

Acknowledgements

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RESURGENCE

Resilience is Africa's future

Climate Adaptation Stories from Africa

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FOREWORD

That Africa is one of the most climate-impacted continents in the world is not in doubt. With cataclysmic cyclones, ferocious floods, dreadful droughts and horrendous heat waves sweeping across Africa, the continent is the frontline where the battle with the climate is the fiercest.

These events have compounded the existing challenges in Africa where food insecurity, energy poverty and, sometimes, climate-incompatible development are rampant.

But Africa is also rising. From Senegalese women replanting mangroves to reclaim coastal rice fields to a Kenyan community preserving Indigenous seeds for food sovereignty and a county solarising irrigation, Africans are doing everything in their power to survive, to salvage their livelihoods and to protect their homes and heritage.

This photo book is a collection of African stories of hope in the face of the biggest and most frightful threat to humanity. Stories of African solutions to a global problem, informed by local needs and driven by local innovation.

It is efforts such as the ones highlighted in this photo book that will, ultimately, enhance the adaptive capacity of communities around the world to cope with the climate crisis.

This photo book will demonstrate that Africans are not taking punches from the climate crisis lying down. Instead, they are standing tall and fighting back with a dogged sense of purpose.

While the world drags its feet to provide adaptation finance, to developing nations, African communities are already taking their place on the battlefront.

But even with this determination, serious gaps exist in the efforts to tackle climate change. While effective, these solutions sometimes cover only a section of the population, owing to an acute lack of resources.

A Ugandan farmer who cannot afford to lease irrigation equipment will continue to practice rain-fed agriculture. A slum weather forecast project in Nairobi reaches those with a mobile phone. Those without one are left out of the critical weather information that sometimes means life or death.

To realise their dream of retaining their livelihoods and feeding their families, only additional, deliberate and predictable finance interventions will make a difference. This support must be delivered to Africa urgently.

Even as we seek adaptation interventions on a global scale, we must prioritise funding and support for ongoing local adaptation projects. Thankfully, with some of these initiatives already in place, there is a solid starting point.

The world owes it to Africa to provide this support.

Mohamed Adow

Founder & Director Power Shift Africa



PRESERVING INDIGENOUS SEED SOVEREIGNTY

Kenya

"Food is becoming scarcer and more expensive. Our children are sleeping hungry. Indigenous seed varieties are disappearing. We have given up our seed power and food sovereignty. We must protect our Indigenous seeds to be food secure,"

~ Veronicah Kalondu,

Champion, Indigenous Seed sovereignty

For centuries, communities in Eastern Kenya have relied on communal seed banks to save different varieties of food crops. The Akamba people have preserved and propagated maize, beans, millet and sorghum crops using traditional means to feed members of the community and to guarantee their food security.

For many African tribes such as the Akamba, seed is life. It is a symbol of culture. It is also a sign of continuity and resilience. To keep these agricultural practices alive, the community has been passing this knowledge down for generations.

As new farming technologies emerge, new seeds are being produced and ownership is patented. As a result, farmers are now unable to own seeds as private companies ringfence this ownership. With new seeds taking over, Indigenous seeds are disappearing. And so are the custodians of this knowledge.

Veronicah Kalondu, 92, and David Musau, 87 have planted Indigenous seeds on their farms for decades. With this generation of farmers leaving the scene, this critical knowledge is at risk of being lost forever. The locals, though, are willing to protect and preserve it.

Through support from local NGO Haki Nawiri, the community has created a platform for the co-creation of this information where farmers in the county engage in weekly community dialogues on Indigenous knowledge systems on seed preservation and propagation.

In these forums, Kalondu and Musau train residents on the importance of reclaiming their seed power as residents share local experiences about climate change and its effects on food security and sovereignty.

Indigenous seeds are, in many ways, better suited to the current climate crisis and, therefore, protect communities' food sovereignty while boosting their adaptive capacity and resilience. These foods are also considered more nutritious. Some even contain medicinal value.

To perpetuate their age-old farming tradition, this community now hopes to set up seed libraries at household and community levels.





Kalondu displaying indigenous maize and millet seeds that she grows on her farm in Eastern Kenya.



Kalondu organises weekly community dialogues to promote the adoption of agroecology for food sovereignty.









David Musau collaborates closely with Kalondu, during the weekly community dialogues to his knowledge in agroecology and the importance of indigenous seed sovereignty.

In uganda, communities' lives are inseparable from the land.

PROTECTING LAND RIGHTS IN UGANDA'S FARMING COMMUNITY

Uganda

"Government leaders and the oil companies are enjoying the money as communities suffer the consequences."

~ Ireen Twongirwe,

At the heart of East Africa in Uganda where generations have dwelled, communities' lives are inseparable from the land. In the pearl of Africa, subsistence agriculture is a livelihood for 90% of the population. These farmers are the custodians of the land, which they regard as an integral part of their heritage and traditions.

