# Handpicked Presents: Voicing Change

Season 4, Episode 5: Agroecology in Kenya

# Featuring: Olga Millicent Awuor, Caleb Omolo, Clark Siaji

### Transcript

# Speakers

Caleb Omolo (CO) Andres Kathunzi (AK) Charlie Spring (CS) Laine Young (LY) Olga Millicent Awuor (OM) Clark Siaji (LS)

{[walking sounds]}

**CO:** Farming in Africa was not meant for Africans. It was meant for cash crop and for export. You find like the best example is coffee in Kenya. Many farmers never taste how coffee, you know, tastes like. In West Africa, Ghana, they produce the best cocoa for chocolate. They don't even know how chocolate tastes. So, this system was brought for industrialized countries for export. Very, very little emphasis was put on food crops. And also the foods they bought is monoculture which wiped a lot of forests like large scale coffee, large scale cocoa, you know, so very, very little effort has been put into biodiversity and food crops. So, it's high time we Africans start diversifying, the way we were doing it before, before that, before we were colonized.

**AK:** So, I think it's a unique, It's a unique experience. I'm happy to see that, they are doing everything from scratch. They're creating their own fertilizer. They're creating their own inputs. There's so much different foods, from leafy vegetables, from trees to fish ponds. It's a whole, I mean, perfect example of agroecology. And I'm so happy to be experiencing it and seeing it, firsthand.

{[walking and bird sounds]}

**CS**: You just heard voices from Migori County in Kenya where farmers are experimenting with growing food in more sustainable ways. These practices can be called many things: agroecology, organic farming, permaculture, food sovereignty, and our Kenyan guests today will explain more.

{[intro music]}

LY: Hi everyone and welcome to another episode of Handpicked: Stories from the field. I'm Laine Young..

**CS**: And I'm Charlie Spring. This is the second of a two-part episode on agroecology. In our last episode, you heard from Eve Nimmo, Erin Nelson and Andrew Spring about agroecology in Brazil, Canada, and other places around the world.

Today, our focus is on Kenya. Through the past 3 years of participating in this Voicing Change project, we have been learning about some of the systemic threats that are facing small-scale farmers in Kenya. These include climate risks- the region has been experiencing cycles of drought as well as flooding- but also ways that Kenyan government policy has encouraged a kind of Green Revolution style of farming through the use of subsidized chemical inputs, GMOs and monocropping, for example.

But members of our community of practice have been questioning this entrepreneurial and individualizing vision of farming and farmers. Exploring agroecology in the Kenyan context will reveal its multifaceted nature, extending beyond agricultural practices to encompass a broader restoration of knowledge and capacity among marginalized farmer groups. Agroecology also offers a pathway for decolonizing food systems that really acknowledges Africa's contributions to civilization and food epistemology.

So, in this episode, Voicing Change member, Olga Millicent Awuor interviews two community partners to discuss how they are creating alternative pathways for growing food in Migori Country. First of all, Olga sits down with Clark Siaji who runs an organization called Wachna Green World. Their non-profit network helps farmers in the area grow organically, and create sustainable livelihoods for their families using the principles of food sovereignty. Take a listen.

{[music]}

**OM:** Thank you so much, ladies and gentlemen. We are again at, the studio. We are discussing issues agroecology and, this is me Olga Millicent Awuor together with, one of the farmers, that's called, Clark. Clark is a farmer based in Migori County. And more specifically, Uriri Sub-County that is in Migori County. We want to have a discussion concerning agroecology. And, Clark will also talk about a CBO that they've formed that ensures that farmers in the region practices the organic farming. Clark, you're welcome to the studio.

**LS**: Thank you so much, Olga. I'm glad to be here. Clark Siaji, founder and a co-ordinator of a CBO called Wachna Green World. Basically, in Wachna Green World, we try to liaise with the farmers all across, but especially the rural people so that they can, work to attaining sustainable livelihood.

