



Learning Product # 1:

Co-designing solutions for urban resilience action

Coastal Cities and Extreme Heat Project (CoCHAP)

Table of Contents

KNOWLEDGE PRODUCT # 1:	1
CO-DESIGNING SOLUTIONS FOR URBAN RESILIENCE ACTION	1
COASTAL CITIES AND EXTREME HEAT PROJECT (COCHAP)	1
INTRODUCTION	1
PREPARATION ACTIVITIES FOR THE WORKSHOPS	2
CO-DESIGN WORKSHOPS IN TANZANIA:	2
CO-DESIGN WORKSHOPS IN HONDURAS:	5
ANNEX 1: LIST OF PARTICIPANTS IN CODESIGN WORKSHOPS IN TANZANIA	8
ANNEX 2: HIGHLIGHTS FROM PARTICIPANT CONTRIBUTIONS IN WORKSHOPS IN TANZANIA	14
ANNEX 3: PARTICIPANT LIST OF THE CODESIGN WORKSHOP IN SAN LORENZO, HONDURAS	16

Introduction

The Coastal City Resilience and Extreme Heat Action ([CoCHAP](#)) Project aims to build climate resilience of urban communities, particularly to extreme heat and coastal threats through expanding risk knowledge and strengthening local action in Bangladesh (Bagherhat and Sathkira, implementing the coastal hazards component), Indonesia (Medan and Surabaya, implementing the heat component), Honduras (San Lorenzo, -implementing both components-, Nacaome, Choluteca -implementing heat component) and Tanzania (Tanga and Unguja in Zanzibar, implementing both components). The duration of Project is September 2022- August 2027.

Under the Urban Climate Resilience Action component of COCHAP, a process of co-designing solutions for the priority coastal hazards and climate risks identified through the City-Wide Risk Assessments (CWRA) process is planned¹. As it is depicted in Figure 1, these solutions are to be developed into project proposals. Through a matching grant process, it is envisaged that the selected proposals will be funded under CoCHAP. (See Annex 1 for the description of the matching grant process). This process is supported by the [Urban Resilience Toolkit](#) with adaptation to city context in each country.

¹ It can also be applied to Heat solutions component if the National Society chose to do so.

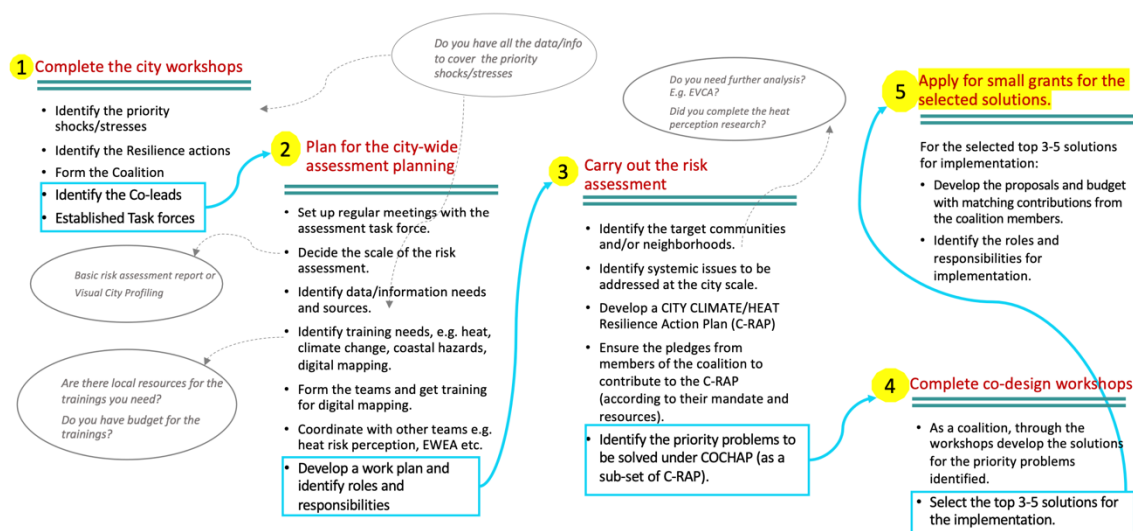


Figure 1: CoCHAP risk assessment and solution design process.

