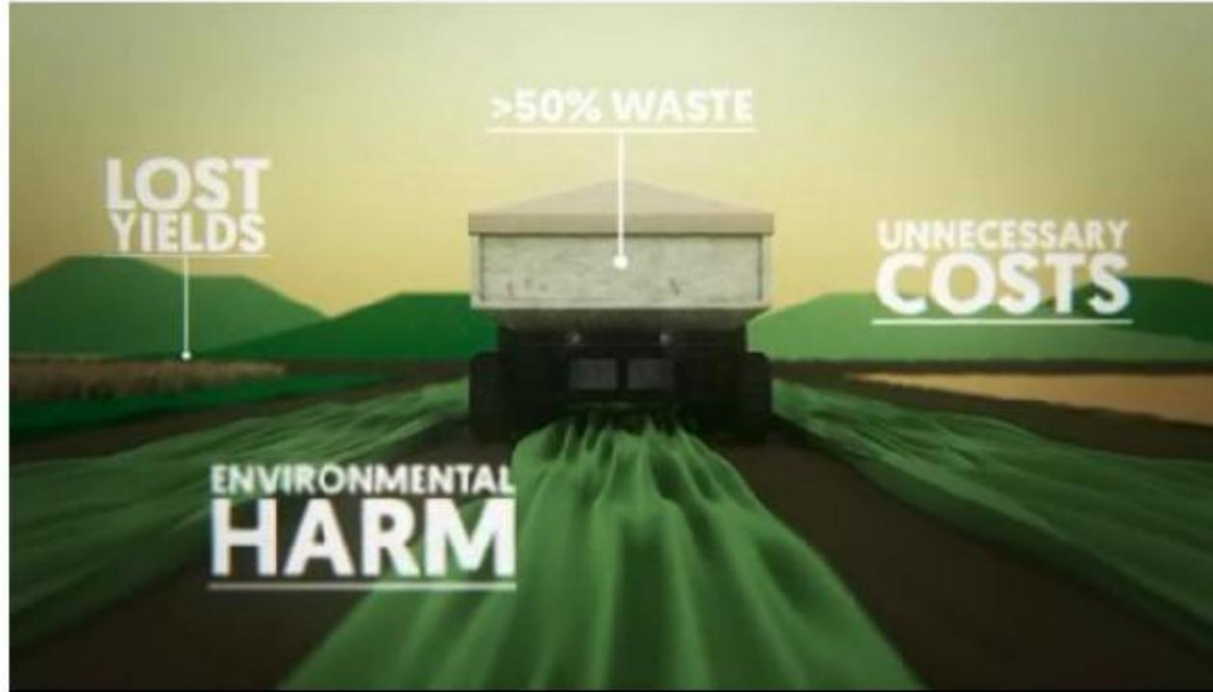


Farm Digitization, Measurement, Monitoring And Management



There are many neglected farmers that need our assistance with ACCESS to 4th Industrial Revolution, 5th generation and Artificial Intelligence based Technologies

PROFILE

Carbon Farming As A Service



SmartAgrIoT

21 Aurora Drive, 1st Floor

Umhlanga Rocks, Durban

South Africa

info@smartagriot.co.za

+27 67 123 6845

Who is Smart-Agr-IoT

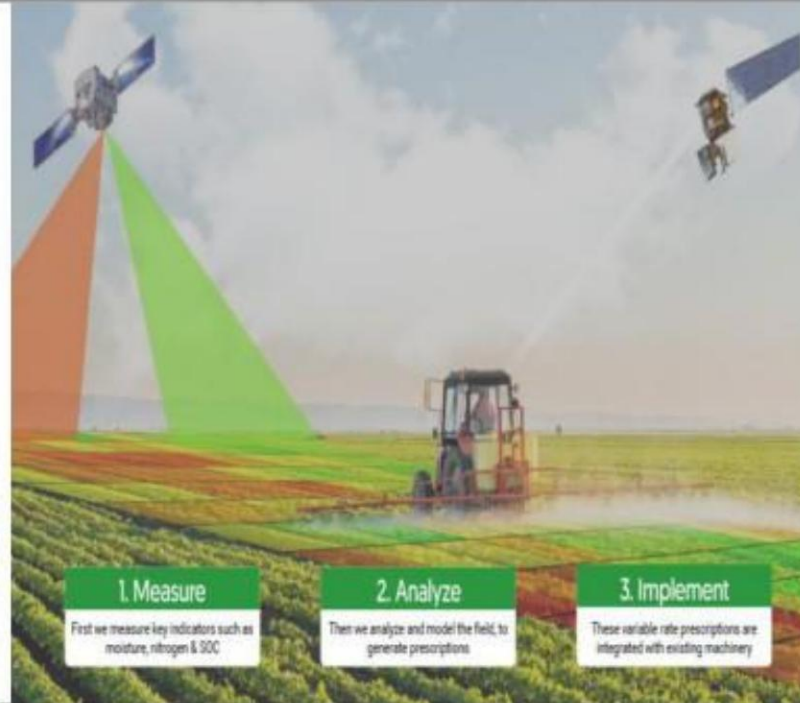
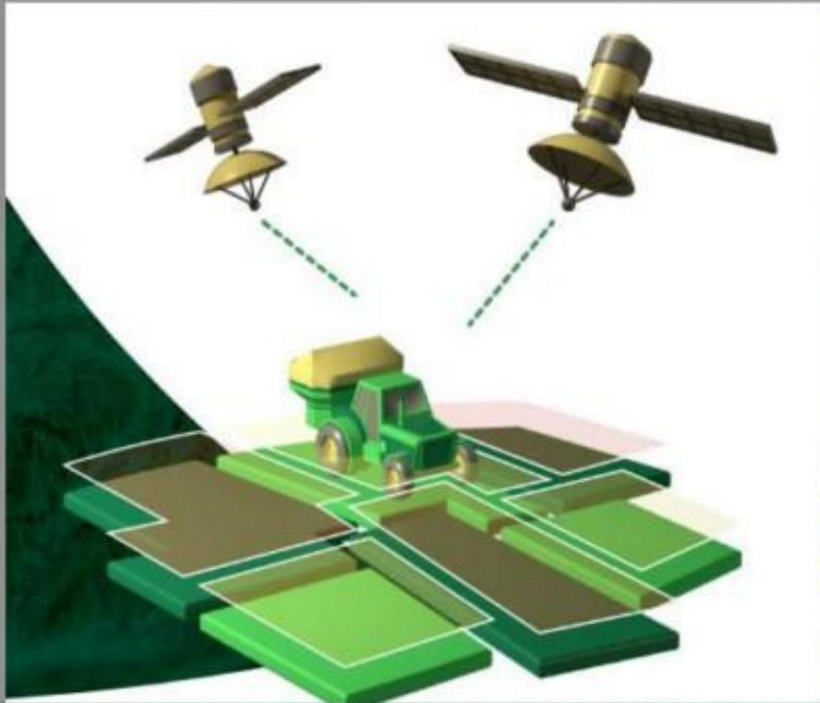
We understand the farmer challenges before, during and Post COVID-19 and the fight for ACCESS to technology, skills, resources and financial inclusion.

