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VOICES OF WACA

IN SÃO TOMÉ AND PRÍNCIPE



GOVERNO
SÃO TOMÉ E PRÍNCIPE



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FOREWORD

São Tomé and Príncipe (STP) is a small island country located in the Gulf of Guinea, 350km off the African west coast. It is covered by tropical forests, coral reefs, and impressive beaches. Most of its population, as well as the national economy, is concentrated in coastal areas. Extreme phenomena related to climate change, such as strong sea disturbances, coastal erosion, land collapses, and increasingly frequent river, rainfall, and coastal floods, pose a growing threat to communities, public and private infrastructure, and the country's economy. With the effect of climate change, it is projected that by 2050 the average sea level will be nearly 30 cm higher, and rainfall events will be 20% more intense than they are currently, resulting in more serious impacts on coastal communities. Approximately 90% of coastal inhabitants are engaged in fishing activities, comprising the most vulnerable segment of the island's population. Emerging from temporary fishing camps located at river mouths, these communities have now become rapidly expanding permanent settlements. The houses built in coastal areas are fragile and located in areas exposed to climate risks, directly affected by storms at the confluence of coastal and river flooding. The working tools of fishermen, artisanal fishing vessels, are often damaged, further economically compromising the fishermen.

To address these challenges, the World Bank is working with the Government of STP to implement the West Africa Coastal Areas (WACA) Coastal Adaptation Program, with the aim of strengthening the resilience of coastal communities along the West African coast. In STP, the WACA program focuses on several components, particularly: Strengthening the institutional capacities of sectors dealing with coastal management policy, including the legal and policy framework for coastal management in the country. The program has been providing training and capacity-building for personnel from various sectors in various areas, emphasizing coastal warning systems, lighthouse management, risk management and first aid, as well as maritime safety for artisanal fishermen. Investing in infrastructure in twelve communities for climate change adaptation, to enable coastal communities to be more resilient to the impacts of extreme phenomena. These measures include, among others: (i) creating seven safe expansion zones for the voluntary resettlement of those living in high-risk areas and constructing over 70 houses, three schools, and other social infrastructure; (ii) constructing multiple coastal protection infrastructures, including breakwaters, protective walls, and rock berms, among others. All these activities are being carried out in close collaboration with local populations. For this purpose, Risk Management Committees have been established in thirty-one coastal communities, playing an essential role in connecting the WACA program with the communities. These committees participate in the dissemination of information, communication, and public

awareness processes, collaborate in the supervision of ongoing works along with their respective communities, and intervene with them when extreme phenomena occur.

To consolidate and expand the gains achieved by the WACA program in STP, it is necessary to continue promoting and strengthening risk behavior changes, strengthening coastal policies, and establishing long-term commitments with communities and the government at the local and central levels. The succession of extreme phenomena that has been affecting coastal communities in STP with greater intensity and frequency makes it urgent to expand interventions to other vulnerable communities in the country. I hope that the "Voices of WACA" presented in this brochure will inspire everyone to act collaboratively towards a more resilient São Tomé and Príncipe.

Arlindo de Carvalho
WACA Coordinator in São Tomé and Príncipe



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About WACA

The West Africa Coastal Areas Resilience Investment Project (WACA ResIP) is the first project of the West Africa Coastal Management Program, implemented with financial and technical support from the World Bank for the benefit of six West and Central African countries (Benin, Côte d'Ivoire, Mauritania, São Tomé and Príncipe, Senegal, and Togo).

Support for this report was provided by PROBLUE, an umbrella multi-donor trust fund administered by the World Bank that supports the sustainable and integrated development of marine and coastal resources in healthy oceans.

Goals

In Sao Tome and Principe, WACA ResIP actions aim to strengthen the resilience of coastal communities and assets, adaptive capacity in twelve (12) coastal communities vulnerable to climate variability and change through the establishment of a national early warning system, safety at sea measures for fishermen, and coastal protection interventions in all project target communities.