The co-designing solution process enables the Red Cross Red Crescent (RCRC) National Societies (NSs) and the members of the city coalition to co-design viable, inclusive and sustainable community resilience solutions, applying Human Centered Design (HCD). HCD is a creative problem-solving approach which begins with understanding people, placing the needs, desires and limitations of the end user at the center of every step of the design process the participants go through to address complex problems. ‘Users’ are the people we are attempting to solve the problem for and who will ‘use’ or engage with whatever we design. It is an iterative and replicable process that can be applied when designing tangible and intangible objects, such as physical products, digital systems, services, strategies, policies, and experiences.

Preparation activities for the Workshops

A series of orientation workshop for all the Urban Resilience toolkit including the co-design tool was organized in March 2024 period. The Project Coordinators from the NSs implementing CoCHAP, focal persons from the AmCross and Climate Centre participated these workshops. Following these trainings, the regional technical focal persons (from the Climate Centre) organized orientation sessions with the respective NS teams to familiarize them with the concept, tools and the process. The NS teams further oriented the city coalition members to prepare them for the workshops. Together with the NS teams, the focal persons adapted the tool materials to the city context and designed the process and the agenda for the workshop accordingly.

The NSs completed the city-wide risk assessments prior to the co-design workshops and identified top priority risks affecting the Project cities in Bangladesh, Honduras and Tanzania in 2024.

Co-design Workshops in Tanzania:

The first co-design workshop in Tanzania was organized in the City of Tanga on June 25 to 27, 2024, with 38 participants. In Unguja, the co-design workshop was held on September 12 and 13, 2024, with 33 participants (participant details are given in Annex 2). The co-design process included reviewing and validating findings from the city-wide risk assessments, reframing challenges into opportunities, brainstorming ideas for change and developing the prioritized ideas into prototype solutions. The workshop brought together various actors including local governments, community organizations, businesses, and residents.

The workshops were co-facilitated by the CoCHAP Project Manager from the Tanzania Red Cross Society (TRCS) and the focal person from the Climate Centre with support from the various TRCS staff who received orientation training prior to the workshops. Both workshops were attended by high level representatives of the regional and provincial authorities.

In Tanga, the workshop was opened by Hon. Sebastian Masanja and Hon. Amina Saidi from the Regional Administrative Secretary (RAS) of Tanga and Mr. Lyimo Emmanuel from the Prime Minister's Office– Disaster Management Department (PMO-DMD). In Unguja, the Introduction remarks was delivered by District Executive Director (Said Mrisho) after the Disaster Coordinator from the Disaster Management Commission and the Disaster Preparedness Manager in collaboration with Regional Coordinator.



Figure 2: Co-designing solution workshop, Tanga, Tanzania

Day 1: Creating a shared understanding of the context

In Tanga, the co-design workshop provided an excellent opportunity to recast the vision, and operational modalities of the coalition. This was crucial given that this workshop attracted various participants who were new to the coalition. Participants reflected on the What, Why and How of the coalition process. As an output the Terms of Reference for Tanga coalition was refined with mission, vision, objectives, roles and responsibilities and a work plan. The priority hazards as highlighted in the CWRA report were discussed and validated as **Coastal erosion, coastal flooding and extreme heat.**

The participants also reviewed the information about the target wards and suggested adjustments to the hazard calendar. Dr. Dorothea Deus a Senior researcher from Ardhi University-Tanzania, presented the Tanga GIS mapping process and findings. The findings included changes observed in various parameters including land use patterns, the transportation network system, temperatures and humidity from 1982 up to date. This session ignited lively discussion revealing a sense of urgency to take action to ensure that the most at risk are protected from adverse hazards in the context of changes in land use patterns.

