

AKADi

Inspiring insights from our communities



GREEN GHANA

Promoting sustainability through
business and community

SUSTAINABLE FASHION **P.23**

GREENHOUSE FARMING **P.44**

PROTECTING ATEWA RANGE
FOREST RESERVE **P.55**



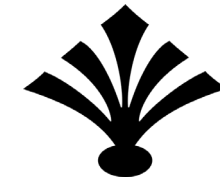
CREDIT

Cover
Photography by
Samuel Oke;
assisted by Alfred
Quartey. Caption:
Backstage at the
Style Lounge 2019

Editor's note
Gemeinsam für
Afrika/Florian

Design
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EDITOR'S NOTE

Growing up in England and knowing that a decade after independence, Ghana's electricity needs were being powered by Lake Volta and the Akosombo Dam filled me with enormous pride. Not only was Ghana using hydroelectricity to power its nation, it was also supplying neighbouring countries with this clean energy at a time when many Western countries were heavily dependent on fossil fuels.

But there has been an environmental and community cost to this investment. Creating Lake Volta – a man-made water body – changed the flora and fauna of the area. It also displaced around 80,000 people – to less fertile land.

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These communities were dependent on subsistence farming and fishing. In recent times, declining fish stocks and smaller-sized fish have resulted in some fishermen resorting to the illegal trafficking of children to source cheap labour.

Such trade-offs continue to challenge how Ghana navigates between preserving its environment and pushing forward its development plans. The UN's Sustainable Development Goals, which were established in 2015, outline targets in areas including water and sanitation; achieving responsible consumption and production and climate action, that countries such as Ghana need to achieve before 2030.

The UN has declared the 10 years between 2020 and 2030 to be the Decade of Action. During this period, nations are expected to

*“WE EXPLORE
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GHANA.”*

vigorously scale up efforts at realising the 17 targets by 2030.

In this issue, we explore what some individuals, businesses and activist groups are doing to leave their mark on promoting sustainability in Ghana.

We hear from activist groups Eco-Conscious Citizens Ghana and A Rocha Ghana that are challenging the government's plans for a state-run Chinese business to explore for bauxite in the Atewa Range Forest Reserve. The deal is expected to finance \$2 billion worth of rail, road and bridge networks for Ghana, according to [CNBC](#).

We speak to fashion brands Gutta Soles, HAUS OF YBA and Ekua Addo about their

Hello

collaborations with communities, use of technology and their drive to achieving sustainability.

We also explore the growth of greenhouse farming in Ghana and one NGO's efforts to develop water conservation solutions for Ghanaians.

We invite you to have a read, share the content and comment.

Abena Serwaa
Editor-in-Chief

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Poetry

WHAT CAN WE DO?

*Today, I will write for the Earth,
These will be the saddest lines,
Because today my family cannot breathe.
My daughter's water is polluted,
And my father's forest is burning.*

*I will cry for the Earth
Because each teardrop
Is vulnerability in resistance –
Illuminating histories of exploitation,
incarceration for profit,
and commodities for economies.*

*Pray for Atewa, Akosombo and Tano!
Respect **Asase ye duru**.
Because our Earth has weight
It is the gold that sustains our lungs,
Perpetually connecting our borders.*

*So, join me –
Because we can bring
our economies back to life,
But not the Earth.*

*2020 © Eileen Gbagbo
Eileen is a final-year student at LSE.*

TURNING ACCRA'S TRASH INTO TREASURE

*Hip hop artiste and entrepreneur **Kromanteng** uses discarded car tyres to create handmade footwear that can withstand Accra's streets.*

He talks about what inspired the Gutta Soles brand.

All images credited to Gutta Soles.



Every year, an estimated three billion vehicle tyres are discarded across the globe, contributing to the toxification of waterways and the de-beautification of our open spaces. Due to their nature and composition, these tyres do not biodegrade easily and finding a function for them can be challenging.

But entrepreneurs are proving their creative credentials and coming up with innovative ways to recycle, upcycle and repurpose these tyres.

Among them is Ghanaian-American Leslie Bentil, who goes by his artiste name Kromanteng, and is the founder of the Gutta Soles brand.

The Gutta Soles team create footwear using abandoned car tyres, discarded fabrics, and fair trade and organic tree rubber and cotton.

OUT OF THE GUTTER

"I wanted to highlight this idea that Ghana's development is reliant on Ghanaians picking themselves out of the gutter," he said.

For those of you that have visited Accra, the all-too familiar open gutters, often filled with rubbish are a common feature of the city's streets. But the gutters being open is also a powerful and positive metaphor for change, Kromanteng believes.

"It means you can get out and you can even repurpose the gutter. You can clean it – you can do whatever you need to do. It is about embracing our condition and celebrating it as

something that we can remove ourselves from. That is the whole metaphor of Gutta Soles, soles that are from the gutter."

TYRES FOR THE SOLE

Established in Accra in 2012, the brand has transformed some of the city's litter into functional items that command a triple-figure retail price and generate income and employment for the low-income communities that produce them.

The idea was inspired after Atlanta-born Kromanteng was stopped by an artisan in Accra who tried to sell him a pair of shoes made of fabric. The shoes inspired Kromanteng to develop a prototype using tyres as soles.



And through collaboration with friends, the Gutta Soles brand evolved.

"The lapel on the top of the shoe was given to me by Ghanaian fashion designer Kofi Ansah, three years after we started making the shoe. And the beads (featuring the Ghana flag) running along the shoe, were given to me by my Austrian friend Laura Lang," he said.