**OM**: So how was Wachna begin and more specifically, what is Wachna doing in regards to, enhancing sustainable food production in Migori County?

LS: Okay, Wachna was formed and registered in 2019 and as a community-based organization, with the vision that, we can have a populace who having food security and not only food security, we have food sovereignty. So, we have adopted the agroecological way of production in

a way that if you have a farm, within that farm, you can address the issue of, food, in terms of crops, vegetables. They harvest the insects, the animals. Their population and, the people, the settlement all together in a way that nature informs the decisions that are done there. How you want to build your house, you will check what is nature saying and try to go "the nature way" as opposed to being anti-nature.

So that is why the element of organic, composting fertilizer, organic farming are coming handy because of their nutritional value. And also, their market value and also because we need a volume so that, that volume, when we come to sales of our production, we need the volume. So, we need a number of farmers on board. And that's how the CBO has brought in some other self-help groups so that we are working together.

We have crops we are doing. We have the pumpkins, the cassava all together in the food forest. Food for us basically depicts the fact that every time you go to your farm, you are supposed to get something back home.

**OM**: And, how long have you been doing these? What has been the impact like?

LS: Okay. Now, as I said, we began actively in 2019, with the tree nursery. Out of that tree nursery currently we are practicing the fruit trees majorly. And that is now we are seeing that is restoring the nutrition of our people are now able to plant the grafted avocado, which they foresee that they will be able to sell it in their export markets sooner. And we have various fruits which we do there. And these seeds from these fruits to be propagated come from their local people again.

So, we are also promoting, circular and solidarity economy and diversity as well. So, and other than that, when we do whatever we do, we aggregate together and value add and then sell together at a prime price.

**OM**: Initially when we were having a talk with you, you talked about food sovereignty, how does Wachna manage this?

LS: Food Sovereignty is just having control over how you produce, how you sell and how you consume. So, this having control starts with the seed, you need to have a seed that you can plant and replant and replant as opposed to those which are promoting the aggravate which you will plant once and then the next season will not have production. So you cannot replant.

So it starts with the seed. How do you get to a seed? Just from what they will produce, you can sell. So you have that sovereignty over, over the seed first of all. Then you have the control over the manure or that you put as a nutrition to the plants you are planting. That one again, that's why we promote organic manure that the farmer can be trained and learn how to produce organic manure. So that he or she have a control over the manure. So, you don't go by where we have a lot of fluctuations or prices at the planting time.

Again, how we harvest we promote, a way of conserving, which is long term. For example, I'm using pumpkin just for example. A well, mature, pumpkin fruit can survive for more than six

months shelf life. So, you see, with that, when you are a family of 5 or 6 as most families are, and you have harvested, say, 1000 fruits, that takes you all the year round. And so, you are food not only secured, but you are also sovereignty.

And when it again come to the last bit, which is the sales, most of the things that we rely on from the aggravate and all that, they have a very short shelf life. So, it means as soon as you produce, you are forced to sell. But if you do the things the way you know how and organically way, most of these products will have a long shelf. So, you can sell at the time that the demand is high and the supply is low. So, that's how we attain the food sovereignty.

**OM**: Thank you so much Clark. I know from where you sit or from where I sit right now, you may not really understand or know the percentage of farmers have adopted to organic farming vis-a-vis inorganic farming. But in your own view, where is Migori County lying in terms of people who have adopted already back to organic farming, where are we?

LS: In my own analysis and observation, I think farmers, they know about organic farming in a small way. So, they are here to capacity build with full confidence. And so, they are shying from really like embracing and thinking that this, is not because it's not promoted. I love this, radio station which has leads at least, as given a chance that we may talk about, agroecology or whatever.

The other stations and the other promotions, the government talks about monoculture. When they talk about, well, corn is just maize and maize alone. If they talk about sugar cane, sugar cane, sugar cane alone and missing out in the other element of diversity, yeah.