Similar to tanga, the Unguja city coalition refined its Terms of Reference with mission, vision, objectives, roles and responsibilities and a work plan. The priority hazards as highlighted in the CWRA report were discussed and validated as **Coastal flooding, Coastal erosion and extreme heat.**

Day 2: Understanding risks and resilience and creating a vision for the city

The participating organizations and selected government agencies were invited to present the projects and initiatives that are related to the activities of CoCHAP. In Tanga, these included [Tanga Yetu](#), Wildlife Conservation Society, World Vision, Tanzania Environment and Agriculture (TEA) and the Ministry of Health.

In Unguja, MILELE foundation, YUNA (Youth of United Nations Association and ZEMA (Zanzibar Environmental Management Authority) [MWANAMKE](#) Initiative Foundation, and Zanzibar Climate Change Alliance ([ZACCA](#)) and the Ministry of Health shared their activities. A summary of these initiatives is given in Annex 3.



Figure 3: Representative of TEA showing lampshades made from seashells, Tanga, Tanzania

Participants co-developed the seasonal calendar with assistance from the Tanzania Meteorological Agency (TMA) official showing the occurrence of floods, winds, heat and humid periods in Tanga city. They sketched risk maps of selected wards most affected by the prioritized hazards as indicated in the respective CWRA reports in each city.

Day two continued with activities aimed at understanding resilience of the communities in targeted wards (Tanga) and shehias (Unguja). Participants created a [resilience star](#) based on 11 dimensions of

resilience showing a visual presentation of the ward's capacity to withstand shocks and stresses. Participants were invited to envision how they wish the city to be using the resilience stars. Using the "how might we" method, participants came up with very diverse imaginations of a thriving and resilient city.

Ideation of actions to achieve the vision of resilient city:

Afterwards participants developed a set of actions that can help in achieving the vision of a resilient city focusing on addressing the risks of coastal erosion and coastal flooding. Through an interactive and collaborative process, the suggested actions were as the following for each city.

Tanga city:

- Restore mangroves and improve marine environmental protection
- Improve waste management and safe water provision
- Support alternative economic activities for vulnerable groups
- Build the capacity of disaster committees.

Unguja city:

- To promote the use of alternative/renewable energy sources.
- Establish designated areas for waste disposal.
- Plant trees to enhance green cover and environmental protection.
- Avoid indiscriminate sand mining in the residential areas.
- Construct sea walls along coast to prevent erosion and flooding.
- Build and improve city water drainage system.
- Review and update policies for proper land use management



Figure 4: Participants drawing a resilient star for selected Shehia, Unguja.

These actions will be refined and further developed by the city coalition members before being submitted for funding under the matching grants.

Key Learnings:

- Participation and presentations from the external partners were invaluable to understand the expertise and ongoing initiatives as well as potential contributions to COCHAP within the city.
- Starting with an activity to create a shared vision served as a helpful guide for developing resilience actions.
- Applying resilience start to targeted communities provided in-depth understanding of risks and vulnerabilities that complements the wider risk analysis done at the city level.

Co-design Workshops in Honduras:

The first co-design workshop in Honduras was organized in the City of San Lorenzo with on 26-28 August 2024, where the participants reviewed the findings of the Coastal Risk Assessment workshop organized in June. However, due to the small number of participants in the workshop, a validation workshop was organized on 23-24 October 2024 to increase the participation, and variety and ownership of the solutions. During the period between workshops, follow-up activities were carried out by the Honduran Red Cross with the city coalition members to guide them through the process of the matching grants, development of a proposal with precise objectives, a work plan, budget and inputs from the stakeholders.

The validation workshop provided an opportunity for participants to delve deeper into the three solutions to address the prioritized risks. These are (i) mangrove deforestation, (ii) the conditions generated for the spread of dengue fever due to increased temperatures and contaminated water, and (iii) the poor management of solid waste.

During the workshop, the participants applied the “HOW MIGHT WE?” statements to develop specific activities towards. The results are summarized below.

