







Green Yoma















Youth are facing two major challenges:

Climate Crisis

- Youth are at the center of the climate crisis, facing uncertainty and challenges to their present and future livelihoods.
- Youth are seeking opportunities to act on the climate and sustainability goals.

Unemployment

- In 2020, young individuals are three
 times as likely to be unemployed as adults
 (ILO 2020).
- Youth need to be equipped with a set of skills and competencies to compete globally and locally.

Preparing youth for the green transition, through fostering green skills development, is key to ensuring that they have access to employment that is sustainable and allows them to thrive.

This is where Green Yoma comes in!

What is Green YOMA?

A part of the larger YOMA ecosystem, focused on creating L2E pathways for young people in the emerging green economy while addressing the SDGs

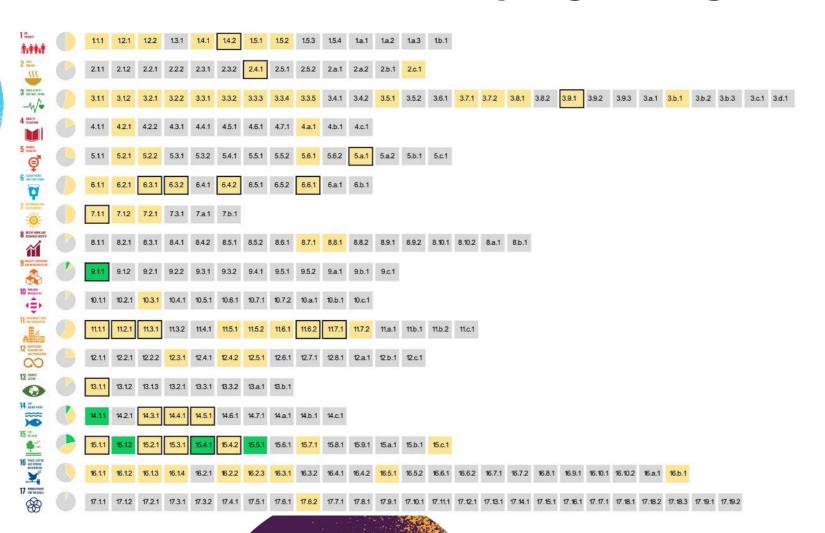
Green YOMA adopts hybrid, online and in-person/physical touch points to effectively reach young people in urban, periurban, rural, and remote areas to facilitate impactful learning, knowledge sharing & training opportunities.

REGIONAL FOCUS Pan-African, Eastern Caribbean, South – East Asian moving globally with early adopters

VALUES

Youth-centric, Open Source, Trust (Privacy), G-local, Inclusive, Impact & Data-driven, Sustainability

Huge potential to use Citizen Science & Earth observation to measure progress against SDGs



The SDG indicators where citizen science projects are

"already contributing" (in green),
"could contribute" (in yellow) or
where there is

"no alignment" (in grey).

The overall citizen science contributions to each SDG are summarized as pie charts.
Black borders around indicators show the overlap between citizen science and EO

A young person's green learning to earning journey

Grow

Learning skills relevant for green jobs (e.g. sustainable agriculture, reforestation, etc.)

Identity (SSI)

data to monitor Academy **Learning nugget** on climate change and Participating in a reforestation challenge Atingi.org >165 k ideas to goodwall.io Plant tress with NGO "Wells for Zoe" Document progress with Citizen Science **Collect Citizen Science Create Self** App "crop observe" to Sovereian lassess climate change

with for IIASA

Learn how to **use** drones and satellite progress against SDGs African Drone and Data

> for carbon markets as well as spill-over effects on e.g. bio diversity to re-finance projects with Wyss Academy, Climate Ledger Initiative. Gold Standard Foundation

> Map biomass to calculate CO2 seguestered

Blockchain stored creditentials = impact certificates can be uploaded on digital CV to be shared with e.g. potential employers or investors

Impact

Youth does green impact – tasks (e.g. planting trees, water conservation) Incentivized through tokens and gamification



Green Yoma's value for Youth on the Move (YotM)

YotM represent a resilient and unique, yet largely untapped pool of talent, ideas and entrepreneurship.