12

COMMUNITIES

(10 in ST and 2 in RAP)

APPROXIMATELY
USD 15
 MILLION
5 YEARS



- * Around 20,730 beneficiaries: The project activities aim to increase the number of direct beneficiaries from the initial project from 8,000 to 20,730 people, which represents nearly 11% of the total population, of which 44% are women



- * 7 km of better-protected coastline



- * Training of 1,000 artisanal fishermen and distribution of approximately 1,250 maritime safety kits to fishermen
- * Development of more than 8 diplomas for improved coastal and disaster risk management



- * 3 schools constructed, benefiting around 320 students per year
- * Over 70 houses



- * Approximately 816 households less exposed to flood risks



- * 7 Safe Expansion Zones created in communities vulnerable to climate risks



- * 6 Breakwaters
- * 2 Protective walls
- * 3 Rock revetments"

TARGET COMMUNITIES

VOICES OF WACA

IN SÃO TOMÉ AND PRÍNCIPE



Latitude: 0,3352,
Longitude: 6,7308 0° 20' 7"
Norte, 6° 43' 51" Este



Área: 136 km²
Comp. máxima: 31,1 km
1° 37' N, 7° 24'

- MICOLÓ
- PRAIA LOCHINGA
- PRAIA CRUZ
- PRAIA GAMBOA
- PANTUFO
- PRAIA MELÃO
- RIBEIRA AFONSO
- IÓ GRANDE
- MALANZA
- SANTA CATARINA
- PRAIA DAS BURRAS
- PRAIA ABADE

- LEMBÁ
- CAUÊ
- CANTAGALO
- MÉ-ZÔCHI
- ÁGUA GRANDE
- LOBATA

VOICES

OF WACA

IN SÃO TOMÉ AND PRÍNCIPE

Ângela dos Ramos . Adelaide Vieira e Catarina Quaresma . Adilza Bonfim . Bartolomeu Nascimento
Cristovão Tindade . Cupertino Martins . Dionísio Calipe . Estalina Ribeiro . Fernando Veloso . Irma Lourenço
Justino Constantino . Sandra Rosa . Tomé Ramos . Valdynácia Barros . Vital Evaristo



TIDE OF HOPE: BUILDING A BREAKWATER ON PRAIA CRUZ



Praia Cruz, District of Água Grande

"The barrier wall will help us, because the sea will no longer trespass into houses on the edge of the beach."

Ângela dos Ramos 22, fisherwoman

The quiet community of Praia Cruz views the giant waves that damage houses during turbulent storms as threats to its existence. To help change this, the World Bank-funded West Africa Coastal Areas (WACA) project is carrying out climate change adaptation work in this fishing village. The works include constructing breakwater barriers, drainage, and an embankment around a lake behind the village to stop flooding. These works are essential to make Praia Cruz safer for its inhabitants.

About 1,652 people live here and most earn their living from fishing. The sea has invaded some of their houses and destroyed boats. The community is looking forward to the completion of the

barrier: Ângela, the young fisherwoman, says the wall will help them because the sea will no longer come up the beach so far. Although she loves the ocean, she is all too aware of the impact of the global climate on her community: "The beach is not the same," she says. "It has changed."

Ângela is the one of the few women working as a fisherwoman in São Tomé and Príncipe. As such, she has experienced the pain of gender prejudice: most of the local fishermen don't like the idea of women fishing for their livelihoods, in part because of a superstition that allowing a woman on board their fishing boats is an omen that brings bad luck. But Ângela says she will not give up her dream.



MAKING HOMES SAFER IN SANTA CATARINA



Santa Catarina, Lembá District

"My dream is to receive this promised house."

Bartolomeu Nascimento, 62, bricklayer

Bartolomeu Nascimento is one of the future beneficiaries of the 20 homes being built in the Safe Expansion Zone of Santa Catarina as part of climate change adaptation works being undertaken by the WACA program: The sea destroyed his house, which was located on the beach, in 2020. Since then, he has been

living with a neighbor. With the start of project works, he was able to improvise and build a small shed without rooms where he lives with his wife and 14-year-old son.

Bartolomeu's new house will have two bedrooms, a living room, kitchen, bathroom, and veranda. The urbanized area of Santa Catarina already has a road, public lighting, sanitation and drinking water. Best of all, the new house will be protected from high seas, floods, and other effects of climate change.

Bartolomeu's house is scheduled to be ready in the second half of 2023. "My dream is to receive this promised house and ask God for life and health to live in it with my family."



ESCAPING FROM DANGER

Praia das Burras, Autonomous Region of Príncipe

"This is where we make a living to support our children."

Sandra Rosa, 39, fish seller

On the northern coast of Príncipe, a UNESCO World Biosphere Reserve, is Praia das Burras, which has one of the largest fishing communities on the island. Praia das Burras has one of the communities most vulnerable to climate change. The WACA program is going to build 20 houses in a Safe Expansion Zone there.