How might we mitigate the negative impact of inadequate solid waste management in the town of San Lorenzo, which causes flooding, disease, and contamination of coastal biodiversity?

Main ideas:

- Carry out and socialize studies on the characterization of solid waste with the relevant organizations in the municipality.
- Incorporate local socio-economic empowerment development into solid waste solutions.
- Implement awareness raising and cleaning campaigns in the city.
- Upgrade the technical capacity of the municipal landfill.
- Create a waste sorting system and a form of remuneration for collected waste.
- Create collection centers to collect plastics, cardboard, cans, glass and generate income through recycling.



Figure 6: Co-design workshop, San Lorenzo, Honduras

How might we maintain a balanced level of salinization of the coastal ecosystem during the rainy season? Main ideas:

- Develop/upgrade technical standards for marine water quality.
- Invest in research on current seawater quality.
- Conduct studies with specialists on the negative effects of salinity and how aquaculture activities affect the mangrove forest.
- Conduct studies of coastal systems and the effects of salinization on them.
- Construct reservoirs or dams to reduce the amount of freshwater in the sea.

How might we avoid/decrease the deforestation of the mangrove (fresh and fresh aquaculture)?

Main ideas:

- Install marine patrols to prevent illegal mangrove logging.
- Improve sources of employment in coastal communities.
- Stop construction concessions in the bay areas.
- Set up recycling facilities.
- Start a reforestation program (terrestrial and mangrove)
- Promote ecotourism that highlights the importance of the forests and eco-systems.
- Implement reforestation projects in schools and educational centers.
- Organize public awareness campaigns
- Create partnerships to manage green funds/ bonds.

During this process, the three solutions were incorporated into two to increase the efficiency and effectiveness of the activities. The validation workshop brought together a larger group, including academic experts, who provided invaluable feedback on each solution proposal (see Annex 4 for attendance). The agreed solutions are:

Solution 1: Installing [bioswales](#) to protect the coast from storm surges and creating a solid waste containment network: Building an artificial or natural retention wall to reduce the coastal impacts of storm surges. The second part of the solution promotes a circular economy from the waste collected in the nets to generate an alternative income for the communities while cleaning the mangroves and avoiding possible floods due to waste accumulation. The coalition members who worked on this solution agreed that research need to be carried out to determine what kind of retention element should be built and the most appropriate places to build it.

Solution 2: Reforestation of mangroves and creation of a catalogue of the current state of biodiversity and water quality: This solution also aims to conduct several studies prior to implementation regarding the status of the biodiversity of mangroves and the state of the elements in the water. This would inform a dedicated effort to regenerate the balance of the ecosystem and would have as a second output a catalogue of biodiversity that different actors could use and contribute to. It could also help flourish ecotourism and local small businesses in the city.



Figure 5: Demonstration of proposed solutions, San Lorenzo, Honduras

San Lorenzo city coalition members are working to refine these solutions, integrating all the feedback provided in the past workshop and using the provided guidelines for the matching grants process. The NS is aiming to start implementation in June/July 2025.

Key learnings:

- It would be useful to provide a range of potential solutions relevant to the risks identified in the city prior to the co-design workshops to encourage innovative and ambitious solutions.
- Commitments for in kind and/or monetary contributions from the coalition members for the solutions require intense and continued engagement with the stakeholders to help them understand the purpose and rationale behind the matching grants modality of CoCHAP.
- The co-design workshops should aim for a balance between avoiding being prescriptive and hindering creativity for the solutions and providing enough guidance on the expected outcomes. An example of this is the initial insistence of the participants to focus on environmentally oriented solutions rather than adaptation to climate change related hazards.

