

How to make access to safe water more sustainable – Part 1

Summary keywords

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Speakers

Jake Lloyd, Charles Macai

Episode 17: How to make access to safe water more sustainable – Part 1

Jake Lloyd 0:17

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It makes up 60% of your body. It covers 71% of our planet. But 25% of the world still does not have safe and affordable access to it. That's despite over two billion people gaining access since 1990. And recently over 20% of the world's river basins have experienced either a rapid increase or rapid decline in the amount of it.

I'm Jake Lloyd. You're listening to the *How to build community* show. And in this episode, we're talking about - you've probably guessed it - water. In a changing climate, with a growing population, what is happening right now in communities around the world that are struggling to access enough safe water for their needs? What is working? What is not working? And what does the future look like? Well, I've been speaking to an expert to help us understand the past, present and future of safe water access for communities around the world.

Charles Macai 1:32

We have the skills, we have the capacity, we have the finance, we have the people. So I'm hopeful that whatever situation comes because of climate change, we can jointly go around it and we can adapt.

Jake Lloyd 1:46

That's the voice of Charles Macai. He is a water sanitation and hygiene specialist at Tearfund with 25 years of experience leading projects in different countries across Africa. In this episode, you'll hear about how communities that struggle to access water are increasingly turning to a business model approach to make sure their water supply is fit for the future. So keep listening and you'll hear how these systems are set up, how they're managed, and you'll hear what work Charles thinks is still to be done. So let's get started. I first wanted to get a sense from Charles of how efforts to bring water to communities have changed over time. So I began by asking him to tell me about what his job was like working on water access projects for NGOs when he first got started.

Charles Macai 2:14

When I joined in, I came in as an engineer, and it was about construction, you know, not so much about people. It's 'there's a need for water, so look at your studies and your skills and ensure that water has been provided.' So this is how it was. And it was very, very technical. It was only engineers who were in there.

Jake Lloyd 3:07

But over time, he and his colleagues began to realise that the focus of this work was too limited.

Charles Macai 3:13

I think most of the interests for, especially the non-government organisations, sometimes even the government, was around access. Let us construct facilities for people so that we can say our coverage is 80 per cent, is 20 per cent... So we are much more focused on access. But then over the years you can see that, although we put up facilities, some may not be working.

Jake Lloyd 3:45

So why did these water projects fail? To answer this, he told me a story from his work in South Sudan.

Charles Macai 3:53

A lot of NGOs, even government, have sunk boreholes and installed them with 100 pumps and trained communities who work as volunteers. They are called hand pump mechanics. And there is even a curriculum of how you train them on maintenance, changing staff and all that. But we have so many hand pumps that we continuously go and do repairs for, and you'll find that the mechanic that had been trained has possibly moved on because there are no job opportunities and they are volunteers. So there's an opportunity that comes up in town where they're employed, so they move on there. Even the tools that are handed over to them cannot be found. So that is one of the practical things that we have seen. People move on to look for opportunities because they are volunteers, but they need to fend for their families. So that's one aspect.

Then secondly, because of the continuous conflicts, and we did not invest in their low cost supply mechanisms, but you could have the mechanic, you could have the tools, you could have the skills. But then once they remove the parts, you don't have access to a budget to replace it. So that again becomes a

challenge. So for us to succeed, we have to ensure that the whole chain has been looked into.

Jake Lloyd 5:25

So having boreholes, wells, water pumps and other water infrastructure in place isn't enough to guarantee success. And so over time, Charles's job expanded from a purely engineering role to something much broader.

Charles Macai 5:40

There are other things that are very, very important. Yes, provide the water - there is need for the skills, engineering, technical skills - but much more than that, there are other very, very critical things. One, financing. Two, legislation, government, what is the mandate of the government and what is the legislation around who provides water, the issues around the water quality itself? There are issues now around environment and there are issues about sustainability.

So over time things have really changed. The key issues around engineering still exist, but it's much more than that. There's much more of communities now taking up more responsibilities. It's quite a big change. And right now, my job is not so much about the technical designs, but much more about 'how do we ensure that these facilities, these needs are continuously sustained.' So quite a change over the years. But a positive change I would say, I would say.

So these are some of the aspects that we need to look at so that we ensure that a system works beyond the construction. So there's a choice of technology, there is a scale, there is finances and there's also the arrangements, the management arrangement. If we say, for example - which was very, very common in the past - that we are handing over this facility to the community, but we have not organised the community, they do not have even the legal mandate to run the system so they don't have even a way in which they raise funds, how do we then ensure that the system continuously operates?

Jake Lloyd 7:51

So how best can a water supply system continually operate beyond its construction? As Charles mentioned, relying on volunteers to keep water systems operating doesn't always work. And in the absence of government provision, communities are increasingly turning to a business model approach. Now there can be lots of different groups involved in this approach. And it's a little complicated to explain, but again, with an example from South Sudan, Charles told me how people who have the skills to maintain water pumps have been assisted to form a professional body so they can source equipment and spare parts from businesses and sign agreements to manage water points with communities. Here's how it works.

