

SUMMARY

Many urban youths are educated and exposed to information about climate change and its global effects. However, modern conveniences often shield the direct impact of climate change in day to day lives. The opposite is true for the youths and rural community members. They experience direct impact of climate change to their livelihoods without really understanding the cause. The project aims to bridge and connect urban and rural youths for a better understanding of climate change direct impact to the food supply chain.



The village of Bedono, on Java island, in Indonesia. The village is sinking due to coastal erosion and rising sea levels. Photo: Antony Dickson

RURAL CLIMATE CHANGE CENTER

R3C is designed to work with the rural youths to introduce climate change, understanding of its direct and cultural effects to the community. Stories through written and visual imageries will be accessible through social media, website and an e-book.

BENEFITS

- Preservation of knowledge about climate change effects, ancestral practices, and stories from elders
- Understanding how food supply chain is affected by climate change
- Information exchange about individual and community actions to mitigate climate change

COLLABORATION OPPORTUNITIES

- Rural youths connecting with their elders to gather stories and ancestral practices about natural resources preservation
- Rural and urban youths connecting and communicating about their role in climate change and how it affects their day-to-day activities
- International, national, and rural area stakeholders working together to collect, manage and share relevant information regarding climate change impact on food supply chain
- Amplifying the voices of rural communities to a global audience on their experiences of climate change consequences to their livelihood

EQUALITY AND INCLUSION

- Social media, website, and videos available in English, Indonesian, and local language (as applicable)
- Focus on gender balanced approach and engagement with vulnerable and underrepresented groups

COP26 INVOLVEMENT

- Dissemination of e-book at COP26
- Slideshow and videos at COP26
- Remote live discussion event with rural youths and COP26 participants
- Physical presence of partners at COP26

THE PROBLEM

Many Indonesian villages are not aware of their day-to-day action that affect their own microclimate/natural resources. Trees along the riverbanks are cut to sell or for fuel, natural forests are cut down and burned to make way for crop farming, and overfishing are happening across the country. Additionally, in a more global sense, the villages are experiencing floods/droughts, landslides, pests, and other impacts that directly affect their livelihoods. Crop yields that are often reduced, less frequent harvests, decrease in fishing catches. It is difficult for rural communities to take climate change mitigation actions without understanding and having the knowledge.

Reduced yields from farmers and fishers because of climate change directly affects rural community livelihoods. In the cities, supermarkets are still able to source sufficient supply to serve the customers. Urban dwellers are not yet affected directly by climate change in ways that modern conveniences cannot obscure. This lack of direct impact means that any motivations they have on climate change mitigation actions are quite shallow. A motivating variable can be the realization of how climate change can affect food supply chain in urban settings.

ACTIVITIES

- Data collection of rural area climate change relevant indicators (ambient temperature, air quality, rainfall, etc)
- Story gathering of village elders' experiences of climate change impact
- Visual evidence of rural climate change impact to farmers and fishers
- E-book and coffee book compilation of stories and visual imagery of rural climate change
- Video production of climate change impact on food supply chain
- Rural community education on climate change and mitigation actions
- Public access recording of workshops

PROJECT OUTPUT

- E-book and printed coffee book of stories and visual imagery
- Video on climate change and its impact on food supply chain
- Establishment of Rural Climate Change Center across Indonesia and SE Asia

SCALE UP OPPORTUNITY

- More R3Cs established across SE Asia
- Climate change workshops at R3C locations with global experts
- Establish tourist attraction activities centered around R3Cs including guided tours to local natural resources and climate change affected areas

NEEDS ANALYSIS

According to a study conducted by Center for International Forestry Research (CIFOR), land-use decisions and supply of ecosystem services for climate change mitigation is influenced by changes in landscape properties or societal values. This means that as food crops yield less for the farmers, they may decide to plant rubber trees, palm oil trees, or other high value crops.

This is already experienced by Giacomo Fedele, a climate change adaptation fellow at Conservation International's Moore Center for Science. He traveled to four Indonesian to learn how different communities responded to flood and drought caused by climate change.

Agroforestry and reforestation of the least productive farmlands are two of the strategies that he observed. Surprisingly, a "bottom-up" approach stemming from within the community members is an effective driver. In one example, one farmer planted teak on his farmland and saw benefits including the soil's water retention and increased soil fertility. Other farmers started copying the strategy and local cooperatives distributed seedlings, created standard procedures for planting and cultivating, and sustainable harvesting. An informal social pressure is the pride each farmer have in caring for their farmland.

Another case Mr. Fedele observed is a village chief that made a rule against cutting trees on and around the riverbanks. The village chief noticed the degradation of the forest and the impact it has to their river and the increasing frequency of flooding. In the short term, the community suffered because they must look for wood in other places, but long-term benefits such as reduced flooding and cleaner rivers compensated for it.

It is well known that in the last several decades there have been changes in land use such as the massive growing of palm oil trees. Forests are converted to agricultural land, affecting water quality, ground water reservoir, and water availability. More frequent flooding/drought, landslides, harvest period changes, and other changes have been observed. These stories of "the good old days" and today's realities need to be captured, documented, and shared with a global audience.

Mr. Fedele's observation of the successes in "bottom-up" approach initiated the idea of having Rural Climate Change Centers. The R3C idea was that it will share information and educate the rural communities on climate change, its impacts and mitigation strategies actionable by individuals and communities in the local area. Realizing that community elders' experiences and stories are valuable to provide a baseline and context to climate change, additional activities for R3C were designed to capture, document and share these stories.