Annex 1: Guide for Designing and Implementing Matching Grants for Urban Climate Resilience Action

Coastal Cities and Extreme Heat Project (CoCHAP)

Table of Contents

INTRODUCTION	8
WHY “MATCHING GRANTS”? 8	
OVERARCHING PRINCIPLES OF MATCHING GRANTS	9
WHAT ARE THE WAYS TO MATCH COCHAP GRANTS?	10
HOW TO EVALUATE AND IMPLEMENT MATCHING GRANTS?	10
MATCHING GRANTS PROPOSAL TEMPLATE	12

Introduction

The Coastal City Resilience and Extreme Heat Action (CoCHAP) Project aims to build climate resilience of urban communities, particularly to extreme heat and coastal threats through expanding risk knowledge and strengthening local action in Bangladesh (Bagherhat and Sathkira), Indonesia (Medan and Surabaya), Honduras (San Lorenzo, Nacaome, Choluteca) and Tanzania (Tanga and Unguja in Zanzibar). The duration of the Project is September 2022- August 2027.

Under the Urban Climate Resilience Action component of COCHAP, a matching grant model will be implemented to support the city resilience coalitions to design and implement urban community resilience actions against the prioritized coastal hazards. *This modality can also be adopted for the design and implementation of the extreme heat actions under the Project.*

This guidance note provides a framework and operational modalities for the National Societies (NSs) in designing and implementing matching grants in each country. The National Societies and their coalition partners are expected to use this framework as a starting point and develop their own process relevant to the local context. However, some of the critical elements that are indicated below are expected to be applied in all countries to ensure consistency and accountability.

The National Societies will ultimately be responsible for setting the processes, coordinating among the coalition members, with IFRC, American Red Cross and the Climate Centre, implementing, and supervising the grants, and reporting on the results according to the COCHAP Project Agreements.

Why “Matching Grants”?

Matching grants are one of the three pillars of COCHAP urban community resilience action; (i) NSs co-leading city coalitions with the local governments (ii) co-designing solutions to address priority risk identified collectively through the city-wide risk assessment process, and (iii) implementing these solutions through a competitive matching grant process.

The intentional design of the COCHAP allowing the development of solutions locally by the communities and the city stakeholders (as coalition members) provides an opportunity for locally led

action and create ownership. The matching grant modality enhances this through mobilization of local resources and prioritization of sustainable solutions.

The main premise of this modality is to encourage the NSs and the city coalition to conceive **city level solutions, rather than small scale community level interventions as much as possible**. It is true that many city level solutions require large scale investment and funding that are beyond the budget amounts available to NSS through COCHAP. However, it is also true that without addressing the systemic nature of urban risk, it is hard to reduce the growing risks that are faced by the underserved urban communities.

Finding a balance between going to scale and practical action will require innovative approaches. In this model, all the coalition members are expected to contribute to the city solutions that are agreed upon. Some of these can be integrated into city investment plans or ideas can be developed to **make the existing investment plans risk informed, climate smart and sustainable**. Collaborative efforts matching grants often lead to stronger partnerships and relationships between coalition members and enhance an organizations' visibility and credibility with the public.

The process outlined below aims to enable the city coalitions to think at scale and kick start a city level action that can be replicated and continued after the Project ends.

Overarching Principles of Matching Grants

The overall approach of the COCHAP Matching grants is flexible, allowing the development of solutions locally according to the needs and priorities. However, there are a set of overarching ground rules and principles that all of the implementing National Societies and their coalition partners are expected to apply to all of the matching grants to ensure accountability and smooth implementation. These are:

1. The COCHAP matching grant funds can only be granted to the coalition members. The National Societies are expected to have a role in each grant.
2. The grants can only be used to fund a portion (maximum 60%) of the bigger scale solutions that are developed by the coalition members. The remaining parts are expected to be covered by the local governments and the city coalition members in ways described below.
3. The total amount of available funds to cover all the grants is limited to the amount set for this purpose in the approved budget of COCHAP for each National Society.
4. Minimum and maximum amounts of individual grants are to be determined by the National Society and the local government as the co-leads of the city coalition².
5. The grants can only be applied for proposals that are based on the agreed solutions by the city coalition and are aligned with risk assessments.
6. Depending on the number and quality of the proposals received and total amount of grants awarded, multiple runs of award process is allowed provided that all the grants are completed in accordance with the Project Agreement with NS in each respective country.
7. The evaluation criteria below will be applied to all grants in each country. National Societies can only add to the list if needed.
8. The National Societies will adhere to accountability and transparency standards of IFRC throughout the grant planning and implementation process.

