THE CHALLENGE

Deforestation is one of the biggest threats to nature. Every minute we lose 30 football fields of forest. It's a race against time to halt illegal deforestation, and to bend the curve of biodiversity loss and the impacts of climate change. Luckily loads of people stand up to protect the forest, but they often lack the required technology and resources to do so.

THE SOLUTION

Our unique Forest Foresight(FF) can predict illegal deforestation before it actually happens. With digital innovation it predicts forest loss up to 6 months in advance. This gives in-country stakeholders the time and tools to intervene and stop illegal deforestation.

So what makes FF unique?

1. **Collect historic satellite images** (Radar, Sentinel 1), analyze and label changes in forest cover
2. **Collect additional datasets** that could predict forest loss, such as topological data and population density
3. Based on all collected data an **advanced machine learning model studies** how forest loss occurred in the past
4. The **machine learning model** concludes that for example forests close to new roads or increased human activity are at risk
5. The forest risk maps can now be connected to **concrete interventions to prevent illegal deforestation**

MISSION: REDUCE ILLEGAL DEFORESTATION BY 30%

Through its predictive models, FF detects and prevents illegal deforestation by up to 30%.

STATUS In close collaboration with national governments, FF is being tested and implemented in three different landscapes with high tropical forest cover: Gabon, Suriname and Borneo. We are predicting forest loss with 80% accuracy. Gabon is one of the first landscapes to have completed the FF pilot.

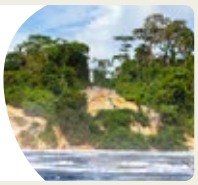
WHY WWF? WWF brings stakeholders together, from international partners to local communities. We create a fit for purpose solution and offer stakeholders the tools to protect their forests.

PARTNERS FF is working together with universities and high-ranking Dutch and international partners in using state-of-the-art radar deforestation data and AI technology. In FF implementing countries we work with local stakeholders, such as local communities, NGO's, governments and universities.

In six months time we carried out 34 field investigations and multiple interventions to halt illegal deforestation using FF - *Gabon stakeholders*

We halted illegal mining activity in the Minkébé National Park buffer zone thereby saving 30 ha of forest - *National Park Agency Gabon*

FF proved to be effective, now we need more support to host part of the system - *Gabonese Agency for Space Studies and Observations*



For the next steps we should include all National Parks, Ramsar sites, all forest concessions and mining zones - *Gabon stakeholders*

We have a lot of models or applications already. But one that can predict and provide an early warning, especially using artificial intelligence, is very rare. - *Ministry of Spatial Planning, Jakarta (Indonesia)*

OPPORTUNITIES

FF can be scaled to additional landscapes to reduce illegal deforestation. Furthermore, different actors can be engaged to maximize adoption of the system and to increase the potential impact to preserve the world's forests!

With your funding we can:

- Scale FF within pilot landscapes to national or transboundary level e.g. TRIDOM, consisting of 178.000 km2, 11 protected areas, 3 countries in the heart of Africa
- Introduce FF to new landscapes to halt illegal deforestation
- Bring FF to indigenous and local communities whose livelihood directly depends on healthy forests
- Advance the technical capabilities of predicting deforestation leveraging state-of-the-art technology and big data from our partners

...WITH SUFFICIENT FUNDING

- FF will have **proven impact** on illegal deforestation
- FF will be active in **15 countries worldwide**
- FF has harnessed the full power of **Dutch and international partners** to keep pushing for innovation that makes a difference in protecting forests

Interested? Contact EWS@wwf.nl

Be one with nature