

Stories of dealing with waste from Nigeria



Timber shavings burn beside a lake in Lagos, Nigeria. Across the country, most people do not have access to a waste collection service. This can mean burning waste to clear it, which can have ill effects on local communities. Source: Steve Goddard/Tearfund

In Nigeria, your support is helping young people and their communities harness new possibilities. Creating healthy spaces, steady incomes and new jobs. All through a focus on a combination of sustainable economic and environmental activities. This includes a focus on sustainable waste management; on water, sanitation and hygiene practices; on climate-smart agriculture and 'self-help groups'.

In Nigeria, most people do not have a waste collection service. Waste ends up dumped around a city, or burnt, to clear it. But entrepreneurial young people are turning this waste into wealth. And churches and

communities are standing with them, to create a new movement which is bringing about health and wellbeing.

Victory is one such entrepreneur. He lives in Plateau State, Nigeria. At just 28-years-old, Victory (pictured, right) has many skills and gifts in his repertoire. He is a student and a tailor. And his creative streak and passion for the environment are drawing together in new ways, as a result of your support.

In the area he lives, Victory was becoming concerned about the waste he was seeing. In particular, the large number of old tyres that were being dumped in the community. A few would be collected, reused or recycled, but in the most part, they would be burnt. This resulted in billowing plumes of smoke going into the air around his community. A problem with not only the potential to cause serious local effects, but global effects too.



When the local church began selecting young people to take part in an initiative about sustainable waste management, run by Tearfund's partner, CRUDAN, Victory was able to join. It gave people a space to find inspiration, to organise and mobilise themselves to address issues relating to waste disposal, as well as issues ensuring sustainable consumption and production.

At the core of their training was a focus on reducing, reusing and recycling waste. As well as creating work and wealth through sustainable waste management. These two approaches, woven together, could lead to environmental and economic thriving for communities. And with a skilled tailor, like Victory, ready to take action, it seemed like success could be just a stitch away.

As one person commented, 'I am so happy with what I have seen [as a result of the initiative]. This work requires creativity...'

Victory, inspired by the training, found it really helped unleash his creativity. He explains 'When I received knowledge on waste management from CRUDAN and Youth Light Initiative¹ [an initiative which is helping young people access work], I used the knowledge to make chairs from old tyres and am happy. I want to discourage people from burning tyres but use them to make something out of it.'



¹ A workshop on Sustainable Waste Management by CRUDAN so inspired one young man that he started the 'Youth Light Initiative', to help other young people access work.

Left, the frame of one of the chairs Victory has made. Right, the stuffed and covered seat.

Source: CRUDAN/Tearfund

Victory explains, 'Nothing is waste'. And the manager of a local hotel, who has seen all Victory has been doing, echoes that, sharing 'No knowledge is a waste provided you make use of it. This is quite commendable. I never thought that something good could come out from something like this. If he [Victory] is given the necessary support, he can go a long way.'

Not sitting still

Throughout the Bible, God creates and restores, and invites humanity, His 'image-bearers' to be a part of this work. These creative people are doing some amazing things.

Victory's chairs are helping reduce the number of tyres which might otherwise be burnt, to make a product which requires fewer raw materials, to create a new livelihood.

Your investment in his entrepreneurial spirit could mean the lowering of air pollution, a decrease in the raw materials required for the end product, and a sustainable income stream.

While Victory took action, this project period was also one which saw many communities experiencing great uncertainty. Highlighting further the importance of a focus on sustainable actions, like those that Victory has taken.

The coronavirus pandemic continued to impact communities around the globe. In Nigeria, many people experienced illness or dealt with the loss of loved ones while navigating continued challenges in their day-to-day life and work, including restrictions to prevent the spread of the illness. And while a Covid-19 vaccine rollout began, the ongoing effects of the disease continued to be felt. Underlying the social impacts on communities, an economic crisis also started gaining momentum.