² The intention here is setting some boundaries to prevent too many small projects or just one too big project. For example, you can decide that grant amounts will be min. 5,000\$ max. 100,000\$.

What are the ways to match COCHAP grants?

There can be many different ways to enhance COCHAP funding, some of them are summarized below. The members of the city coalition can also come up with their own ideas about how to contribute.

In-Kind

In-kind contributions are valuation of the contributions in different ways, including but not limited to technical expertise and time of staff and volunteers, policy support, advocacy, promotion, providing venue for workshop, training and meetings etc. Enabling actions such as changing the laws and regulations can also be considered as in-kind support IF they are linked to a specific resilience action.

Similarly, changes and/or improvements in city planning and investment processes and standards, or any other resulting actions by the local governments can be considered as in-kind support IF they are linked to a specific resilience action.

Investment in infrastructure:

The investment plans of municipalities, local governments, city service providers or national government agencies can be considered as another kind of in-kind contribution IF these investments are essential to the solutions e.g. building a road, drainage system, allocating land for green/open spaces/parks. Long-term investments of this kind can go beyond the COCHAP period as an in-kind contribution.

Donation and cash contributions:

Although **not required by COCHAP**, you can consider either receiving cash contributions or starting a donation campaign to contribute to matching grants. Private sector and/or NGO partners who are engaged in COCHAP activities could potentially be interested in contributing in cash.

How to evaluate and implement matching grants?

The following are the basic steps to follow in preparing for and implementing and monitoring the grant process:

1. Planning and preparation

- 1.1. Complete the solution phase including organization of co-design workshops and identification of key solutions by the coalition members.
- 1.2. Set up a review and award committee. Make sure to include one staff member of either of the American Red Cross or IFRC or Climate Centre to provide technical advice and recommendations.
- 1.3. Plan the process with timelines, the selection criteria, financial and procurement processes (see guidelines below).
- 1.4. Confirm budget allocations, with minimum and maximum amounts for individual grants.
- 1.5. Finalize the proposal template (Annex 1) and application process and announce it. Organize information meetings for city coalition members to clarify the process.

2. Reviewing and awarding grants

The evaluation criteria below will be applied to all grants in each country. National Societies can only add to the list if needed.

The proposals will be submitted by the coalition members. Each proposal can potentially be submitted by sets of different members and:

- Aligns well with the aims/objectives and budget allocations of COCHAP.
- Identifies actionable solutions to address challenges that are prioritized by the city coalition members and the communities targeted. Has potential to deliver impact and strengthen local resilience capabilities of the target communities and the location e.g. neighborhoods/wards.
- Presents a coherent structure of contributions by members of the city coalition: leadership, management, types of collaboration and clearly defined roles for each main activity e.g. implementing, supervising, coordinating etc.
- Provides a delivery model suitable to the context, effective and with a reasonable budget and clear timeline.
- Promotes continued engagement with stakeholders to nurture collective action and mutually beneficial relationships.

3. Procurement and Financial Procedures:

3.1. Items that **cannot be funded** under the COCHAP grants budget: In line with the COCHAP Project Agreements with the National Societies, following items cannot be funded through the funds for COCHAP:

- Large scale construction
- Vehicles
- Equipment including laptop, phone, tablet and camera (small equipment could be eligible if it is an essential part of the solution)
- Any maintenance cost e.g. of equipment or facilities.
- Salaries.

However, these types of expenses can be funded by the local governments, municipalities, national/local service providers, other NGOs or private sector, as per the approved project proposal.

3.2. Procurement process:

Each National Society will apply their own procurement process making necessary adjustments to accommodate the “Matching” feature of the grants. In cases where there are no existing provisions or regulations to apply, the National Societies will seek advice from the IFRC and American Red Cross.