Green Yoma can support their L2E journeys & empower them to achieve impact and access opportunity no matter where they go.

How so?

- Portability: Digitally accessible opportunities & user-friendly Single-Sign On (SSO) account
- **Technology**: Verifiable credentials (blockchain) safely stored in a digital CV
- Data & Identity: Self-Sovereign Identity (SSI) places youth agency and privacy at the center
- Green Skills: Upskilling for in-demand jobs in the emerging green economy
- **Impact**: Many YotM know firsthand the impacts of climate change and desire opportunities to take action for their communities

Achieving the Global Compact for Migration Objectives with Green Yoma









for every child

Leaving no one behind - Yoma Together

YOMA TOGETHER is about making the Yoma ecosystem more inclusive, accessible and equitable.

It seeks to do this through 2 main approaches:

- 1) Benchmarking success on **Yoma**'s inclusivity and ability to reach and engage 'hard to reach' young people focusing on **young people on the move** and out of school adolescents.
- 2) Accelerating digital inclusion through digital/blended and hybrid approaches to learning, earning and local engagement, starting with a proof of concept in Burundi.

Scaling Yoma to Peru:

Peru has the 2nd highest number of migrants in South America, predominantly from Venezuela. There is an estimated 1.5 million migrants with many being children and adolecents. With **Green Yoma's** current Reforestation programme in Peru, and keen interest from the UNICEF Peru Country Office to incorporate Yoma, YotM will have easier and sustainable to access learning and employment opportunities, whilst contributing impactfully to the Green Economy.

Ongoing Projects



South Africa: Youth **EnviroChamps** Programme

Main Objectives of MVP

- 1) Improving water quality monitoring and reporting
- 2) Gentrifying and maintaining a heritage trail between Howick and Hilton by removing invasive plant species and planting beneficial and indigenous plants.
- 3) Upskilling & empowering 1060 NEET youth in the Kwazulu-Natal province
- 4) Supporting youth livelihoods

Achieving Impact with Green Yoma

GROW

- Launch of **learning opportunities** on (i) citizen science for SDG 6, (ii) miniSASS trainings & (iii) social learning via Pluto platform (GroundTruth)
- Increasing number of Enviro-champs participating in the initiative in different spheres

IMPACT

- Launch of **impact tasks** to (i) collect science data in local catchments & (ii) create social impact projects (DUCT, GroundTruth)
- Community leaning and empowerment initiatives (Teaching local communities on the importance of

• THRIVE

- Recruitment of youth Envirochamps on Yoma for Social Employment Fund (SEF)
 employment opportunity (employed as Team leaders, Administrators, and Envirochamps with 10 local NGOs)
- Crowding in employment partners to support youth post-programme
- Testing **incentivization** for learning & impact (Zlto, Moya pay)
- Young People participating in Citizen Science to collate information vital for Water Quality reporting in South Africa
- Supporting green L2E pathways & green skills credentaling research



Key Partners







PRESIDENTIAL EMPLOYMENT STIMULUS





EnviroChamps: Exciting New Developments

Scaling Prospects

- 10 New Enviro Champs have been onboarded on a new project to clear and maintain an old heritage train rail trail from Howick to Hilton. These Enviro Champs are conduct their learning and training using both a hybrid model of online learning through the YOMA platform and in-person site visits for training purposes.
- Durban (KZN), Pietermaritzburg (KZN), and Limpopo Province are new areas in South Africa where the Enviro Champs programme is being scaled to.
- The project is also very likely to be scaled to neighboring countries Lesotho and Mozambique.

Mentorship:

- One favorable aspect of this Programme is how invested previous Enviro Champs are in the continuation and success of Enviro Champs. Despite this project predominantly targeting disenfranchised youth for upskilling, many older community members are active participants and play a crucial mentorship role for new Enviro Champs.

