tradeinspace
Track.Verify.Enable

BRITISH COFFEE ASSOCIATION

Remote Sensing for Coffee Sustainability

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BCA – Sustainability Committee

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What is Trade in Space?

We offer cutting edge technology, tested and designed with global super users. The tools we've developed include a desktop and mobile tool, offering API integration to existing supply chain tools. We have a proven user centric and flexible approach with opportunities to co-create outcomes resulting in bespoke solutions and mature product packages to suit a multitude of user requirements budgets and needs.

We're market experts, with a trusted reputation offering stability, efficiency and knowledge in supply-chain management systems, and blockchain applications.

Track

Deforestation monitoring within supply chain

Verify

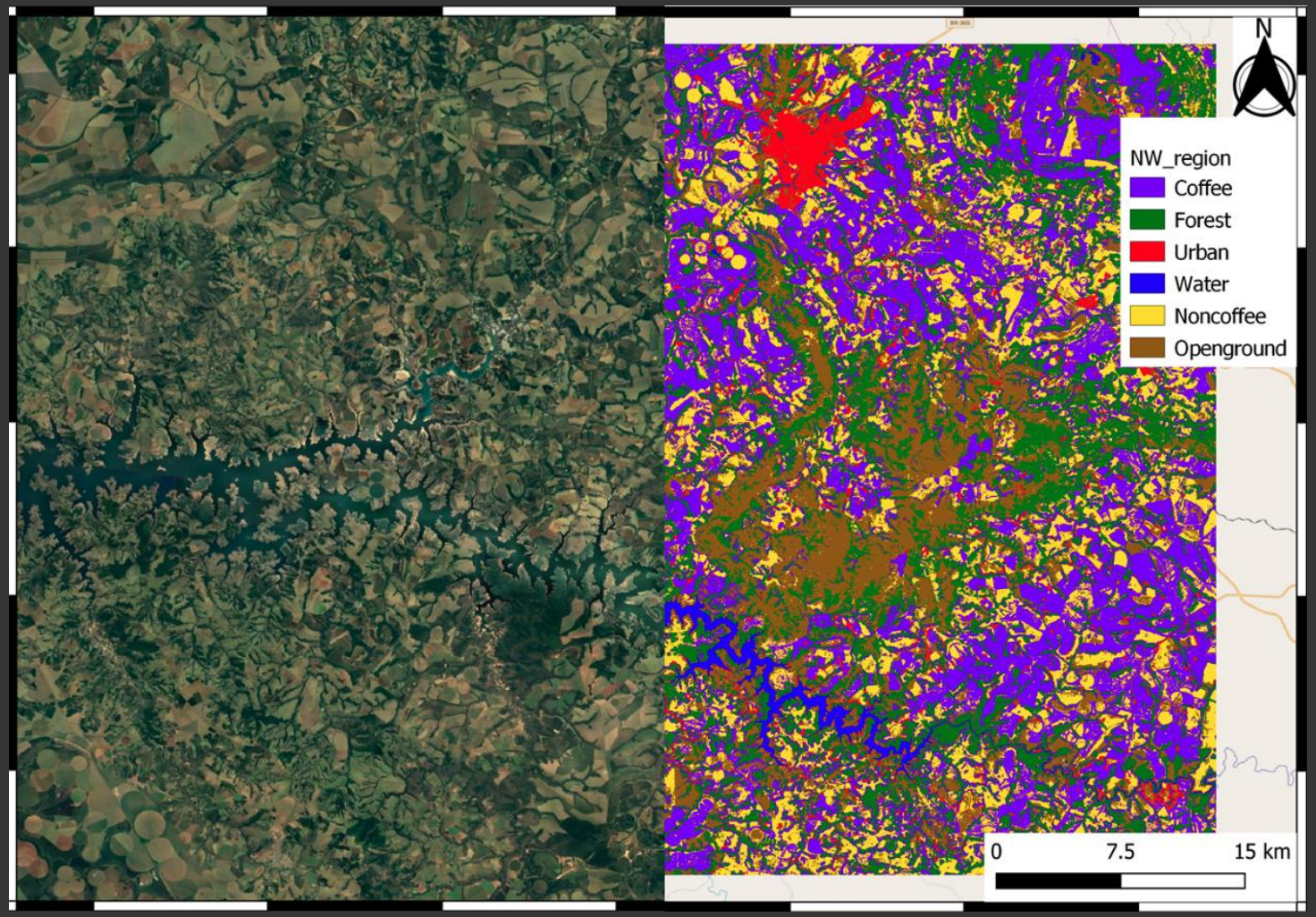
Assess to legislation or sustainability standards