But this land, its rich history and the lives of millions who depend on it are at risk. The ongoing construction of the East African Crude Oil Pipeline (EACOP) poses grave danger of destruction to biodiversity and forests ecosystems. By kicking them out of the land that the communities have cultivated for generations, the proposed pipeline will put their food security at risk and, therefore, erode their ability to cope with the climate crisis.

The Government of Uganda has bought off land from communities, often at poor rates and delayed compensation, displacing them and disconnecting them from their sole source of livelihood. This is being done in the guise of economic gain through employment and infrastructure development.

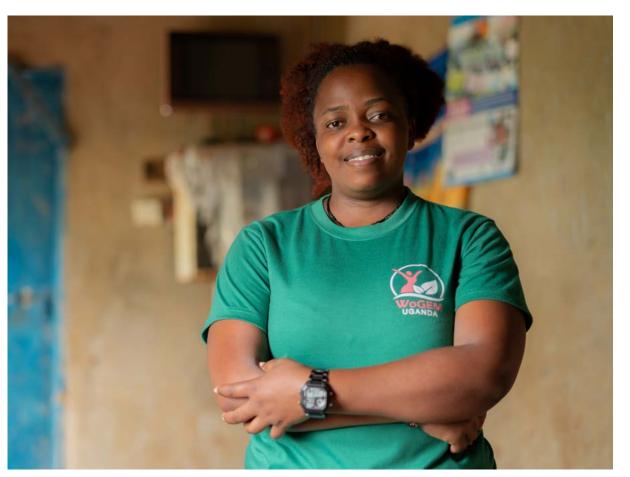
Locals, though, are not taking this disruption lying down. Saying #NOTOEACOP, women groups, for instance, are mobilising their communities to stand up for their land rights and to protest against this unwarranted invasion into their heritage.





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Irene Twongirwe is a community mobiliser and climate activist in Uganda.



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This young mangrove tree is growing in the shallow waters in Saloum Delta in Senegal. Mangrove trees also provide important habitat for a wide variety of wildlife, including fish, shrimp, crabs, and birds.

RESTORING MANGROVES TO PROMOTE BIODIVERSITY AND PREVENT COASTAL FLOODING

Senegal

"Women are champions of climate resilience. From early on, they have put endogenous solutions in place. These solutions help to counterbalance the effects of climate change."

~ Fatoumata Kine' Niang Mbodji, Ecofeminist

Saloum Delta, a network of 200 islands in Senegal, tells a story of climate resilience, adaptation, and environmental guardianship. Offshore oil drilling in Senegal has threatened the mangrove ecosystem, which help protect against extreme weather disasters by absorbing the impact of waves.

These ecosystems have prevented flooding in the area for decades, allowing communities here to cultivate rice. Recent oil discoveries are exerting stress on the biodiversity, destroying rice fields and in turn, undermining coastal communities' resilience.

Led by Fatoumata Kine' Niang Mbodji of Lumière Synergie pour le Développement, local women are now counteracting this threat by replanting mangroves to preserve their environment. By doing this, these climate champions are not only building and enhancing the resilience of their communities, but they are promoting ecofeminism through collective climate action as well.

Their efforts, they hope, will decrease salinisation of this section of the Atlantic Ocean and counter rising water levels that cause flooding in the area. This, they say, will allow them to continue growing rice and to feed their communities as they have done for generations.



A group of women in Salome Delta, Senegal, restoring their coastal ecosystem by planting mangrove trees. By working together to restore biodiversity in this delta, women lead efforts to enhance the resilience of communities living in this coastal area.



When the young mangroves start to grow and thrive, this brings joy to the community, and the hope of a better, more resilient future.





Fatoumata Kine' Niang Mbodji is not just a community leader but a climate champion par excellence. Fatoumata leads a group of women in the restoration of biodiversity in their land.



Women in this coastal community in Senegal nurture nature by replanting mangroves that act as a buffer against flooding. These efforts also build a sense of collective action for the common good.



Under the warm glow of the Salome Delta sun, a group of local women tend to the mangrove trees along the coastline.



Knowledge is power. And women power is impregnable. For these Senegalese women, meeting regularly in public forums to discuss climate change and how to position themselves better to tackle it enhances this power.

An aerial view of tin houses adjacent to a river in Kibra slum in Nairobi, Kenya. Flash floods in this informal settlement brings telling damage to homes and sometimes loss of lives.