An AgriTech And Aggregator focusing on the implementation of technologies that reduces farming costs, improve yields, manage water usage, and contribute towards a better environment through reduced greenhouse gas emissions.

Our services strictly target to benefit smallholder, small commercial, household and subsistence farmers.

Carbon Farming As A Service (CFAAS).

Meaning, the farmers do not need to be trained, skilled, educated in Agriculture and there is no need to procure any technology. By offering this model, we reduce the need for the farmers to invest upfront. We provide the needed resources from farming to Offsets.



Trial basic information document:

1. Unique Identification (ID)
2. Farming platform information
3. Field boundary and area (GeoJSON, SHP, or KML)
4. Crop type information
5. Last season crop and practice
6. Seeding/sowing date
7. Seeds spacing
8. First application date
9. First application dosage (kg/ha). Uniform rate or variable rate
10. Irrigation practice (rainfed or irrigated)
11. Available historical harvest information
12. Available historical fertilizer information
13. Available historical soil map
14. Any significant information regarding the field

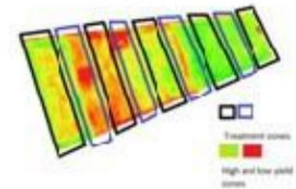
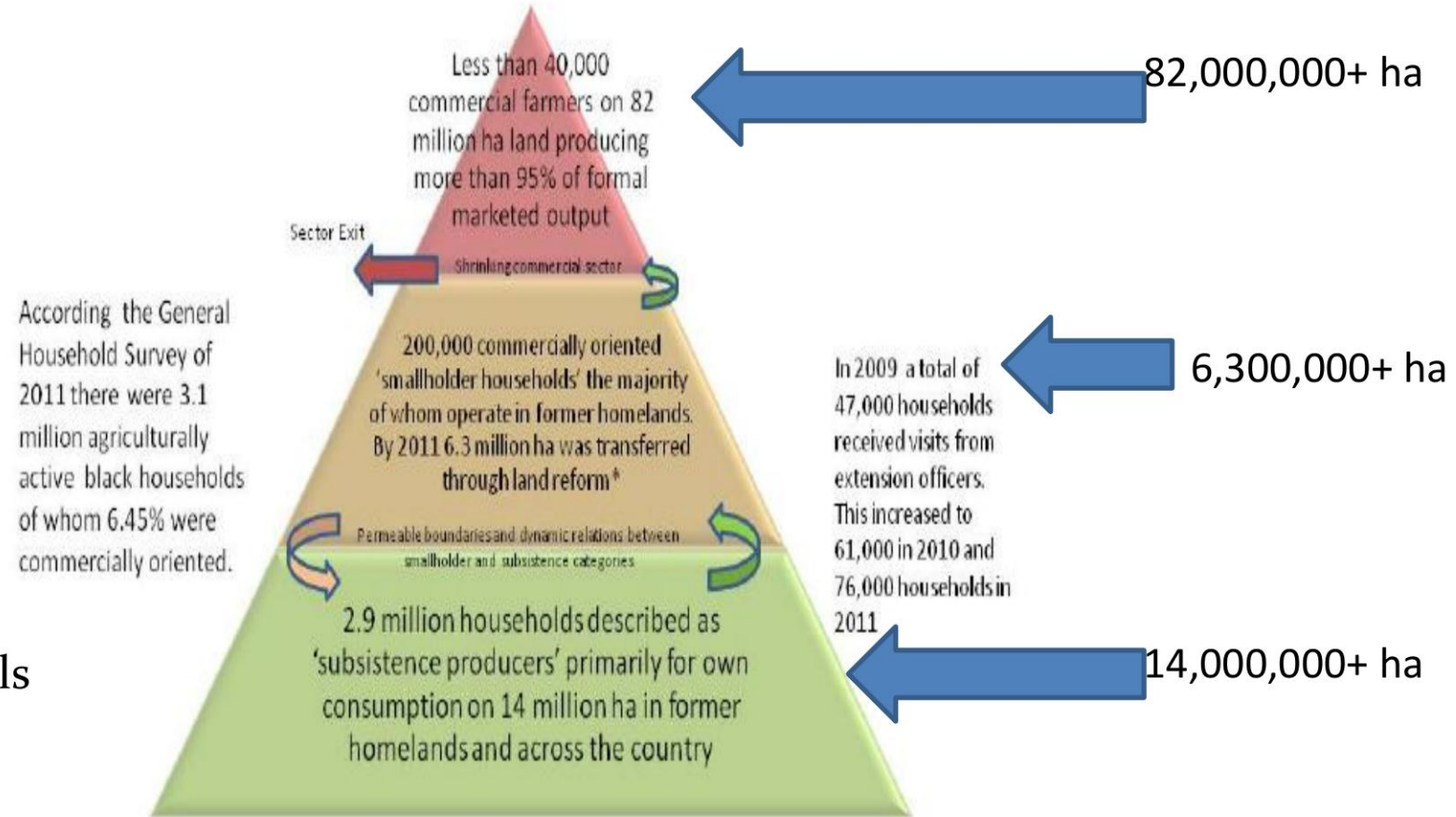


