



2019 - 2024

# ENHANCING FLOOD RESILIENCE: INSIGHTS FROM THE PHILIPPINES

## FINAL REPORT ON THE FLOOD RESILIENCE PROGRAM





The Zurich Flood Resilience Alliance is a multi-sectoral partnership which brings together community programmes, new research, shared knowledge and evidence-based influencing to build community flood resilience in developed and developing countries. We help people measure their resilience to floods and identify appropriate solutions before disaster strikes. Our vision is that floods should have no negative impact on people’s ability to thrive. To achieve this, we are working to increase funding for flood resilience; strengthen global, national and subnational policies; and improve flood resilience practice.

Find out more: [www.floodresilience.net](http://www.floodresilience.net)



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## ACKNOWLEDGEMENTS

*We extend our heartfelt gratitude to all those who have been part of this journey.*

*To our dedicated team members, both past and present, your hard work, passion, and innovative spirit have been the backbone of our initiatives. Your tireless efforts, often under challenging conditions, have transformed lives and strengthened communities.*

*We are profoundly grateful to our community partners and local leaders. Your collaboration, trust, and local knowledge have been invaluable. We also extend our appreciation to the partner organisations that have worked alongside us. Your cooperation and shared vision have been crucial in advancing our goals and amplifying our reach.*

*To the residents of the communities we serve, thank you for your resilience, courage, and active participation. Your stories of hope and perseverance inspire us daily and drive us to continue our work with renewed vigor.*

*As we reflect on the past five years, we are filled with pride for what we have achieved together and optimism for the future. Let us continue to work hand in hand, building on our successes and forging new paths toward a resilient and sustainable Philippines.*



# EXECUTIVE SUMMARY

Globally, flood risk is a major concern, with floods often leading to substantial economic and social ramifications that are projected to increase in the future. It is estimated that approximately 74% of the population of the Philippines is exposed to more than one hazard, and the country is often ranked among the countries with highest disaster risk worldwide<sup>1</sup>, experiencing extreme events including floods, droughts, typhoons, landslides and mudslides, earthquakes and volcanic eruptions. Since 2019, the Philippine Red Cross, as part of the Zurich Flood Resilience Alliance (Alliance), has worked to increase flood resilience in communities in Pangasinan and Metro Manila.

Through the Alliance, the Philippine Red Cross has implemented a diverse range of evidence-based resilience building interventions through engagement with local populations and stakeholders at national and subnational levels.

## PILLARS OF CHANGE

In this report, we explore **3 fundamental pillars of change** that have led to significant impact at both the local and national level as a result of work carried out between 2019 and 2024:



**Communities are more informed, organised and have the skills to face floods.**



**Communities leverage the physical and natural capitals to mitigate and adapt to flood risk.**



**Local authorities engage local communities in resilience-building.**

The combination of these interconnected and interdependent approaches, as well as the unique partnership with the private sector, is the key to the program's impact.

## LESSONS LEARNED AND RECOMMENDATIONS

As the climate crisis leads to more frequent and intense extreme events, as well as increased vulnerability of communities across the world, it is paramount that we scale up and deepen resilience work.

This report highlights how the achievements and challenges faced have resulted in important lessons learned and recommendations for future resilience initiatives:

- Design interventions that are community-led and sustainable.
- Engage with diverse stakeholders for scaling up and advocacy.
- Prioritise adaptive management.
- Leverage organisational strengths for replication and sustainability.



The **Zurich Flood Resilience Alliance** (the Alliance) is a multi-sectoral partnership bringing together actors in the humanitarian, development, research, and private spheres to strengthen climate resilience. Driven by the vision of a future where floods have no negative impact on people's and businesses' ability to thrive, the Alliance combines community programs, new research, shared knowledge, and evidence-based influencing to build community flood resilience.

As the Alliance celebrates over ten years of operation, the collective impact of increasing flood resilience through community actions, scaling up and influencing work across **10 partners** and more than **25 countries** has reached over