WEATHER MTAANI: HOW SLUM WEATHER FORECAST PROJECT IS SAVING LIVES

Kibra, Nairobi, Kenya

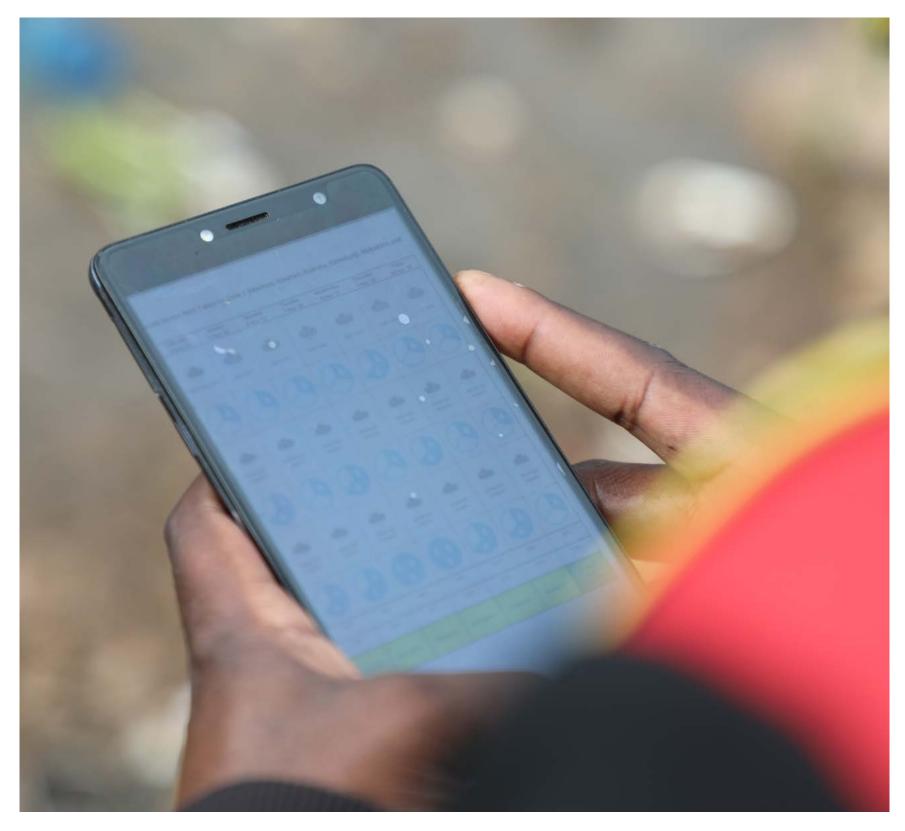
In Nairobi's largest and poorest slum Kibra, heavy rains invariably mean flashfloods, destruction and death. This expansive informal settlement in Kenya's capital city is the archetype of poverty and poor sanitation in Kenya, following decades of neglect. With climate change driving sudden rains frequently in recent years, living here has become a matter of chance.

For the residents, an accurate weather forecast is the difference between drowning in flashfloods and living. Between salvaging one's home and being rendered homeless. This is where Weather Mtaani (Weather in the Hood), also known as Daraja Ambition, a local early warning system, comes in.

Weather Mtaani provides locals with weather forecasts for early action. The project works by collecting weather information from Kenya Meteorological Department. A team of youth then convert the charts and images into textual data. This is then sent to the locals in "sheng", the local slang (blend of English and Swahili), which most of them speak and can receive on their mobile phones.

Upon receiving information on impending rains and floods, the residents unclog the drainage system and even dress warmly. Those near the river move their families and belongings to higher, drier and safer ground.

With this weather forecast project, residents of Kibra can now go about their daily activities, unworried about the prospect of losing their homes or drowning.



A slum dweller and user of the Weather Mtaani, a local weather forecast system reads the week's weather predictions on his mobile phone.



Mary Akoko, a resident of Kibra slum, unclogs the drainage system near her household. Akoko is a beneficiary of the local weather forecast system.



A slum resident wades through her flooded compound. In this neighbourhood, flood water invades homes, displacing residents.



James Kirika is the coordinator of the Weather Mtaani project. Kirika is one of the pioneer champions of the weather forecast projects in the informal settlement.



Residents of Sokomoko village in Kibra stand on the site of houses that were swept away by flood water during a past rainy season.



A section of abandoned households in Kibra near a river. Residents fled after their houses became waterlogged due to floods. In the area.

For many generations in Africa, beans have been a central component of the diet for millions. Beans are fairly cheap and grow in most climatic conditions, making them a reliable food source.

REVOLUTIONISING AFRICA'S FOOD SECURITY? BEANS IS HOW

Malawi & Zambia

From desserts to sauces, spreads and even beverages, few foods have been as versatile as beans in the history of human food, making them a critical component of many global cuisines for millennia. Beans can be consumed as a meal or made into bean cake. In Africa's low-income settings, beans are one of the most widely consumed food type.

Eastern and Southern Africa have the highest per capita bean consumption in the world. In Western Kenya, Rwanda and Burundi, and now Malawi and Zambia, an individual consumes between 50 and 60kgs of beans annually. The delicacy is gaining popularity in Central Africa and West Africa. For a good reason.