The brand includes G-Soles, which retail from \$65 to \$120, and uses recycled fabrics and an upcycled second-hand sneaker base.

The Gutta Soles feature the recycled car tyre sole, natural tree rubber, fabric, and hand-made beads and cotton lining. They retail from \$350 up to \$800. Gutta Soles are available in three versions: the custom collection, the exclusive collection and the gold collection, which is an exclusively-made piece of footwear made from gold fabric.

COLLABORATION

The brand has attracted a celebrity fan base that includes

actress Michaela Cole, musician Wiyaala and hip-hop artist Mutulu Olugbala of Dead Prez. Highlife legend Pat Thomas and the Kwashibu Area Band were added to the celebrity list in 2019, when Gutta Soles launched a footwear range exclusively for them.

Creating a business out of trash has been a learning curve for Kromanteng, who started out largely investing his own money into the initiative.

He has created networks with seamstresses and tailors to collect fabrics and has a list of mechanics to source tyres from.

The natural tree rubber comes from Sri Lanka via the sneaker company Ethletic, and the cotton is sourced from Pakistan



Kromanteng and Gutta Soles team.

and India. Each shoe takes about six days to make at the company's base in Jamestown, near the Arts Centre, where his team include Ben (master beader), Fedmon (tailor) and Godfree (sole maker).

GUTTA SOLES FOUNDATION

"I noticed that some of the workers were re-doing their roofs at home or had a bit more income from making the shoes and this was allowing them to support their families more," he said.

It is for that reason that Kromateng established the Gutta Soles Foundation – the NGO arm of the Gutta Soles brand. Gutta Soles also has a music and film division.

The Foundation aims to promote social development and boost the awareness and the preservation of arts and culture, and the environment. It does this by investing in the

"OUR AIM IS NOT TO BE A CAPITALISTIC ORGANISATION."

health and wellbeing of people (mainly single mothers and children) in economically challenging communities in Ghana.

"Our aim is not to be a capitalistic organisation," he said. "We are an NGO running off retail demand. We turn that money into projects and those projects aim to create impact in communities," he said. "When I started making these shoes, I wanted it to be an example of value of the African market. It is not like we are over-pricing these shoes. These are handmade. If

people are willing to pay between \$700 and \$1,500 for other celebrity-made shoes, which are mass manufactured in factories, they should be willing to do the same for customised and hand-made African products."

Kromanteng has high hopes for Gutta Soles and believe the brand's appeal will extend to other parts of the continent. "We want to enter every African country, have their flag on every shoe and their own textiles."



To find out more about Gutta Soles, click this four-part YouTube podcast below and visit the brand at www.guttasoles.com



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23

Fashion and Tech

SHAPING AFRICAN FASHION THROUGH E-COMMERCE, TECH AND SUSTAINABILITY

UK-born Ghanaian **Kami Arkorful** launched African fashion agency *IKE Online* to showcase some of Ghana's emerging designers. She speaks about her vision to encourage more African businesses to tap into e-commerce and tech innovations.

Image credit (left): @d|bevanphoto

I am the founder of IKE Online and created the agency to showcase African contemporary fashion and promote designers and brands coming straight out of Africa. IKE Online has a wide range of designers who have brought a twist on the traditional ways of expressing African cultures and new ways of wearing African print.

During Ghana's Year of Return in 2019, we partnered with digital business accelerator platform - The Global Start-up Ecosystem - to showcase some of Ghana's up and coming designers during the Ghana Tech Summit VIP Gala Fashion Show.

THE GALA

The Gala was held at Osu Castle and showcased designers such as Samuel Antwi - featured in *British Vogue*; Ekua Addo – featured in *Vogue Italia* and *Afropunk*, and David Effah who has designed for Dentaa Amoateng MBE, Ghanaian actress Joselyn Dumas and Iain Walker, the British High Commissioner to Ghana. It also included eye-catching pieces by designer Nana Yaa Serwaah Akuoku, founder of HAUS OF YBA, whose work combines culture and science in an unconventional style.

The event brought together all of the VIP speakers, innovators and partners from the Ghana Tech Summit, with guests such as

Nollywood star Omotola, Tom Davis – chief growth officer at *Forbes*, Kwame Anku – chairman and ceo of Black Star Fund and Shaka Senghor – *New York Times* bestselling author and friend of Oprah Winfrey.

Most of their designers and brands are advocates of sustainable fashion, who are constantly looking into ways to support the growing consumer demand for responsible eco fashion. It was a true celebration of the new fresh talent that is coming out of the beautiful continent that is, Africa.

THE VISION

IKE is derived from the Igbo word meaning strength, and the agency's long-term goal is

to push the African fashion industry into e-commerce and tech innovations to capitalise on the opportunities out there for their businesses.

West Africa, especially, is becoming a centre for big tech investments and tech start-ups; and Ghana has been branded as one of the leading hubs for innovation. Tech innovation is starting to influence multiple sectors such as banking, agriculture and now more recently, fashion.

In the following articles, AKADi speaks to designer Nana Yaa and Ekua, who formed part of the Gala Fashion Show.

For more on IKE Online, visit www.ike-online.com.

Wearable Art

EMBEDDING SUSTAINABILITY INTO THE DESIGN PROCESS

Nana Yaa Serwaah Akuoku creates garments that combine her love of science and art and promote sustainability. She tells us more.

Image credit (right): Image credit: Max Luger @TheContentcampus



Nana Yaa Serwaah Akuoku is a US-based fashion designer and founder of avant garde conceptual couture brand HAUS OF YBA.