**3 MILLION PEOPLE**


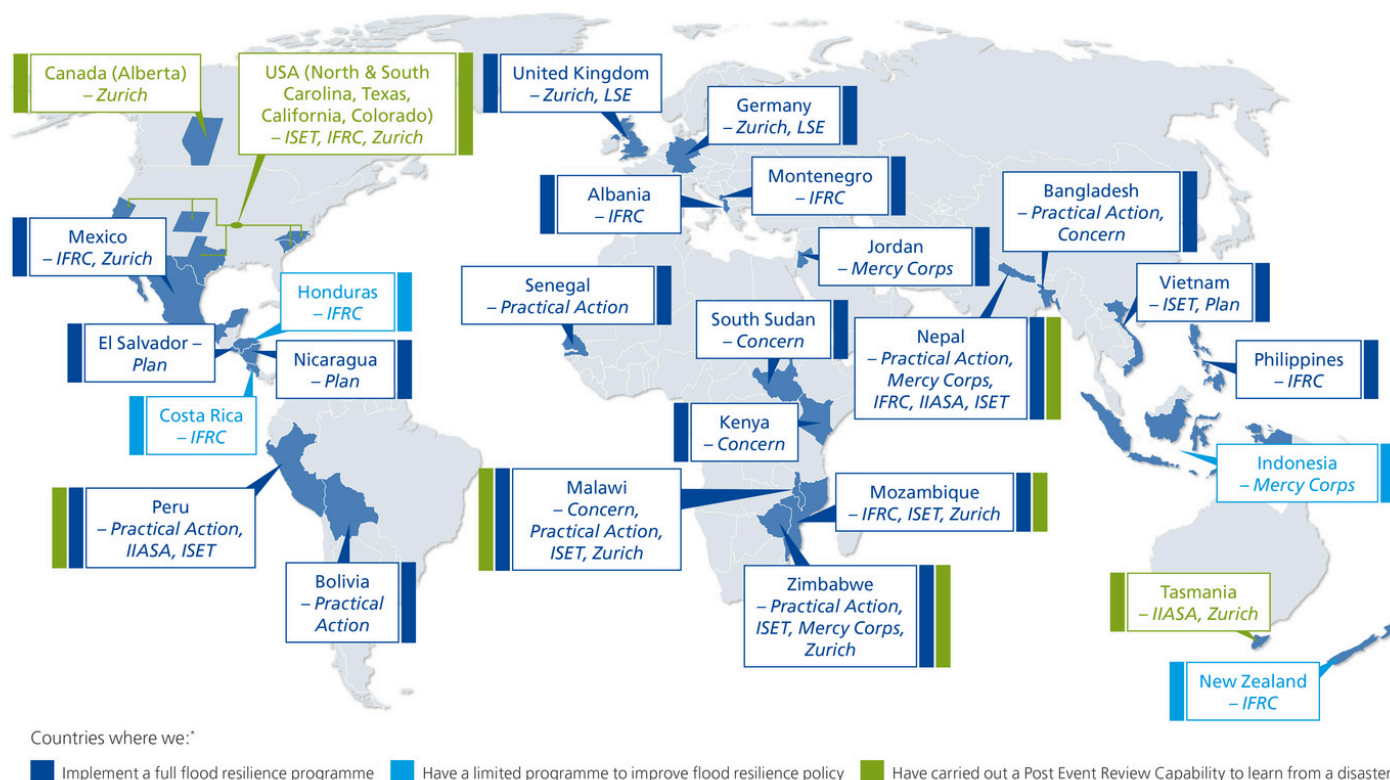


Figure 1: Alliance activities and programs across the world



\*Accurate in January 2021

In partnership with:

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Figure 2: Scales of impact

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## LOCAL

Deep and lifelong changes in mindsets and practices related to flood resilience.



## SUBNATIONAL

Replication and scaling up of best practice to broader populations and key sectors.



## NATIONAL

Integration of community priorities in national plans, policies and budgets.



## GLOBAL

Contribution of Alliance knowledge and experience to global initiatives.

*Multi-sectoral partnerships bring together different points of view - governments, non-profit organisations, academia, private companies such as Zurich and most importantly, community perspectives - to work towards a common goal. This collaboration allows for the sharing of resources, experiences, and ideas, leading to more effective and coordinated efforts.*

Francisco Ianni, Senior Officer – Floods Resilience, IFRC

# INSTITUTIONAL CONTEXT

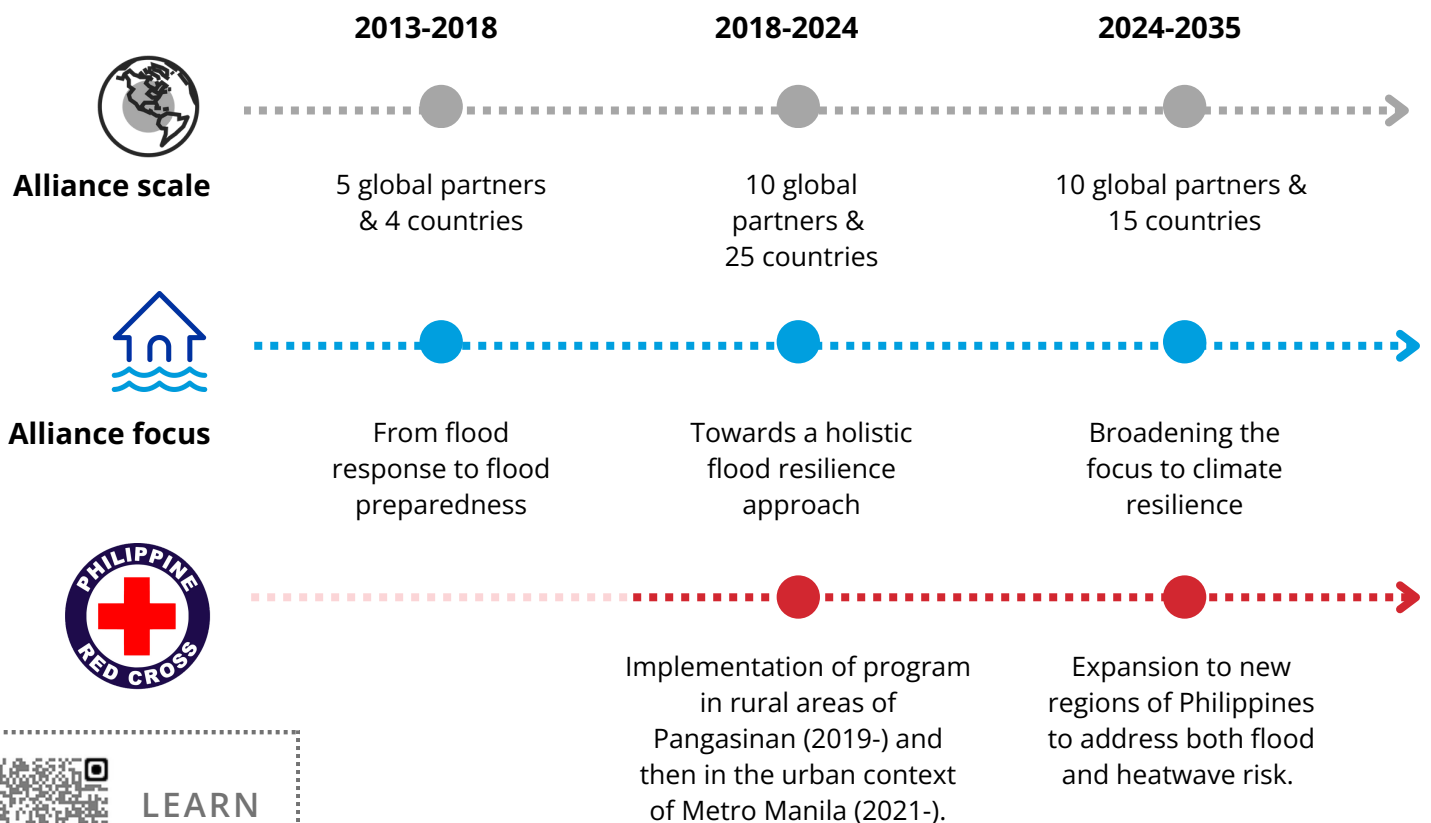
As a founding partner of the Alliance, the **International Federation of Red Cross and Red Crescent Societies** (IFRC) has supported the strategic direction and empowerment of country programs and local communities to take the lead in understanding, preparing for and adapting to flood risks across the regions of Africa, Americas, Asia-Pacific and Europe.