Beans are rich in protein, dietary fibre and minerals vital for human health. But beans are essential not only for nutrition. Their cultivation is good for the soil, water quality and the planet as well.

But beans are no longer only a food for the poor, rather they have become an important food that is evolving from a subsistence food crop to a market-oriented cash crop. With climate change fuelling food insecurity in most parts of the continent, beans are proving to be a reliable source of food.

Now SDG2 Advocacy Hub is seeking to double the global consumption of beans, as well as peas, lentils and other pulses, by 2028. The "Beans is How" campaign is amplifying the importance of beans as a "simple, affordable solution to our global financial, health and environmental challenges".

SDG2 Advocacy Hub is a platform that brings together NGOs, advocacy groups, civil society, the private sector and UN agencies to share expertise, ideas and to collaborate on campaigns around food security.





Unlike some legumes, beans are easy to cultivate and mature fast. Species Indigenous to Africa creep and support themselves on objects and other plants, yielding more.



Beans come in all sizes, shapes and colours. There are estimated to be at least 400 different bean species cultivated around the world.



While they are mostly consumed in low-scale households, beans are now becoming a popular market commodity traded in bulk.

A food market in Uganda where fruits, vegetables, nuts and tubers are sold. This variety makes food relatively cheaper in Uganda.

NAVIGATING CLIMATE CHALLENGES THROUGH FOOD DIVERSITY

Uganda

When it comes to food, Ugandans are not choosy. A typical dinner table in Uganda is a beautiful setup of variety and plenty. From bananas to tubers, vegetables, nuts, meats and grains, the people of Uganda are deft at making different food components blend for a serving rich in flavours and nutrients for healthy communities.

In this East African country, traditional staples like matooke, potatoes, maize, and millet coexist with exotic fruits such as passion fruit, pineapples, bananas, mangoes, and avocados. All these constitute a robust defense against food insecurity now common elsewhere owing to unpredictable weather.

But in Uganda, variety is not merely a lifestyle or tradition. It is a way of adapting to the climate crisis. Uganda's agricultural landscape is as strategic as it is diverse, with farmers spread out across the different climatic regions of cool highlands and warm lowlands.

Local communities understand that cultivating various food crops helps to weather pests, diseases and climate uncertainties. This adaptability also supports year-round cultivation, effectively sidestepping climate risks. This approach not only shields them against crop failures but ensures a balanced, climate-resilient diet for healthier communities as well.

Uganda's pursuit of food security extends beyond cultural practices. Government initiatives actively bolster small-scale farmers with improved seeds, technology and extension services thus empowering them to adapt and diversify in the face of a changing climate.

This proactive approach has forged a fairly resilient agricultural sector, essential for the nation's food security. With enough to consume and more to spare, Uganda today exports grain to neighbouring countries, some with bigger economies than its own.

By embracing a diverse array of foods, Uganda has not only secured its own food future but emerged as a climate adaptation trailblazer in the region.

In a region where climate change has pummelled agriculture, rendering communities food insecure, the Ugandan people are proof that a commitment to cultivate and consume multiple food crops is crucial for long-term food security.





For Ugandans, variety is not merely a lifestyle or tradition, it is a way of adapting to the climate crisis.



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For decades, indigenous people of Cameroon have protected this natural wealth using indigenous knowledge systems.

INDIGENOUS KNOWLEDGE SYSTEM FOR RESILIENCE-BUILDING AND ADAPTATION

Cameroon

"We are called to use our hands and hearts to mobilise our communities to engage with nature. To be action takers and not just talkers."

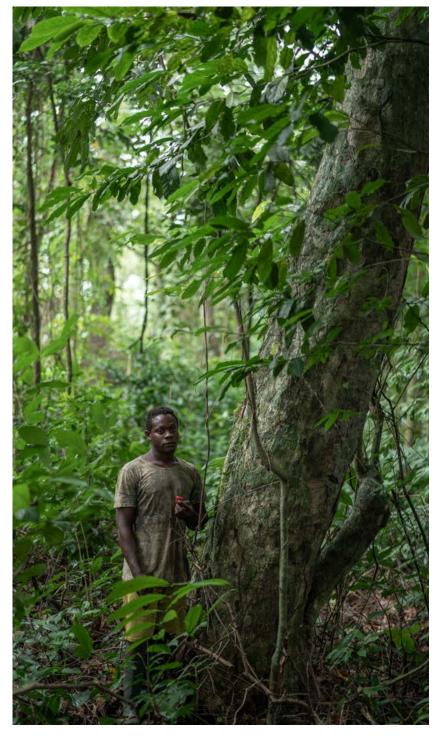
~ Ewi Stephanie Lamma, Forest Resources and People

When the climate crisis bites, the most vulnerable in the community suffer its sting the most. Africa's Indigenous groups of people, the majority of whom are marginalised, are often on the frontline of the crisis.