She describes her work as wearable art which combines technology and design, and promotes aspects of sustainability.

"I'm a lover of science so learning a new way of producing fashion is something I like to explore," she said.

Nana Yaa is trained in hand-sketching and also in using computer-aided design technologies. The latter includes using 3-D design software, Adobe Illustrator, Photoshop and Autodesk Design to sketch

and model, which are predominantly used by designers in the fashion industry.

"Although I appreciate the flexibility, convenience and range that computer-aided design offers, I still am very grateful to have attained the skill of sketching with my hands. It makes me feel closer to the work. Therefore, I typically combine the two worlds in all aspects of my design process - merging both traditional and technology-based techniques."

WEARABLE SCULPTURES

This fusion is brought alive through her work, which is not only designed using technology but also embeds aspects of it into the finished product.

She calls it wearable sculptures.

Her collections have featured mini computers, lights, electrically-powered motors and dry ice. Nana Yaa's most recent work called Grandma, is an interchangeable talking dress that features a motion sensor to determine proximity of the viewer, and a speaker that projects the voice of her 95-year-old Ghanaian grandmother. This piece was created in the USA but was directly inspired by meeting her grandmother on her first trip to Ghana.

During her visit to Ghana in 2019, Nana Yaa participated in a number of fashion exhibitions. She showcased an exclusive collection, which she called I Am Both. And Yet I Am

Still One, that was a celebration of her Ghanaian culture at the 2nd Ghana Tech Summit. This event was hosted by fashion management agency IKE Online at Osu Castle in Accra during Ghana's Year of Return initiative.

In the same year, she presented a solo exhibit at Ghana's Science and Technology Museum called A Work in Progress with THE BLACK GALA. She also secured a collaboration with African culture festival Afrochella in Accra. There, she delivered a fashion presentation with three models and conducted a live performance piece featuring one of her wearable art pieces.

SUSTAINABLE FASHION

In terms of sustainability, like other



Image credit: Marked Studios. Insist 2 Persist

fashion designers, Nana Yaa explores ways to reduce pollution and waste. “I try not to discard textiles, even the small pieces. I try and repurpose items that would normally be discarded. I do this particularly when I am applying my freeform design technique called ‘free-stylin’. So ultimately, my design process arrives at a sustainable method of producing fashion.”

Part of Nana Yaa’s HAUS OF YBA collection featured during the Tech Summit, included a headpiece made of recycled drinking water bottles called Chic Hawker. The piece paid homage to Ghana’s female roadside sellers, known as street hawkers.

“Ghana was really inspirational. It made me consider how important sustainability was and consider ways that I could consciously infuse sustainability into my fashion brand.”

Nana Yaa’s collection also featured other repurposed items including her use of the Ghanaian bathing sponge, known as sapo in Ghana, in work entitled 3 Flags. She also repurposed metallic-coated plastic plates in her work The Elizabethan, which she describes as a modern play on the ruff and collar designs of England’s Elizabethan period.

Nana Yaa speaks more on her views of sustainability, technology and art here:

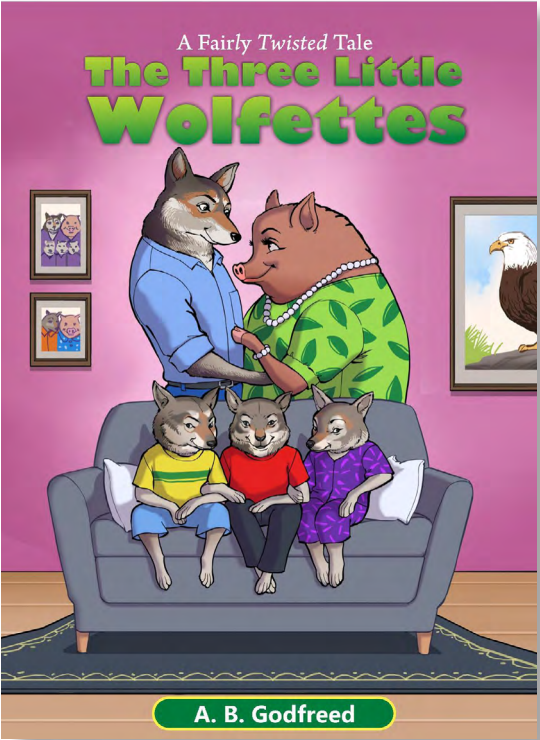


And you can follow her on Instagram [@haus_of_yba](#)



Image credit: Ghana Tech Summit

GOOD BOOKS 2 READ



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Sustainable Fashion

FINDING THE BALANCE IN SUSTAINABLE FASHION

*A sustainable fashion label is the ultimate vision for designer **Ekua Addo**. She explains how she is using her skillset, cultural heritage and community connections to achieve that.*

Image credit (right): Photography by Samuel Oke; assisted by Alfred Quartey.

Caption: Backstage at the Style Lounge 2019.



"I want people to fall in love with the whole factor of working with your hands. It adds value to whatever you are making and is much more intimate because each piece is created with your blood, sweat, tears and laughter."

These words come from Ekua Addo, founder of the self-named clothing and accessories label and passionate advocate for sustainable fashion.

The Ekuaaddo brand started life in 2017 while Ekua, who is based in Tema, was still completing her fashion and business university degree. But Ekua's career in fashion design dates back to 2011 during

which time, she has mastered skills in screen-printing and batik dyeing.