Figure 2 shows treatment zones/strips traversed across the field

Economic Challenges

1. No access to finance
2. Most land owners are not educated
3. Too much Land but NO Farming skills (where to start ?)
4. All Wish to reduce greenhouse gases
5. No or little access to Technology tools
6. Management skills mostly non existent
7. No monitoring tools implemented
8. Expensive AGRI consultants
9. No BUDGET to employ Agri Professionals

The structure of South African agriculture



According to the General Household Survey of 2011 there were 3.1 million agriculturally active black households of whom 6.45% were commercially oriented.

* According to DRDLR M&E between 1994 and 31 March 2011 there were 198,901 redistribution beneficiaries and 1,645,898 restitution beneficiaries in 337,000 households. Some restitution beneficiaries received financial compensation and not land. Overall no reliable data currently exists to determine how many beneficiaries/households are active on land transferred through the land reform programme.

OUR MISSION

To accelerate carbon removal on a planetary scale through the actions of farmers and landowners.



OUR CORE SDG's



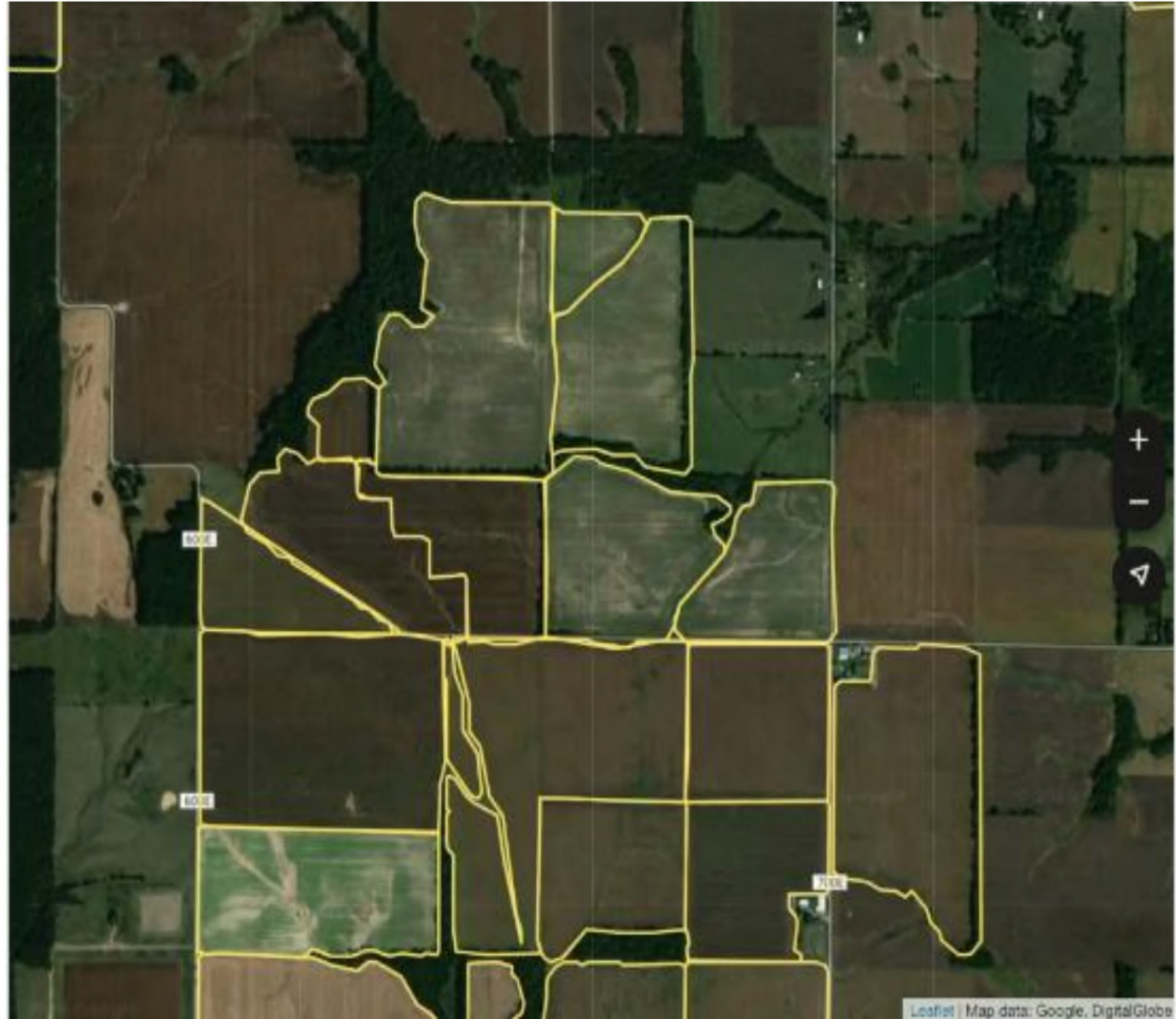
South Africa has a carbon tax that will allow all credits generated to be bought completely within South Africa at a high price, since there is a big shortage of carbon credits in South Africa, to the tune of \$200M per year.

HELPING FARMERS BECOME MORE EFFICIENT AND RESPOND TO THE CHALLENGES AND OPPORTUNITIES OF THE FUTURE



LAND DIGITIZATION

We start with community land digitization, to digitize and place digital boundaries on the community land.



