



ROOTS OF RESILIENCE: RESTORING KENYA'S MANGROVES –VIDEO TRANSCRIPT

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Hello everyone. My name is Miss Jocelyn Marquez and I work closely with the education program at Conservation Nation.

I am so happy to be able to introduce our amazing 2025 conservationist grantee, Mr. Fredrick Kioko Kilonzo.

Mr. Kilonzo is the founder of NatureHubCollective community organization dedicated to community-based conservation and environmental justice in Kenya.

He is joining us today to talk about his amazing conservation work. So, please join me in welcoming Mr. Fredrick Kilonzo.

Hi everyone, my name is Fredrick Kioko Kilonzo. And I'm so excited to be with you today. I'm 24 years old calling from Kenya's beautiful coast. I'm a conservationist, but there's so much more to who I am. I'm from the Maasai community in Kajiado County. My grandmother is a master beader who taught me that our traditional patterns actually encode environmental knowledge about seasons, water sources, and the migrations. Growing up, I watched our springs disappear.

That's what pushed me into conservation. outside work. I love hiking Kenya's beautiful ecosystems and learning traditional songs from elders and honestly I'm terrible at beekeeping.

Today I'm going to show you how the incredible Kongo women's group is transforming Kenya's coast through mangrove restoration.

Let's dive in.



Look at this map. Kenya has about 60,000 hectares of mangroves along our Indian Ocean Coast. But here is the problem we have lost 18% of mangrove cover since 1990. That is almost 1/5 gone.

Why does this matter? Mangroves are incredible guardians of the coast. They are nurseries for over a thousand sea creatures that is baby fish, crabs, shrimps, all grow up here. They store four times more carbon than regular terrestrial forests and they protect our coastline from storms and erosion like a natural wall.

But if mangroves are so valuable, why are we losing them?
Let's look at the data.

But before that, I have a question for you students. Why do you think mangroves are often called the guardians of the coast? I'll repeat the question. Why do you think mangroves are often called the guardians of the coast?

This chart shows the threat to mangroves.

Number one, charcoal production at 40%. In Topa Creek, families were cutting mangroves to make charcoal because they needed money to survive. Imagine if the only way your family could earn income was by destroying the forest that feeds you. That's the impossible choice these communities faced.

Population pressure is second. Climate change third.

I don't know if you can notice something. Most threats connect to poverty and survival. So we can't just tell people to stop cutting trees. We have to give them a better way to earn money. That's where our solution comes in.

Meet the Kongo Women's Group. 15 incredible women changing everything. Mama Grace once told me, "When women lead conservation, both people and nature thrive." She's



absolutely right. We build committee nurseries where women grow seedlings. We taught them beekeeping for mangrove gold, honey, Income. Then we plant the seedlings Together.

The first planting season taught us fast. Mangrove mud does not forgive. That's mistake.

Three women had to pull me out. They laughed and said, "Now you are really a conservationist."

Field work isn't glamorous, but it is worth it. Here is how it works.

Healthy mangroves produce flowers. Bees make honey from those flowers. Women earn \$15 per day from honey cells. And because they making money, they protect mangroves instead of cutting them for charcoal production.

Everyone wins. People and nature. Let's talk about how economics drives this.

This is where economics meets conservation. We gave 15 women beehives and training.

Look at the income change. \$3 per day to \$15 per day. That's five times more. With \$3 a day, you barely feed your family. With \$15, you send kids to school, buy medicine, save for future.

This transform lives, not just trees.

The key principle, when people earn more money protecting nature than destroying it, conservation becomes everyone's priority.

So, what results have we seen?

I have a question for the students. How does linking income to conservation change committee attitude towards nature? I'm going to repeat. How does linking income to conservation change committee attitudes towards nature?



I have another question for the students. Which of these impacts do you think benefit local communities the most and why?

Which of these impacts do you think benefits local communities the most and why?

Now I want to show you what this work actually looks like in the field.

Let's watch this video. This video we that we have prepared.

Mtwapa Creek in Kenya. For years we've already forced families here to cut mangroves for charcoal. 18% of Kenya's mangroves have disappeared since 1990.

But the Kidongo women's group decided to change that.

With support from conservation nation's 2025 conservationist grant. We built a community nursery. Women collect mangrove propagules, prepare them in bags, and care for them for three to four months.

We've grown 8,000 seedlings so far, working toward our 20,000 tree goal.

Then comes the hard part, planting in the mud flats. And yes, we get stuck in the mud.

Through our integrated approach funded by conservation nations combining fish ponds and proper spacing, we've achieved 85% to 90% survival rates.

I'll never forget my first planting day. I sank knee deep in the mud and needed three women to put me out. The Kidongo women laughed and said, "Now you are really a Mangrove conservationist."

Conservation Nation's grants enable amangrove gold beekeeping enterprise.

We purchased 15 beehives and trained women in sustainable honey production.



Women's income jumped from \$3 to \$15 per day. This is the CN grants impact transforming conservation into sustainable livelihoods.

Thanks to the Conservation Nation, 8,000 seedlings are thriving. That's 40% of over 20,000 tree goal achieved.

Bird species increased 25%. Fish population rebounded. Carbon is being stored.

Most importantly, 51 women are leading change.

Conservation Nation believes in community-led solution. And this is what is possible.

Conservation looks glamorous in documentaries, but reality it's muddy, hot, and things really go as planned.

Mangrove restoration taught me you can plan everything perfectly and still get rained on.

This was supposed to be our perfect planting day. Then a storm hit.

Fieldwork isn't always clean, but it's always worth it. Every seedling represents hope for the ecosystem, for the community, for the future.