"Screen-printing requires two people holding the screen at the right angle so that everything fits into the right place. As a result, not many people like doing it because it is time consuming and getting it wrong can be expensive."

Her work is split into two distinct collections. The Ekuaaddo Basics which are a range of cotton, dye print clothes for men and women that are affordable. They include a range of bumbags (fanny packs) and jute bags and more recently, facemasks. Her other collection features tailored pieces that have graced

catwalks at Accra Fashion Week 2018, the Style Lounge and the Africa Future Gala, organised by fashion agency IKE Online. Her collections have also featured at Chale Wote Street Art Festival and Vogue Italia's August 2019 edition.

RESPONSIBLE SOURCING

At the heart of her designs is a desire to develop a product range that promotes sustainability from the raw material to the final product.

Ekua mainly uses 100% cotton, linen or silk in her collections because they take up the dyes better, she said. But silk is hard to source in Ghana and importing it impacts on her retail price. Similarly, sourcing Ghana-made cotton is a challenge.



The dyeing process. Image credit: Ekua Addo



ONE OF MY
BIGGEST GOALS
IS TO MOVE TO A
POINT WHERE
EVERY MATERIAL
I AM USING
IS 100%
GHANAIAN,"

- Ekuu Addo

It is grown in the north of the country but production has been on the decline.

"One of my biggest goals is to move to a point where every material I am using is 100% Ghanaian," she said. "I eventually want to have my own plot of land to grow cotton and transition from using chemical dye to fruit and vegetable ones."

"I spend a lot on chemicals – on average it costs Ghc130/kilo - but I would spend a lot more money and manpower using natural dyes. I would first have to use fruits and vegetables that are in season, and would have to negotiate with farmers to buy stock that would ordinarily be sold into catering establishments or homes. It also includes boiling and drying the fruit before extraction and ensuing enough quantities to cover the yards of cloth I work with."

COLLABORATING WITH COMMUNITIES

Ekua reminds us that sustainable fashion is about more than just sourcing the materials responsibly. It is also about what influences the design and working collaboratively with communities.

"I realised that most of the topics I deal with are linked to culture, tradition and heritage – and a big part of that is linked to your

environment and how that shapes us as people.”

Ekua’s Cohoba Collection features nature symbols linked to one of Jamaica’s indigenous people, the Taino, of which she can trace her roots to. She also draws on her Ghanaian heritage and knowledge of Colombian culture, where she was born.

“One of my biggest dreams is to own my own factory in Ghana. That would allow me to scale up and also draw in tourists interested in understanding the hand dye technique, screen printing, meet other artisans and understand the stories behind the designs.

“But that requires large sums

and there is a lot of bureaucracy involved in accessing government support. Unfortunately, if you want something done quickly, you are going to have to pay someone to get it done. For now, I prefer to use my own funds and scale up slowly.”

Ekua is collaborating with artisans to ultimately achieve her aim of having a factory.

She works with two tailors, who have their own businesses in the Art Centre in Accra, that handle her menswear collection and bumbags.

“I was going to the tailor who does my shirts almost every other week and that’s revenue for him that’s work for me. It was so beautiful - he actually called me during the coronavirus times when



Photography by Samuel Oke; assisted by Alfred Quartey



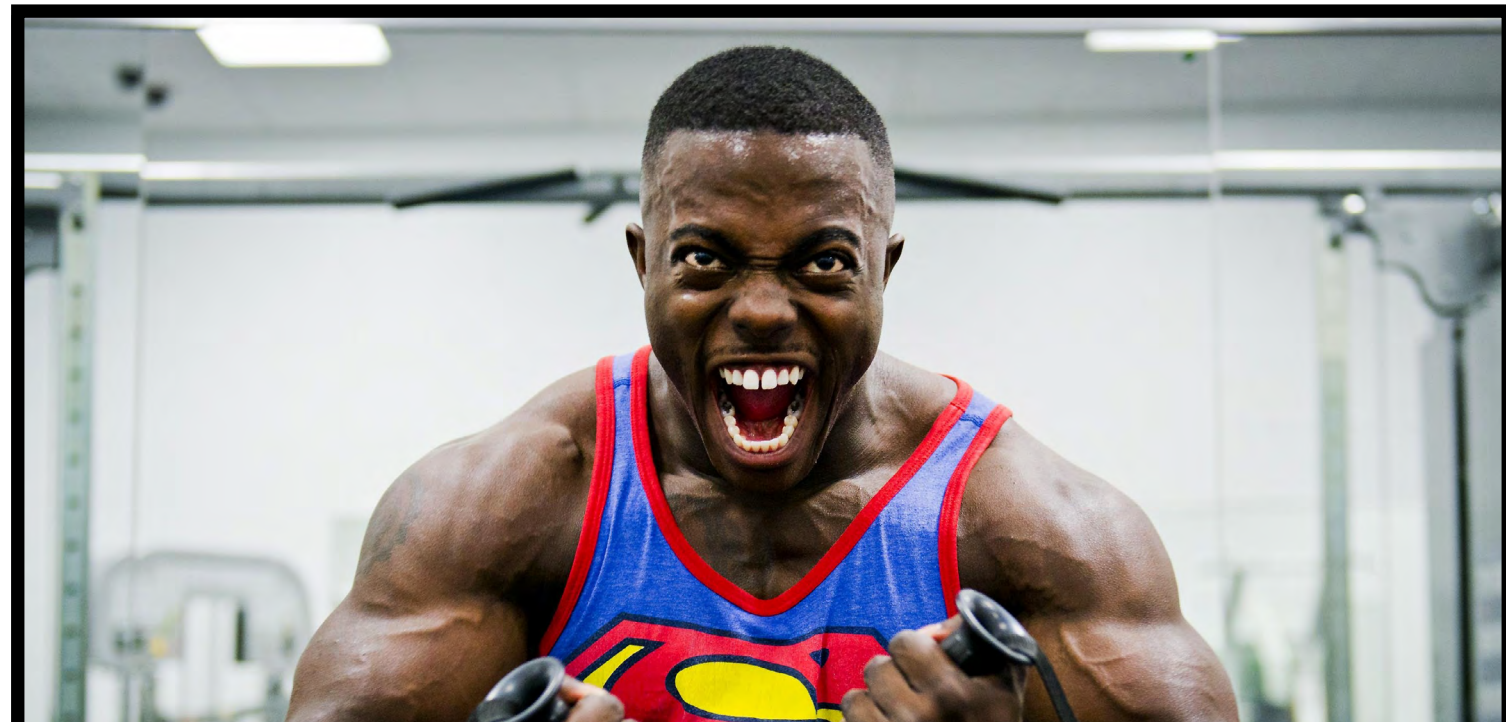
Ekua Addo. Photography by Samuel Oke.