Sandra and her family will be among the beneficiaries. The sea once almost took her son, just a year old at the time. Luckily, her father managed to save him. Sandra fears the coming of storms. She knows her home is not in a safe place but has no choice but to live in it. "This is where we make a living for our children," she says. "We have nowhere else to go." She is excited that her future home will increase her family's security.

REVIVING THE COMMUNITY SPIRIT

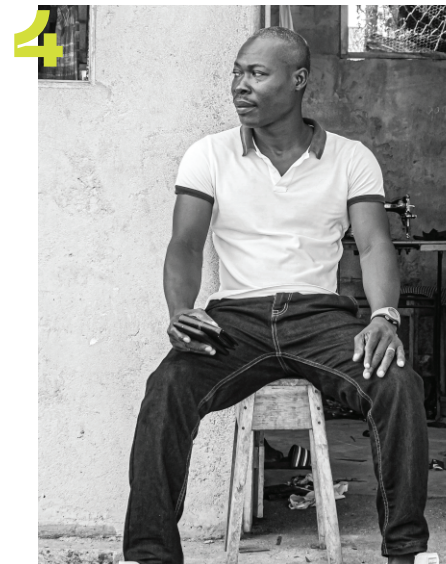
Praia Gambôa, District of Água Grande

"WACA's intervention helped us to raise awareness and to talk to the community about climate change."

Fernando Veloso, 49, tailor

Praia Gambôa is one of the most important fishing communities in Sao Tome and Principe but in recent years even it has suffered the impacts of climate change—erosion, rising sea levels, and the effects of strong storms that cause flooding on land. Fernando, a tailor as well as a fisherman, points to the extraction of sand from the beach for construction as one of the causes of its current vulnerability. Nonetheless, he believes the construction

work WACA has initiated will make Praia Gambôa safer. "It's a good sign," he says. "I feel that, once it's finished, we can become a place of leisure and a place where we can build a school and day care center as well, and that's welcome in the community."



SHORING UP THE BREAKWATER, DRAINAGE, AND EMBANKMENT AT LOCHINGA

5



Praia Lochinga, District of Água Grande
"WACA's program at Praia Lochinga has supported organization and hygiene on the beaches."

Adilza Bonfim, 45, seamstress

Adilza, a seamstress and member of her local Risk Management Committee, says one of its main challenges is keeping the beach clean. She's seen WACA supporting organization, hygiene, and the building of barriers to prevent the sea from coming into areas where they live and work. Keeping the beaches clean and safe could attract more tourists and generate another stream of income for the community via its inclusion in São Tomé and Príncipe's tourist circuit.

Adilza hopes that, after the completion of project works to construct the breakwater, drainage, and lake embankment, Praia Lochinga will have more visibility and be cleaner with better living conditions for the community.



MORE SAFETY AT SEA, MORE FISH

Praia Melão, District of Mé-Zóchi

"I received a kit that greatly benefits the fishermen."

Cupertino Martins, 62, fisherman

Praia Melão is also one of the busiest beaches in the city of São Tomé. It has about 2,670 inhabitants, and fishing and selling fish are the main activities of this locality. For fisherman Cupertino, fishing has changed a lot: "Now fishing has become more modern. I received a kit from WACA with a GPS, first aid, life jacket, cape, and luminous stick."

Equipped with this maritime safety equipment, fishermen like Cupertino are now safer at sea and able to bring in bigger fish and larger quantities of them.



About 1,000 artisanal fishermen from target communities have received training and about 1,250 maritime safety kits have been distributed to fishermen.



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ADAPTATION IS NECESSARY: CHANGES IN MICOLÓ

Micoló, District of Lobata

"The sea no longer comes in and invades people's backyards."

Valdynácia Barros, 26, fish seller

Like many women who reside in the fishing villages, Valdynácia is also a fish seller. In the fishing villages, the dynamic is always the same: the men fish, the women sell the fish.

Valdynácia's house is very close to the beach, and she has felt the effects of climate change. "The sea used to invade us and go all the way to the road," she says. "But now it doesn't because of the barrier." With the construction of a sea wall as a buffer, the beach has become safer. "The sea no longer comes in and encroaches on people's yards." Climate adaptation construction in Micoló includes the building of housing



and a school in the Safe Expansion Zone. Valdynácia says the WACA program is improving living conditions in Micoló, and she hopes people will take good care of the new housing the community receives.