For Nigeria, a fall in demand for one of its key commodities, oil, saw the currency, the Naira, losing value against the dollar. There has been a recession for the second time in five years. While inflation has caused the price of goods to rise. As a result, many of the costs originally budgeted for the project changed this year, increasing, in line with the markets. This meant some replanning of activities in line with these changes. However, thanks to your support, it was still possible to do a huge amount in communities like Victory's. To take action to create sustainable change. So that people can live healthy lives, despite the ups and downs of external factors.

...all the crops were burnt...'

Two years ago, Paul was tending to the land and vegetables he'd planted, when his hopes for a good harvest were dashed. He explains: '...all the crops were burnt as a result of excessive application of inorganic fertilisers'. It was a disappointment, which weighed heavily upon him. Paul explains 'I had a very poor yield and as a result couldn't meet up with market demand'. And it had a terrible knock-on effect. Paul explains '...my family felt the impact as I was unable to pay my children's school fees. I was very unhappy'.

Farming is a major occupation in Nigeria. But dry seasons are causing communities, like Paul's, to experience seasonal famine. They are finding themselves facing tough decisions about how to get the most out of their crops. But a limited knowledge of environmentally-friendly agricultural practices could see their situation worsen. For, as the rich ecosystems their crops rely on are lost during periods of extreme heat and rain, practices like the use of inorganic fertilisers, can add to the stresses these ecosystems are placed under.

While communities work hard to overcome the day-to-day challenges of a changing climate, other factors are impacting those on the lowest incomes too. For Paul, not growing enough had a knock-on effect on his daughter, limiting her educational opportunities. Placing a ceiling on her potential. Absenteeism due to illness

is another barrier that can disrupt education and work for many in Nigeria. And a lack of waste management systems, and practices like open defecation, make the chances of becoming ill greater.

It wasn't easy for Paul two years ago. And unfortunately, it wasn't the first disappointment Paul had experienced. Despite farming for many years, Paul had always experienced a poor yield at the end of the season. He would try to access inorganic fertilisers to help his crops to thrive, but often they were too expensive, and difficult to get hold of.

But support like yours can lift the ceilings which are limiting families, like Paul's.

Lifting the limits

With the support of Tearfund's partners, Paul has been able to lift the ceiling he kept reaching - and it came about in three life-changing ways...

1. **Paul was able to take part in training on Climate-Smart agriculture.** Its aim is to promote techniques that improve food security, with the changing climate in mind. Techniques, which can help protect the ecosystems that are so vital to good soil and plant health. Techniques, which could mean the difference between yields remaining small, to Paul growing enough food for his family to stay well fed, or to sell.



Training sessions are helping communities to grow their incomes. Here, people gather to learn how to make their own natural, low-cost fertilisers. Source: ACET

2. **Paul was able to learn how to make his own fertilisers.** He was able to use these - organic, liquid fertilisers and manure - on his own land. He also ventured into irrigation farming. Having then used a combination of these new techniques, he had a bumper harvest of his tomato and pepper crops. Over a three-week period, he found himself harvesting 40 baskets of tomatoes a week, giving him 120 baskets to use!
3. **Paul was able to earn all he needed to make sure his children could stay in school.** 'I sold the tomatoes and helped my family, paid off debts and had money in my hands.' He explains: **'The proceeds of the sold tomatoes were used to pay my children's school fees and this makes me feel great...And other farmers are coming to me to learn more'**. From a space where he felt all eyes had been upon him for the failure he had experienced, all eyes were now on Paul for another reason.



Waste pickers - and goats - sort through an array of plastics and other items that fill the landscape in front of Nigeria's beautiful hills. Your support could be a part of bringing stability and restoration to land and livelihoods, through ideas like those which focus on converting what was once considered 'waste' into 'wealth'. Source: Tearfund

Overview

Communities in Plateau State are finding themselves under increasing pressure. Climate change is impacting lives and livelihoods. Farmers are finding themselves under increasing pressure from pests and changes in weather. But your support could provide the means to protect the land and livelihoods in ways which protect the environment not just now, but for the generations to come.