So, we are not, we just need confidence and awareness creation and then farmers are just going to wake up, yeah.

**OM**: So where are you seeing Migori county, perhaps in the next five years or so? Because what you're doing at Wachna CBO is also advocacy. So as well advocate for organic farming, where are you seeing Migori County lying in the next five years?

LS: I think, we need to bring government on board or seek the government so that when they are promoting an organic fertilizer, what percentage of that budget will go for organic, way of life, of farming, so that even if they do it to 30%, that will be good enough.

So, we are saying there must be intentional attempts from the people, the farmers and the farmer and the government coming together so that the government, the location to improve farming do not only go 100% to the inorganic farming.

**OM:** What do you think in our initial discussion that we had with you on air though, you happen to tell me something on, exports, people who are doing exports of food that they produce or they always prefer, you know, organic food that have been grown, you know, in an organic way. What do you say about this?

LS: Most of export markets, and in Kenya, the one now in, which is trending is avocado. Why avocado? Because mostly avocado is done in Kenya, you know, in the organic way. You just use the compost manure and you spray the bio-pesticides and bio fertilizers. And it worked. So, this is what meet the threshold to export. But if you use the DAPs and you utilize the inorganic fertilizer, it will not meet the threshold of export. And therefore, when we, train our farmers to do the organic farming, then they can just have few trees and they are able to sell them at the prime price than having so many trees, which you are not able to sell at the prime price.

**OM:** What you're trying to say that food that are produced inorganic way do not meet the threshold of exports, including maize?

LS: Yeah, yeah. That's right.

**OM:** What do you say about sustainability of food production in organic way? The agroecology way compared to the chemicalized way that is in Migori County for sustainability and more so in terms of producing food that is in now for the consumption of residents of Migori County

LS: In the agroecology system and the organic way system, that is what we call the recycling/recycle. I think that is a bit which is missing in the agroecology way of working, there is no waste. What you can consider waste at a certain time value chain stage is a very, good sharp input at another stage.

So, when we are able to circulate this, that waste from this end is just an input on the other end. Let me say, for example, if you have a cow and they are producing manure, you use it for biogas or this biogas is what you use to cook with. And they add the slurry. They call this slurry, the waste which comes out now you give to your plants, the plants consumes. When the crops, like vegetables are not able to go ... there is leaching over time, it will go down. Then the trees are able to pick the nutrients, which has gone down, and bring it back to the leaves and drop it again on this harvest. So, there is a cycle, this, recycling of of things then that makes all the farming become very sustainable, yeah.

**OM:** In our initial podcast, I had Mr. Buka saying if we go organic way, then Migori County still will not have enough food to feed the residents of Migori County. How true is this statement?

LS: I don't agree with that statement because, I have just mentioned the recycle as part of the principles in the agroecology. Now every home is producing a waste and dumping it as a waste. What do you think? If we will just tweak their mind shortly and then they understand that what they are calling waste can be used to produce food, then they will be empowered and have sufficient food.

So, the mentality of having the inorganic fertilizers when you use and you cannot recycle back, is just gone completely and you have to go to the shop again and buy and that is waste. And it's giving nutrients to the plant but not taking care of the soil health. So, I think all we need to take care of the soil health, then the soil will now take care of our plants, and then we will have enough food and even supplies. It is highly wrong if somebody in the organic, way of farming,

inorganic way of farming is addressing organic way of farming, because that is what they know, that's what they are practicing, that's where they get results. We in Wachna who are practicing organic farming, we see the results and I believe to go the way of sustainability, then we need to go the organic way.

**OM:** Last but not least Mr. Clark, is that the government is the one that is pushing the adoption of inorganic farming. And once the government is pushing this is means a lot of advocacies are going on, to the public about adoption of chemical fertilizers, adoption of seeds in their shops. How are you going to counter-attack these? How are you going to manage to influence farmers to go back to organic farming as far as Wachna is concerned?