**Philippine Red Cross** (PRC) is recognised by Philippine law (Republic Act 10072) as a voluntary, independent, and autonomous non-governmental organisational auxiliary to the public authorities in humanitarian field. Driven by a mandate to alleviate human suffering and uplift dignity of the most vulnerable populations, the PRC is currently active across a network of 102

local chapters both in times of emergency and disaster as well as during peace time. The Flood Resilience Program is integrated in PRC’s larger framework for community and school-based disaster risk reduction and management, which pursues a community and systems-based approach and includes cross-cutting issues such as climate change adaptation, community engagement, and urban resilience.

**Plan International**, a global partner within the Alliance, also has community resilience operations in the Philippines, particularly in coastal communities in Metro Manila. PRC and Plan International focused on finding opportunities to coordinate strategy in influencing increased investment and improved policies for flood resilience at all levels of governance.

Figure 3: Evolution of the Alliance and the Philippine Red Cross



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# COUNTRY CONTEXT

The Philippines ranks among the top five nations most susceptible to natural hazards, including earthquakes, flash floods, mudslides, typhoons, and volcanic eruptions. In 2013 alone, the country faced five significant flooding events, eight tropical cyclones, and an earthquake.

As part of the Alliance, the Philippine Red Cross has implemented local community resilience activities in barangays in Pangasinan and in the Metro Manila area. In the rural context, a barangay refers to a village, while in the urban context it refers to a suburb or neighbourhood.