A changing landscape

The growth of healthy crops can be vital to a community. They provide essential produce, like food. For farmers, they can provide an income too. To make sure there are enough nutrients in the soil for these crops to grow well, fertiliser plays a key role. Its addition can be one of the fundamental components of a farmer's work.

However, the high cost of inorganic fertilisers reduces the overall profit that can be made from a crop. Having spent their money on fertiliser, a farmer can find themselves with less income to take home, and having to look to other areas of their lives to save the money they need to ensure their family has basic essentials, like housing or food.

This money can end up coming from other important places, such as the savings they have set aside for their children's school fees. Unable to attend school and learn about core ideas, on subjects like reading, writing, or mathematics - it can become harder for these children to compete in Nigeria's increasingly busy workplace.

The fertiliser put in to help the farmer's crop - and improve their incomes - can end up risking their children's future.

There is another disadvantage too. Inorganic fertilisers can result in negative effects on the land, which makes it harder, year on year, to grow healthy crops.

Kamil has seen the evidence of these fertilisers firsthand. Most of his family are farmers. He shares: 'The rate at which, in my community, we make use of inorganic fertilisers is very alarming.' Kamil explains: **'Every farmer saves quite a fortune so as to get a bag.'** These expenses end up having a direct impact on families.

In Kamil's community, even though people worked hard not to apply too much inorganic fertiliser on their land, they noticed their crops did not last long after the harvest season. The soils have also become more acidic and very exposed to erosion. This creates a need for more fertiliser. Farmers go the extra mile to borrow money so they can afford this, and life becomes a constant balancing act. It can put them in impossible situations. Soil amendments are needed for a crop to thrive, but these same additions are making the condition of the soil worse. As more and more money is invested in inorganic fertilisers, the need grows.

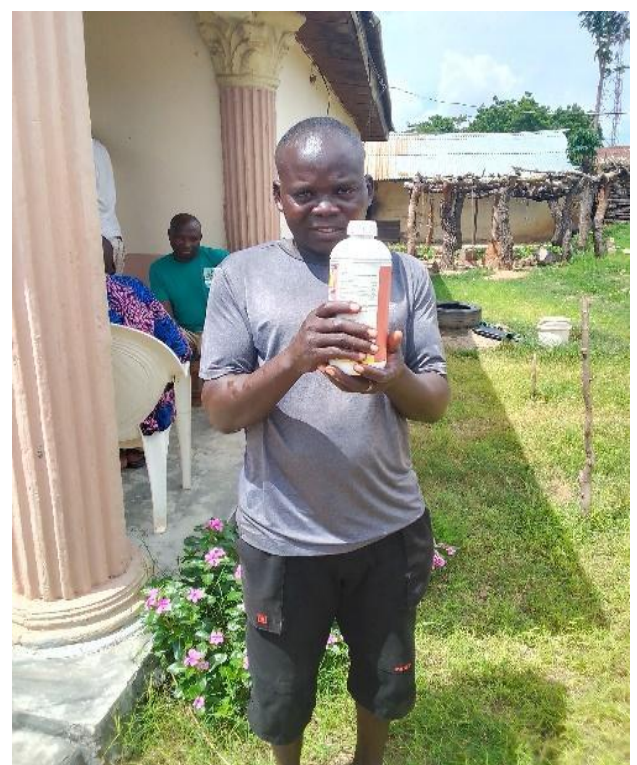
Eventually, this cycle forces people to live outside of their means, and when something urgent happens, like a child falling sick, they can not afford the medical bills. Parents are instead forced to turn to herbal drugs, which can cause more harm than good. **But things have been changing for Kamil and his community.**

Restoring what was lost, reimagining what could be gained

Kamil was one of 20 farmers in his area to take part in a project supported by Tearfund's local partner, the Aids Care Education and Training Society (ACET) Nigeria. Through them, the farmers learnt about a range of ideas to help them get the most out of their work.