How it works Solution

Step 1. We analyze the farm/ property

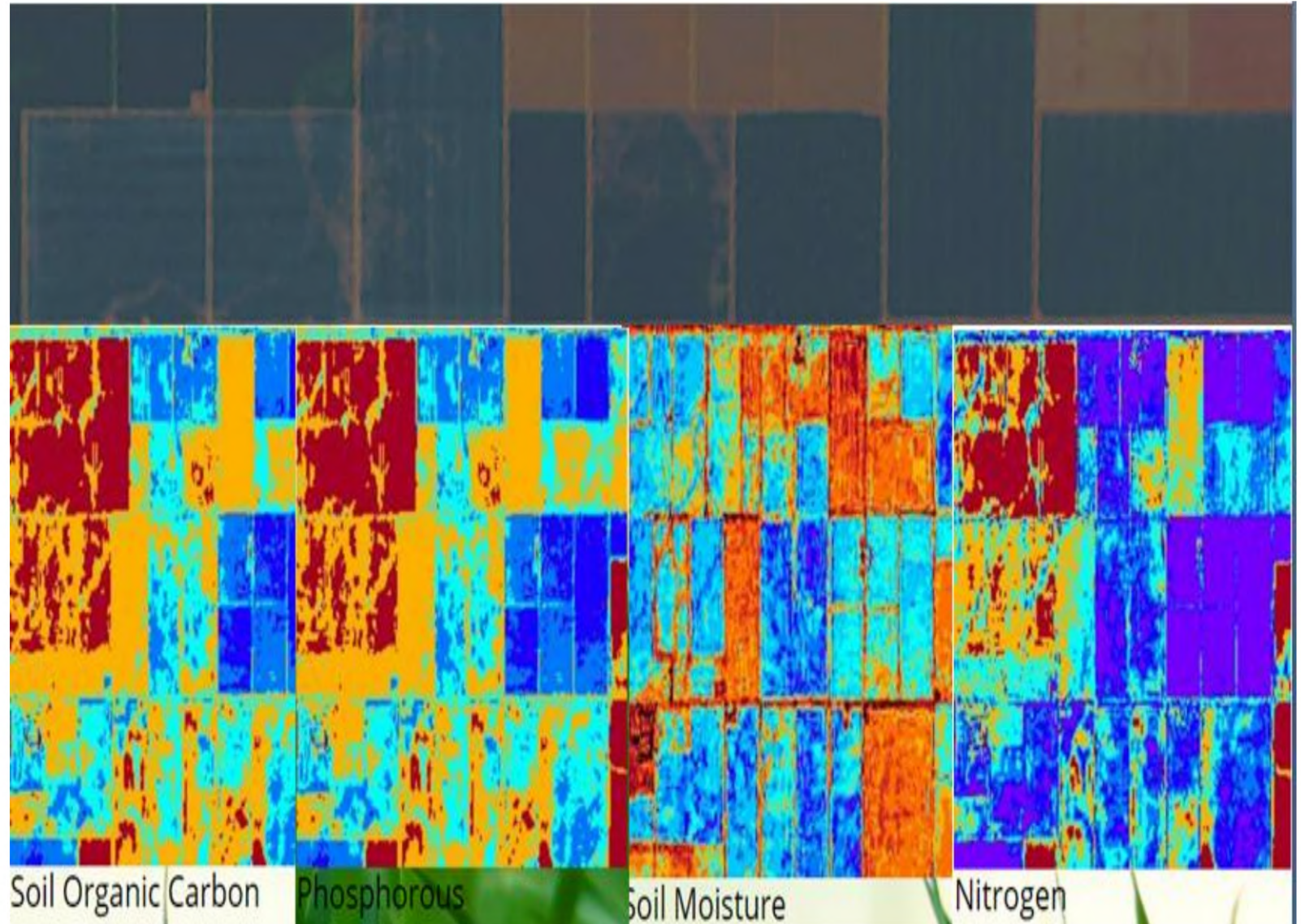
We start by mapping the farm boundaries, this helps us determine the pasture coverage and woody areas, etc

We use this to generate a detailed report on the historical ground cover to help you assess where you're at today.



FIELD or PADDOCK DIGITIZATION

We then
digitize each
farming land
with
boundaries

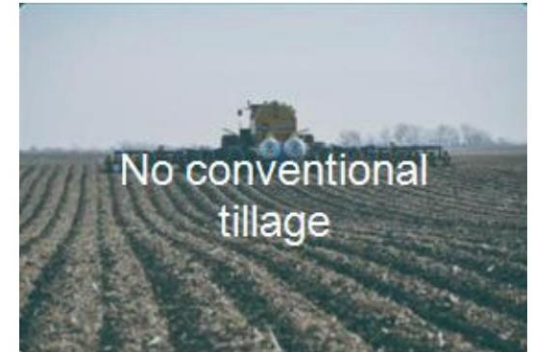


MONITOR FIELDS

Consistency & permanence is the basis of success

To avoid reversals of GHG removals and thus ensuring validity and tradability of certificates.

Tracking multiple activities to quantify all CO₂_e reductions & removals



Regenerative Agriculture Farming

These practices include:

Biodynamic farming, Permaculture, Biological farming, Natural farming, and Traditional farming.

Farmers Using Own Practice

- Process – we will allow those farmers to continue using chosen practice (any of above).
- We will introduce monitoring, and management tools
- We will ensure the practice uses approved global standards
- We will submit for verification

Farmers NOT using ANY Proven Practice

- Process – We will introduce our acceptable Practice
- We will measure, monitor, manage
- We will submit for verification and certification

Forestry Farming

Trees absorb CO₂ from the atmosphere and store it as carbon in trunks, roots, branches, leaves and even the soil.

What is REDD+ ?