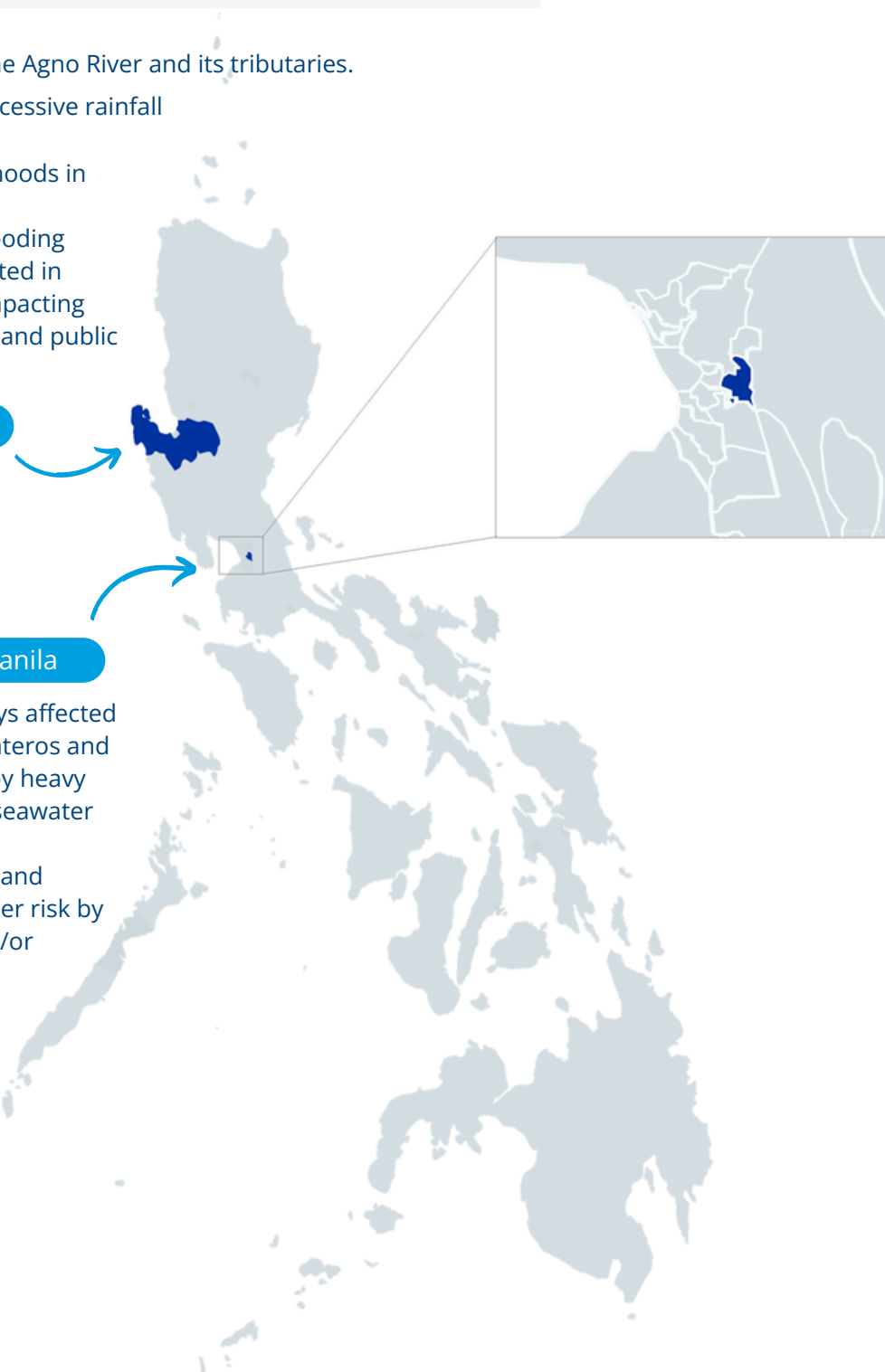
Figure 4: Target communities

- Barangays located along the Agno River and its tributaries.
- Riverine flooding due to excessive rainfall and strong typhoons.
- Significant impact on livelihoods in the agricultural sector.
- In 2018, multiple severe flooding events in Pangasinan resulted in US\$6.2 million in losses, impacting infrastructure, agriculture, and public works.

Mangatarem, Pangasinan

Pasig and Pateros, Metro Manila

- Low-lying areas barangays affected by the overflow of the Pateros and Marikina Rivers caused by heavy rainfall and backflow of seawater from Manila Bay.
- Urban density, diversity, and dynamics generate greater risk by amplifying exposure and/or increasing vulnerability.
- Waste and water management systems in urban contexts are more complex and can lead to greater impact from vector-borne diseases following floods.



# OUR IMPACT

In the past five years, the Flood Resilience Program in the Philippines has generated significant impact on flood resilience, by **scaling out** to spread resilience practices and models to more communities in both rural and urban contexts, **scaling up** to influence budgets and plans at the sub-national and national scales, and **scaling deep** to shift institutional approaches, culture, and beliefs.

*I have seen improvement not only in the Branch, not only in the Chapter but also in the community and of course in myself as well.*

Ann Jastine Villanueva, Rizal Chapter, Pasig-Pateros Branch



**+34,000 lives improved**

*New mindsets and behaviours, infrastructure and policy that have a sustained positive impact on people's lives.*

**+260,000 indirect reach**

*Population that benefit from community interventions, scaling up and influencing initiatives.*



Resilience work carried out in communities in urban and rural contexts, as well as with municipal, city, provincial, and national actors.



Hundreds of resilience actions have been implemented, including public awareness campaigns, community workshops, local volunteer training and engagement programs, and stakeholder meetings to ensure the program remained locally driven.



*There has been a big change in our family and in the community because we learned how to help those who should be helped during a disaster. My message to other communities is just to trust in yourself and in the knowledge or learning that the Red Cross has provided ... if there is an opportunity like this, to strengthen your community, just grab it.*

Nora Camacho, Red Cross 143 volunteer, Barangay Dorongan Valerio

## OBJECTIVES:

1. Improve understanding of the flood risk faced by communities.
2. Strengthen the capacity of communities to implement disaster risk management actions.
3. Influence local and national stakeholders for the integration of flood resilience into plans and policies, with a focus on the most vulnerable communities.



## JACQUELYN'S STORY

Jacquelyn has lived in Dorongan Sawat, Mangatarem, Pangasinan, for 40 years. She is married with two children, and she runs a small general store and vegetable garden. She is active in her community, participating with the Philippine Red Cross and other organisations; *"I am the team leader of Red Cross in Dorongan Sawat ... I think I was born to be a leader, to stand up as the leader of the Red Cross in my community"*. As Jacqueline says, the impact is multi-faceted: *"this program was one of the best things that has ever happened to me. I'm not just resilient as a mother, I also became resilient as a team leader, and I have become more resilient as a citizen of my community."*

Through her participation in the formation of a community group dedicated to flood resilience and numerous trainings and workshops, Jacquelyn recognised an important shift from a primarily individual or household outlook, to a broader community perspective, *"previously, we didn't think about our community, rather we tended to focus on*

*ourselves and on our family. So, when we joined the Red Cross, we became aware of everyone. One shouldn't just think about family but should also think about your community, your neighbours and community members."* This shift represents an important step towards leveraging solidarity, social cohesion, and local organisation for building collective resilience in the face of floods and other hazards.

Understanding the characteristics of flood resilience and having up-to-date, localised information about strengths and needs at the community level was a core element of this program. Jacquelyn also noted how this awareness can help to define priorities and to motivate the community to take action: *"we can see our resilience gaps, especially related to the floods that we experience here. Given we're prone to floods here, it's very important to us because the resilience measurement tells us that we're not ready enough, we're not skilled enough. We need to be prepared, to be resilient."*

# FROM MEASURING TO BUILDING RESILIENCE

The **Flood Resilience Measurement for Communities (FRMC)** is a framework and tool developed by the Alliance. As a decision support approach for both community programming and policy change, the FRMC supports a deeper and systems-level understanding of resilience gaps and strengths designed around the five capitals: natural, financial, human, social and physical.



FRMC studies were carried out in 6 rural and 28 urban communities.

*Some of the initial findings were surprising to us, so there are things that we really need to improve on. For us at the city level, we are really open to those multi dimensional frameworks and approaches... because they provide another point of view.*

Aaron Jacob Omaña, Pasig City Disaster Risk Reduction and Management Office

**Baseline FRMC studies** strengthen understanding of the risk context at local and subnational levels, support connections with stakeholders, identify priorities and potential entry points, and define locally led interventions.

#### Key community strengths:

- Flood risk awareness
- Community safety
- Disaster Response Budget

#### Key resilience gaps:

- Flood healthcare access
- First Aid knowledge
- Early Warning Systems
- Community Representative Bodies

**Endline FRMC studies** are key to learning how resilience changes in response to diverse interventions and to providing up-to-date information to stakeholders to support ongoing resilience-building.