In Cameroon, a significant proportion of the population identifies as Indigenous. These include the hunter-gatherer communities, the Mbororo pastoralists and the Kirdi mountain communities. The communities grow the food that feeds the country and protect the country's forest ecosystems, by applying intergenerational local knowledge systems. This knowledge is based on local facts and has worked for centuries.

But when oil and other development projects are carried out, they disrupt centuries-old way of life for these Indigenous communities. The projects curtail food production, pollute the environment, poison water sources and people's health.

To counter this threat, Ewi works with local women and youth and spends time with them, teaching them about climate change and development and the importance of using existing knowledge to tackle the climate crisis.

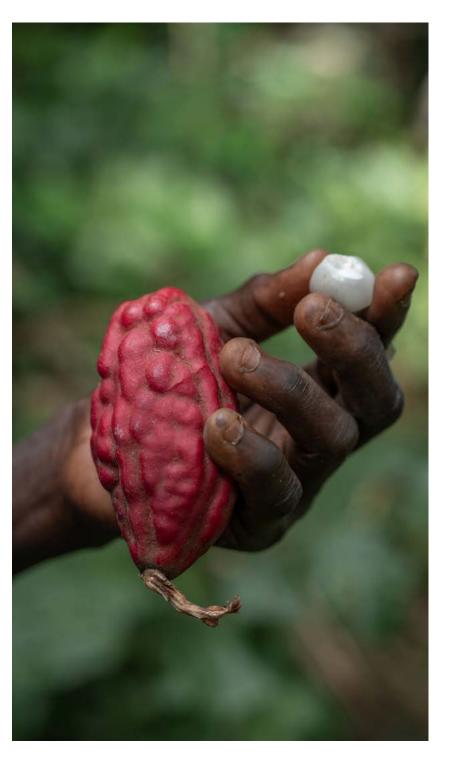


By living in communion with nature for centuries, these communities have long understood and preserved the symbiotic and delicate relationship between animal species, plants and humans.



Ewi Stephanie Lamma, who works with Forest Resources and People, coordinates local efforts to protect the ecosystem. She believes that communities must use their hands and hearts to engage with nature.





Nature in turn provides food for them, from nuts to fruits, berries and other food parts.





Women groups meeting to share this knowledge and to discuss their affairs as the primary custodians of nature.



TECHNOLOGY IN ADAPTATION

Makueni, Kenya

In the arid landscapes of Makueni County, Kenya, where each dawn marks the start of another fight for survival, Mary Mathuli has taken the battle to the doorstep of the climate crisis. Mary, a smallholder farmer, stands out as a beacon of adaptation and resilience in this locale where the impacts of climate change grow fiercer by the day.

On her 4-acre farm, she practices mixed farming, cultivating both commercial and subsistence crops, alongside rearing poultry and livestock. She has embraced innovation by utilising mobile-based weather forecast technology to monitor weather changes. This information allows her to prepare her fields in time and tend her crops better.

Mary also uses her mobile phone to conduct market surveillance for produce prices. Collectively, technology has enabled her to navigate the challenges posed by drastic changes in rainfall patterns and volatile market prices. The result has been bountiful yields despite erratic weather and a steady income to support her family.

In the face of relentless droughts and unpredictable weather events, farmers like Mary are rising to the occasion. Through these climate-resilient farming activities, she is able to rear chicks and animals that give her eggs, meat and milk. This produce fetches her a reliable income, meets her family's nutritional needs and contributes to the economic stability of her community and county.

Driven by an entrepreneurial spirit, Mary is pursuing not just her own adaptation but that of her community as well. The model farmer who trained as a village-based advisor by her local Cereal Growers Association is now teaching members of this community how to become more resilient and adaptable to climate threats by using technology.

Mary shares knowledge on drought-tolerant seeds, poultry farming and other climate adaptation strategies. Thanks to her efforts, more than 90 percent of farmers in the locale are embracing new farming practices, notably technology. The community now appreciates that only building their own resilience, innovation and community support will give them a fighting chance against the vagaries of climate change.





Mary uses mobile-based weather forecasts and market surveillance in her farming.

By embracing innovation and utilising mobile-based weather forecast technology to monitor weather changes, Mary is able to prepare her fields in time and tend her crops better. This has minimised losses on her farm.



An aerial view of Mary Mathuli's farm in Makueni county, Kenya. Mary stands out as a beacon of adaptation and resilience in this locale where the impacts of climate change grow fiercer by the day.



Mary provides drought-resistant bean seeds to other farmers to plant in their fields as an adaptation intervention. She also supports them to build their climate resilience by using technology.





On her 4-acre farm, she practices mixed farming, cultivating both commercial and subsistence crops such as pawpaw, beans, maize and sorghum alongside rearing dairy cows, fish and poultry farming.



With this innovation, smallholder farmers are able to water their farms and grow different food and cash crops throughout the year, including during the driest months. This has also relieved them from the agony of hauling water in buckets and sprinklers.

