

CASE STUDY

MOZAMBIQUE 2022-2024 / COMPLEX CRISIS

CONTEXT / SETTLEMENT		SHELTER TYPE	SUPPORT METHODS
CRISIS	Armed conflict and various Disasters (cyclones, floods and drought)		
PEOPLE AFFECTED	2,3 Million people affected*		
PEOPLE DISPLACED	1,341,937 people displaced*		
PEOPLE WITH SHELTER NEEDS	1,6 Million (individuals)*		
PROJECT LOCATION	Cabo Delgado		
PEOPLE SUPPORTED BY THE PROJECT	Total of 4,960 HH direct beneficiaries (24,800 Individuals 13,081 female, 11,719 male)		
PROJECT OUTPUTS	1,167 retrofitting of existing structures 1,562 shelter kits distributed 2,075 HH supported with early recovery and emergency shelter solutions. 650 HH trained in resilient construction techniques and Build Back Better Principles. 7 Community DRR committees established		
SHELTER SIZE	29 m² for early recovery shelter 15-40 m² for shelter retrofitting		
SHELTER DENSITY	5.8 m² per person (Including kitchen and veranda) 3.9 m² per person (Excluding kitchen and veranda)		
DIRECT COST	USD 280 per shelter (New construction) USD 50-150 per shelter (retrofitting / kit)		
PROJECT COST	USD 130 per household (including trainings, retrofitting and shelter construction activities)		



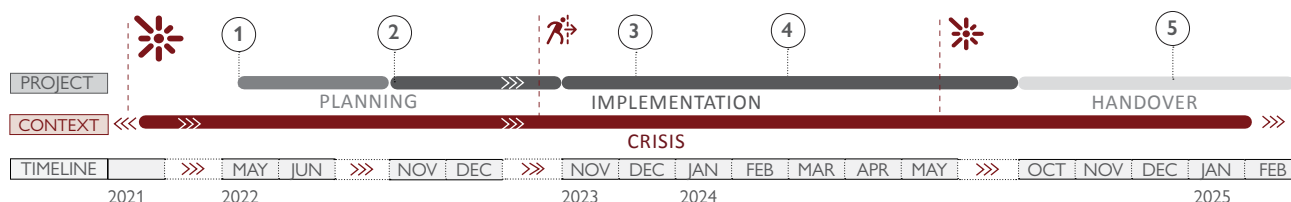
PROJECT SUMMARY

The project aimed to assist displaced and returned families affected by the armed conflict and various disasters in Cabo Delgado by providing early recovery shelter solutions and community engagement through capacity building.

The methodology used for implementing the project encompassed three key aspects: participatory design and DRR principles at the community level, capacity building on resilient construction techniques at household level, as well as collaborative shelter design implementation.

This approach ensured that the shelters met the families' needs and supported their mid and long-term resilience.

* HNRP 2024



2021: Major displacements following the attacks in Palma Sede.

1 May 2022: Needs assessment and identification of protection concerns following emergency shelter interventions.

2 Nov 2022: Design and implementation of new shelter models and start of the project.

April 2023: Increase of returnees.

3 Dec 2023: Implementation of early recovery shelter and shelter repair/upgrade for returnees in the Quissanga district.

4 March 2024: Prioritisation of BBB training due to the increase of transit population in Cabo Delgado.

May 2024: Resurgence of the conflict in 2024.

5 Dec 2024- Feb 2025: post monitoring and evaluation.

BACKGROUND

Mozambique, a southeastern African country with a population of around 33 million, gained independence in 1975 and endured a civil war until 1992. Since then, it has focused on rebuilding its economy, which relies heavily on agriculture, fishing, mining, and natural resources. Mozambique faces significant challenges such as poverty, political instability, and vulnerability to natural disasters like cyclones and droughts. Cyclones have impacted nearly 3.5 million people since 2019, with major storms including Kenneth, Idai, Gombe, and Freddy. Additionally, an ongoing armed conflict in the northern province of Cabo Delgado, which began in 2017, has exacerbated poverty and governance issues, contributing to the region's instability and further complicating efforts to address these challenges.

