



# **Grassroots adaptation through the Citizens Climate Network: Implications for climate change adaptation policies in rural Cambodia**

**Policy Brief**

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**Climate change poses a major threat to long-term development objectives, especially poverty reduction. With increasing climate risks, strong adaptation at the grassroots level is key to improve adaptation capacity.**

Cambodia placed 13th on the ranking of most vulnerable country to global climate risk between 1995 and 2018. In 2016, the country ranked 8th in the World risk index (National Council for Sustainable Development, 2017). Cambodia also has been affected by global warming with the annual temperature increase accounting for 28 °C with an average maximum temperature of 38 °C in April and 17 °C in January.<sup>1</sup>

More than 30% of Cambodian people live at the poverty level with a US\$1 income a day. It shows that the climate risk will affect those poor, people in lowland areas and vulnerable through natural disasters such as floods, hurricanes, typhoons, storms, and landslides. Also, Cambodia is the fifth country of 162 countries with the highest flood risk which affects 1.8 million people every year. Another estimation has shown that floods kill people annually which accounts for 100 people and produce the loss of the agricultural sector from 100 to 170 million US dollars each year (UNISDR, 2006).<sup>2</sup> In addition, although there were few typhoons happening in the past, it brought massive destruction and damages as Typhoon Ketsana in 2009.

In a study conducted by Thrive Networks/East Meet West Foundation in Cambodia, the findings support the literature in demonstrating the significant impact of climate change, such as labour productivity, agricultural yields, and water availability and quality, access to education and health services.<sup>3</sup> Sochan (2021)<sup>4</sup> found that in 2013, due to flood more than 1,200 schools were affected, and 155 schools were highly destroyed as they were forcefully closed for over 9 weeks. These critical impacts lead to other negative impacts on migration, food security, human health, livelihood and income.

Our study analysed vulnerabilities and adaptation for different socioeconomic groups and geographical areas. The analyses show a large and disproportionate impact of climate risks on poverty and economic opportunities, especially for the most vulnerable members of society. Higher vulnerability of people in or close to poverty is linked to higher exposure to risk for workers who work directly under the sun such as farmers, construction workers, garment workers, etc. which they all require to work under extreme temperature, hot humidity, heat radiation, and severe weather events. It is also linked to a lower ability to prepare and respond (for example, lacking access to borrowing or having no or low savings) and lower access to support systems, such as remittances, social protection, health care, or a voice in decision making.

Gender equality is also impacted by the climate risk as women are known as more vulnerable than men in the same status because women are shown to be less in power in making decisions, lack knowledge, and have leadership roles. Climate change has affected natural resources while women living in rural areas mainly depend on natural resources. Women are likely to face the risk of the low common knowledge of climate change adaptation and resilience. The impacts on women will occur from climate change as the natural resource will be degrading while some women are working on collecting food sources for cooking and earning.<sup>5</sup> Furthermore, women's participation in political roles is still a major problem. As we can see, in the local area, inclusiveness is not really applied socially. It will result in a low outcome of the gender roles in climate change adaptation.<sup>6</sup>

### **Cambodia's national policy and institutional setting**

According to the World Bank,<sup>7</sup> building resilient communities is possible, but only if all countries embrace major change. For low-income countries like Cambodia, this means changes to policies,

regulations, and investments. With appropriate adaptation policies, countries can reduce impacts in the short term.

The government in Cambodia has progressively come to focus its attention on this issue. Cambodia signed the United Nations Framework Convention on Climate Change (UNFCCC) in 1995 and the Kyoto Protocol in 2002. The Department of Climate Change (CCD) was established in 2009 within the Ministry of Environment (MOE) to coordinate climate change-related commitments. The National Climate Change Committee was established in 2006 with 19 members, all high-level decision makers from relevant government organizations, with a view to enhancing cooperation between relevant organizations in implementing the UNFCCC.