Enable

Write to blockchain and integrate via API

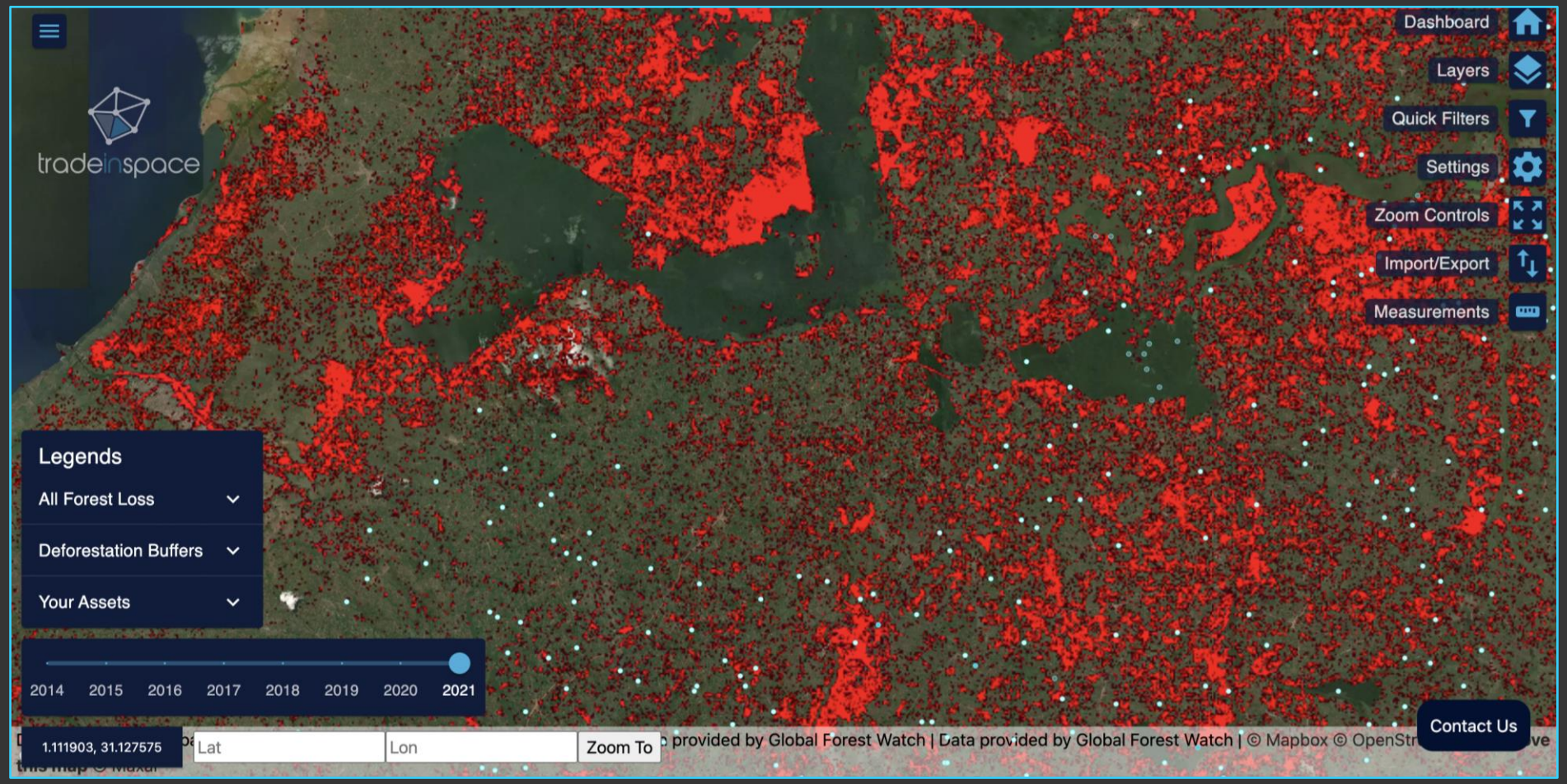
Remote Sensing

- Obtaining information about the earth from above.
- Different sensors detect different data types – RGB, CO2, Soil Moisture
- See it from space? Monitor it for change on earth!



Remote Sensing to minimise the environmental impact of coffee production

Deforestation



8 years cumulative forest loss in coffee growing region of Uganda displayed on Trade in Space's visualisation tool, Sustainimaps

Water Use

- Crop irrigation accounts for 70% of freshwater withdrawals.
- Monitor run-offs, phosphates and nitrates.
- Satellite weather tracking can promote more responsible land use, minimise water and fertiliser wastage.

Carbon

Carbon sequestration and emissions – what does it actually mean?

- Remote sensing for land use change can measure Carbon Flux
  - is the farming practice absorbing carbon?
  - is it enhancing the release of carbon into the atmosphere?
- Net-gain can generate alternative income sources by way of Carbon Credits.