- Community resilience was strengthened in the areas of preparedness, corrective and prospective risk reduction.
- In Pangasinan, FRMC endlines demonstrated significant improvements in Flood Healthcare Access, Asset Protection Knowledge, and Community Participation in Flood-Related Activities.

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*The question is not if communities are resilient or not, the question is what are the factors that are keeping them resilient and what are the factors that will strengthen their resilience. So, looking at things in a targeted manner with a micro level lens rather than one aggregate or general idea, is the best asset of the FRMC in my opinion.*

Steven Laranjo, DRR Technical Officer, Philippine Red Cross

The expansion of the program to Metro Manila prompted a **process of adaptation** of the FRMC tool to the constraints and opportunities in the highly urban context. In addition to the logistics of collecting data in a city, the design of the measurement process had to consider the diversity, density and dynamics of the urban context.

While the Philippine Red Cross identified seven target barangays across the city of Pasig and the Municipality of Pateros, the land area and population warranted a new approach. For the sake of setting community boundaries for

applying the measurement tool, the program considered geographic bounds but also other characteristics such as livelihoods, demographic data, and type of residence (formal vs. informal).

Another interesting change was at the stage of analysing and sharing results and **working together with stakeholders to design resilience interventions**. Given the presence of many high-level stakeholders in Metro Manila and the closer proximity and interaction between communities and decision-makers, intervention brainstorming had to think bigger and consider opportunities beyond the community.





# PILLAR 1



## IMPACT

Rural and urban communities are more informed about flood risk, have the skills to face floods at the local level and are more organised to take action before, during and after floods.

Informed by our FRMC approach and broader locally-informed risk diagnostics, the Flood Resilience Program in the Philippines prioritised strengthening the human and social capitals. The implementation of trainings and workshops on **disaster risk management, community-based health** and **first aid and basic swimming**, among others, have resulted in barangay populations able to prepare for and respond to floods, acting as the first line of action at the local level. Community members, local leaders and decision-makers have a clear understanding of key concepts and roles and have developed specific life-saving skills that they can apply when required. In Metro Manila, an **Olympics-inspired activity** showcased and strengthened the First Aid skills and knowledge gained by volunteers and **flood drill exercises** were held with households, local leaders and city authorities to put it all into practice.

The impact of the Covid-19 pandemic on the program's target communities led to a greater

focus on promoting good hygiene practices to ensure families can protect their health through everyday measures. The **delivery of hygiene kits**, alongside **hygiene awareness sessions**, equipped local populations with essential skills and knowledge to strengthen community health. While aimed primarily at supporting the population through the Covid-19 pandemic, this learning is highly relevant to flood resilience given that many of the health conditions brought about by floods can be significantly mitigated through hygiene practices at the household and community levels. Furthermore, the program applied the **Psychological Support Program**, including a session on Child Protection Policy, to address the mental health impacts of the Covid-19, particularly anxiety and stress. Similarly, these measures are relevant and transferable to other disasters, such as floods. Additionally, a **campaign on extreme heat risk** included the distribution of awareness-raising materials in print and online and a webinar, to take into account the multiple hazards faced by target communities.



*Baseline results indicated that access to health services is limited by transportation interruptions and communities being isolated by floodwater.*



## ACTIVITY SPOTLIGHTS

### ► Red Cross 143

Volunteers play a major role in strengthening community resilience and supporting the implementation of the program. **Red Cross 143 (RC143)** is a flagship program of the Philippine Red Cross in which community volunteers are recruited, trained, and mobilized to support local actions. The program has leveraged and expanded this volunteer network, ensuring local groups participate actively in and champion resilience-building efforts. Through this intervention, rural and urban target communities have heightened their resilience by increasing community organisation, enhancing knowledge, and developing skills essential for managing risks and reducing vulnerability to disaster risks and deepening social cohesion through a prioritisation of empathy and solidarity.

Furthermore, this approach serves as a sustainability mechanism whereby community members take leadership of resilience-building activities and are integrated into the Philippine Red Cross network for ongoing engagement and partnership, even outside of the scope and beyond the life of the program.



*It's also super nice that there are really many volunteers in different barangays because when there's an emergency the volunteers are the eyes, ears and hands of the Philippine Red Cross in the field.*

Claire Henson, Rizal Chapter, Pasig-Pateros Branch



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### ► Mobile health clinics

**Community-based health and first aid trainings** were prioritised by the program as a foundation of the services provided by the Philippine Red Cross aimed at increasing capabilities and fostering a sense of collective responsibility and preparedness within the community. Participants from various sectors of the community, including farmers, educators, homemakers, and the youth, engaged in these sessions, highlighting the inclusive approach of the program.