REDD+ stands for Reducing Emissions from Deforestation and forest Degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

It is an international framework developed by the United Nations Framework Convention on Climate Change (UNFCCC) in 2005. It aims to stop global warming through the enhancement and conservation of forests in developing countries.



Reducing emissions from deforestation

Reducing emissions from forest degradation

REDD+ Activities

Conservation of forest carbon stocks

Sustainable management of forests

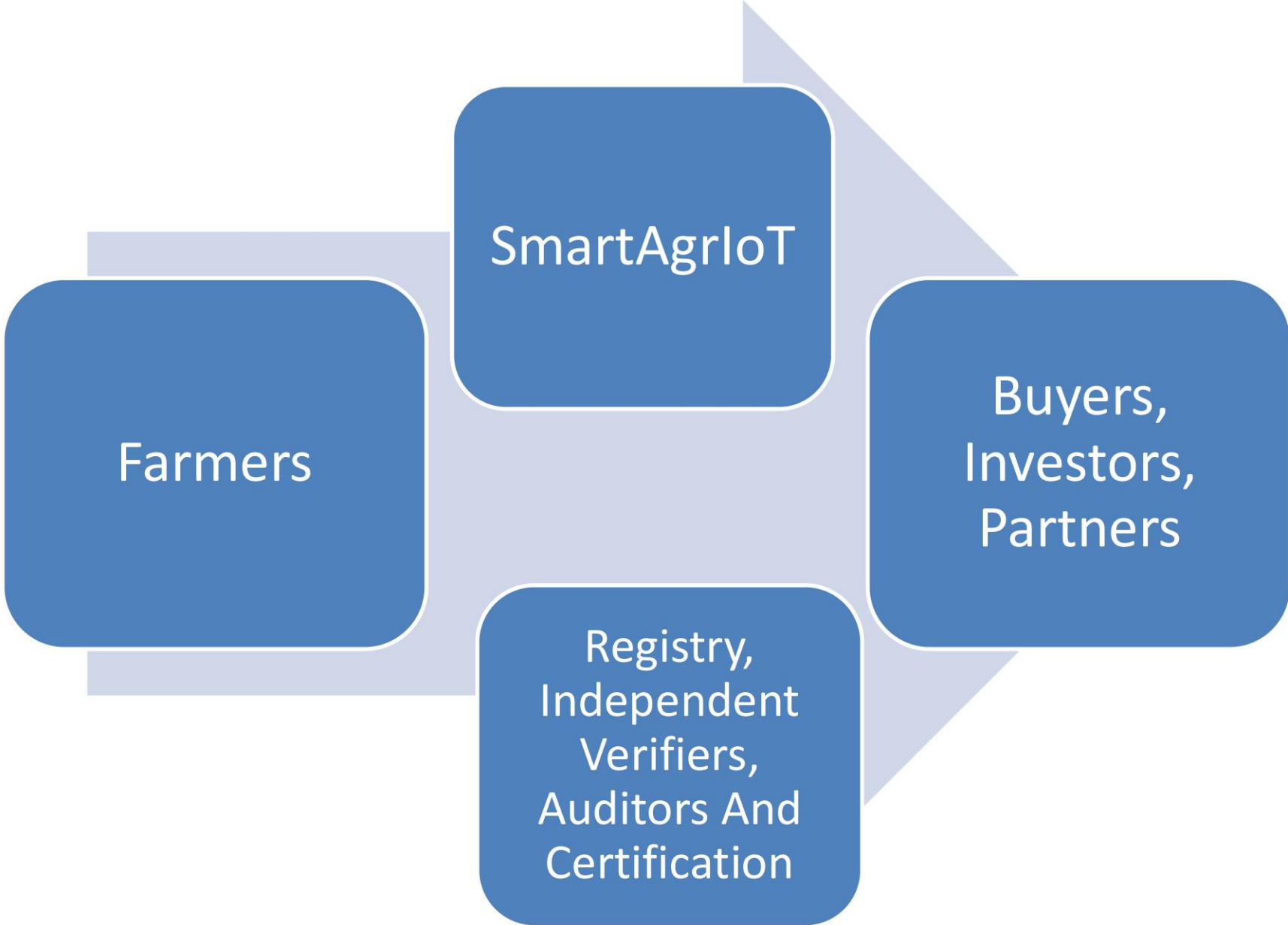
Enhancement of forest carbon stocks



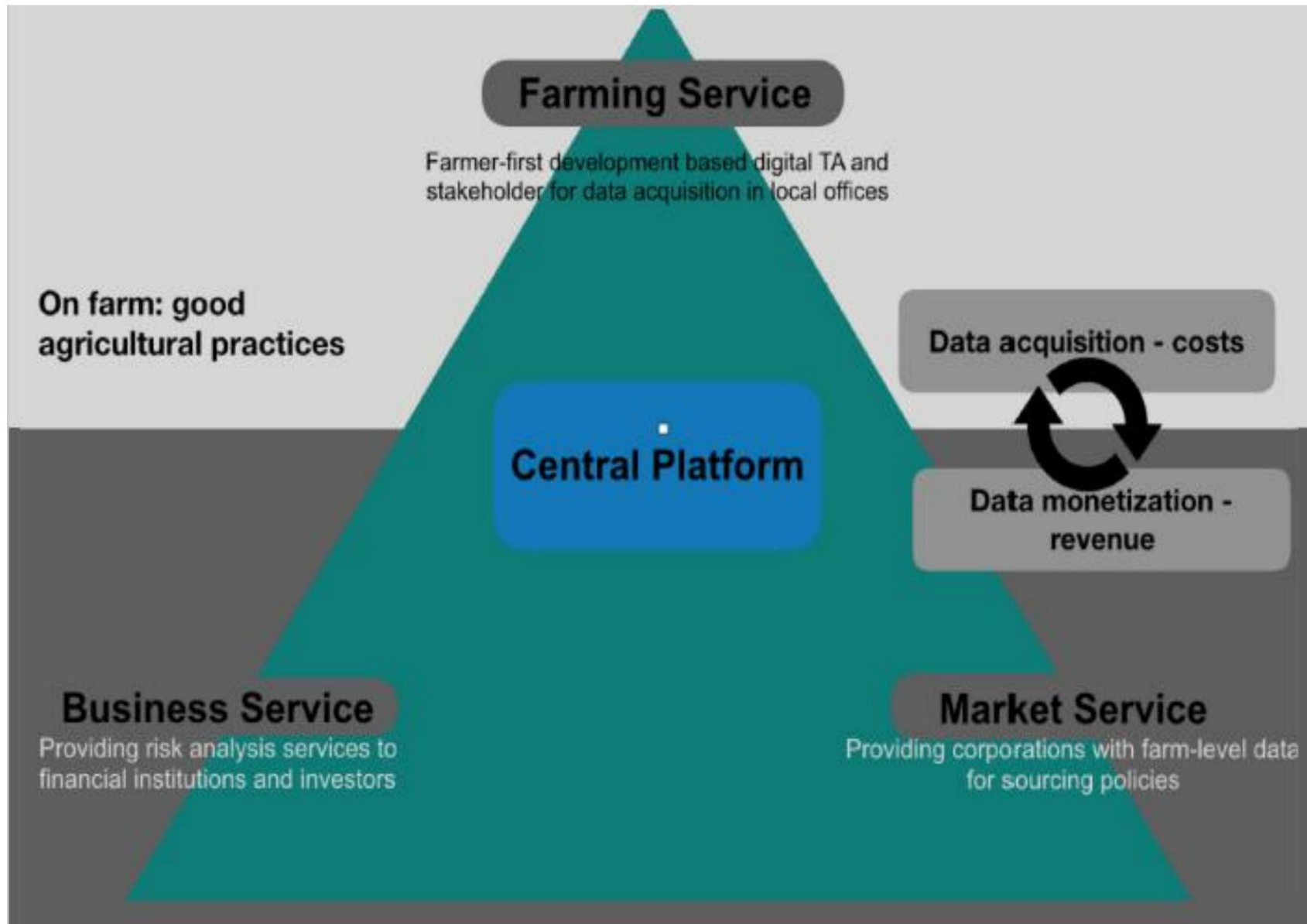
Monitoring Platform



Our Business Model



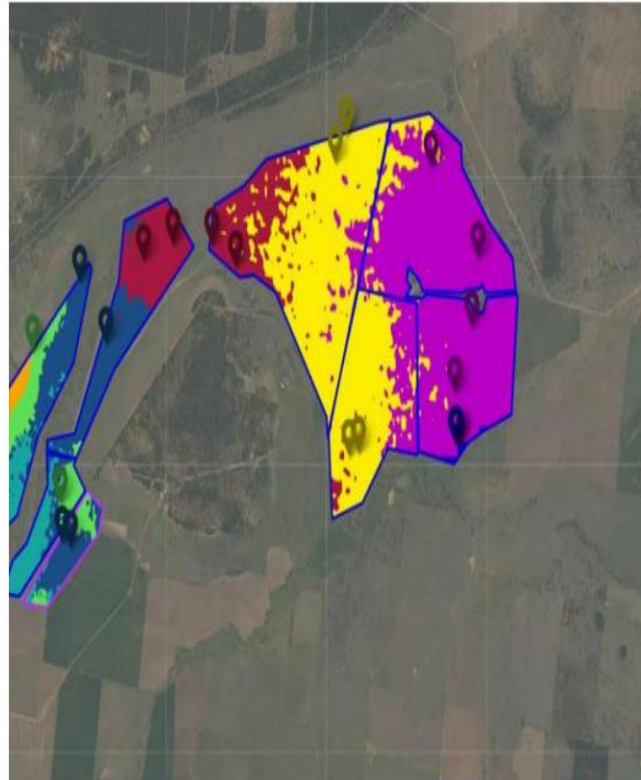
We are Harnessing the technology to revolutionize farming



How it works Solution

Step 2. We calculate your potential

Using the latest data, we Help calculate your potential to increase soil carbon for your operation, in your region. We help you understand your limitations too, Including climate risks and soil constraints.



Measuring and reporting soil organic carbon

Changes in soil organic carbon (SOC) generally occur over many years, and it is often difficult to identify small changes.

A larger change in total organic carbon stock, which may take several years or longer to occur, is required before a significant change could be measured with any degree of confidence. With annual inputs of organic residues likely to be less than the 0.2t C/ha in typical grain cropping systems, more than 10 years would be needed to detect a significant change in soil organic carbon.

Accurate measurement of changes in organic carbon requires:

- a soil sampling strategy that captures the natural variation in soil carbon
- a measure of soil organic carbon concentration
- an estimate of bulk density of the soil to adjust for changes in soil mass at specified depth intervals.