These moments working with community members in mud and rain. This is where real change happens.

You are the generation that can restore a planet. You don't need to wait. You don't need permission. You don't need to be perfect.

The Kidongo women not did have environmental science degrees.

They had determination, creativity, and commitment that made the difference.



Whether you are in Kenya or Kansas, the principles are the same. Listen to your community. Find solutions that help both people and nature.

Start small, but start now. When communities lead, nature thrives.

You can be that leader in your community. Thank you.

Thank you so much, Frederick, for that lovely presentation. We are so excited to see what you have done in Mtwapa Creek and also um all the restoration you have accomplished with the Kidongo community of Women.

Um we hope that you continue to restore and build the fish and bird biodiversity in Mtwapa Creek and um we're so excited to see what's next.

So thank you so much for that presentation Frederick.

[Q&A]

Now we'll be taking questions from the students.

All right, I got one question.

If you if you never came to Washington DC, uh would like would you ever like come to Washington DC?

Okay, so the question is if you've never been to Washington DC, would you ever come to Washington DC?

Yes. Yes. Um very interested in coming to Washington DC. I've never been to Washington DC.



However, I've been in Kansas, last year where we had attended the a conference by the American Association of and Veterans.

Yeah. So, I'd really be interested in coming to Washington DC and getting to meet some of the students.

Yes, that would be exciting. Thank you, Frederick.

Another question. Yes. Hello, Frederick. Uh, I want to ask uh what got you uh into restoring mangroves forests?

So Frederick, the student asked, "What got you into restoring Mangroves forests?"

That's a great question.

Um, I didn't start planning our planning to work with mangroves at all.

I'm actually from the Maasai community inland, not the coast.

So I grew up watching savannas and grasslands, not oceans and mangroves.

But when I was in university, I took a few trip to Kenya's coast and I saw something that broke my heart.

There were entire areas where mangroves used to stand. You could see the stems, but they'd all been cut down for charcoal.

And the fisherman told me they were catching fewer and fewer fish every year.

But here is what really got me. I met women in Mtwapa Creek who said, "We know cutting mangroves is destroying our environment, but we have no other way to feed our children." That hit me hard.



These weren't bad people, they were loving mothers making impossible choices.

Um, I realized that telling people to stop cutting trees without giving them an alternative was useless.

That's when I thought, what if we could flip it? What is what if protecting mangroves could actually make them more money than cutting them down?

That's where the beekeeping idea came from. Healthy mangroves produce flowers. Bees make honey from those flowers.

Women sell the honey and suddenly they are earning five times more protecting the forest that destroyed it.

So yeah, that's how we got into mangrove restoration and yeah, it wasn't love for mangroves at first. It was wanted to solve that impossible choice we made were facing. So that's how we got into mangrove restoration.

Thank you Frederick. We'll probably take another question.

Uh I was going to ask are there any other trees you like to like restore?

So the question is are there any other trees you've gotten to restore?

Yes. So we do restore terrestrial forests in the ecosystem that is indigenous and native seedlings.

We also do programs whereby we plant fruit trees in schools across Kenya. Yes. So it's not basically mangroves but other indigenous seedlings and fruit trees in schools and also the communities.



Uh we also into wildlife conservation and most of it involves habitat restoration.

So we have also been doing a lot of indigenous tree seedlings planting. Yeah.

Thank you Frederick. Should we take one more question?

How many mangrove seedlings do you plant in a day?

So the question is how many mangrove saplings do or seedlings do you plant in one day?

We always do like 2,000 to 3,000 a day depending on the kind of patterns because sometimes the water fills up quickly. So yeah. So probably 2,000 to 3,000 per Day.

That is a very large amount. Um so congratulations Frederick on all the seedlings that you're able to plant in a single day. 2,000 to 3,000. Now we'll be moving on to Kahoot.

[Time for Kahoot]

[Closing Remarks]

So everybody, please join me in giving Frederick a warm applause.

We are so honored that Frederick was able to give us his time today and really talk about his mangrove restoration project and all the amazing work he is doing with the Kidongo community in Kenya.

Um Frederick, would you like to have some closing remarks for the students?

Yeah, before we go, I want to leave you with one final thought.

When I was your age, that is 11, 12, 13 years old, I never imagining I never imagined I'd be standing knee deep in mangrove mud on Kenya's coast working with incredible women to restore an entire ecosystem.



I thought conservation was something that happened in documentaries done by people with fancy degrees and expensive equipment.

But here's what I learned. The biggest changes start with the smallest actions.

The Kidongo women didn't wait for permission. They didn't wait to be perfect.

They just started.

One seedling, one beehive, one day in the mud. You don't need to wait either. Maybe you start a recycling program at your school.

Maybe you plant native flowers in your neighborhood.

Maybe you organize a creek cleanup.

Maybe you just ask questions and learn about the ecosystems around you.

Whatever you choose, remember this.

Conservation isn't about saving nature from people.

It's about people and nature thriving together.

The Kidongo women taught me that.

My grandmother taught me that.

And now I'm teaching you.

You are the generation that will restore our planet.



Not because you have to, but because you can, because you care, because you are ready.

When communities lead nature thrives. So go and lead.

Thank you for having me today. It's been an honor. Asante sana. Thank you very much.

Thank you again, Frederick, for all the amazing work you are doing and what an inspiration from the Kidongo community.

Um, we hope that students feel inspired by the work that we've seen today and I want to thank everyone for joining us on this academy live session and we hope you'll join us on the next session. Thank you so much again everybody.

We hope you enjoyed this lesson!

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