





AFRICAN EQUITY

There are cultural as well as socioeconomic barriers for African women who want to start their own business, but a number of projects are under way to change that.

By Caroline Hayes

"Women are not owners of land or property titles, and given that it is often the first source of collateral that financial institutions rely on, that basically pushes women aside," says Dassanou.

In countries where the inheritance law has been reformed, women can co-own land with their husbands, but financial institutions still ask if the husband has agreed to using the land as a guarantee.

It is also the case that land can be too valuable to be used as collateral, Dassanou points out. If it means the loss of the family home, it becomes too high a risk to take.

Re-thinking collateral

The answer is to look for alternative collateral. For example, the Guarantee for Growth programme is jointly operated by AFAWA and the African Guarantee Fund to cover between 50 per cent and 75 per cent of a loss of any loan made by a financial institution

The initiative's aim is to release \$5bn financing for small and medium enterprises (SMEs) owned and managed by women by 2026. The programme is supported by the governments of Canada, Denmark, France, Germany, Italy, Sweden, the Netherlands, the European Commission, and the Women Entrepreneurs Finance Initiative (We-Fi).

The programme includes training for financial institutions to understand the challenges women face and assess the risk differently based on that knowledge.

Another consideration is what services a woman can access to run her business properly. Dassanou explains that typically, a woman relies on her husband's health insurance; taking out her own is a major expense for a small business. Yet, if she falls ill and cannot work, a woman puts her business loan at risk. Providing health insurance as part of the loan will avoid this. "It's really about understanding the realities [women] have... in order for the credit to be not just a loan but a solution to enhance her business. She will therefore not only repay the loan but come back for another one," Dassanou observes.

AFAWA also encourages women to be trained in developing a business plan, understanding finance and the importance of keeping proper financial records. There is also support for training to educate women >

identified digitisation and fair competition as "fundamental levellers" in the challenges facing women entrepreneurs in Africa. It cites corruption, unfair competition, lack of skills and inadequate access to power or finance as roadblocks to a sustainable way to "unleash the potential of young people and women".

THE INTERNATIONAL Labour Office has

In 2021, the majority of investment raised by African start-up companies went to single or all-male founding teams. Start-ups founded by a single female or all-female teams received just 0.95 per cent and companies started by mixed teams received 18 per cent of the total funding raised, according to Briter Bridges' Africa Investment Report (2021).

There are many reasons why women are prevented from accessing this financial support, according to the manager of the African Development Bank's Affirmative Finance Action for Women in Africa (AFAWA) programme, Esther Dassanou.

One is a lack of recognisable collateral. In many countries, women cannot inherit or own land or, if they do, their husband may take it away from them without notice.

www.EandTmagazine.com July 2022 Engineering & Technology





< on what needs to be in place to scale-up her business as well as encouraging her to have the vision for how far this business can potentially go.

Since it started in 2021, AWAFA has approved over \$500m in loans to women, helping around 1,800 women. Focusing on SMEs has been a deliberate strategy, explains Dassanou. Research shows that SMEs have the most capacity to create jobs, and that is what the continent needs, she says

Access to technology

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Technology has ensured that rural areas can benefit from virtual training sessions. Similarly, during the Covid-19 pandemic, urban areas also conducted virtual training.

Around the world, however, women have less access to the internet. The Alliance for the Affordable Internet (A4AI) reports that men are 21 per cent more likely to be online than women; this figure is 52 per cent in less developed countries. Its 2020 Affordability Report identified unaffordable devices and data tariffs as barriers for women, together with inequalities in education and digital skills, social norms that discourage women and girls from accessing the internet and participating online, as well as privacy, security, and safety concerns.

Fortunately, most digital services can be accessed via a mobile phone, and women increasingly have access to these, confirms Dassanou. Another important consideration is that most services do not need the most sophisticated phones. Most transactions can be conducted on 2G networks although 3G and 4G networks are common and more countries are adopting technologies to ensure there is wide coverage.

Microfinance

It is in rural areas that businesses are based on microfinance models and community finance projects, and they are usually

agriculture based. The World Bank estimates that women make up between 40 per cent of the agricultural workforce in sub-Saharan Africa and 50 per cent or more in some developing countries.

Farm Africa is a UK-based charity, funded by UK government aid, which promotes agricultural practices that protect the environment. It has introduced the Village Savings and Loans Association (VSLA) to farming co-operatives, such as the Rugyeyo Organic Farmers' Co-operative Society in Kanungu, western Uganda.

"Farm Africa taught us good methods of farming, like emphasising mulching, pruning and digging trenches to increase coffee yields," says the co-operative's treasurer, Ninsiima Patience. "Farm Africa also trained our group on how to work together as a co-operative.

In addition to barriers to ownership of land for women, tracing titles to land can be complicated, and community land may be government-owned. Farm Africa has conducted workshops to promote voluntary land use agreements where older generations grant access to land, for coffee growing, for example.