One particular training session proved transformative. The farmers learnt how to use natural, local materials to make a liquid fertiliser (see picture, right of Kamil with one such fertiliser. Source: Tearfund).

Getting back after their training, the farmers split into groups. One person showed each group how to use banana peel to produce liquid fertiliser for their nursery plants. In Kamil's group, they were able to gather materials to produce compost, biocides and liquid fertilisers, which they then experimented with on their banana plantations.



They got good results from this new fertiliser. So much so that Kamil decided to take his experimentation to another level and produce fertiliser using moringa seeds and leaves.

Kamil shares: **'The high cost of procuring the inorganic fertiliser is now history**, as I now leverage on the liquid fertiliser I produce. In addition, I can pay my children's school fees and meet up with demands from the home front. People and other farmers now come to me to get fertilisers to grow their crops.'

Organic fertiliser is offering Kamil's family a better future. With a way to cover school fees, his children gain an edge in a competitive market. Fellow farmers gain a way to reduce their overheads.

Fertilisers, like compost, are turning waste into wealth. Kamil explains: 'Farmers in our communities embraced the liquid fertiliser technology which helped reduce the cost of buying fertilisers as the materials needed are around the community; littered around'.

This year, your support could make a vital difference to communities, like Kamil's, in Plateau State. Your faithful giving could offer five communities a way to bring about the healthy, flourishing environment they'd like to see.

How will this project make a difference?

Farming is a key occupation. It provides food and income both to those who are subsistence farmers and to those who are farming commercially. But the farmers here are coming against a range of challenges, just like those experienced by Kamil.

Tearfund's local partner Aids Care Education and Training Society (ACET) Nigeria is working in a range of ways which protect communities across Plateau State. Ways that see livelihoods thrive and the land flourish. So that farmers, like Kamil, have enough food and income, not only for the coming season but for seasons far beyond.



Across Nigeria communities are starting innovative initiatives, like charcoal production, that use waste to create fuel, protecting the environment and the economy. Source: CRUDAN/Tearfund

A changing landscape

Today, Nigeria is experiencing some massive changes in its environment. The felling of trees to ensure fuel for everyday activities like cooking has seen the very landscape of the nation changing. This leaves precious soils exposed to the elements, and with the seasons' weather patterns and lengths shifting, life is becoming harder. Where thirty years ago rains fell from late March to October, rains now usually fall between May and October. This has huge consequences for farmers: water becomes scarcer, and the growing season shorter.

Naka town in Gwer West, Benue State is no exception to these issues. Their trees and forests have been fast disappearing. The wood from these trees is a vital component in charcoal, a fuel that many rely upon for cooking. This makes it not just important for families as they make food, but a commodity people know they can produce to earn a living in an already thinly stretched job market.

As families work hard to provide the income they need to get by day by day, the world around them is changing too. A growing population, a shift toward urbanisation and changes in lifestyle have caused an increase in waste around the globe. As a result, cities, like Jos, up in Plateau State, are experiencing new challenges. Here, as the poorest work hard to bring in income for their families, a lack of waste management systems is putting communities' health, livelihoods and futures at risk. They are finding themselves surrounded by objects they can't get rid of - things like empty food packets and items that can no longer be repaired - creating piles of rubbish which continue to grow.

But the problems with waste go beyond Jos. Around the world it is estimated that every 30 seconds someone dies because of diseases caused by plastic pollution and other waste. In Nigeria it is estimated that 70 percent of diseases are linked to the environment. Over in Adamawa State, communities in Yola are experiencing another growing global issue - a build up of electronic waste or 'e-waste' - the waste caused by electronic equipment that has become obsolete. As this waste breaks down it can become toxic - releasing harmful chemicals and heavy metals. Without a formal recycling centre for such waste, around 500,000 tonnes of it is being added to Nigeria's landfills, open spaces and water sources each month.