we were on lockdown, to find out how I was doing.”

She also sews with a single mother of two children. “The woman’s husband does not support her financially and so the extra money comes in handy. And that is the kind of relationship I want people to build on - a sustainable brand, where I am helping to generate jobs for others in my community but also creating a space where people can build on their skills.”



Follow the Ekua’s brands [@liveekuaaddo](#) and [@ekuaaddobasics](#)



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A ROUTE TO SUSTAINABLE FARMING IN GHANA

Soilless fruit and vegetable cultivation in controlled environments has been linked to increased plant yields, extended shelf life and limited crop damage. Rhoda Korley-Owu investigates its popularity in Ghana.

Image credit on page 49 & 54: icon0.com from Pexels

One may wonder why greenhouse farming is only now taking root in Ghana more than 20 years after Professor George Oduro Nkansah returned from Japan with the idea in 1996.

'I tried to propagate the gospel but people didn't buy it until recently,' said Professor Nkansah, in an interview with *Univers* in 2019 at the [EnviroDome®](#) Greenhouse Technology Centre.

The Centre is part of the University of Ghana, where the Professor is the coordinator and also the University's director at the Institute of Applied Science and Technology.

Greenhouse farming allows farmers to have greater control over the plant-growing environment compared to on an open field and can boost the yield.

The EnviroDome® Ventilation System, that is used by some in greenhouse farming, is a dome-like structure that features netting to prevent insects from entering. It also helps to regulate heat and light and delivers water and nutrients in a controlled manner. In doing so, yields can be around 250 tonnes per hectare, compared to 7.8 tonnes in an open field, according to Professor Nkansah.

SOILLESS SYSTEMS

Greenhouse farming encompasses several types of soilless cultiva-

tion including hydroponics. Hydroponics is the process of growing plants in gravel or liquid with added nutrients but without soil.

Instead of using soil, some techniques use substrates such as peat moss, or gravel and are potted in individual containers as opposed to in the ground, to minimise pests and to maximise space. These substrates are particularly useful because unlike soils, they generally do not contain bacteria or fungi.

Hydroponics allows plant roots to come in direct contact with the nutrient solution and oxygen to encour-

“HYDROPONICS IS THE PROCESS OF GROWING PLANTS IN GRAVEL OR LIQUID WITH ADDED NUTRIENTS BUT WITHOUT SOIL.”

age growth. Foods such as tomatoes, lettuce, peppers, cucumbers, spinach and herbs have been grown using this method.

TECHNIQUES

Systems used in setting up hydroponics vary depending on the techniques or media used. With the Nutrient Film Technique (NFT), for example, a shallow stream of water circulates all the nutrients required for plant growth

past the bare roots of the plants. The constant flow prevents nutrients from accumulating. In most cases, a substrate such as cocopeat is used, allowing the roots unhindered access to nutrients and oxygen to encourage quick growth. In the Deep Floating System (DFS), plant roots are kept in a solution with a medium that is 15-20 centimetres deep. Air pumps are used to circulate the solution and oxygen in the water all the time.

Farmers are adopting hydroponics in closed greenhouse environments because these techniques promote uniformity in the shape of vegetables and fruits, increase yields and ex-

tend shelf life, according to Celestine Danso, greenhouse consultant and agronomist at Kroppharmer Venture.

BACKYARD FARMING

One of the biggest challenges for upcoming farmers however is the cost. Setting up a greenhouse can cost between \$6,000 - \$8,000 per 210m² and \$150,000 – \$180,000 per 5000m². This does not include installation and production costs, setting up irrigation or choosing the substrate. The standard EnviroDome® greenhouse unit is \$11,908 per 271m²., according to Celestine.

For small-scale farmers and even homeowners unable to afford their own greenhouses, applying



“PEOPLE WITH A LITTLE SPACE, SAY ON A ROOFTOP, BALCONY OR BACKYARD, CAN GROW CROPS USING THIS TECHNIQUE.”

soilless cultivation techniques in their backyard is the next best thing.

“People with a little space, say on a rooftop, balcony or backyard, can grow crops using this technique,” said Cletus Bedi Darrah, owner of Lakesyde Farms in Agordome, Volta Region. Lakesyde apply a range of farming techniques including greenhouse.