3.3. Financial Procedures:

Each National Society will apply the financial procedures and requirements as stipulated in the COCHAP Project Agreements.

4. Implementation and Reporting:

The National Societies will ultimately be responsible for setting the processes, coordinating among the coalition members, with IFRC, American Red Cross and the Climate Centre, implementing, and supervising the grants, and reporting on the results according to the COCHAP Project Agreements.

Specific to the matching grants, it is expected to produce an inception report and a final report for each grant. Additionally, the National Societies will

develop **case studies** for a selected 2-3 matching grants.

Develop a learning plan describing how the learnings will be documented and used.

Matching Grants Proposal Template

Please complete below information following the template and submit your proposal by [...] to [department, email]

Descriptive short title:

Project lead: (Organization, name, role contact number, email)

Project Partners:

Describe the coalition members who are part of this proposal. Add support letters to demonstrate commitment. Presenting a support letter from the local government will be an asset.

Case for support

- ◆ What is the project going to do? Why is this the best way of doing it, and why is it significant? Describe how the city-wide risk assessment has informed the proposal.
- ◆ Describe how the project addresses the systemic nature of urban risk.

Project description:

- ◆ Aims and objectives
- ◆ Targets
- ◆ Description of project activities, and timeline
- ◆ Contributions from Coalition members
- ◆ Roles and responsibilities (among the coalition members -RACI)

Impact:

- ◆ Explain the intended consequences of the project (social, technical, economic).
- ◆ Geographical coverage: Who are the urban communities being addressed in the short and long term? How can you increase the chances of reaching a city-level impact rather than community level?

Budget:

The budget will clearly show the matching contributions and their value in monetary terms as much as possible. Please indicate the value to the communities where the monetary value is not possible to set. e.g. introducing new laws or building standards for adaptation to climate change.

Risk management:

Describe briefly potential disruptions and risks in implementing the proposal and explain how you will address them.

M&E and Learning and plan

How is learning going to be incorporated throughout the process? How will the project be evaluated?

Annex 2: List of Participants in Codesign workshops in Tanzania

Tanga participant distribution by gender³

Sn	Designation/Title	Male	Female	Total
1	Climate Center (Facilitator)	1	0	1
2	TRCS Staff	3	1	4
3	TRCS Regional Coordinator	1	0	1
4	PMO-DMD	1	0	1
5	Ministry of Health (MoH)	1	0	1
6	Regional	2	2	4
7	TMA	1	0	1
8	Pangani Water Basin	0	1	1
9	University	0	1	1
10	NGOs (Tangayetu, WCS, World Vision, TEA)	3	1	4
11	Districts	6	3	9
12	Community Leaders (WEO)	8	2	10
	Total	27	11	38

Unguja participant distribution by gender⁴

Sn	Designation/Title	Male	Female	Total
1	Climate Center (Facilitator)	1	0	1
2	TRCS Staff	4	3	7
3	TRCS Regional Coordinator	1	0	1
4	DAS	1	0	1
5	Disaster Management	2	1	3
6	Municipal	0	2	2
7	TMA	1	0	1
8	ZAWA	0	1	1
9	University (SUZA)	0	1	1
10	NGOs (Mwanamke Initiative, ZACCA, YUNA, MILELE FOUNDATION)	3	1	4
11	Districts(1 Community development, 1 livestock, 1Fisher, 1Forest, 2 DOE, 1Business association)	2	4	6
12	Ward Leaders	4	1	5
	Total	20	13	33

³ Tanga Ward Executives represented: Chongoleani, Tongoni, Tangasisi, Nguvumali, Ngamiani Kati, Central, Mzizima, Duga, Pongwe and Mnyajani.