SITUATION BEFORE THE CRISIS

Cabo Delgado has long been marked by widespread poverty and precarious living conditions. Historically, it was one of Mozambique's most marginalized regions, while remaining culturally rich, with diverse ethnicities, languages, and traditions. Before the conflict, the security situation was generally stable, although some social tensions and petty crime persisted. Governance challenges and a sense of exclusion fuelled local frustration, even as traditional community structures helped maintain peace. Coastal and urban areas were comparatively more developed than today, and formal companies showed growing interest in natural resource extraction, raising expectations of future economic growth. However, the education system faced high dropout rates due to shortages of qualified staff and inadequate infrastructure, and literacy stood at 60% in 2017. Access to health services, especially in rural areas, was also limited, compounding these challenges.

SITUATION DURING THE CRISIS

Armed conflict that intensified from 2017 has produced cycles of displacement and returns. As of early 2024, over

half a million people remained displaced in Cabo Delgado, while hundreds of thousands had returned to areas marked by damage, destroyed homes, and disrupted services. Repeated movement, occasionally triggered by insecurity flare ups or heavy weather, undermined household assets, food security and social networks. In many sites and return areas, shelter gaps were acute: families needed safer, more durable options and guidance on resilient repair to reduce recurring losses.

NATIONAL SHELTER RESPONSE

The Shelter Cluster in 2024 prioritized a range of scalable modalities aligned to settlement types and population profiles. These included emergency household items and emergency shelters; shelter repair and upgrades; and early recovery shelter assistance. Recognizing the protracted nature of displacement, partners reinforced community engagement and technical trainings—often with CCCM collaboration—to reduce dependency and build self recovery capacity. An emergency common pipeline managed by the sub national shelter cluster in Pemba continued to enable rapid responses to sudden movements. In parallel, outreach to development actors sought to bridge humanitarian and recovery work on livelihoods and community led reconstruction.

PROJECT DESIGN

The project was designed to address immediate and medium to long term shelter needs for displaced and vulnerable households in Mozambique, with a strong focus on community participation. Given the complex displacement context, beneficiaries were engaged throughout design and implementation to ensure that assistance was effective and appropriate to local priorities and constraints.

Focus Group Discussions (FGDs) informed the project design by providing a structured space for community members to articulate needs, preferences and concerns regarding shelter options. This input helped tailor shelter designs and implementation arrangements to the requirements of displaced, returnee and host communities.



For households with existing but inadequate shelters, the project provided in kind construction materials and technical guidance to support repair and retrofitting.

Assistance was delivered through four complementary modalities:

1. Shelter construction: For households without a viable shelter alternative—primarily displaced and highly vulnerable returnee families—the project supported emergency or early recovery shelter construction.
2. Shelter repair and improvement: For households with existing but inadequate shelters, the project provided in kind construction materials based on technical assessments, alongside guidance to support safe repair and upgrading.
3. Capacity building: Build Back Better (BBB) training strengthened resilient construction and maintenance practices, increasing households' ability to withstand climatic hazards and potential future displacement linked to the conflict.
4. Community resilience: Disaster Risk Reduction (DRR) committees were established, equipped and trained in return and host communities to strengthen preparedness and local disaster management capacity.

PROJECT IMPLEMENTATION

Project implementation was led by two teams:

- a construction team (1 engineer and 4–6 trained masons);
- a community engagement team (2 shelter officers and 2 community engagement officers).

Work was delivered through four main phases:

Needs assessment: a rapid assessment was conducted by the technical team using key informant interviews (KIIs), supported by secondary data collection and analysis, to identify the community's priority needs. Focus group discussions (FGDs) were then held to gather additional detail and keep the community informed of the project's objectives and progress.

Beneficiary identification: household (HH) surveys were conducted to assess vulnerability and prioritise support for households with the most urgent needs.