MOBILE IRRIGATION TECHNOLOGY DRIVING FOOD SECURITY AND RESILIENCE

Mbale, Uganda

In the foothills of Mount Elgon in Mbale District of Uganda, a blanket of green farms lends the landscape splendour and serenity. For decades, farmers in this land of plenty have grown tomatoes, cabbage, maize, bananas and cassava to feed their families and to sell in local markets.

Until climate change happened. Rainfall became erratic. Seasons became unpredictable. Rain-fed agriculture virtually collapsed. Yet farming is the only livelihood this community has known for generations.

Irrigating their farms was the only way out. For these subsistence farmers, this meant one thing: hauling water from nearby rivers using buckets and sprinklers. When Agriworks Uganda, a local irrigation solution, arrived in the area, their lives were transformed for the better.

This simple technology uses a motorcycle to pump water from a river. The equipment is connected to the motorcycle's engine that acts as a pump, drawing water from the river and piping it to the fields.

The solution is cheap, simple and convenient. A farmer can operate the equipment alone, minimising the cost of labour. Many here own motorcycles, making it easier to use the technology.

In these villages, farmers cannot afford to buy this kind of irrigation equipment. Agriworks Uganda leases the units to them at a low fee, with charges based on the amount of water pumped and the number of hours used.

In Mbale, farmers no longer worry about the dry season. With this water-pumping technology, they can now grow vegetables and other essential food crops all year long, to feed their families and to sell. Thanks to a simple watering solution, their fortunes have turned a corner.



The mobile irrigation equipment is powered by a motorcycle engine to draw water from the source and pump it to a farm to irrigate crops.



With climate change disrupting weather patterns, making the rainfall unpredictable, delaying it or making it disappear completely, farmers in this district are now abandoning rain-fed agriculture to turn to irrigation.

Abraham Solomon is the Founder and Managing Director of Agriworks Uganda. His organisation provides affordable, mobile irrigation solutions to smallholder farmers in Mbale District.





For many farmers, this solution is cheap, convenient and easy to use. With many unable to buy their own equipment, Agriworks leases it to them to pay based on the number of hours used and the amount of water pumped.





Throughout the year, Mbale radiates greenness and productivity, with farms flourishing with tomatoes, cabbage, bananas and chilies among other vegetables and food crops.

A bird's eye-view of a farm in Wajir county in Northern Kenya. The greenery stirs up hope in the emptiness and hotness of this semi-arid – and sometimes completely arid – wilderness.

SOLARISING FARMS TO BOOST FOOD SECURITY AMID CLIMATE CHANGE

Wajir, Kenya

"It doesn't make sense to keep cattle alone anymore. They will always die in the next episode of drought. Food farming is our safety net now."

~ Abdi Adan Ahmed, Abdi Gayle Farm

Against the expanse of bare red soil and scrubs in Wajir County in Northern Kenya, patches of lushness dot the landscape. From a bird's view, the greenery stirs up hope in the emptiness and hotness of this semi-arid – and sometimes completely arid – wilderness. These are new community farms where maize, mangoes, pawpaw, lemons, spinach, collard greens and hay grow.

The farms are an adaptation initiative of the County Government of Wajir County for the local population. This community of nomadic pastoralists has traditionally moved around searching for water and pasture for their livestock. In recent years, however, climate change-driven droughts and acute loss of vegetation have drastically decimated grazing fields, resulting in the death of livestock by millions.

The community is now trying their hand at farming, a rarity in the Horn of Africa. The County Government of Wajir installs solar panels in farms to pump water from a nearby borehole to irrigate food crops. The green produce is shared among locals for their food needs. The remainder is sold in the local market and proceeds is distributed among members for their financial needs.

The project has not only made the community food-secure, it has allowed them to diversify their livelihood. They no longer have to worry about the supply of green produce during the dry season.

While the government desires to scale the project across the county, inadequate funds have stalled the plans, owing to inadequate resources.



The project installs solar power to pump water from a nearby borehole to irrigate their farm.



In this community farm, maize, mangoes, pawpaw, lemons, spinach, collard greens and hay grow. The farm is an initiative of the County Government of Wajir aimed at making local farmers more resilient to the impacts of climate change.



Saadia Ahmed, the county minister for environment and climate change and farmer Abdi Adan Ahmed, one of the beneficiaries of this adaptation programme. They are holding some of the produce from the farm.







The leadership of Wajir County responsible for planning and designing intervention programmes for resilience to climate change.



Ahmed Abdullahi, the Governor of Wajir County in Kenya, has initiated several community-led resilience-building and adaptation programmes in this climate-vulnerable county. Wajir has set aside 2 percent of the annual budget to tackle climate-related challenges.