CONFRONTING CLIMATE CHANGE IN MALANZA

Malanza, District of Caué

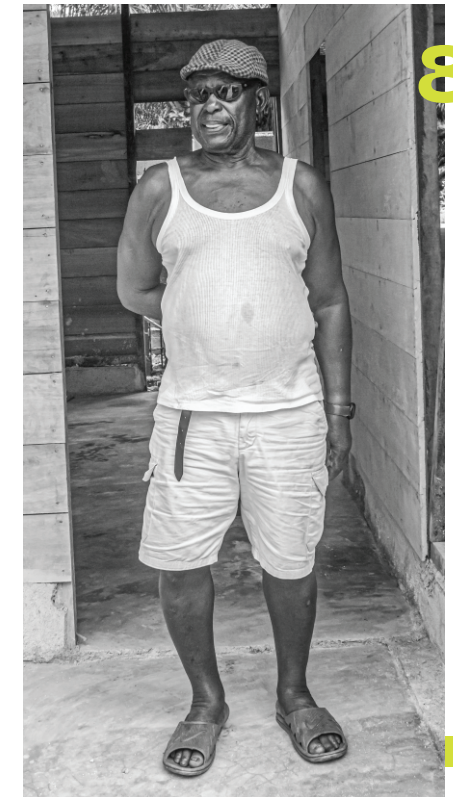
"Give grace to our school."

Vital Evaristo, 76, retiree

Malanza is in the district of Caué on the southern coast of São Tomé and has 550 inhabitants. It is there that the largest area of mangroves on the island is located. Vila Malanza is one of the communities most affected by rising sea levels, flooding rivers and the interaction between the two. Given the importance of mangroves in reducing coastal erosion, the WACA project hired a team of experts from Cameroon to train a group of local technicians in mangrove planting and the rehabilitation of mangroves, with the aim of reforesting them.

The program is also building 12 houses to relocate families from areas that are the most vulnerable to the effects of climate change. Vital's house is one of those most affected. Vital was president of the Malanza Association and is, to this day, a respected and authoritative figure in the community. He is proud to have nine children (and 75 grandchildren and great-grandchildren) and hopes to be one of the beneficiaries to leave a safe home for his descendants. Construction should be completed in the second half of 2023.

A school with two classrooms has been built that already accommodates 110 students per shift, a total of 220 students per day. "We give grace for that school," says Vital. "For us and for the students."



THE OCEAN CAN STEAL OUR HOUSES, BUT NOT OUR DREAMS



Praia Abade, Autonomous Region of Príncipe

"My dream is for us to get out of here from the beach."

Irma Lourenço, 48, fish seller

The rising sea level has put fear into the community of Praia Abade—fear that at any moment they will be left without their belongings. The small fishing village in the Autonomous Region of Príncipe has been among those most affected by climate change. Given the occurrence of storms and of fluctuating tides, a catastrophe is looming.

Irma looks forward to the day when she can move into one of the 13 houses to be built in the Safe Expansion Zone. Irma sells fish and woven mats and brooms to support her family. She says her first house was a small shack made of andalas (palm tree leaves). The house she now



lives in is made of wood, but it is very close to the sea. "Over time, this house has started to have problems," she says. "The rain and sea come in." The fear of losing everything barely lets her sleep. However, Irma doesn't stop hoping. "My dream is for us to get away from the beach."

"The WACA program will relocate people whose dwellings are in the at-risk zone. The beneficiaries are expected to receive their housing in the second half of 2023."

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TRANSFORMATION IN IÔ GRANDE BEYOND THE TIDE

Iô Grande, Caué District

"With the support of the government and the World Bank, we'll get off the beachfront."

Justino Constantino, 64, farmer

Iô Grande is an Angolares community in the south of the island of São Tomé, an area of heavy rainfall. The houses, almost entirely made of wood, are located near the beach. They are buffeted by the wind and sometimes by high tides. The inhabitants of Iô Grande have survived floods, but the creeping effects of climate change have caused coastal erosion and threaten fishing, their main economic activity.

Justino used to be a fisherman but for health reasons he was forced to give up and now works on his plantation. But Justino sees the difficulties his former fishing companions and the entire community face.