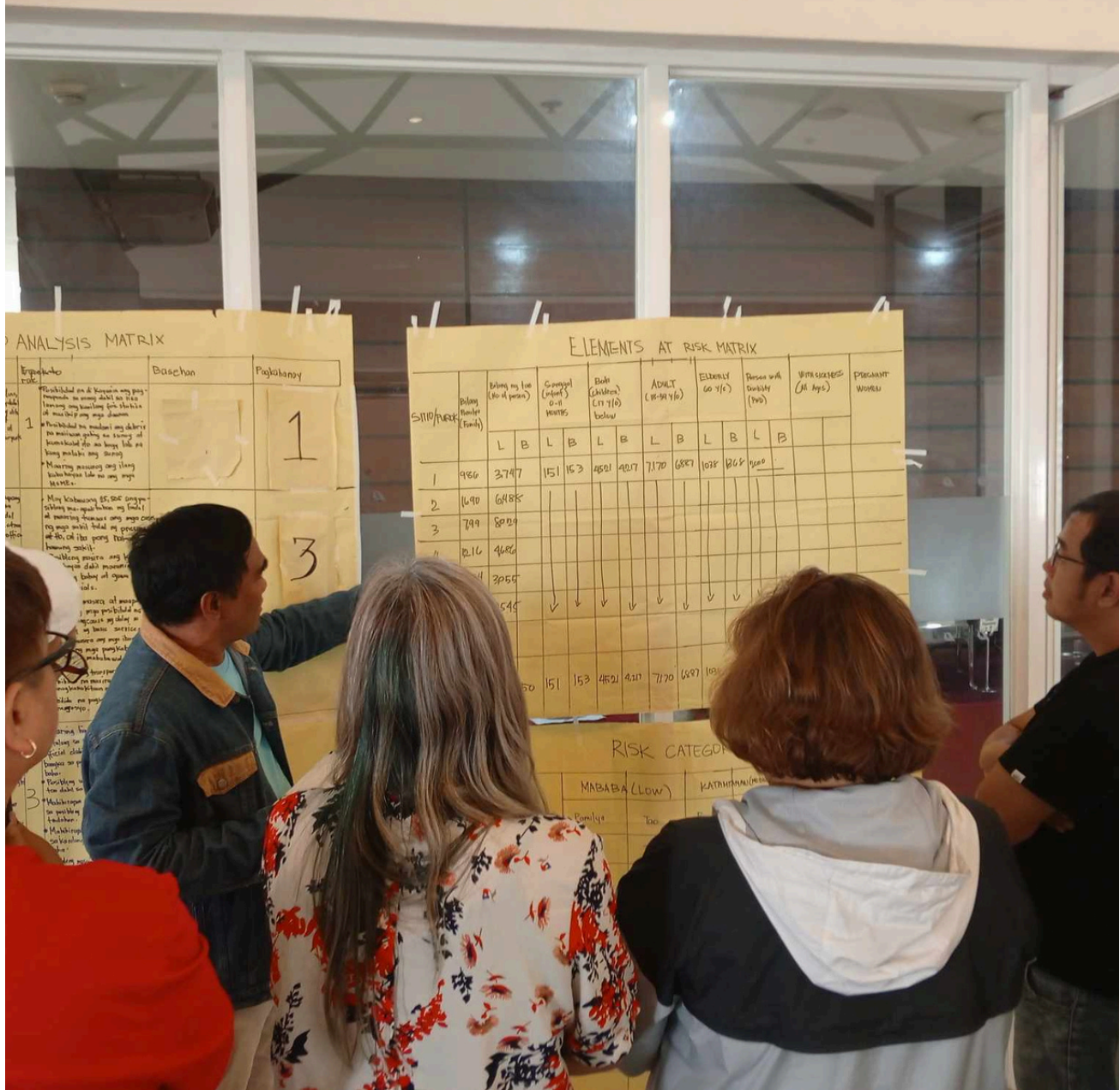
Furthermore, the program delivered **vital health care equipment and medicine** to local health workers to enhance the health care available to the community as well as to promote the replication of first aid training throughout the broader population. An innovative approach of distributing **go-bikes with sidecars** to the rural communities of Mangatarem, Pangasinan, has been key to activating mobile healthcare clinics that ensure the needs of the most vulnerable, primarily those more distant households, are met. This intervention demonstrates the value of participatory intervention design based on local knowledge and needs.



**1000**

community volunteers that have joined Red Cross 143 program.

# PILLAR 2

## IMPACT

Communities have collaborated with key stakeholders to leverage the physical and natural capitals for mitigation and adaptation measures that protect lives and livelihoods.

Flood resilience at a barangay level was fostered through a series of interventions targeting physical infrastructure and environmental management, particularly through the strengthening of community Early Warning Systems and a tree growing campaign. The Philippine Red Cross acted as a **bridge between the local population and key stakeholders**, such as the Disaster Risk Reduction and Management Office (DRRMO), the Environmental

and Natural Resources Office (ENRO) and PAGASA (the Philippine Atmospheric, Geophysical and Astronomical Services Administration), to support structural changes based on the priorities as identified by the FRMC resilience measurement process. In this way, these resilience actions have integrated sustainability through the connections established between the communities and key authorities.





## ACTIVITY SPOTLIGHTS

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### ▶ Environmental management and tree growing initiative

Community members were engaged in **training sessions** that emphasised the importance of sustainable environmental practices and the role of vegetation in stabilizing soil and absorbing rainwater. The **tree growing initiative**, which focused on strategic locations within the community, served to rehabilitate degraded areas, increase green cover, and restore ecosystems that are vital for disaster risk mitigation. Furthermore, the communities planted various species, including bamboo and fruit trees, with the potential for disaster risk mitigation as well as livelihood co benefits.

These activities help shift focus from a reactive approach to a proactive one, where measures are being taken before disasters occur to mitigate the damage incurred to people and property. Working with the natural capital is a relatively innovative approach for the Red Cross, and this intervention successfully raised awareness about the importance of preserving natural ecosystems, which are crucial for disaster risk reduction, through activities focused on strengthening the human, social and natural capitals.



*One of the things that helped us was the tree growing initiative so that the water doesn't rise too much, as well as learning to arrange the garbage and throw it in the right place.*

Christina, Barangay Officer, Barangay Pampano

### ▶ Community-Based Early Warning Systems

The strengthening of Community-Based Early Warning Systems (CBEWS) represented a significant leap towards ensuring the local population can take early action to reduce the impacts of floods.

**Workshops** were conducted to train community members on the four components of an Early Warning System, including how to interpret warning signals and the appropriate response actions. During these sessions, local community members worked together to formulate their own **Early Warning System action plans**, including the identification of necessary equipment, and the preparation of budgets and monitoring and evaluation processes. Finally, the Philippine Red Cross distributed equipment to the community including communication mechanisms (loudspeakers, two-way radios), emergency lights, and whistles, to strengthen flood preparedness.