Technical assessment and construction:

- Land allocation: land use was secured and formalised. In planned camps, this process was managed by the Serviço Distrital de Planejamento e Infraestruturas (SDPI). In return areas, land allocation relied on informal or customary tenure arrangements.
- Technical assessments: each house or shelter was assessed in detail to identify structural damage and define the scope of work required.
- Construction and rehabilitation: the team comprised four technical leaders and 50 artisans (including 10 women supporting mudding activities) who led and implemented the construction phase. The actual number of workers varied between 30-50 based on project timelines and the specific needs of each community. Teams of 4–6 people worked on site, while technical leaders oversaw structural checks and adapted each shelter design to the household's needs.



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Build Back Better trainings strengthened household skills and introduced improved, resilient construction techniques aligned with local customs and traditional shelter models.

Training and capacity building:

- Building Back Better (BBB) training: strengthened household skills and introduced improved, more resilient construction techniques aligned with local customs and traditional shelter models. At least 50% of participants were women. As many displaced and returning people are women, the training both involved them directly in construction activities and built practical skills for future shelter works.
- Disaster Risk Reduction (DRR) training: focused on strengthening community-level resilience. The project also supported the establishment of DRR committees (together with INGD) to improve preparedness and response to future shocks.

TARGETING

Targeting combined stakeholder inputs and community validation. A draft list of vulnerable families was prepared in coordination with Protection and CCCM actors and local leadership structures. FGDs—organized by gender, age and specific needs—were used to capture diverse realities, including persons with disabilities and other at risk profiles. A door to door household survey then confirmed eligibility. Selection guarded against exclusion by triangulating three factors: socioeconomic status, specific vulnerabilities (e.g., orphaned children, women headed households, pregnant women, older persons, people with disabilities, survivors of GBV), and shelter access/conditions. Results were presented publicly to communities to foster transparency and acceptance of the final lists.

COMMUNITY ENGAGEMENT

The community engagement process was integrated into every phase of the project, through different components or tools:

- Identification of beneficiaries as starting point to ensure that households most in need were included.
- Focus group discussions (FGDs) conducted to understand families' needs in depth. The discussions highlighted key shelter concerns and helped identify

specific requirements. FGDs were organised by gender, age, and special needs to reflect diverse realities and vulnerabilities, including men, women, and people with disabilities.

- Participatory design methodology: this approach was used to understand and incorporate community needs while building on Mozambique's vernacular construction systems. Families participated in design sessions—first with selected FGD participants and later with local artisans—so that shelter designs responded to household needs while integrating local building practices.

TECHNICAL APPROACH

The technical approach emphasized feasible, locally sourced solutions that households could implement and maintain. Early recovery shelters averaged 29 m² and were complemented by retrofitting/upgrade packages ranging from 15 to 40 m² to accommodate diverse starting conditions. Shelter density averaged 5.8 m² per person including the kitchen and veranda (3.9 m² excluding them), reflecting norms and usability of space. Models integrated resilient features learned through BBB sessions, such as improved fixings, bracing and weather proofing details adapted to local techniques. The approach prioritized incremental risk reduction achievable with local materials (e.g., bamboo, timber) and available skills.

COORDINATION

Operational relationships with authorities and partners were structured to support access, coherence and scale. SDPI's role in land allocation in planned camps ensured that shelter siting adhered to local development plans. Collaboration with CCCM teams enabled integrated support in resettlement centers—especially for vulnerable households needing help with drainage clearing and latrine or shelter construction. At the same time, engagement with the sub national Shelter Cluster in Pemba connected the project to the common pipeline and to broader strategic positioning alongside WASH and other sectors.

DISASTER RISK REDUCTION

DRR was delivered through community committees created and trained with the Instituto Nacional de Gestão de Desastres (INGD). Priority was given to coastal and flood prone locations and to resettlement centers, where committees supported reconstruction tasks for the most vulnerable families, including drainage maintenance and (re)construction of shelters and latrines with CCCM teams. Each committee—composed of 15 members with a minimum of seven women—developed action plans with INGD, conducted risk and vulnerability mapping via consultations and exploratory walks, and received five hands on training sessions on flood, fire and strong wind preparedness. Toolkits were provided to enhance response capacity.



Focus groups were organized by age, gender and special needs.