LS: At Wachna level, This, what we, we are doing, and one of the principles that we have in agroecology is, responsible governance. Now, we wouldn't go to the government, as we say and tell them to be responsible, but you can be responsible even at the household level.

There's already a government office on "how do we reward the practices, the best practices in the organic farming?" Do you reward every time something happened or weeds are cropped and we give fertilizer, manure or something? We need to begin to have models and that's what we do. We have the demo farm and we are also adding the farmers that they begin to reward every good practice.

And in fact, I, you are a lady for that, but that these, ceremonies I have gone for birthday. Why don't you plant a tree for the birthday so that you can commemorate? You think about ... nowadays there is a reason for what I call ... heard them say baby shower. Why don't you, you know, plant a paw paw for example, so that in few months the baby come up, but then the paw paw is ready. Yeah. So, if we begin to intentionally, reward good practices, then this will really influence.

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LY: I really liked how Clark talked about food sovereignty, I think that sometimes gets missed in these conversations.

**CS:** Yes, I agree. It sounds like the work that he's doing through his organization is promoting more sustainable growing techniques, but also greater control over the food system and the livelihoods for his members. And agroecology is really about bringing together these ecological and social justice aspects. For me, agroecology and food sovereignty are pretty inseparable.

In Olga's next interview, we also see these themes of balancing care for the land with care for people. She sat down with Caleb Omolo. The audio you heard at the start of the episode came from a tour of his very unusual farm, which some of the Voicing Change team were lucky enough to visit in early 2024. Let's hear what he had to say.

**OM**: Today in the studio, I'm privileged to host Mr. Caleb Omolo, a 65-year-old farmer who for the last 20 years, has decided to take a different path in farming from other local farmers in his region, and instead adopted permaculture as a way of his survival to curb the rising food insecurity in the region. Allow me to introduce to you this unique farmer, to share with us this transformative journey and to know who Caleb is and what he does in his farm. He practices

permaculture as a method not only to feed members of his household, but has also come out to educate other farmers into adopting this sustainable food production. Caleb, welcome. CO: My name is Caleb Omolo. I've been practicing permaculture for the past 20 years. And before we go further, I would like to explain what permaculture is. Permaculture is permanent agriculture. It's originated from an Australian by Doctor Bill Mollison and his student Mr. Holmgren. It arose as a result of environmental degradation caused by humans. So, Dr. Mollison was really, really frustrated by the way he saw the humans destroying the environment, but he tried to explain it to the planet and, you know, the world that ... Yes, we are doing something wrong, but nobody listened. So, he went into Tasmania to learn how the Aborigines deal with nature and solve nature problems. And then he traveled extensively to Africa, South Africa, to learn how the Bushmen. And then he went to Congo and learned how the pygmies are, you know, dealing with the environment. And he came up with permaculture, which is permanent agriculture, which is farming sustainably, working with the environment without destroying the environment, but learning from environment and nature working with nature. It's a way of farming sustainably without destroying that environment, working with the environment. So, in Rongo-

#### OM: Yes.

**CO:** I teach farmers and I also teach it, we call it, sustainable farming.

#### **OM:** Right

**CO**: Where you copy the forest, the way forest works, and then you mimic it and then you apply it to your land. So, instead of a lot of digging, we don't dig, we do is what you call mulching. So, we work with bacteria and fungi. So, you know, it's called biological farming, as opposed to industrial chemical farming, which works with, you know, fertilizers, which are destroying the rivers, the lakes, the water and killing microorganisms. We work very, very closely with microorganisms and everything in nature. So, the way we farm is we don't do monoculture, but we do like polyculture, where you plant many, many crops in a very small plot of land in case of a disaster or flood or anything, you have something to hold on to. And also, we don't use chemicals. We work with what you call bio complete compost. We make our own compost. And then in permaculture we produce no waste. Any industrial waste, any farm waste, household waste, we turn it into organic manure to feed the bacteria and fungi. And that's how we farm.