Diversification

- As previously mentioned; Enviro Champs does not only focus on water quality monitoring and evaluation, the programme is moving into spheres of biodiversity and sanitation and conservation.





South Africa: Crop Observation Program

Main Objectives of MVP

- 1) Upskilling & empowering 50 youth in the Eastern Cape province through hybrid and context-specific learning with local farmers
- 2) Increasing youth participation in agriculture sector and crop observation activities
- 3) Supporting youth as learners and changemakers
- 4) Involving young people SDG 2: Zero Hunger

Achieving Impact with Green Yoma

- **GROW**
 - Promoting learning & skills development with online courses, CropObserve citizen science trainings and practical learning with local farmers (hybrid learning)

IMPACT

- Launch of **impact tasks** over 5-weeks to participate in crop observation activities
- Participation of Ground Truthing activities which are greatly beneficial to satellite imagery accuracy.

THRIVE

- Testing **incentivization** of impact tasks (vouchers)
- Potential to connect youth with employment and entrepreneurship opportunities (TBD)
- Development of concrete and comprehensive **Learning to Earning Pathways** for young people
- Opportunities for the pilot project participants to become team leaders and project coordinators for subsequent crop observation projects (potentially hosted by our implementation partner- University of Stenden)

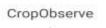




Key Partners











South Africa: Circular Economy Entrepreneurship

Main Objectives of MVP

- 1) Empowering & upskilling youth on Circular Economy issues
- 2) Generating entrepreneurship pathways via Yoma ecosystem partners & local programming
- 3) Supporting youth as entrepreneurs to generate environmental and social impacts

Achieving Impact with yoma

- Generating Green Entrepreneurship Pathways for Youth
 - 1. Virtual Yoma Challenge targeting 50,000 youth (100-200 solutions)
 - Goodwall Digital X Challenge with UNDP -- #CircularInnovators
 - 2. Hybrid Circular Economy Hackathon with 300 youths participating
 - Imvelisi 3-day Hackathon leveraging South Africa's private sector (Accenture, government (DSI), start-ups, and more)
 - Taking place in Johannesburg 1-3 December 2023
 - Participants receive hands-on training, mentorship, incubation support, and potential seed funding (winners)
 - 3. Circular Economy Intensive Bootcamp for 10-15 youth
 - Imvelisi & UNDP supported bootcamp for hands-on incubation and seed funding













Yoma x Goodwall: Youth Engagement & Citizen Science

#ClimateMatters

Challenge under GenU GreenRising program, asking why climate change matters and how it affects our planet, communities and which actions can help

#DonateWaterNG

Young people will use the DonateWater app to monitor quality of water bodies as well water infrastructure in Nigeria and upload a video explaining their experience. This project was done over a period of 3 weeks. In a second phase, Yoma will test the incentivization of young people with tokens as reward for successful participation.

-This initiative has seen over 120 participants make more than 2000 entries on the platform using the Geo-Wiki App,

Achieving Impact with yoma

- Engaging youth in impact tasks to collect citizen science data for water infrastructure monitoring
- Building digital skills by using smartphones & digital applications (DonateWater)
- Empowering young people to use their voices and become advocates for climate action.

DonateWater NG app for documentation / monitoring of water sources for climate action















Malawi and Peru: Reforestation & Environmental Impact Monitoring

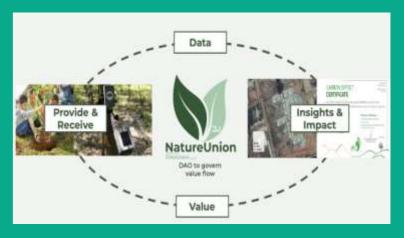
Main Objectives of MVP

- Boosting reforestation & forest conservation efforts
- 2) Training green skills for **Yoma** youth
- 3) Monitoring & assessing environmental impacts
- 4) Utilizing disruptive technology & financing methods
- 5) Wells for Zoe Campaign in Malawi