MATERIALS AND SUPPLY

To stimulate local economies and reduce environmental footprints, procurement favored materials cultivated, processed and treated within the project locations. The main materials used were bamboo, wooden poles, mud, recycled tire rope, straw, and tarpaulins. This market forward strategy reduced transport distances and costs, increased community acceptance and participation, and helped sustain small businesses. The approach required careful planning and close engagement with communities to manage potential delays in deliveries and to ensure that quality and availability met implementation timelines.

CROSS CUTTING ISSUES

The project mainstreamed inclusion and participation. BBB trainings aimed for at least 50% women attendees, and women were included directly in construction (e.g., as mudding artisans) while also receiving targeted sessions to raise confidence and leadership in site practices. Participatory processes elevated the voices of at risk groups identified through FGDs and household surveys, and the team facilitated design adaptations responsive to specific needs. Land allocation considerations were addressed through formal channels in planned sites (via SDPI) and through customary tenure in return areas, grounding implementation in locally legitimate arrangements.

MAIN CHALLENGES

Women's participation in construction faced traditional role constraints and competing daily responsibilities. To counter this, the project established women only training groups and adapted session schedules and content, improving attendance and empowerment without compromising cultural norms.

Insecurity and renewed movements sometimes displaced beneficiaries who had already received support. The team adopted a flexible posture: intensifying BBB training for people in transit or at higher risk of short term displacement and sequencing direct construction where stability permitted. This preserved continuity of learning and increased the likelihood that families could re establish shelters quickly after further movements.

Foundations posed a risk under budget constraints typical of early recovery solutions. Field observations showed that exposed posts or poorly drained footings could undermine stability in floods and heavy rains. The team documented practical mitigation options (e.g., crushed stone at load points to aid drainage, soil compaction around foundations, improved pole fixings into block holes with cement) for consideration in future budgeting and specifications.

OUTCOMES AND WIDER IMPACTS

At household level, the combined shelter construction, retrofitting, and kit support stabilized living conditions for thousands of families, while BBB training increased the quality and safety of self built solutions. Capacity building that initially had a smaller footprint expanded significantly once its positive effects on shelter quality became evident. Communities exposed to training showed a marked rise in shelters adopting improved models and details, with women notably more proactive where dedicated training had taken place. Skills gained—particularly around resilient detailing and maintenance—proved critical in a context of repeated displacement, allowing quicker stabilization after shocks.

Procurement strategies that emphasized local materials invigorated markets, strengthened acceptance and ownership within the community, and reduced logistical bottlenecks. The project's participatory design, tailored technical assistance, and integrated community structures collectively increased the odds that safer practices will persist—visible in the replication of improved techniques beyond direct beneficiaries and the growing pool of trained artisans who can support future interventions.

EXIT/HANDOVER AND SUSTAINABILITY

By anchoring solutions in vernacular methods, locally available materials and training delivered through live construction, the project positioned skills and know how within communities. This approach supported handover: households understood how to maintain and upgrade their shelters, and local artisans—many trained through the project—can continue to build and adapt safer models. DRR committees, established with INGD, provide an ongoing platform for preparedness and small scale mitigation actions. Together, these elements strengthen the sustainability of gains and the likelihood that safer construction practices will be replicated during future repairs and new builds.



Women were involved directly in the Build Back Better trainings as many of them played a key role in the rehabilitation or reconstruction of their own homes.

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STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