So, it is very, very productive and also, it's resilient because we plant so many things at once in different things. And they work, instead of competing, they work with each other.

**OM:** Can you just tell us a few of these things that you plant together, like, which kind of crops do you plant together? What else do you bring together to help you in your farming?

**CO:** In permaculture, we work with the energy. When it rains, we capture that rainfall runoff into our farms, and then we sink it into the soil to be used right away and for, for later, for later purposes. Also, we're watching the sun orientation. How the sun affects our land so that we get maximum sunshine. So, we plant different, crops. But we really, really encourage farmers to plant crops which does not expire like three, four months. We call them perennials. We prefer

perennials instead of annuals. And what we do is we not only work with the crops, we work with animals like chickens, birds, cows into our system because they provide us with the milk and also the manure, and also when they eat the grass, that grass, you know, gives us, you know, manure when we're making a bio complete compost.

So, we work with everything in nature. But we really, really, you know, emphasize farming for, for example, in a small plot of land you have to have like cassava, potato, malabar, spinach, arrowroot, bananas, maize, millet in a portion in different sections so that you have everything. So, in case there's a flood, the bananas use deep roots and also, they will not die. But a lot of places have experienced locust infestation. People who have just one crop, you know, fare really very bad. But us, we survive, because when the locusts eat the top, our bananas just emerge again, and arrowroot, things like that, even our sweet potatoes. So permaculture teaches us to be diverse instead of just having, like one crop, like sugar cane or just maize alone.

**OM:** Maybe, just explain to us how you always prepare your bio complete compost manure.

**CO:** We use farm waste and anything which is biodegradable like sticks, fresh grasses, cow manure, goat manure, forest soil, we all combine it together. And this, microorganisms and bacteria, they need a lot of water. So, when we make it, we just, like, add water and we mix these things in a cool place so that they start multiplying. So, it gets very, very hot because they really, really reproduce. When we know it's working is when, you know, you put a stick into the hole and when it's hot, you know that the biological process is taking place. And then when it stops that it turns like reddish, that means just really, really now complete. You can use it in your farm.

**OM:** Would you normally make enough to supply your entire farm or you sometimes get other fertilizers from somewhere else.

**CO:** No, no no we don't use quick fix, we use you know the bio complete. But since we are mimicking nature, once we reactivate these microorganisms, we just, like, now make environmental conditions good for them. So, we do a lot of mulching and, chop and drop, just like a tree. You see a tree dropping a lot of leaves or, you know, stems and everything, and then it decomposes into humus. So, we do the same. So, in our farm, since we mimic nature, we use a lot of mulching with, you know, dry grasses, any weeds we cull, or you know, we chop, we just, you know, and also the household waste, like chicken manure or cow manure, we just dump it into our farms. And also, we use earthworms. And another one that's called black soldier fly. So, earthworms are very, very good decomposers because that is what they do naturally.

OM: How sustainable is this method Caleb?

**CO:** It's very, very sustainable because you have instead of growing just one monoculture, you grow several things in a very small place of land. We call it stacking. For example, in my one-acre land I have like seven layers of crops I have ground cover. I have deep roots, like cassava and, arrowroots. I have peanuts, I have pumpkins, as a cover crop. Then on top I have avocado. And then in the middle I have coffee, and then outside I have like, nitrogen fixing gravalea. And,

so it is very, very profitable because I can make money selling any of this at any time. And also, I have food all year round because they mature different times of the year.

**OM:** You talked about you're able to educate other farmers on the same on what you're doing right now. What has that process been like? Are people really understanding what permaculture is all about and that how do they receive this information? Are they able to adopt it or what is it like? Can you share that with us as well?

**CO:** Yes, I'm partnering with, teenage mothers and also widows because most widows, when their husband dies, they just lease a big piece of land for, like, monoculture farmers because they don't know how to, you know, farm that big piece of land.