The Cambodian government formulated its National Adaptation Program of Actions to Climate Change (NAPA) in 2006. A Cambodian national program of action on climate change (NAPA) was completed in 2006 and identified a number of high-priority projects for addressing climate vulnerability in both health and non-health (water, agriculture, and coastal zone) sectors.

In the last 15 years, a number of policies and plans have been formulated indicating the government's recognition of the need to address climate change adaptation through different sectoral channels. The key policies include Cambodia Climate Change Strategic Plan (CCCSP) 2014 – 2023; Climate Change Action Plan for Rural Community 2021-2023; The National Strategic Plan on Green Growth 2013-2030; Policy Recommendations: Impact of Climate Change Programs in Cambodia: Vulnerability, Poverty, and Gender 2022; National Climate Change Action Plan for Public Health 2019

Locally, climate change policy and programming in Cambodia is perceived as policy and programming have been top-down, and that duty bearers see adaptation and mitigation as a source of funding rather than as a meaningful responsibility. There has been little involvement of the community in setting policy plans and indicators. The duty to protect populations from disasters appears, thus seem to be poorly understood or implemented in Cambodia. There is awareness of the links between climate change adaptation and disaster risk reduction among many NGOs, but these perspectives are not necessarily reflected operationally. The 'green growth' model is the mantra of the national government wherein adaptation is assumed to be a 'positive externality' of economic development. This leads to a focus on those with growth potential, which implicitly downplays disaster risks or the priorities or risks of the most vulnerable, and those living in remote rural areas. In addition, 'in the drive to develop large-scale monocultures, there is little consideration by government planners or agribusiness interests of the social and environmental costs of their activities'.<sup>8</sup> Smallholders like family rice farmers are being left out of the technical support that large plantations have benefited from, but also that their vulnerability may be exacerbated by dominant strategies.

So, despite the robust national policies and plans across ministries, the questions for policymakers in Cambodia are:

1. How to translate policy plans to adaptation and mitigation actions that are effective and sustainable?
2. Which policy plans should be prioritized and through which mechanisms and channels?
3. What are the benefits of immediate actions compared with costlier delays?

## Local people awareness of climate change and NGOs

In a survey conducted with 440 households and 110 local authorities (comprising Commune Councils and Village Chiefs), the responses indicate that people's awareness of climate change and risks, and knowledge about adaptation is quite limited, with less than 20% of respondents practising adaptation.<sup>9</sup> The adaptation practices households were mostly aware of are government provision of social and health services, raised roads and raised household areas, rainwater harvesting system, community-managed bottled water, community managed water supply system and resilient latrines. Jiao, Zhen & Liu (2020) found that people from different places across Cambodia such Takaen in Kampot Province, Sangkae Satob in Kampong Speu Province, and Tum Ring in Kampong Thom Province with specific adaptive skill in the farming method (for example enhance the soil fertilizer, improving seed and farming integration, water management, crop diversification) were really low compared to the total samples.<sup>10</sup>

Frewer (2013) argued that 'NGOs in Cambodia play a crucial role in constructing consent' insofar as they 'play supportive and mediating roles' (p. 103) between state and international development partners, both of which they are too dependent on to meaningfully challenge.<sup>11</sup> Funded by international agencies and sometimes linked to government-led major infrastructure investments, there has been a proliferation of new climate change adaptation-related initiatives in Cambodia. In this regard, many NGOs are supported to implement community-based climate change adaptation projects, usually paired with 'capacity building.' While civil society solutions are included in official development documents and platforms, actors who are more concerned with underlying social and economic drivers of climate vulnerability appear to be largely excluded from mainstream climate change efforts.<sup>12</sup> Against this backdrop, conflicting roles of NGOs in Cambodia have conflicting roles as professional service-delivery agents as well as democratic watchdogs; the pressures of the first often crowd out – if not co-opt – the latter. Rodan and Hughes (2012, p. 67) argue that civil society's