This initiative not only equipped the community with the necessary tools to anticipate and respond to disasters but also fostered a culture of preparedness and vigilance.

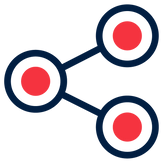


*It's a change of culture that started simply by informing each other through group chats, they inform each other and even the other communities ... the main purpose is to really update each other on an upcoming disaster and informing each other, within the community and beyond the community, what to do.*

Steven Laranjo, DRR Technical Officer,  
Philippine Red Cross



# PILLAR 3



## IMPACT

Local voices are integrated into disaster risk reduction planning and key authorities are engaged with community-led resilience-building at the local level.

In addition to directly addressing resilience gaps at the local level, the program sought to elevate local voices, connect communities to key stakeholders and promote engagement, collaboration, and investment in flood resilience. Diverse actions have been taken with this advocacy approach, supported by the **distribution of knowledge products**, including video and magazine materials, that emphasised local needs and priorities.

Most significant progress was made in bridging community members and local authorities towards more inclusive and evidence-based disaster risk reduction efforts through the establishment of Local Stakeholders forums and platforms.

Historically, the Red Cross has worked to support and align with Disaster Risk Reduction and

**Management Plans** (DRRMP) developed at the local, municipal or city level. These plans are important mechanisms to organise priorities and to access funding for flood resilience. However, as flood resilience merges into a broader climate resilience approach, it is also important to consider other mechanisms such as **Climate Change Adaptation Plans** (CCAP). The program continues to discuss a collaboration model with the Climate Change Commission (CCC) to leverage opportunities to integrate local voices into adaptation plans, to increase understanding of adaptation measures to ensure that funding can be accessed and to support the alignment with DRRMPs. Furthermore, a **workshop on contingency planning** in Metro Manila brought together local neighbourhood representatives and relevant city authorities.



13

Barangay Flood Resilience Committees formed with a total of 130 members.



## ACTIVITY SPOTLIGHTS

### ▶ Empowering local advocacy

The Philippine Red Cross formed **Barangay Flood Resilience Committees (BFRC)** made up of representatives of the local population to increase the organising capacity of the community around the topic of flood preparedness and response. The BFRC participated in the implementation of the Flood Resilience Measurement for Communities (FRMC) tool and were central to the **intervention planning workshops**, where resilience gaps were identified, and potential solutions were co-designed and prioritised. The BFRC then led the presentation of the FRMC results and interventions plans to barangay and Local Government Units, who, as a result, committed support to some of the suggested resilience actions, for example local infrastructure to rehabilitate the creek that runs through the community and enhance water flow in the case of floods.

The advocacy efforts aimed at local policies and budgets resulted in tangible investments in flood resilience. The BFRC continues to act as the community partner to the Philippine Red Cross as well as for the authorities in engaging the local population in resilience building initiatives. In Mangatarem, the Municipal Disaster Risk Reduction and Management Office (MDRRMO) has expressed interest in replicating this methodology throughout the remaining 76 barangays of the municipality.

### ▶ Strengthening capacities and connections with local authorities

The Philippine Red Cross established strong relationships with key stakeholders and undertook regular **stakeholder meetings** to bring together local community members, provincial and municipal government officials from departments related to DRRM, social welfare and development, health and environment and natural resources, to provide updates on the program progress and to leverage opportunities for collaboration. This regular engagement resulted in increased coordination between actors and increased local voices in DRRM planning.

Further, the Philippine Red Cross supported capacity-building and networking for city authorities in Metro Manila through a regional **Urban Resilience Workshop** hosted by the IFRC Asia Pacific Regional Office as well as sponsored participation of city DRRM officers in the Regional Training Workshop on Building Cities' Resilience to Climate and Disaster Risks, as part of the **MCR 2030 initiative**.

*It was a privilege to be part of the MCR 2030 workshop, it was our first time hearing the topics that were discussed. Our goal in the city of Pasig is to be a resilient city so that is intertwined with the goal of MCR 2030.*

Aaron Jacob Omaña, Pasig City Disaster Risk Reduction and Management Office

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**\$50,000**

A combined commitment of over \$50,000 USD from municipal and city budgets allocated or spent on locally led community flood resilience measures.

# INSTITUTIONAL LEARNING

*I've been reminding the rest of the Chapters to strike while the iron is hot and look really into all of the possibilities ... every time that there is an opportunity, such as this program, they really have to make out the most of it, and they have to work not only within the stated objective, but rather go beyond that.*

Florame Sanchez, Chapter Development, Philippine Red Cross

The Flood Resilience Program has led to several substantial institutional changes within the Philippine Red Cross that not only expand its capacity for disaster risk management but also contribute to shaping a more resilient future for the communities it serves.

Through the development of the Program, the Philippine Red Cross was **strengthened at the local chapter and national levels**. Workshops and trainings and the delivery of equipment and supplies ensured the Red Cross had the capacities and tools to scale up flood resilience actions. The integration of the Red Cross 143 initiative into the program design **increased the volunteer network** within the target areas. These local volunteers extend the reach and provide a foundation of support to the local chapters going forward with other activities and projects. Furthermore, the **engagement of local Red Cross chapters in the program's interactions with key stakeholders** established a relationship that can be leveraged beyond the life and scope of the program.

*The program helped the branch to gather volunteers ... last year we were able to recruit a thousand volunteers and that allowed us to implement a lot of activities from our different services ... and a lot of stakeholders see a greater opportunity in collaborating with PRC.*

Reynante Santos, Rizal Chapter, Pasig-Pateros Branch



As a long-term community program, it was necessary to develop an **adaptive management** approach that allowed for flexibility to meet program objectives despite external changes. The Covid-19 pandemic represented a challenging situation whereby access to the communities and direct contact with local populations was limited over an extended period of time. This required a redesign of the planned program activities and the **piloting of new ways working virtually and by distance**. This also highlighted the value and relevance of having RC143 volunteers in the communities as an extension of PRC. In 2021, the expansion of the program into Metro Manila required not only a scaling up of Red Cross resources but a process of **adaptation of methodologies and best practice** to be able to make a positive impact in a context with different characteristics and needs. This pushed the Philippine Red Cross to be more creative, flexible, and patient.