An aerial view of a farm in Yatta constituency in Machakos, Kenya. This 25-arce farm uses water pans designed to collect rainwater. By storing water for up to eight months, these pans ensure constant nourishment for the crops, including during the dry season.

AGRO-REVOLUTION THROUGH WATER PANS

Yatta, Kenya

In the plains of Yatta in Eastern where drought has cast its long, relentless shadow for decades, a story of resilience and transformation has been taking root for years. At the forefront of this transformative endeavour is Bishop Titus Masika, a visionary leader reshaping his community's connection with their land amidst the ever-changing climate.

His flourishing 25-acre farm in Makutano village serves as testament to the potency of adaptation in the face of adversity. Despite the dryness of the area, his maize, sweet potato, sugarcane, chilies and cabbage crops look as healthy as those cultivated anwehere, if not healthier

The founder of Christian Impact Mission (CIM) has cultivated not only food and cash crops but sowed seeds of a profound movement toward sustainable agriculture as well. Central to this agricultural revolution that is also informed by market research is the strategic use of water pans.

These artificial reservoirs, designed to collect and store rainwater, spread out across his farm. These ensure constant water supply even during the harshest dry seasons. After filling up during the rainy season, the water pans can store water for up to eight months. This ensures continuity in farming.

The abundant harvest reaped from Masika's farm defies the conventional constraints imposed by nature. Crops thrive with the water harvested from these reservoirs, yielding abundance twice a year, even when the rains are scarce.

Beyond the flourishing fields, Bishop Masika through the Christian Impact Mission is cultivating a profound shift in mindset. Through community training sessions, he is sowing the seeds of adaptation and empowerment, guiding individuals and communities on a transformative journey to navigate the challenges presented by the climate crisis.

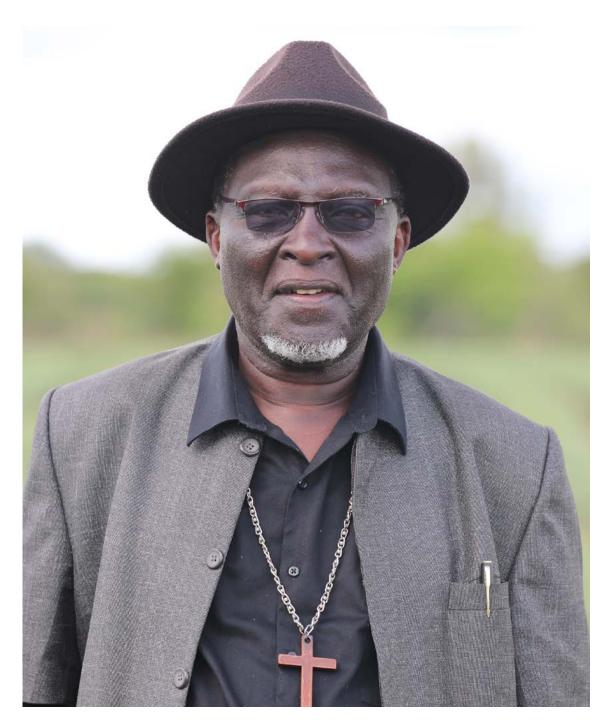
The impact of Masika's work extends beyond the borders of Yatta. Similar farms modelled like Masika's have emerged across Kenya and Tanzania. Today, more than 8,000 communities have redefined agriculture by becoming more resilient.

In the fields of Yatta, Masika is not merely cultivating crops. He is driving a farming revolution by nurturing a vision for a future where communities stand tall against the changing climate. A future anchored in resilience, innovation, and sustainable prosperity.





From above, the farm distinguishes itself from the surrounding, the abundance of healthy crops below a marker of resilience in the harshness of climate change-driven drought.



At the center of this strategic initiative is Bishop Titus Masika, founder of Christian Impact Mission. The mission trains farmers on the sustainable use of water through harvesting and irrigation.







To Raya Ahmed from the coastal city of Lamu in Kenya, there s no insurmountable challenge. She has taken on and won a ight against the Government of Kenya. The government had anted to construct a coal plant in the coastal city, posing a erious threat to the ocean and nearby ecosystems,

NURTURING THE NEXT GENERATION OF CLIMATE CHAMPIONS THROUGH EDUCATION

Lamu, Kenya

"Every person should have access to education. Education is a change agent. It's important for our young girls to witness climate justice in action. This teaches them the importance of fighting for what they desire."

~ Raya Famau Ahmed, Founder, Lamu Women Alliance

When the Government of Kenya and a foreign company set out to build a coal plant in Lamu in Coastal Kenya, a fierce community and civil society movement put a halt to the planned development. The plant would pollute the air and release sludge into the Indian Ocean, affecting 80 percent of the fishing population that relies on the water body for their livelihoods.

At the forefront of this push was Raya Ahmed, a fearless community mobiliser and climate justice champion. Raya injected into the struggle a perspective that had previously been overlooked: women's voice. In her Swahili culture, women are virtually voiceless. They are particularly shunned in the push for social justice. But Raya wanted to make a difference, despite the odds, including threats to her life.