- ✓ **Community anchored, adaptable shelter assistance.** The model combined modalities such as early recovery shelter construction, retrofitting and shelter kits, with household level coaching, allowing tailored packages that matched families' starting conditions and priorities. Solutions incorporated local customs and site realities, supporting usability and acceptance.
- ✓ **Robust capacity building that elevated quality and ownership.** BBB trainings, designed for accessibility and practical application, improved shelter quality at household and community levels. Targeting at least 50% women and using women only groups where appropriate fostered inclusion, confidence and direct participation in construction, which, in turn, enhanced replication and day to day maintenance.
- ✓ **DRR structures embedded at community level.** With INGD, seven DRR committees were established and trained to map risks, plan collectively, and undertake preparedness and small scale response tasks (e.g., drainage maintenance). Toolkits and hands on sessions anchored practices in local routines, strengthening settlement level resilience.
- ✓ **Use of local materials and markets.** Prioritizing locally cultivated and processed materials reduced transport costs and delays, supported small businesses, and increased community buy in. This reinforced the circular benefits of shelter investments and improved prospects for sustained replication.
- ✓ **Implementation teams structured for coaching and customization.** A dedicated engineer, technical leaders and artisan teams enabled site specific adaptations and on the job learning, improving build quality and household understanding of safer details and upkeep.



DRR trainings were conducted at community level to strengthen resilience and preparedness to future shocks.

WEAKNESSES

- × **Foundations under early recovery budgets.** Limited budgets in emergency/early recovery phases resulted at times in weaker foundations and drainages that underperformed during floods or strong water currents. Addressing this requires marginal cost increases and standardizing practical improvements (e.g., crushed stone at load points, compacted soil, improved pole fixings).
- × **Constraints on women's participation in construction.** Traditional roles and daily workloads limited women's availability for full time site tasks. While women only groups and tailored training schedules improved engagement, these constraints remained a challenge across some locations.
- × **Material availability variances.** In areas where bamboo or specific timber were scarce or untreatable locally, replicating models was harder, creating variability in pace and, occasionally, in quality of outcomes.



The shelters provided by the project incorporated local knowledge and traditional techniques and materials.

LESSONS LEARNED

This project builds on, and improves, shelter models that have been implemented across multiple communities and districts in Cabo Delgado. Since 2021, internal evaluations have indicated strong replicability, supported by enhanced approaches to BBB training and Focus Group Discussions (FGDs). Key results include greater community initiative in reproducing improved shelter designs and increased participation and empowerment of women in construction. Over the past three years, shelter quality and design have also improved at community level across all targeted districts.

The main features supporting replicability were:

- **Adaptability.** The shelter model can be adjusted to household needs, informed by community consultations, FGDs, and other feedback mechanisms.
- **Vernacular approach.** The use of locally available materials and traditional construction methods supports community acceptance and facilitates replication over time. These elements are integrated into the shelter design and reinforced with contemporary resilient construction techniques.
- **Empowerment.** The project complemented shelter assistance with training delivered to women and men in equal numbers, including separate groups where appropriate. This increased women's participation in construction and strengthened practical skills among groups that are often excluded from these activities.

RECOMMENDATIONS MOVING FORWARD

- **Households require stronger sensitisation on routine shelter maintenance**, particularly adding capim (straw) to the roof after construction. This extends the lifespan of roofing materials such as tarpaulins. Site visits indicated that only a small number of families add capim once shelters are completed. Maintenance messaging should therefore emphasise (re)placing roof thatching as a key measure to improve comfort and reduce impacts during the rainy season. Other skills promoted through resilient construction training were generally applied and replicated by communities.
- **Safety could be strengthened further.** It was observed that some households using pau au pique mixed mud with cement to increase the strength of load bearing elements and walls, improving overall stability. In some shelters, laminated doors secured with padlocks were also installed.
- While the approach supported local markets through the purchase and sourcing of locally available materials, **integrating income generating activities linked to shelter construction would add value.** A model is being piloted that builds on the existing design while introducing prefabricated bamboo panels that can be manufactured locally. Pre positioning these panels would enable faster assembly and installation for newly displaced households and others with urgent shelter needs.



Prototypes were built during BBB trainings using vernacular techniques.



While women only groups and tailored training schedules had positive effects, some constraints on women's participation remained across some locations.



FURTHER READING ON SHELTER PROJECTS

On Mozambique: SP 8TH ED. A.6 / MOZAMBIQUE 2020-2021.
SP 9TH ED. A.7 / MOZAMBIQUE 2021-2022.

On BBB and DRR: SP 13-14 / A.23-25 / PHILIPPINES 2013.
SP 11-12 / A.22-23 / PAKISTAN 2011.