"Social accountability mechanisms ... help preserve existing power hierarchies and limit the scope for critical evaluation of prevailing reform agendas... [and] often privilege nonconfrontational state-society partnerships, drawing activists into technical and administrative processes limiting political reform possibilities by marginalizing or replacing independent collective political action crucial to the democratic political authority of citizens." <sup>13</sup>

Meaningful participation of rights holders, alongside associations at the grass roots including youths, and the INGOs and national NGOs indicate that grass-roots actors – including community-based organizations (CBOs) and constituency groups - is starting to emerge with genuine influence on both government and NGO programming. CBOs in Cambodia are suddenly finding their voice. This may reflect subtle changes in political space in Cambodia but also, very importantly, the increasingly precarious state of rural livelihoods in a context of widespread dispossession and deteriorating farming and fishing conditions due to climate change. 'farmers, fishers and forest-dependent villagers have become increasingly vocal and determined in Cambodia; now representing a major force for social change that the ruling party cannot ignore'.<sup>14</sup> Emergent CBOs are now largely acknowledged by NGOs and donors as key to participation in advocacy efforts to demand accountability from those responsible for environmental destruction and loss of livelihoods. CBOs and resource-user associations (especially in fisheries) are also seen as having a central role in setting locally adapted ground rules and demanding effective enforcement of existing regulations.

Climate change adaptation is defined to be pivotal for local people. The bottom-up solutions are the keys that provide what needs to be improved and done from the local perspectives and to

measure the socio-economic aspect due to climate change and how the adaptive capacity of the local community and household towards the new environment.<sup>15</sup> The context is changing rapidly and there is now action at the grass roots, including rural areas, and especially among youths.

### **Grassroots adaptation through the Citizens Climate Network**

To bridge the gap of local community involvement in national climate change adaptation policy in Cambodia, the research team at Thrive Networks/East Meets West Cambodia trialled an innovative Citizens Climate Network (CCN) - a consultative approach to identify and carry out practical actions for adaptation. The CCN acts as channel for knowledge mobilization between citizens on climate change and adaptation, while finding a space to raise awareness about the importance of community members working together in order to give power, legitimation, and voice to all.

The CCN is a community-based network that is locally owned with direct community engagement to raise the communities' awareness about climate related issues and adaptive measure, and bring their perspectives about climate risks and actions to policy dialogues. The CCN acts as demonstration sites of sharing resources and stories in each community and to spread ideas and inspire other communities to join the network and conversations that will strengthen their adaptive capacities and the local voices on policy dialogues about climate actions in rural Cambodia. The pilots provide prototype for materials and modalities for a sustainable CCN, and share lessons learned on challenges and success factors in strengthening local networks.

After a series of community consultations in March 2022, the pilot is designed and conducted over 6 months from June to November 2022 in Prey Veng and Pursat province, which are starkly different in climate change exposure, geographical and socio-economic characteristics, and adaptive capacities. Over the 6-month piloting period, different topics and activities related to climate hazard and practical adaptation activities are introduced to the CCN members.

Underpinned by the principle of *co-designed localism*, the CCN includes citizens from all villages in one or two communes of one district. The CCN trains facilitators from local communities, who may be village heads or other leaders, to organize monthly activities, coordinate members' attendance, facilitate group discussion and reflection exercises, and practical adaptation activities. In Pursat, the CCN is piloted in Talou Senchey District, Taluo and Prey Rong communes. It has 4 facilitators (1 woman, 3 men) and 68 participants (57% are women), and 1 focal point (a local sanitation supplier) coming from 34 villages. The CCN pilot in Prey Veng is in Kamchay Mear district, Smoang Khang Cheung commune. It has 3 local facilitators (2 women, one men), 46 members (46% are women), and 1 focal point (local authority) from 17 villages.