The potential health impacts of these different types of waste is huge. And where health is affected, so is people's ability to work, causing families to struggle to get the income they need to provide for their families. For children, the effects of the dumping or burning of waste can be particularly serious.² The dumping of waste can clog water systems, causing diseases to thrive in the stagnant water, which leads to a higher incidence of diarrhoea, nutrient malabsorption and stunting in children. Illness that directly impacts a child's ability to attend school.

In Nigeria, young people are facing other huge challenges too. It is estimated that about 42 per cent of young people are unemployed. Many have been unable to complete their education, and with young people making up around 50-60 per cent of the population, the number of people competing for jobs is high. The picture for these young people, the future of Nigeria, is one of uncertainty.

But something new is emerging from the waste, and you can help it grow.

From the waste, something good

Through the collaboration of young people, communities and faith leaders, and encouraged by the church, new enterprises are starting up all over Nigeria. Initiatives that have the potential to transform life today, and bring bright hope for tomorrow.

In the communities of Kabong and Rankyeng, Jos, with support from Tearfund's partner CRUDAN (Christian Rural and Urban Development Association of Nigeria), young people have a new opportunity. One where they can create new 'green' jobs through sustainable waste management initiatives. These will be jobs that not only improve the environment, but the health of the communities. A joint community campaign on sustainable waste management and water, sanitation and hygiene should help embed a shift in habits and practices to prevent some of these environmental problems in Nigeria today, in order to protect people tomorrow.

An amazing centre for eco-entrepreneurship, the Jos Green centre, is helping innovative young people build businesses that are sustainable; protecting the environment while focusing on things like renewable energy sources. Within just two years of opening the centre, in 2015, they had already started similar centres in each of the geopolitical zones of Nigeria. Now, with your support, they could build up their capacity, so they can keep on developing and working on a sustainable waste management model for Jos city centre.

Churches will be unpacking the ways they might become 'salt and light' to their communities - becoming a beacon of hope that people can look to for practical as well as spiritual advice. They will provide training on topics like waste management and establish Self-help groups; an initiative that provides spaces for people to save together, provide low-interest loans to one another and create new jobs and small businesses.

Meanwhile, in Yola, a new e-waste recycling programme is getting started. It is an initiative in which young people will be able to restore and bring new life from what was once considered rubbish. Through it, they will be trained on the dangers of e-waste, about the practice of sustainable e-waste management, and in solar technology and its installation, with e-waste components being recycled into solar converters. Then, in collaboration with the local government, they hope to bring about a policy change on waste management, with an e-waste audit initiated.

² 'Making Waste Work' WasteAid UK



In Naka, people are learning ways of making waste into charcoal briquettes, which can be used and sold to make an income. Source: CRUDAN/Tearfund

The innovation and ingenuity rising up in Nigeria is perhaps no better exemplified than through the amazing work of the young people of Naka. With the support of Tearfund partner, CRUDAN, they were able to assess the needs of those around them - the need for fuel, for work and for a change in how waste was being managed. They were given training about ways to manage waste sustainably and learnt how they might transform it into something that serves every one of those needs; through the production of a new type of charcoal briquette.

Instead of wood being taken from local forests, these briquettes can be made from organic waste: from dried leaves, coconut husks, groundnut shells, sawdust and food waste. It is work that is transforming what people already have into something that can be sold to bring in an income. And it helps prevent further deforestation locally. This group of changemakers also learnt about some of the other effects tree logging can have - like how it can lead to soil erosion and climate change.



Some of the newly formed charcoal briquettes, produced using waste materials.

Source: CRUDAN/Tearfund

Now, equipped with their new skills, knowledge and a means to bring in income, this group of young people are hopeful about the future. After their training, a number of them commented on the things they learnt. Olabisi* explained 'I now understand that there is danger in cutting down trees to make firewood'. Oluwakemi* shared how the training led to a change to the way they thought about the waste they produced; 'I used to dump waste anyhow in [the] house. But now [I] am aware that something good can come out of waste'.