Because soilless cultivation requires controlled use of water, they are ideal for areas such as northern Ghana where water can be scarce, said Kwaku Owiredi-Gyamera, senior agriculture officer at the Local Government Service in Asamankese.

GOVERNMENT AND EXPORTS

It seems Professor Nkansah’s idea is bearing fruit. Not only has he been able to establish two greenhouse excellence centres but private companies and the Government have also established ones too.

Professor Nkansah’s centres – one at the University of Ghana already mentioned - and the other in Gomaa Budutta, Central Region, train farmers and students.

Private greenhouses operating in Ghana include Agtemp, Lakesyde Farms, Greengold Farms, Jasey Farms, Hydroponic Africa Limited. Ardhi IG at Akuse and Agritop Limited are set up

Below: Growing Lettuce. Credit Jatuphon Buraphon (Pexels)

Bottom right: Celestine with plants grown using the Deep Float System.

Credit Celestine Danso.



to train students. Meanwhile, the Government has set up a greenhouse village at Akumadan in the Ashanti Region. Two others at Dawhenya and Kasoa in the Central Region and Greater Accra Region respectively, are nearing completion.

VEGETABLE PRODUCTION

The Government has been on a mission to boost vegetable



production after Ghana lost over \$30million between 2014 and 2017 due to a ban on vegetables to the EU market, the Daily Graphic writes.

The country was found to be non-compliant with the EU standards on the exports of some vegetables with the suspicion that farm produce was infested with pests. This prompted concerns that these pests would be introduced into EU ecosystems. Through the intervention of the Ministry of Food and Agriculture, measures were introduced to meet EU standards after an EU delegation visited Ghana. It resulted in the ban being lifted in 2017.

In 2018, Ghana signed a Memorandum of Understanding with the Israeli government to send around 50 students to Israel for a 12-month agriculture training programme. The idea is that once trained, these students would be able to establish their own farms.

At the inaugural ceremony of the Akumandan Greenhouse Village in January 2020, Ghana's President Nana Akufo-Addo said training in the greenhouse villages is expected to impact the local market by taking over supplies to hotels and restaurants, the Daily Graphic writes. The expectation is for the country to benefit from about \$1 billion in the next seven years from greenhouse exports.

The use of empty crates to nurse the seedlings – image credit Marian Quaynor-Ganyo.



Growing Cabbages – image credit Marian Quaynor-Ganyo.



GROW YOUR OWN

1 To create your soilless backyard garden, seek advice from an agriculture extension officer. These officers are a local government worker who trains farmers on farming techniques and gives technical advice to farmers on the field. Or get help from a well-trained farmer who can give you an estimate for your budget.

Collect household empty containers, old car/ lorry tyres, or flower pots.

2

3 Source a substrate, such as coco peat or peat moss, which can be bought from agro-chemical product shops and costs around GH¢30 per 60kg. This can fill four lorry tyres.

A nutrient or organic compost is also a key ingredient.

4

5 Identify the crops you want to plant, start nursing them in smaller containers and, transplant them into the tyre containers or empty bottles after three weeks depending on the crop of target.

These tips on setting up of a backyard soilless farm come from **Kwaku Owiredu-Gyamera**. He has over 10 years' experience in delivering agriculture sector workshops to small-scale farmers.

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Environmental Activism

ACTIVISTS SERVE NOTICE TO SUE GHANAIAAN GOVERNMENT OVER BAUXITE MINING PLANS

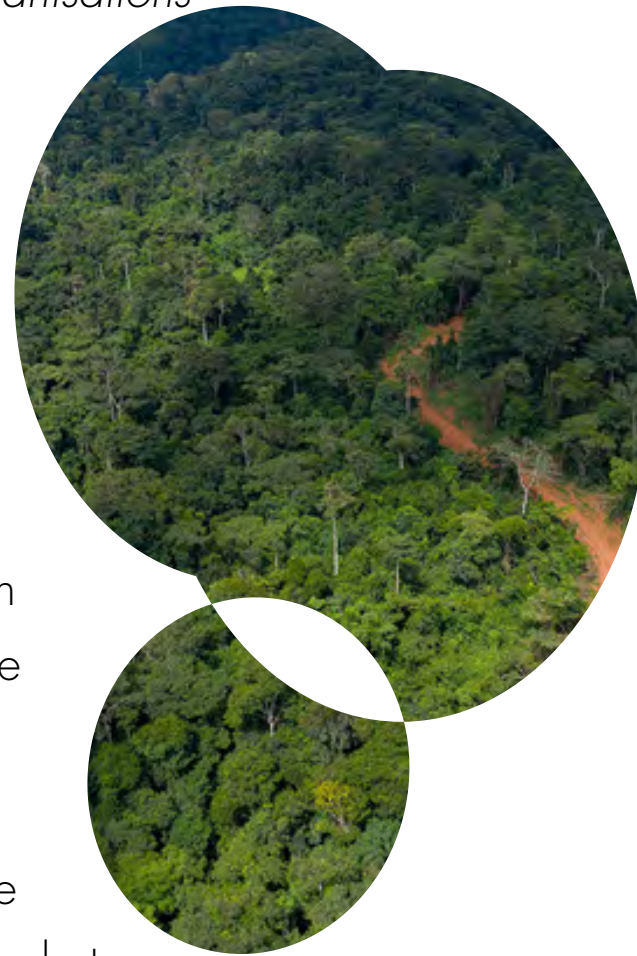
All images credited to: A Rocha Ghana

*Plans to mine bauxite in the Eastern Region of Ghana could threaten the area's biodiversity. Environmental campaigner and founder of Eco-Conscious Citizens Ghana **Awula Serwah** outlines why some organisations are fighting back.*

Nestled in the Akyem Abuakwa region of eastern Ghana, is a 725km² expanse of land that is home to some of the country's rarest primates, birds, plants and insects. It is also the source of three important rivers: the Densu, Ayensu, and the Birim, which provide clean water to communities of over five million people.