With the project now abandoned, much to the relief of locals, Raya has shifted her focus. She is now building the next generation of climate champions. Through "Sauti ya Wanawake" (Voice of Women) and "Lamu Women Alliance", the activist organises talks in schools, where the society's role models address schoolgirls on the importance of protecting the environment and the planet.





Raya and others opposed the development on the shows of the Indian Oceans through activism. The government abandoned the project. Now she is nurturing the next generation of climate champions by mentoring schoolgirls in the town.



Raya works with "Lamu Women Alliance" and "Sauti ya Wanawake" (The Voice of Women) to advance women interests in the climate discourse.



The women group meets regularly in the historical town to deliberate on the climate threats facing the area and their contribution to make their Swahili community more resilient to these threats.



The main livelihoods for this coastal town are trade, fishing and tourism. The planned coal plant would have spelled doom for the coastal city, its heritage, economy, ecosystem and future.



The Somali community in Kenya has reared cattle, camels, sheep and goats for generations as their livelihood. To raise the level of adaptability of this community, the Food and Agriculture Organisation (FAO) has been providing them with chicken varieties to rear as a way to diversify their livelihood.

CHICKEN AND EGGS? AYE

Ijara and Fafi, Kenya

Chickens are a rare feature in a Somali household. For generations, the Somali community in Ijara and Fafi sub-counties in northern Kenya, have exclusively practiced pastoralism for their livelihood. Traditionally, they have used cattle, camels and goats for food, often selling some to buy other foodstuffs.

Recurrent drought in the last 15 years, and the death of their animals has, however, consigned the communities to dependence on relief food from the World Food Programme (WFP) and the Food and Agriculture Organisation (FAO) for survival.

But this relief food is neither sufficient nor the supply reliable. Now these communities are shifting gears. To do what was only a few years ago unthinkable: rearing chickens and practicing small-scale food farming to supplement relief food. FAO provides families with Indigenous chicken varieties to rear in their plots.

The chickens are easier to feed even during the toughest drought and are a reliable source of eggs and meat. This has boosted the dietary and nutritional needs of the families. This new way of life is also easing their generational dependence on livestock, making them more resilient against climate change.



For those whose animals have survived the drought, feeding them household scraps is the only way to keep them alive through the harsh period.





In this region, carcasses of livestock lie every what way, a bleak reminder of the catastrophe that has befallen this land.







Chicken cheer. Until recent years, chickens were a rare type of domestic animal in Garissa County in Kenya.

These chickens provide eggs and meat to meet the dietary and nutritional needs of families and their families.



VALUE ADDITION: CASSAVA MADE MY FAMILY FOOD-SECURE

Kilifi County, Kenya

"I used to boil cassava and feed my children. Since I discovered I could make baking flour out of it, I have had more uses and value from the tubers. I bake cakes and sell them to my neighbours for additional income. We also eat some at home."

~ Elina Sultan, Farmer

Like many farming households in Kenya, Elina Sultan has sustained her family by growing maize, beans, green grams and vegetables. Over the years, however, crop seasons have been failing, turning her livelihood into a persistent lossmaking venture.

When she shifted her farming gears in 2019, cassava was an easy pick. After all, it is an ideal resilience crop that most communities in this semi-arid coastal strip in Kenya farm. "Even when its leaves have dried up during the toughest drought, there is always some healthy cassava below the ground."

This time, though, she needed to take a different approach: value addition. Thankfully, Sultan had undergone training through a local self-help group on how to convert the tubers into a more valuable product: flour.

By drying out the cassava to make baking flour using a pestle and mortar, its shelf-life triples. By mixing this meal with only a handful of wheat flour, highly nutritious baked products come out of the cassava.

Sultan earns revenue by selling flour, bread and cake. She is also a model farmer in her community and teaches other women about growing drought-resistant and high-yielding cassava varieties. Many are adopting the practice as the community's resilience is strengthened.

Unlike before, Sultan is now able to keep her children well-fed and in school. "I don't struggle to pay their school fees or to buy books for them."

"Abandoning maize farming was the best farming decision I ever made for my family's food security. Failed rains had made it hard to produce enough grain to feed them. Value-added cassava has been our saviour." says Sultan.

Additionally, farming cassava is less disruptive to the soil structure as only simple implements are needed. It is also less labour-intensive.







After harvesting her cassava, she cleans and peels it ready for drying. Dried cassava can be stored for longer periods, providing an essential food option to families even when there is nothing on the farms.



To add more value to her cassava, Sultan makes baking flour out of the cassava which the then uses to bake cakes and other snacks for her family. She sells the rest to her neighbours.





Besides cassava, Sultan grows droughtresistant vegetables to supplement her family's food needs.

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