The CCN meets once a month for a full day workshop. Each month focuses on a different topic including climate change and adaptation, flood and drought management, hydrology and water security, crop management, hygiene and the environment) and members work together during the session on a range of activities: presented with information about the topic, group discussion on the content presented, undertake a practical adaptation activity which is mostly done in the local village, group reflection on the activity and on the whole session. The practical adaptation activities supplement the content presented and encourage members to use the hands-on experience and consider its application in their own home and village. Members also undertake pre-test and post-test to assess their acquired knowledge about the topic. Facilitators' feedbacks are sought at the end of the session to assess their learning and to empower them in leading the CCN. All feedbacks are used to revise the content and mode of delivery in the next sessions.

### **Preliminary findings from the CCN pilot**

In the first month, the CCN raises awareness and to invite discussion about climate change (causes, impact and adaptation) among CCN members, which the starting point to promote their interest in climate change issues in relation to their livelihood. The knowledge materials presented during this 1st session allowed the CCN member to learn about basic knowledge of climate change science including the natural and manmade cause of climate change, climate related disasters, climate change impact on Water, Sanitation and livelihood, and climate change adaptation and mitigation. Members engaged in a tree planting activity and were encouraged to discuss and consider the effectiveness of this nature-based method as an adaptation as well as mitigation initiative.

Both the session in Prey Veng and Pursat, more than 90% of the expected participants were participated in the program.

The CCN members were interested in the training topic and activities. However, the training session is too short for the participant to gain content knowledge from the presentation. But it does provide them some awareness on climate change, adaptation and mitigation. They express that they have more interest to participate in community program related to livelihood activities and climate change.

At this stage, the capacity of local facilitators in facilitating group discussion and CCN activities were very limited. It appeared that local facilitator and the CCN members needed to be reminded about the CCN, so they could be more prepared and prioritise their schedule to attend the session. As a result, a guideline was provided to the facilitator and a briefing session was conducted before next month's session to help their facilitation.

The objective of the 2nd month CCN activities is to raise awareness and to induce discussion about flood (causes, impact and adaptation) among the CCN members, which the starting point to promote their interest in climate change issues in relation to their livelihood. The knowledge materials presented during this 2nd session allowed the CCN member to learn about basic knowledge of flood science including the natural and manmade cause of flood, flood impact on Water, Sanitation and livelihood, common strategies to cope with flood at household and commune level.

Members were given instructions and took part in preparing flood emergency kits and discussed the benefits and challenges of flood emergency kits for large scale distribution to the whole village. Some of the suggestions for scaling up are awareness campaign to raise people's awareness about flood risk and impacts; fund raising or charity event to raise funds to provide emergency kits to poor households. The challenges relate to lack of awareness for people who had never experience flood situation before, and lack of financial support especially for the poor families, transportation, human resources to prepare the kit, and knowledge of the local authority about the importance of emergency kit. There was a general agreement that vulnerable and poor citizens should be prioritised, and that the government, NGOs, national and international donors are responsible actors for mass distribution of flood emergency kits.

The lesson learnt for many members was the importance of identification of an evacuation site and evacuation plan for the village; and simple action that they can help themselves and their family to adapt with flood such as planting tree, prepare emergency kit, how to survive when there is flood, the correct space between well and latrine to mitigate impact of water quality during flood, stay inform about flood situation and sharing information about the impacts caused by flood with their neighbour.

The next three sessions will focus on drought management, water and livelihood, water-environment and hygiene practices. The last session will focus on scaling up pilot adaptation activities to community wide, and resources to continue the CCN network post the pilot completion.

Although the pilots have only taken place in 2 months, some of the members, especially the CN facilitators had participated in the public consultations prior to the pilots and have become more familiar with the CCN approach of community involvement and knowledge exchange. We observe increasing confidence and willingness of the participants, especially women, to share ideas about climate change and adaptation with each other and in their villages. All participants agreed that the sessions have provided knowledge about climate risk and adaptation, gained from each session and accumulated over the two CCN sessions. Most significant impact is the shared information and built relationships within the network which has given them the sense of individual and shared responsibility for taking up adaptation. The first step for this is their sharing of knowledge learnt with their family and neighbour.