⁴ Unguja wards represented Kwahani, Shangani, Mchangani, Mwembeladu, Sebleni, Kikwajuni juu, Kwa binti amrani, Nyerere, Miembeni and Chumbuni

Annex 3: Highlights from participant contributions in workshops in Tanzania

TANGA	
Ministry of Health	<ul style="list-style-type: none"> Ministry of Health reviewed the Climate change strategies of 2023 Actively advocating for climate change strategies Ongoing research on heatwave impacts in relation to early warning for diseases
Tanzania Meteorology Authority (TMA)	<ul style="list-style-type: none"> Historical trends of weather temperatures for the last six years The thresholds temperature period of month is differing from one year Temperature analysis shows that February and March experience higher temperature compared to other months.
TANGA YETU	<ul style="list-style-type: none"> Data Observatory (1 Risk area mapped and then shared feedback with communities). Developing and updating Community risk maps to help during city planning and management Road Safety City Project, 11 Schools benefited: Motobike rider training for over 900 riders and taxi drivers regarding road safety Youth Economic Empowerment support Youth Economic Empowerment through Agri-business The data has been used with different stakeholders like (UN Habitat & UNICEF) and city sectors like environment, planners and health for co-create and develop project for climate change initiatives. Lesson learnt: Data should be shared back to the communities for validating and any feedback.
World vision	Climate change initiatives <ul style="list-style-type: none"> Farmer Managed Natural Regeneration (FMNR) – ARDHI project Regreening Communities Project mode – THRIVE project Citizen Voice and Action – SAUTI Youth Project where Children are trained to be ambassadors for Climate change (Clean energy for cooling) Smart Agriculture – THRIVE project, Youth groups using digital mode to monitor trees, provide skills education to communities' members on how to resolve different challenges attained through tree planting initiatives. Key lesson: Communities are not fully aware the extent they are affected by rising temperatures
Wild Conservation Society (WCS)	<ul style="list-style-type: none"> Research; survey to understand general community awareness of climate change impacts on the economic sectors in order to help them with skills and equipment's (Swimming equipments, training swimmers and divers, Community Engagement and Accountability including decision making, and development of plan of action) Mangroves impacts assessment Mangrove conservation initiatives; promote alternative energy sources such as gas and electricity stoves, training community to make energy saving stoves Control illegal fishing and train fishermen society to adopt and use alternative sources of incomes.
Tanzania Environment Agriculture (TEA)	<ul style="list-style-type: none"> ECO tourism (enhancing youth skills such as crafts from seashells as a way to generate incomes and appreciate the value of ocean conservation) Promote recycling for income generation while reducing impact on environment General economic empowerments for youths
UNGUJA	
Youth of United Nations Association Zanzibar (YUNA)	<ul style="list-style-type: none"> conducting environmental awareness sessions Climate change awareness. Establishing school clubs and organizing tree planting initiatives Other chapters of YUNA include; UN CHAPTER which engages University students in environmental and community service activities. They organize mangrove planting

	events and other eco-friendly activities. YUNA also runs the UN COMMUNITY that has championed mangrove planting in Unguja and Pemba island. Furthermore, protect coastal ecosystems through regular beach clean-up programs
Mwanamke Initiatives	<ul style="list-style-type: none"> • empowers women and communities through environment sustainability by planting trees, promoting reforestation and waste management. This initiative supports eco-friendly businesses such as craft making from recycled materials.
Milele foundation-	<ul style="list-style-type: none"> • is building sustainable communities through environmental protection and mangrove restoration along the coastlines to protect marine life and prevent erosion.

Annex 4: Participant list of the Codesign workshop in San Lorenzo, Honduras

- Honduran Red Cross
- CODDEFAGOLFF (Committee for the Defense and Development of the Flora and Fauna of the Gulf of Fonseca)
- Members of the City Coalition
- Municipality of San Lorenzo
- Ministry of Health
- Ministry of Education
- NASMAR (Association of Municipalities of the South)
- Fire Brigade
- SERNA (Ministry of Natural Resources)
- Institute for Women
- Youth for Climate Action Network
- San Lorenzo Youth Network
- Community representatives
- COPECO (Standing Committee on Contingencies)
- Academia experts in: Biology / Architecture / Circular Economy / Climate Change