Remote Sensing to respond to a changing environment

Increased Risk of Crop Damage

One of the most relevant uses Remote Sensing has is how to help us adapt to the world as the climate changes.

Frost, Fires, Floods

- Satellite data can predict high-risk areas to help minimise loss
- After the event Satellite data can assess damage and promote fast recovery.

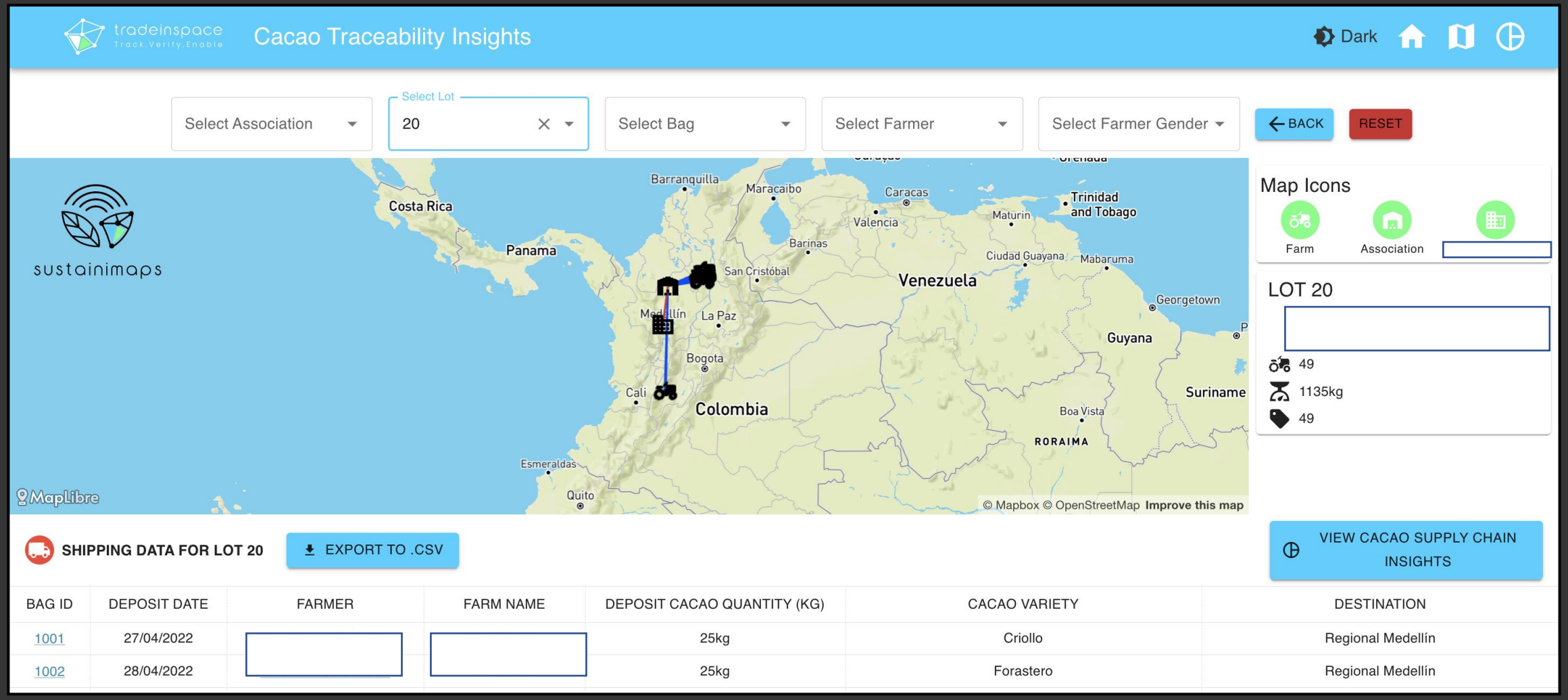
Pests and diseases

Monitoring the spread of pests in the crop; their exact location and the lifecycle stage of the pest can be recorded.

Adapting to Change

- One of the most relevant uses Remote Sensing has is how to help us adapt to the world as the climate changes.
- Some coffee growing regions will decrease by 50% over the next 50 years, but remote sensing can ensure we're investing in the right areas most suitable for specialty coffee farming.

Data Capture and Recording



BAG ID	DEPOSIT DATE	FARMER	FARM NAME	DEPOSIT CACAO QUANTITY (KG)	CACAO VARIETY	DESTINATION
1001	27/04/2022			25kg	Criollo	Regional Medellín
1002	28/04/2022			25kg	Forastero	Regional Medellín

Commodity Traceability Insights Dashboard – sustainimaps by Trade in Space

Looking to the future

- Consumer driven legislative change
- Increased competition over suitable growing areas.
- Better, cheaper and faster remote sensing data.
- More technology driven solutions.

THANK YOU

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