Charles Macai 8:42

We have brought together the handpump mechanics that were trained by the different agencies, and they have been registered by the government as a co-operative and we have now been assisting them with their supply chain and linked them also with the private suppliers. And then since they have the training, just do refresher trainings, but train them much more on business. And then enter into agreements with the community. And this has been approved by the District Water Ministry that yes, we have given responsibility to this cooperative. So the contract is for such an amount, the mechanics will ensure that the system is running. So yes, privatisation or professionalisation can take different forms, but basically it's just

the notion that this is not going to be voluntary. It's about business and this is where the sector is heading.

Jake Lloyd 9:47

But what is happening in the communities where this business approach is starting to form? Charles told me about how often local people are forming groups to manage the water access points where they live.

Charles Macai 9:59

We call them the Water Users Committees. At each of the water points, the community have selected representatives whose responsibility it is to make sure that there are queues, the water infrastructure is clean, there are issues around usage that are resolved - when there is conflict. When the animals come, where do they get drinking water from? You know, if there are conflicts between two families, how is that resolved? We call them Water Users Committees.

Jake Lloyd 10:30

These groups sign an agreement with the Hand Pump Mechanics Association, and this agreement is endorsed by the government. And here's what happens next.

Charles Macai 10:40

The Water Users Committee sits down with the community and discusses the costs involved. If you want to reduce that to a scale, there are different levels: gold, silver, bronze. So the community decides, and then they look at themselves and say: 'We are a community of 300 people - or it will be 20 households - so what is the implication of this in terms of payments?' And so they agree either to pay on a monthly basis, sometimes they will agree on paying quarterly, or after the harvest. And sometimes, where they might not have the money, there are even issues around, 'Can I bring a sack of groundnuts instead because it's worth this much, and then the Hand Pump Mechanics Association can sell that and that will be my contribution.' So there are all these arrangements. There's not one that fits all, but everyone is involved in that.

Jake Lloyd 11:48

That's interesting. And typically does each household then pay a fixed amount each year? How is income generated?

Charles Macai 12:00

So income is generated from payments by the households. It depends mainly on the family size. It's not uniform. If you have a big family size, then they work that out. But this is done within the community. But I also want to mention that in DRC, for instance, there are people who are exempted from paying. Each community has vulnerable people and the community knows them. So there are those categories that they have saved for this family because we know their situation, then they will not pay. This family will pay this much money. There are those issues, but these are not things that the Tearfund or the government will say, it's the community themselves who agree. And there are mechanisms to ensure that people pay for that.

One very interesting thing that they found in DRC, which some people might frown about, is that security people do not pay. And so as part of follow up, we tried to find out whether this was an issue around, you know, that these are big people and they are exploiting the community. And it was very, very interesting because of the conflict. They have agreed as a community that one of the police areas who get their water will not pay. But what they do in the town is they ensure that their plumbers have security any time they want, even at night, to go up and ensure that everything is okay. They ensure that anyone is brought in for vandalism, they take that as first priority and they also monitor alongside the plumber. So that for me is quite interesting because coming from an NGO and a rights kind of thinking, I would expect that the police are not exempt. But the community have decided this because of their context and situation. So interesting stuff that we find when we follow up.

Jake Lloyd 14:27

Charles clearly sees this business model approach as a very good thing. But he also told me about what else he would like to see happen, and he talked to me about why NGOs should seek to collaborate more with governments or 'duty bearers', as he calls them, and make sure that the NGOs plans align with government plans.

Charles Macai 14:49

I think more and more we should realise that as NGOs, we are supporting the duty bearers. So we need to involve them much more and mention them much more because they have the mandate knowing that they are the ones that are supposed to be providing these services. Even when we are doing the planning, it should be based on the government's plan because I think most governments will have ten year plans, five years plans. But then sometimes as NGOs, there's a tendency to pull us towards the donor's priorities. It's good because donors also have a role as stakeholders. But then once we get these priorities, I think it's important that we check this against what the government has planned and align it to the government plan. Because at the end of the day, I think governments will continue to be the duty bearers and will always be there even when our projects that are funded for a certain period of time are not there. So maybe if we could continuously talk about this a little bit much more, I think that will be important and align ourselves to this as well.

Jake Lloyd 16:20

Finally, it's hard to talk about access to water in the future without also talking about climate change. With some areas of the world becoming more prone to droughts, others more prone to flooding, when Charles thinks about climate change, how does he feel about the future?

Charles Macai 16:38

Hopeful. Definitely hopeful that we can always look for solutions. Worried because climate change is real, we are seeing it and it needs all of us to take action. So their hope comes in for me in the realisation that all of us need to come together and climate change will continue happening. Drought now consistently is happening in the Horn of Africa, so we need to adapt to that. We have the skills, we have the capacity, we have the finance, we have the people. So I'm hopeful that whatever situation comes because of the climate change, we can jointly go around it and we can adapt to that. So yeah, worried because the situation is as it is, probably will get a little bit worse, but hopeful because people realise that these things are affecting us and we have to deal with them. And we have this team, we have the technology even for monitoring, the

systems that we have, the engineering systems and all that. We have the support of the governments. And so we can do something about that.

Jake Lloyd 18:05

That was Charles Macai, a water and sanitation expert from Tearfund. And you'll hear more about water in our next episode of this podcast, where we'll be hearing from a Senior Policy Adviser at Water Aid who'll be telling us about the changing relationship between women and water access in communities around the world.

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