Known as the Atewa Range Forest Reserve, the area is not only regarded for its rich ecosystems but because of the minerals that lie beneath it.

The area contains gold deposits and low-grade bauxite, and as a result, was the subject of a Memorandum of Understanding (MoU) between the Ghanaian government and Sinohydro, a Chinese



state-run hydropower engineering, and construction company.

This MoU was signed in 2017 to develop a bauxite industry in Ghana with Atewa Range Forest Reserve and according to articles by [Daily Guide Network](#) and [CNBC](#), will result in China financing \$2 billion worth of rail, road and bridge networks in exchange for 5% of Ghana's bauxite reserves.

BIODIVERSITY AREA

But a large area of this evergreen forest reserve contains plants that have been given specially protected GSBA ([Globally Significant Biodiversity Area](#))

following a national botanic survey in the 1990s of forest reserves by the Ghana Forestry Department.

Despite a campaign started in 2016 to promote Atewa to national park status, logging, bushmeat hunting, and more recently, plans for bauxite exploration continue to put the reserve under pressure.

On 30 May 2019, work to clear part of the forest and create access roads started. On 13 January 2020, a coalition of civil society organisations* and individuals including [A Rocha Ghana](#), and Save the Frogs Ghana served a notice to sue. According to A Rocha, the

action stated that plans to exploit the Atewa range Forest Reserve for bauxite were in violation of the right to a safe and healthy environment.

The Ministry of Environment and the Environment Protection Agency were contacted to comment on the intention to sue and the impact this deal will have on the forest. However, no one was available to respond.

SAVE THE FOREST

Daryl Bosu, deputy national director – operations at A Rocha Ghana, said: “The associated water availability and access vulnerabilities identified during this period of COVID19, affirms the need for

prioritisation and urgency in securing critical watershed like Atewa Range Forest Reserve. We cannot convert these ecosystems into a mine pit and be justified for whatever reason. Bauxite we can find anywhere, but there is only one Atewa.”

Also backing the campaign is Awula Serwah Ghana-born lawyer and community and environmental activist.

She established Eco-Conscious Citizens Ghana in 2019 after over 20 years of activism linked to protecting Accra’s parks and gardens from being built on. She is now calling on the public to stop forest’s destruction by instituting Ghana Environment Weekend. Starting 5 June 2020



on World Environment Day and ending on 7 June, the weekend aims to embed environmental concerns into the national consciousness, she said.

“Bauxite mining will not only destroy the ecosystem and endangered species, but will also pollute the source of water to over five million people,” said Awula, who is based in London. “I have joined environmental group A Rocha’s court case regarding this matter.”

“Frequent washing of hands under running water is a

preventative measure to control the pandemic,” she said. “But this will not be possible if the water is polluted. We cannot wash our hands with bauxite.”

“In view of the importance of forests and waters to our survival, well-being and the climate emergency, we invite the public to support the campaign by writing to Ghanaian President Nana Akufo-Addo via social media and ask him to remove Atewa Forest Reserve from the Sinohydro bauxite contract. Use the Twitter handle [@NAkufoAddo](#) and the #ProtectOurForestsAndWaters hashtag.”

**“I WAS APPALLED
TO HEAR THAT
OVER 140 TREES
AND 5,000 PLANTS
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PARKS AND GARDENS

Awula’s activism started when she was part of the East La Environmental Group over 20 years ago in Accra. More recently through Eco-Conscious Citizens Ghana, she and her team have been able to stall plans to build on the ministerial government department, called Parks and Gardens in the La Dade Kotopon Municipality. Awula said: “I was appalled to hear that over 140 trees and 5,000 plants had been



destroyed to make room for a multi-storey office building on parks and gardens land. We know that the indiscriminate felling of trees impacts negatively on air quality.

‘Such destruction also goes against section 41(k), of Ghana’s Constitution that says: ‘It will be the duty of every citizen to protect and safeguard the environment.’

“When we visited the site, we saw building materials on the cleared land,” said Awula. Enquiries at the Environmental Protection Agency revealed that it had not given permission for the trees to be felled.”

Her organisation also helped to prevent the Parks and Gardens department from being re-zoned. Such a move would have removed the requirement for the area to include green spaces.

President Osagyefo Kwame Nkrumah set up Parks and Gardens as a ministerial government department in 1961 under cabinet minister Mr Ocansey. Under this department, land in regional capitals was acquired for parks and gardens for a number of activities.

“These included promoting landscape beautification, acquiring lands to establish public parks, promoting

ecotourism, initiating programmes to identify threatened economic and ornamental plants for multiplication and conservation. The vision seems to have been forgotten, and Parks and Gardens has now been downgraded to a ministerial department,” she said.



If you would like to take part in the campaign to protect Atewa Forest Reserve, use the handle **@NAkufoAddo** and the **#ProtectOurForestsAndWaters** hashtag. Or you can sign the petition [here](#).

For more information, click the button below:



DID YOU KNOW?

Atewa Forest Reserve contains many birds that are rare elsewhere in Ghana including afep pigeon, olive long-tailed cuckoo, African broadbill, least honeyguide, spotted honeyguide, common bristle bill and blue-headed crested-flycatcher. Endangered species of primate include the Geoffroy's pied colobus, and the olive colobus.