Through close observations of the participants engagement and their feedback, there are some lessons learnt about promoting community-based adaptation:

- local facilitators can benefit from guidelines for facilitating community sessions
- participants are reluctant to provide frank feedback in a large group as this may be seen as criticism, so feedback should only be sought in safe spaces such as small groups or in one-to-one encounters
- scheduling must take into account women's domestic duties, as they are generally unable to stay for a whole day of activities
- presentation materials should include pictures and videos to accommodate participants with limited literacy
- groups should aim to have a balance of those who are quiet and those who tend to speak a lot, so as to ensure all have a chance to share their thoughts
- team-building games are useful to keep participants motivated through the day.

### **Implications for policy**

The pilot results in its first 2 months suggests positive outcomes for community-based network as a mechanism of grassroots adaptation. Although there is wide gap between citizens' awareness of climate risk and adaptation, and translation to adaptation practices and what is proposed in the national policies, the results offer some answers for the policy questions asked earlier.

1. How to translate policy plans to adaptation and mitigation actions that are effective and sustainable?

Community-based network can deliver resilient pathways, and they can be realised with improved and sustained access to education, training of adaptation, and financial investment in adaptation measures at community wide scale. Applying the principle of co-designed localism, grassroots adaptation is a powerful way to enable policy implementation that promote equity in access, participation, and voice in decision about adaptation that matters for the people whom the adaption is supposed to benefit.

2. Which policy plans should be prioritized and through which mechanisms and channels?

The transition to more resilient development requires strengthening institutional capacity at the local community level (for example through capacity building of adaptation facilitators such as those in



the CCN), and careful management of distributional outcomes of adaptation measures that prioritise the poor and disadvantaged families.

3. What are the benefits of immediate actions compared with costlier delays?

Without a step change in support, adaptation actions could be outstripped by accelerating climate risks, which would further widen the adaptation implementation gap. The CCN as a mechanism that intersects power and voice between the national government and the citizens, which coupled with citizen willingness and sense of shared responsibility can potentially be the anchor for policy enactment and make good of allocation of state resources, external grants, or private investment in climate adaptation.

**For more information about the Citizens Climate Network and to discuss opportunities for collaboration, please see <http://emwcambodia.com/citizens-climate-network>**

## Notes

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<sup>2</sup> UNISDR (2006). *Cambodia disaster statistic*. Bangkok, Thailand: UNISDR Asia-Pacific region.

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<sup>4</sup> Sochan, R. (2021). Cambodia's children 46th most vulnerable to climate change. Retrieved from <https://www.phnompenhpost.com/national/cambodias-children-46th-most-vulnerable-climate-change>

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<sup>7</sup> World Bank (2022). Climate Change and Development Report. [https://openknowledge.worldbank.org/handle/10986/38220?cid=ECR\\_E\\_NewsletterWeekly\\_EN\\_EX\\_T&deliveryName=DM160059](https://openknowledge.worldbank.org/handle/10986/38220?cid=ECR_E_NewsletterWeekly_EN_EX_T&deliveryName=DM160059)

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<sup>10</sup> Xi Jiao, Yuan Zhen, Zhen Liu. (2020). Three-stage quantitative approach of understanding household adaptation decisions in rural Cambodia. *International Journal of Climate Change Strategies and Management*, 39-58.

<sup>11</sup> Frewer, T., (2013). Doing NGO work: The politics of being civil society and promoting good governance in Cambodia'. *Australian Geographer*, Vol. 44, No. 1, pp. 97-114.



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<sup>15</sup> Piya, L. (2019), *Socio-Economic Issues of Climate Change: A Livelihood Analysis from Nepal*, Springer, Singapore.

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