So, I partner with them, and I show them how to design it in a permaculture way so that they can grow different things and then make money. So, I have a small pulping machine they bring the coffee for me twice a week because coffee we have like short rains and long rains. So, coffee matures during the rainy seasons. So, we pick coffee twice a year. So, when they bring the coffee, I buy it from them and then I sell it to the market and then I pay them very, very good money above what the land lease costs. So, they get money all year round, plus what they will get when we just flood just one monoculture like sugar cane or maize.

**OM:** So how big is the group of widows and the young ladies that you're talking about?

**CO:** In Rongo, we are almost 250, but I go all over. I go to Rwanda, Uganda, Tanzania as a consultant. And, you know, I try to promote permaculture and regenerative farming using permaculture principles.

**OM:** Now that you practiced this and you said you practice it for the last 20 years, where are you seeing yourself being perhaps in the next 20 years? What's your plan like?

**CO:** I started with a quarter of an acre. Now I'm developing five acres, the whole of my land, into permaculture, which is divided into five zones like zone one is my house, zone two is where I have like chickens and things which I take care of all the time because in permaculture it is divided into zones like this zone one, zone two, zone three, zone four, zone five.

So, I'm now fully developing my farm into permaculture. So, in the next few years I'm hoping to leave very good food for me and for my children, for the new generation, and also as a learning place where somebody can come and see how permaculture works.

**OM:** Okay, this permaculture to just me personally it looks so complex, I don't know, but, how are the locals, like, the widows and the young ladies that you've always trained, are they also getting the idea? They adopt the idea, or they're just looking at you and there's nothing they are doing about it?

**CO:** No, permaculture is not technical. It is like the way grandma and we used to work before the Europeans, because even the Europeans learned from the Aborigines. There exists a very

simple way of farming, like just following nature, mimicking nature, which that my grandma, my grandma, whenever she sweeps out chicken house, she always dump it next to kitchen, and that's where the plants are. So, she always had, like, perennials like, black nightshade, spider plant. They always grow up there because. Because permaculture it's almost like a lazy man's farming. Because there's very, very little maintenance.

## **OM:** A lot of labour required, right?

**CO:** Not labor. Just for designing. But after that, nature takes care of itself. You just have to, like, prune and maintain.

**OM**: Okay. That sounds beautiful, Caleb. Maybe before you share with us the challenges that you face of the permaculture farmer, share with us anything that you think we are leaving behind. I was asking you question, what is it that you think I was supposed to ask? And I did not ask. And you can, also help other farmers to get what permaculture is all about.

**CO:** You know, challenges is just like in every farming or in every aspect of life there's challenges, advantages and disadvantages. So, the disadvantages is like maintenance, like for example, my bees, I'm so afraid that, you know, the kids or the cows, that would be the cows passing nearby, you know, can get bitten by them because bees, they bite nine miles radius. So, and I have like 20 boxes. So those are my biggest fear. If they invade the village. And also the way my land looks, it looks like really wild and bushy and people think like, this guy is crazy. Like, why is he planting so many things in the same place? So, it's opposite from conventional farming.

So those are the challenge and adaptability because it's very hard to understand like what I'm doing. I try to just tell them like know harvest all year round and I don't wait for the rain because I plant the rain because with the swales and contour lines and also planting vettiver grass, my land is wet all year round.

**OM:** And it's a busy piece of land as well.

CO: Yes.

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**CS** :And that's all for today. A really special thanks to Olga Millicent Awuor, Clark Siaji, and Caleb Omolo.

{[Outro music begins- low level]}

And thank you for listening to this episode of Voicing Change. This episode was hosted by me, Charlie Spring, with editing and sound design by Narayan Subramoniam. Our music is composed by Ali Razmi. Voicing Change is produced with support from the Laurier Centre for Sustainable Food Systems, Wilfrid Laurier University, the Centre for International Governance Innovation, and the Balsillie School of International Affairs.

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