There are also 17 rare butterfly species and the critically endangered frog species.

*The Coalition consists of Green Livelihood Alliance; Concerned Citizens of Atewa Landscape and the Coalition of NGOs against Mining in Atewa Forest which includes; A Rocha Ghana, Forest Watch Ghana, Save the Frogs Ghana, Friends of the Earth Ghana, WAPCA, Tropenbos Ghana, UN Youth Ghana, Civic Response and Eco Care Ghana.

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Spring 2020

AKADi

Inspiring insights from our communities



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Water Conservation

RESTORING OUR HUMAN RIGHT TO WATER – ONE NGO'S PERSPECTIVE

Evans Agyei Ntiamoah speaks on how his not-for-profit organisation Ghana Environmental Community for Sustainability (GHECO) is tackling water scarcity across the country.

All images credited to: Skillz Gee @iamskillzgee

The coronavirus pandemic unearthed the unsightly path of Ghanaians' right to water. When the President of Ghana Nana Akufo-Addo, announced a three-month waiver on water tariffs during the COVID-19 lockdown on 5 April 2020, the right to water evolved into a privilege rather than a basic right.

Eighty percent of Ghana's urban areas have access to this basic right and are connected to the country's municipal supply – Ghana Water Company (GWC), according to managing director Dr Clifford Braimah. Speaking to online publication [Modern Ghana](#) in March 2019, he said he anticipated

that the remaining 20%, representing around 3.3 million people, according to extrapolated figures on data from Ghana's urban population from [Trading Economics](#), would be connected by 2025. By 2030, Ghana is expected to deliver on its commitment as part of the UN's Sustainability Development goals, which include access to clean water and sanitation for all.

ALTERNATIVE SUPPLIES

Until then, rapid population growth and urbanisation, particularly in cities such as Accra, has resulted in those not connected to the municipal supply forced to find their own access to water. Populations in the western corridors of Ghana are forced to compete for water



Queuing for water

access with private companies that use them for other means. Farmlands have been converted into illegal mining pits which have depleted crops, freshwater supply and wild fish stock.

In the face of this, we founded GHECO in 2016 as a way to use community-based research in water protection, healthcare, waste management and food safety to be a catalyst for change. We have developed a series of strategies designed to help those populations with limited access ways to

conserve supplies or find other routes to sourcing water.

We wanted to highlight the challenges of communities in water-stressed areas of Ghana and did so through an initiative earlier this year called 'Photostories'.

This initiative worked by encouraging households that have access to municipal Wwater supplies such as those in Legon, Adenta and Oyar-ifa, to conserve their use to ensure there would be more for others in water-stressed communities. In Ghana, a 1,000-litre container of water can cost Ghc5.60. In a single downpour, it is estimated that a household can harvest around

2,000 litres or the equivalent of just over Ghc10 in a single downpour.

Our online sensitisation campaign encourages households to save this amount or more, by harvesting rainwater, fixing leakages in the home, limiting showers to five minutes and recycling used water by flushing it down the toilet.

The toilet is the highest consumer of water in the home and can result in a 40% saving per household.

Over 20,000 people living in water-stressed communities were targeted to participate and those that achieved the aim were rewarded with a water harvesting container.

A single downpour is capable of harvesting around 2,000 litres of water.



RAINWATER STORAGE

In areas such as Teshie, a suburb of Accra, where the desalination plant is struggling to keep up with community demand, our investigations highlighted the benefits of harnessing rainwater that would otherwise clog in culverts and cause flooding. We developed Our 'Plastic Waste-to-Water' Model that uses recycled plastic storage containers to hold rainwater for households.

When installed on the roof of a three-bedroom house, it produces up to 2,000 litres of water in a single downpour. We are currently partnering with [Young Black Excellence Ghana Limited](#), a creative

architectural and interior design agency, that develops ways to incorporate rainwater harvesting into house design.

Since this strategy was launched at our World Water Day 2018 celebration in Kumasi, Ashanti Region, we delivered 20 1000-litre capacity water storage tanks to homes in Kumasi and Accra.

Where communities depend solely on aquatic systems, we have also been able to respond. During World Water Day 2019 in Ankobra, a coastal settlement in the Western Region, we responded to concerns from community leaders about the deplorable state of water supply and sanitation. We did this by

constructing two boreholes and rainwater harvesting systems on the roofs of 30 houses. With your help, we are keen to continue the work and sink 20 boreholes through your donations. Further investigation in February 2020 identified that Ankobra's only public toilet in the seafront locality has been washed away by tidal waves and mobile toilets that had been donated seem inadequate.

The case study of water and sanitation in Ankobra underscores the need to assist inland and coastal communities that are losing their right to water in Ghana. We call on collaborators and sponsors to help us build new lavatories for the community before cholera, diarrhea and typhoid fever debilitates the entire population.



Our call is to ensure no one is left behind in the allocation of clean water, sanitary facilities and aquaculture systems within the next five years. To lend your support, visit: www.ourgheco.wixsite.com/gheco for more details.

AKADi

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website: www.akadimagazine.com

COMING SOON

Ghanaians in Literature is the title of our autumn edition. This issue spotlights novelists in Ghana and across the diaspora and provides a snapshot of the depth and range of their creative talent.

Hear from writers such as Abena Eyeson (pictured left), author of 'Looking Up', who shares her journey to becoming a published writer.

Click the image on the left to subscribe to our newsletter and be the first to read all about it.