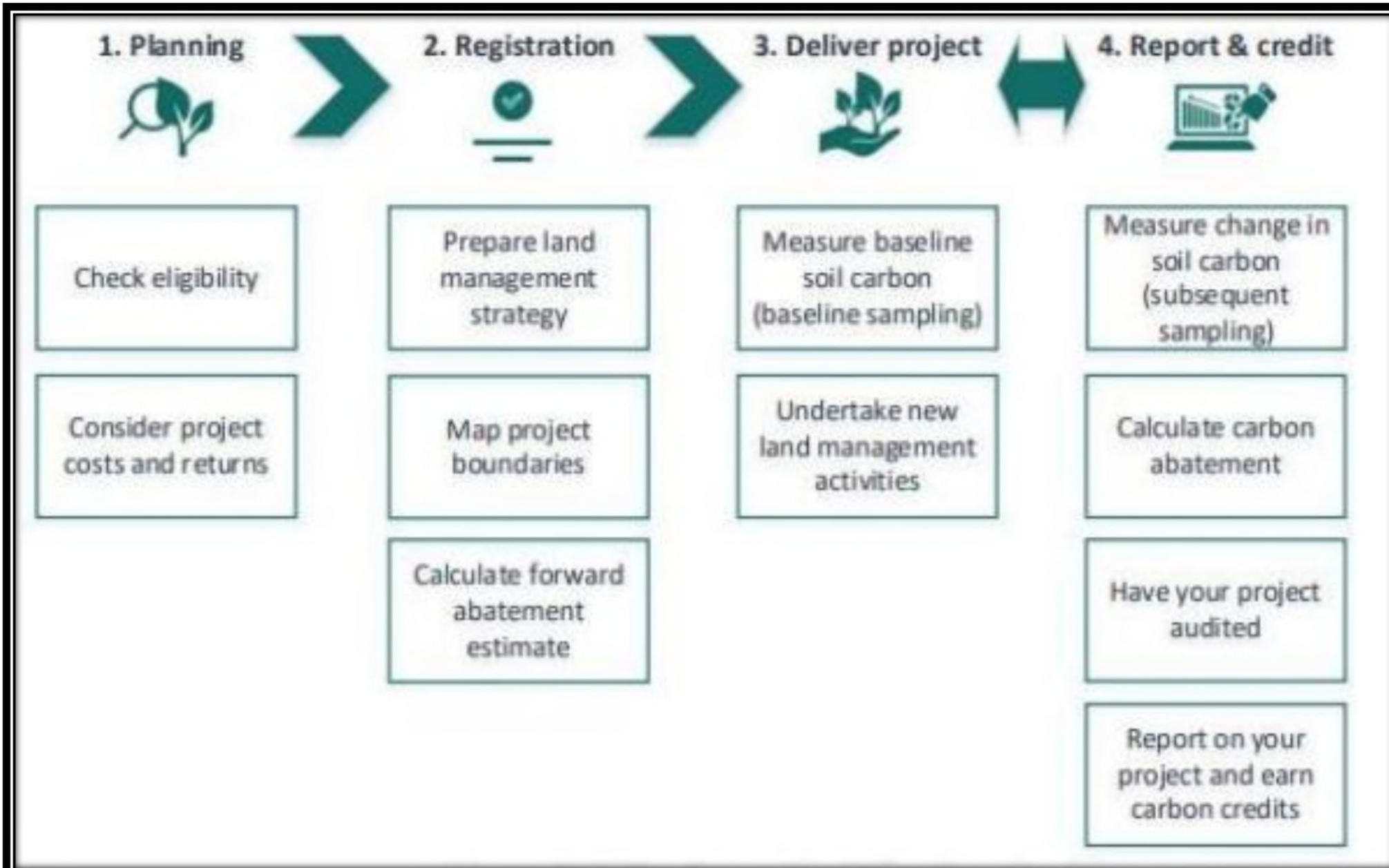
Visualization Monitoring of Carbon



The ton/ha calculated by the actual area for each Paddock gives us the tons of Soil Organic Carbon currently sequestered in the soil.

Every tons of organic carbon is the equivalent of about 3.67 tons of atmospheric carbon dioxide.

Carbon Farming Life Cycle



Pricing And Fees

Subscription

Monthly subscription
or PAYLATER

The subscription is your only upfront cost and acts as a participation fee to the Carbon Farming As A Service program.

15%

Issuance Fee

The issuance fee is paid to cover verification and issuance costs.

20%

Non-permanence Buffer*

The buffer acts like the buyer's insurance that the certificates will keep their credibility.

15%

trading Fee

Sell certificates through carbon trader services

%

Farmer Offset

Farmer is paid after paying the Aggregator of its PAYLATER costs in cash, or crypto using blockchain

%

Aggregator

Reimbursable for ALL costs



Team? Women, Board



Jabu
Technical Founder



Dr. Patricia Mokoena
Agronomist



Smangele
Director & Co-Founder



Amanda
Precision Agriculture Specialist



Dudu
CEO



Peter
CFO



Kay
Chief Human Relations



Vela
Chief Biodiversity

Our Operational Team

1. Jabu is a key player in the business, he has over 30 years business, founder of the business
2. Kay Pillai is an expert in Human Resources
3. Ms. Dudu Thabede is the CEO with over 25 years marketing, public relations, management consulting
4. Vela Dlungele Is an expert in Agriculture, Environment
5. Norman Ngema – expert in Training And Extension Services industry
6. Moira is the Founder and is board member and secretariat
7. Peter McKnight – Finance Executive

More than 60 years of combined business experience make this successful team to lead the expansion of the organization

Proudly BEE
Proudly BEE
Proudly South African
Proudly South African

Board Of Directors



WOMEN

Top Management



MAJORITY

CONTROL

Corporate Secretary

Crops

Livestock

Call Centre

Training

Export Marketing

WOMEN

MAJORITY

CONTROL



Our Theory of Change

If We

Then

SDG Targets

Build Africa's Largest Farmers GHG offset market, providing smallholder farmers with:

- Access to Capital on a Pay As You Go Basis or PAYLATER
- Access to advisory on better agriculture practices and modern techniques
- Access to skilled resources and unaffordable technologies to manage, monitor their farms

Farmers will have the resources to grow high-yield competitive farms, enabling us to build an Africa that feeds herself and the world...

...leading to the accomplishment of our 2030 SDG targets :

- **No Poverty:** 15 million farmers earning 2x above minimum wage
- **Zero Hunger:** Increase the productivity of 15 million farmers and provide them with market access
- **Decent Work & Economic Growth:** 15 million farmers, 3,000 full-time employees, 300,000 contract employees
- **Industry, Innovation and Infrastructure:** \$2.3B credit disbursed to smallholder farmers.