The WACA program is creating a Safe Expansion Zone in the community, where six houses will be built to re-house people who are living in the risk zone. WACA is also preparing the safe zone so it will be possible to connect Iô Grande to the main public power grid—a dream come true for the community, which still has no access to electricity.

"We are going to move away from the beachfront," Justino says. "All this because of the sea, which is taking over Iô Grande and pushing us out of there."



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ONE FOR ALL, ALL FOR ONE

Ribeira Afonso, District of Cantagalo

«We are ready to work with floods, we plant plants against the wind and do clean-ups.»

Estalina Ribeiro, 43, head of the Brigade of the GIME, a group of small associations whose mission is to keep rural roads and lanes clean.

The village of Ribeira Afonso is located on the east coast of the island of São Tomé, 16 km south of the capital São Tomé. Besides fishing, the population lives on agriculture and religious tourism. The increased frequency of high seas is, however, a threat. A Risk Management Committee was created to raise awareness and improve people's resilience to the repeat of catastrophes caused by climate change.

Estalina is a member of this committee. With the support of WACA, she and her fellow members have received training in



knowledge fundamental to keep their community informed and on alert. "The program has come to minimize these problems, such as flooding," she says. "It has built a sea barrier and widened the river.

" The committee sees itself as prepared for a natural disaster. "We are ready to work with floods, we plant plants against the wind, and do clean-ups."



BETTER CONDITIONS FOR THE FISHERMEN OF PANTUFO



Pantufo, District of Água-Grande

"The role of the Pantufo Risk Committee is to closely monitor the fishermen and the community."

Tomé Ramos, 66, retiree

Pantufo is a small fishing village about 3 km southeast of the capital of São Tomé and Príncipe. Its population is 1,836, according to the 2012 census. Tomé is a volunteer on the local Risk Management Committee created by CONPREC. Committee volunteers are responsible for raising community awareness before project interventions. They have roles in communicating the type of intervention to be carried out and in managing expectations.

For example, the committee was instrumental in the process of moving canoes from one location to another while construction was going on. In

Pantufo, most people live by the sea. "This project is of great benefit not only to the immediate area concerned but the whole waterfront," says Tome. "It helps fishermen protect their canoes, their lives and property. It allows them to go about their business." Ramps are being made for canoes, as well as a protective wall and a rock berm.



SAFELY MOORED AT PRAIA LOCHINGA

Praia Lochinga, District of Água-Grande

«All the boats will have a proper place to dock.»

Cristóvão Trindade, 54, fisherman

The community of Praia Lochinga has about 1,200 inhabitants and lives mainly on fishing. Cristóvão is one of the fishermen and President of the local Risk Management Committee. In his view, WACA's intervention has added value. "We are aware of the many risks we face here because of the weather conditions," he says. In the region, the impacts of climate change are evident, especially in coastal erosion. A number of boats have already been stranded or destroyed in strong storms. The project is building a ramp with this in mind. "All the boats will have a proper place to dock without running the risk of being battered onshore during storms," he says.

Praia Lochinga, like all the target communities of the WACA project, has a suggestion and complaint box for people to express their concerns and leave recommendations and comments. Cristóvão praises this initiative and says he dreams of the day the entire community is safe.



IN GAMBÔA, UNION IS STRENGTH

Praia Gambôa, District of Água-Grande

"We have to get everyone to collaborate to stop garbage accumulating at the beach."

Adelaide Vieira, 49, and Catarina Quaresma, 60, cleaning assistants

On Praia Gambôa, the struggle to keep the beach clean happens daily. Adelaide and Catarina are friends, neighbors, and companions in the beach-cleaning mission. They want everyone to support this work as beneficial to them all. It also makes their surroundings look more beautiful.

Sadly, though, some people continue to litter the beach. But Adelaide and Catarina are undeterred: they guarantee they'll continue cleaning up. The WACA program has helped address the challenge these clean-ups face. Adelaide says WACA has "allowed the community to unite around this cause, to join hands." The program has provided the tools and improved local collaboration with the district council to make sure the trash is collected after the clean-ups take place.



