Based Campaigns to address the climate change-aggravated high-tide flooding in Coastal Kerala. Manjula Bharathy, Professor at the School of Habitat Studies, TISS, Mumbai, conceived and implemented these three counter maps - Community Mapping, Community Video, and Community

Theatre—with her expert team comprising technical professionals with vast experience in such interventions. They trained and helped in developing the needed technical skills and capacities for the selected community members.

## 5. Community Mapping of the Tidal Affected Areas

Community Mapping of the High Tide-affected areas was done by selected women from the Kudumbashree network, who were given a three-month-long training, both online and offline modes, under the guidance of Manjula Bharathy and Antony Kunnath to function as community researchers.

The participatory countermaps used five PR methods:

- participatory resource mapping of the high-tide affected areas;
- historical time analysis of the climate change issues, using oral narratives and historical temporal analysis;
- time-use gender ratios to understand the time-use poverty among women during climate disasters, using time-use calendars;
- cob-web analysis to understand the perception of the local community about service delivery, effectiveness, and efficiency of local institutions, both formal and informal; problem tree analysis to explore and record the problems and causes of the problems and manifested issues at the local level, as perceived by the local community.

This gender counter-mapping was initiated at the neighborhood level, where they, along with NHG members of the Kudumbashree, mapped the affected wards of the selected panchayats. The data was collated at the ward level and consolidated at the panchayat level. This gender counter map initiated the subversive politics of upturning the normative expert-driven, techno-centric data set and substituted it with communitarian and participative data gathering, which is inclusive.

This community mapping provided gender-sensitive counter data sets at the local community level through:

- counter-historical data sets;
- counter resource data sets;
- counter spatial data sets; and
- counter temporal data sets.

## 6. Community Video

Community video training tried to change the overt and covert landscapes of visuals and their production by producing counter visuals and subaltern knowledge using the women's network of Kudumbashree. Six- months' training to make short videos with mobile cameras was given to the women collectives of Kudumbashree, through both

offline and online modes, under the guidance of Bindu Sajan, G. Sajan, Abhijit Narayan, and Sunil Prabahkar.

Community Video was envisaged with the following objectives:

- Equipping women, the most vulnerable and directly affected persons of the high-tide floods, to make small videos of their areas, reflecting their day-to-day lives, with the aim of generating data that would tell volumes about their lives and livelihood options that have been seriously affected by high-tide flooding;
- Small videos coming out from their lived experiences will be the new set of data at the micro level for planning the adaptation and mitigation interventions of climate change disasters;
- To make the public sphere more engaging with these development issues arising from climate change, especially when the mainstream media have turned a blind eye towards these location-specific developmental issues;
- To make the discourses on climate change gender-responsive and gender-sensitive To develop climate-change grass root level women leaders, who are informed and technically sound, at the neighborhood and panchayat level; and
- To subvert the hegemony of visual politics and the epistemology of the mainstream and popular visual narratives

The training helped the community members to make more than 30 short, 2- 3 minute, videos that narrate high tide issues of their neighboring houses.

### **6.1 Community Theatre: Chevittorma (here say)**

Community theatre tried to collect the memory landscapes of the residents of these affected areas and attempted to make them navigate through their hegemonic social consciousness, using theatre as the medium of SpectActor, to produce a counter-hegemonic consciousness challenging the normativity of the hegemonic, patriarchal knowledge related to climate change. Primarily, the community theatre initiative tried to collect the memory landscapes of local residents of tidal flood-affected areas through continuous engagements with them.

These interactions helped to explore the historical, cultural, and social landscapes of the region and the multiple life-worlds of its inhabitants. Unfolding the situated knowledge of the people and their day-to-day lives helped them to unravel their embedded hegemonic social consciousness that, most often, positions them as the passive, defenceless victims of climate change.

The Community Theatre started out with multiple visits by the director, Dr. Sreejith Ramanan, and the team to those panchayats in Ernakulam district that face the threat of tidal flooding. The team began the preliminary research for the community theatre with limited information about tidal flooding. While the

organisers were expecting the usual method of a street play, the director was determined to find a form of theatrical representation capable of effectively bringing the issue in front of a larger public. The team consisting of a dramaturg and a video artist—Vipin and Akarsh Karunakaran, respectively—stayed in the area for almost a week and furnished comprehensive data regarding the people's lives, including local history, myths, songs, rituals, lifestyles, environmental issues, articles, and images. Two-week offline trainings were given to the selected local people from these three panchayats to make the script and to equip them to be the actors of the community theatre. This recasting and reinventing of the community theatre, along with the local consciousness, helped in evolving a theatre language and form that would directly engage with the local community about their living issues and vulnerabilities; making them claim their voice and agency.

## 7. Solidarity Economy from the Micro-Politics of Alliances

The interventions to address climate issues with a critical gender lens would be diversified and extended to other micro spaces in Kerala and India. Similar micro-interventions within the framework of the SDGs have been initiated in three panchayats of Raigad District, Maharashtra. A network, WICAN—Women In Climate Action Network - was initiated to focus on bottom-up transformation in marginal environments that challenges top-down valuations and framings of marginal environments. This implies that adaptation and mitigation choices for climate change interventions need to draw on multiple perspectives, alliances, and place-based knowledge to address power and gender imbalances and create transformative change. This shift enabled history to be re-read through the lenses of the gender subaltern, but affirmatively not the gender from the victim position, but from a subject-and-citizen position that speaks of active agency with dignity. We do see the light of hope—parallelly. We do see the emergence of counter-hegemonic currents and movements at meso, micro and nano sites and spaces, which have the potential to converge and to become strong sites of resistance to the mighty powers through solidarity and politics of collectivization and politicization. Right now they are not the sites of spectacle- but only embody and exist as sites of micro resistances which surface through their everyday struggles, which we can call the grass root active spaces- spaces that breathe the politics of hope- for a transformative gender politics, for a transformative climate politics and a transformative epistemic politics towards a counter-hegemony through a war of position and war of movement...

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