Sustainability

Sustainable Farming practices aim to:

1. Change the way land and water resources are managed, so that their long-term productivity is optimised and sustained
2. Contribute to the economic and social well-being of all
3. Ensure a safe and high-quality supply of agricultural products
4. Safeguard the livelihood and well-being of farmers, farm workers and their families
5. Maintain healthy, functioning agricultural ecosystems rich in biodiversity
6. Mitigate and adapt to climate change

The benefits of sustainable farming should be:

1. Reduced or predictable input costs
2. Stabilised yields
3. Reduced environmental pollution
4. Reduced exposure to toxins
5. Increased water use efficiency
6. Living soils – increased soil fertility and/or nutrient-holding capacity
7. Reduced soil erosion
8. Carbon sequestration (mitigating climate change)
9. Enhanced, robust natural systems protecting biodiversity and ecosystem services.

Impact

Improved environment – less gases emitted

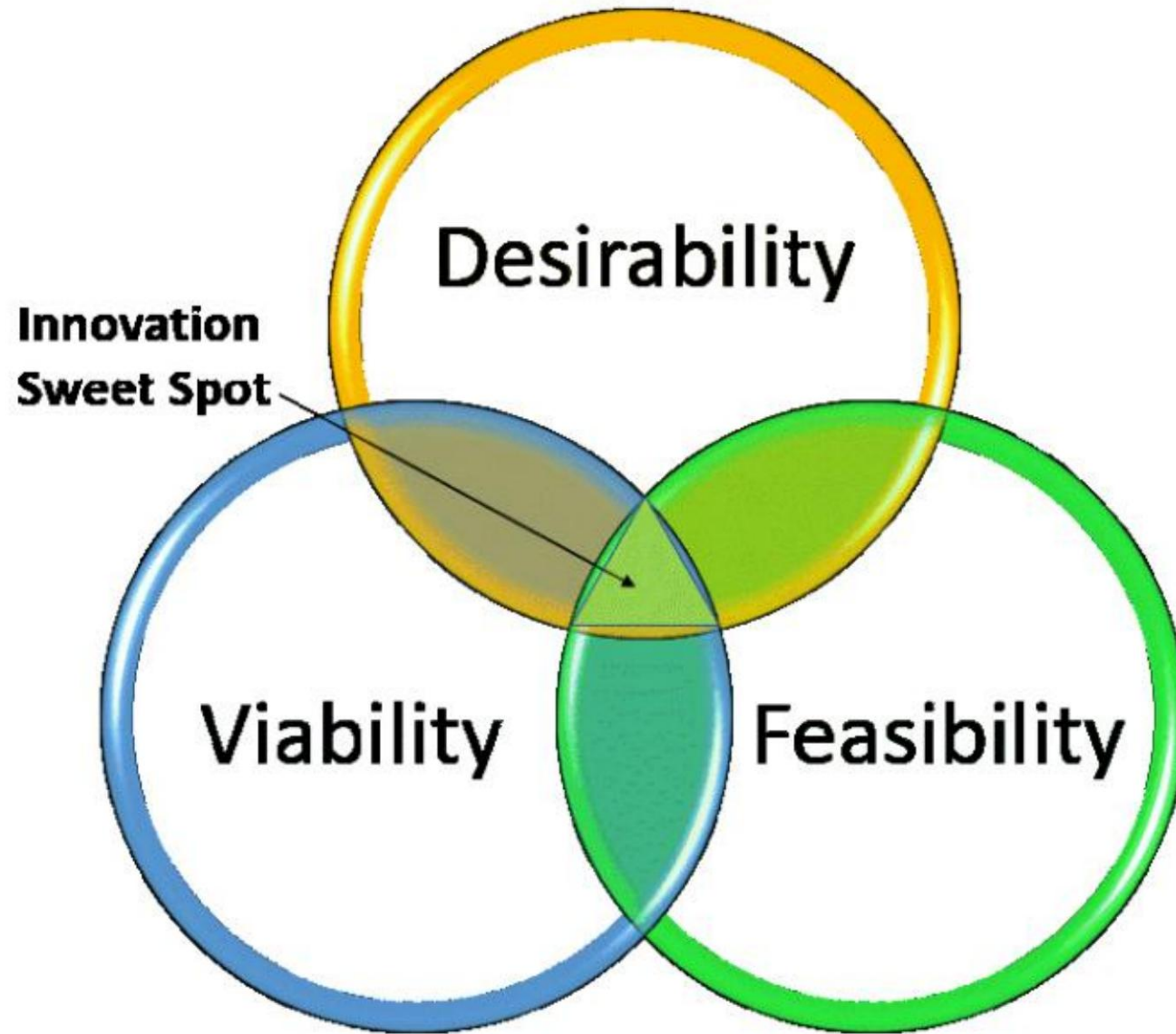
High Yields – Less Wastage

Skills and education to rural communities

Sustainable farming communities

Employment

THE TRIFECTOR IN OUR MODEL



2022



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[GOOD BUSINESS WEBSITE](#)



WSIS FORUM 2021

Starting from January
Final Week 17-21 May 2021

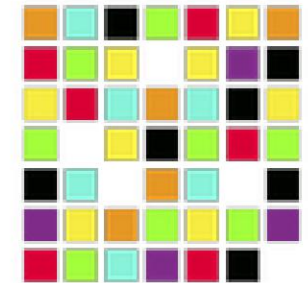


TECHTRIBE ACCELERATOR



Smart AgriOT is a cloud-based digitisation and farm management platform for smallholder farmers to promote precision agriculture solutions, including data gathering by satellites and drones, weather information and soil sensors as well as other data-driven farming practises. They aim to build a world with no poverty or hunger by providing low-cost solutions that enable smallholder farmers to meet the needs of their direct and broader communities.

WINNER
2nd PLACE



SA INNOVATION SUMMIT.

THANK YOU

21 Aurora Drive, 1st Floor
Umhlanga, KwaZulu Natal
South Africa
+27 67 123 6845 (contact)
info@smartagrIoT.co.za