WINDS OF CHANGE IN PRAIA DAS BURRAS

15



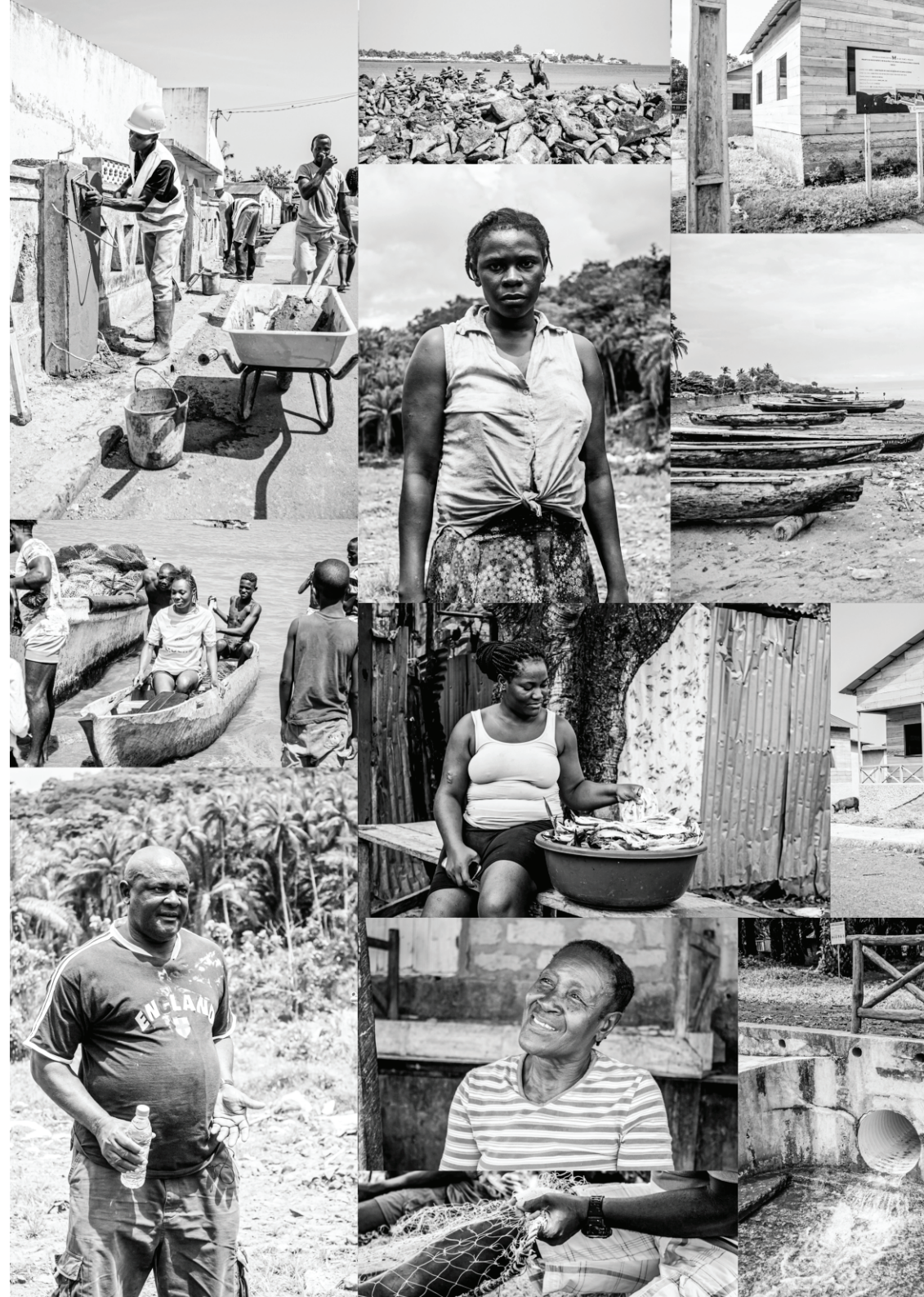
Praia das Burras, Autonomous Region of Príncipe

«They also want to make a change.»

Dionísio Calipe, 38, fisherman

From the city of Santo António, the capital of Príncipe, it is about 8 km to Praia das Burras, the fishing village where Dionísio has lived for more than 20 years. Access to the village was extremely difficult until WACA improved the access road and movement became easier. Fishermen received equipment. “Fishing materials like raincoats, wallets for protecting our phones, first aid kits, GPS, and training,” says Dionísio. Thanks to the training provided by WACA, he says, committee members are ready to help anyone who needs it.

Dionísio is grateful for the support the program has provided the community. “It also wants to take people living in a risk zone and put them in a more perfect zone,” he says. The WACA program is creating a Safe Expansion Zone with 20 homes. Construction is scheduled for completion in the second half of 2023.



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