Achieving Impact with yoma

- Working with local partners to provide a certified account of carbon sequestration created in reforestation & forest conservation projects
- Use of **ADDA** graduates for ground truthing/monitoring/evaluation
- Engaging youth in impact tasks to use citizen science and earth observation to monitor environmental impact projects & carbon assessments
- Incentivizing youth with tokens to support livelihoods
- Strengthening 21st century skills with disruptive technologies (drones, satellites, smartphones, etc.)
- Developing disruptive verification & sustainable financing schemes

Bringing People, Data and Insights together to sustain nature and communities



SDG's reached: 1,9,13,15



Green Yoma Potential Partnerships- In the Pipeline









Earthshot Prize winner

- Carbon credits for soil regenerative agriculture
- Opportunities for citizen science/ADDA/employm ent
- Carbon crediting

- Social enterprise building safe and affordable water treatment systems from nanotechnology and macadamia nut shells
- Potential for scaling with Envirochamps

- Organization facilitating strategic partnerships for reforestation
- Collaboration with their YouthHub
- Potentially engaging ADDA for M&E purposes and scaling

- Hub for digital learning content on Earth observation, remote sensing etc.
- Potential for integrating their courses on the platform





Spotlight on ADDA: Institutionalizing regional skill building



Building youth skills locally allows for greater sustainability in innovation and creates new learning & earning opportunities

ADDA first opened in January 2020 in Lilongwe, Malawi





Blended learning approach to train future service providers & public officials in:

- building, piloting and maintaining drones;
- using drones for transport and image acquisition
- using Artificial Intelligence techniques to harvest data out of the collected geo-referenced imagery





ADDA Scaling & Sustainability

Regional scaling:

A variety of countries across Africa plus Asia requested the establishment of ADDA campuses

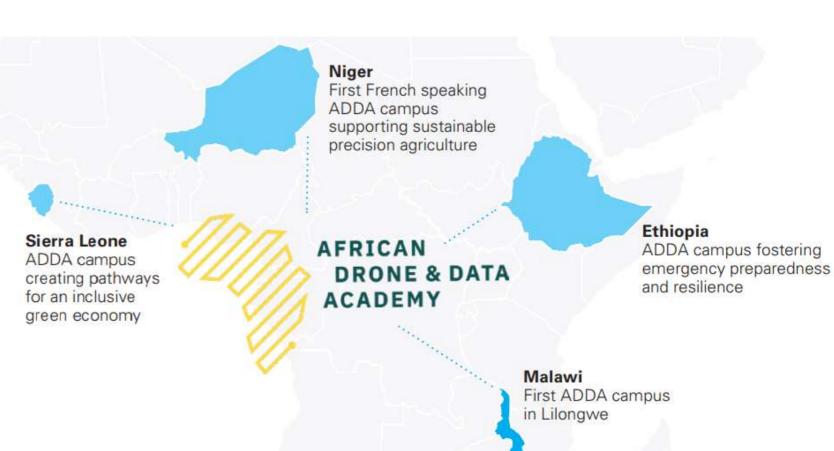
- Potential for scaling in South Africa, in current conversations with Cortac Aviation & GroundTruth
- Curriculum development in Nepal

Business case development:

Opening "professional training" program for professionals to respond to demand and generate income

Curriculum development:

Creating new content on ethics in data collection, adding earth observation (EO) data to tackle climate change, disaster preparedness, spatial planning, etc.



Youth Green Finance Initiative

with partners in Liechtenstein and Switzerland



Create Self Sovereign

Identity (SSI)

Looking into e.g.:

Blueprint Bankable Product

Identification on of the potential target market of the financial product by differentiating the target client categories as well as the nature and complexity of the investment product

Investment Case

to develop a business process that can generate funds that are paid back to the investors

Ex: Ghana and Marine Plastic Pollution



Monetizing impact: emissions, bio-diversity, etc. for impact investors

Example:

- Blockchain anabled impact verification and evaluation – through data stored in smart contracts allowing for transaction
- Improve verification and sustainibility of green action