Introducing the Flood Resilience Measurement for Communities (FRMC) framework and tool built **technical capacity** within the Philippine Red Cross and provided a pathway to carry out resilience actions that were truly community-led and evidence-based. This also pushed the National Society to pursue resilience solutions outside of the traditional Red Cross activities, such as the environmental management awareness intervention. This not only enriched the PRC's operational toolkit but also deepened its understanding of effective resilience-building practices.

The unique scale of this program, going beyond the local to influence flood resilience at the municipal and national level, led the PRC to leverage **knowledge management** to support the bridging role between communities and stakeholders. In this way, local interventions are not only important for making a real impact in peoples' lives but are also essential for generating evidence and success stories, that can be shared and scaled up.

Through the experience of this program, the Philippine Red Cross strengthened its project management capacities. For example, **internal administrative and financial processes** also represented a significant challenge to overcome. The Alliance's **impact measurement** framework provided an opportunity for the Philippine Red Cross to quantify the changes that were generated as a result of the Flood Resilience Program. However, the introduction of this framework at the midpoint of the program and the changing and somewhat complex definitions of the impact categories generated confusion and frustration and requires continued learning and practice.



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# RECOMMENDATIONS

The successful development of the Flood Resilience Program in the Philippines over the last 5 years has marked a pivotal improvement in community resilience. However, as climate risks continue to grow it is important that our approaches remain dynamic and innovative; leveraging the lessons learned from previous experiences.



## Institutionalize co-designing methodologies and participatory approaches



Continuously engage the local population and reiterate the program's key objectives and activities.



Apply flood hazard mapping, resilience measurement and vulnerability assessments to support evidence-based intervention design.



Actively involve community members as resilience champions to facilitate local empowerment, ownership and accountability, as well as to support scaling up and advocacy.



Where possible, prioritise taking action on the community's preferred solutions, even where it requires undertaking innovative approaches and building new institutional experience.

*I can't overemphasise the importance of community engagement, it's the heart of the program because the involvement of the community is vital for the success of any DRRM project ... community engagement helps us to have a program that is cohesive, inclusive, and participative. No matter how well planned an initiative is, if the community is not involved it will surely fail and the sustainability will not be assured.*

Aaron Jacob Omaña, Pasig City Disaster Risk Reduction and Management Office



## Establish mechanisms for collaboration and engagement with internal and external partners for scaling up and advocacy.



Strengthen the PRC's auxiliary role to the government through capacity building of Chapter Administrators and Chapter technical staff on advocacy strategies.



Establish and institutionalize mechanisms for collaboration that allow for balanced decision-making.



Coordinate with other Alliance partners in country for shared messaging and efforts at the national level.



Develop and nurture relationships with stakeholders through proactive and consistent communication and collaboration, as well as leveraging existing partnerships.



Find alignment between the Red Cross mandate and existing stakeholder priorities.



## Prioritise adaptive management.



Integrate flexibility into program design as well as within PRC PMER training and guidance.



Look at the big picture to understand how resilience actions can have co-benefits for more than one hazard.



Adapt tools and methodologies for the characteristics of the context of the target communities.



For the urban context, plan resilience actions with an eye on the unique density, diversity and dynamics of cities.



## Leverage organisational strengths for replication and sustainability.



Leverage the nationwide reach of the Red Cross and support local branch personnel to advocate for the wider replication of program initiatives.



Prioritise institutional learning and innovation and integrate these new ways of working into the PRC structure and plans.



Expand the volunteer network to increase the capacity for action and to enhance the sustainability of the impact of the program.



# APPENDIX 1

## REFERENCE LIST

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## KEY RESOURCES



Review the following key resources to learn more about the experiences and lessons learned from the Flood Resilience Program in the Philippines.

### **About the Flood Resilience Program in the Philippines**

- Country Briefing Philippines ([English](#))
- Flood Resilience Program in the Philippines pamphlet ([English](#))
- Video clips about the Flood Resilience Program in Pangasinan ([English](#))
- Brochure on Flood Resilience Alliance activities in Pangasinan ([Tagalog](#))
- Brochure on Flood Resilience Alliance activities in Pasig and Pateros ([Tagalog](#))
- Postcards for floods resilience in the Philippines ([English](#))

### **Measuring resilience**

- Flood Resilience Measurement for Communities (FRMC)
- Expanding community resilience programs to urban contexts: key considerations for resilience measurement ([English](#))
- Video: How does measuring existing levels of resilience help flood-prone communities in the Philippines? ([English](#))
- Video: 2020 Community Presentation in the Philippines ([English and Tagalog](#))
- Case study: Community Presentation of FRMC Results ([English](#))
- Understanding the flood resilience of rural communities in Mangatarem, Pangasinan ([English](#))

### **Pillar of Change 1: *Communities are more informed, organised and have the skills to face floods.***

- Exploring co-benefits: Community-centred resilience building in times of Covid-19 ([English](#))
- Hand fan with key messages ([Tagalog](#))

### **Pillar of Change 2: *Communities leverage the physical and natural capitals to mitigate and adapt to flood risk.***

- Video: Environmental Management for Flood Resilience in the Philippines ([English and Tagalog](#))

### **Pillar of Change 3: *Local authorities engage local communities in resilience-building.***

- Blog: Putting communities in the driver seat: good practices from the Philippines ([English](#))