Agricultural education

One woman aiming to bridge the gap between the latest technologies and methods in agriculture is Esther Ngumbi, assistant professor of entomology at the University of Illinois at Urbana Champaign. Raised in a rural community on the south coast of Kenya, she recalls the devastating effects of drought, extreme temperatures and insects eating the crops in the fields or in store.

There are many challenges, Ngumbi says. "Most of the farmers have very small parcels of land, passed on from generation to generation, without much care for the soil. All we do is grow, grow, grow, without growing something to feed the microbes

mobile payments service. Originally it was an idea part-funded by the UK Department for International Development to send and receive money via a mobile phone in simple steps. Bob Collymore, CEO of Vodafone's African subsidiary, Safaricom, explains that it replaces a "relatively clumsy, seven-step approach" to transferring payments between

banks when cash had to be withdrawn from an account to move onto a payment platform, and then the recipient having to do the reverse to put the digitally transferred money into their own account. M-PESA is a tap and pay app, says Collymore

A country's banks will work together in digital payment apps, but these tend to be targeted at larger transactions. For example, the Kenya Interbank Switch platform is a real-time mobile payment app developed by the Kenya Banker Association which represents 46 of the country's banks. Its transactions are for 70,000 to one million shillings, whereas M-PESA, says Collymore, targets shillings (a shilling is just under one US cent). "The banking sector across the word has always ignored that so-called base of the pyramid, but we understand that the base of the pyramid needs to be served and that there is also commercial viability in doing

M-PESA now serves over 51 million customers and 465,000 businesses, provided by 600,000 agents across Kenya, Tanzania, Mozambique, the Democratic Republic of Congo, Lesotho, Ghana, and Egypt. It processes 61 million transactions a day and has evolved to include the Super App, which offers users access to shopping, transport and government services as well as savings, insurance, and credit and third party 'mini apps'

M-PESA says that by connecting millions of customers via a 2G mobile phone, it has contributed to a more than three-fold growth in formal financial inclusion across Africa and has empowered women with access to and control over finances.

Engineering & Technology July 2022 www.EandTmagazine.com









Ester Ngumbi founded Oyes<mark>ka Greens to inspire</mark> and empower smallholder farmers in the Kenya Coast region through training and demonstration

The Vodafone Foundation's Instant Schools for

The Vodafone Foundation's Instant Schools for Africa initiative uses mobile tech to help half a million children access a quality education

something for the micro-organisms that live in the soil." This makes agriculture resource-intensive, she explains. "Degraded soil requires a lot of fertilisers. The plants being grown may be weak, and unhealthy plants attract a lot of insect pests, so farmers use a lot of pesticides, which are costly..."

Ngumbi developed an interest in agriculture at a young age and was encouraged by teachers and mentors to study physiology and ecology at an international centre 15 minutes from her home. She says she has never looked back.

She soon realised that while she was learning about new crop varieties and discovering new ways to control insect pests, farmers did not have access to this knowledge. She founded Oyeska Greens to share the latest findings and encourage agricultural development.

A demonstration farm allows farmers in the Kenya Coast region to see what is being used and adapt this knowledge for their own farm. There is also a collective seed stock of assured high quality which smallholders can plant to minimise risk. Farmers can return at any time during the growing season to see how the demonstration farm is using technology or to relearn skills or boost their

knowledge base. Training is also given if farmers want to learn a particular technique that they can implement on their own farm.

Oyeska Greens has helped more than 2,000 farmers since 2014, working with several during one growing season who then go on to share their knowledge with other farmers.

The farm also has a school, so students can acquire hands-on skills, Ngumbi explains. "I believe, once you have that knowledge, it may be useful now, it may be useful next year or a few years after that, but once you have it, it's something that no-one can take away from you," she continus.

Educating farmers extends to how the latest research findings are presented. Information is translated into English and Swahili and presented in formats like CDs, which do not rely on the internet or expensive mobile phone bundles to view videos.

The next challenge is climate change and how to ensure farmers have resources to tackle drought and weather extremes to maintain the quality of the soil.

Ngumbi says: "Where there is a will there is a way. I feel for farmers and want to find any way we can ensure their hard work does not go to waste or yield nothing."

EST INNOVATION AWARDS



The *E&T* Innovation Awards are an annual celebration of some of the finest projects and people from around the world. While technology and

engineering are at the foundation of all these awards, they also embrace the seven 'Critical Targets' – the societal pillars – that *E&T* identified as being the biggest challenges facing engineers, technologists and scientists. These cover energy, sustainability, diversity, global equality, trust and truth, transport and inspiration. It is no surprise that Esther Ngumbi's work was recognised at the 2021 *E&T* Innovation Awards, when she was named as Difference Maker of the Year – the highest accolade at the Awards.

Entries for the 2022 Awards are now open, but will close on 4 July 2022 – so time is running out! For all the information about the *E&T* Innovation Awards, including the categories, how to enter and the ceremony itself, go to:

bit.ly/eandt-innovawards

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