

WEB CLINIC NOTES:

Profiling Global Forest Watch & Project Noah Leading Edge Watchdog Networks – September 11, 2014

Program Overview

The Global Solution Networks Program is a non-profit research initiative based at the Martin Prosperity Institute, Rotman School of Management, University of Toronto and supported by governments, companies, foundations and international organizations around the world.

Central hypothesis: *We are moving into a new phase of global leadership and problem solving where a lot of the activity to address issues of a global nature is driven by multi-stakeholder networks – networks that use technology to assemble a greater diversity of skills, knowledge and resources than one institution could marshal on its own.*

This web clinic focused on global **WATCHDOG** networks, one of the 10 types of GSNs we have identified.

Watchdog Networks are scrutinizers – responsible for revealing problems and issuing calls to action. They help us track important developments, acquire new knowledge, and inform action with credible data.



Crystal Davis, Senior Manager, Global Forest Watch, *World Resources Institute*

Global Forest Watch – uses an exemplary blend of technology and human networks to provide what is unprecedented transparency on the state of the world's forests in real time. The GFW initiative began 15 years ago with the aspiration to be able to monitor forests globally and frequently. Until 2-3 years ago, the technology available didn't allow them to achieve their *global* vision – they were limited to local in-country networks that monitored on the ground and reported back to the international level. The new version of GFW, launched in February 2014 has over 40 partners (including Google, UNEP, and the University of Maryland) and aims to completely revolutionize transparency around forests. With this new version we can see for the first time where forests are being lost, anywhere in the world, with frequent updates.

3 key components to the initiative:

- **Data** – GFW brings 2 critical new forest monitoring data sets to the surface:
 1. Data showing updated tree cover loss at 30m resolution for the entire world
 2. Monthly tree cover loss at 500m resolution for the entire tropics
- **Platform** – allows users to dynamically visualize data, conduct an analysis on the fly, subscribe to email alerts for an area of interest, and contribute their own information from the ground. The website is all open-sourced code and GFW has its own open-source API which allows people to design their own apps using GFW data and technology.
- **Action** – GFW is starting to build out partnerships with companies, governments and NGOs around the world to figure out how to apply the data, and what type of information-based tools need to be built to improve

law enforcement, improve land-use planning, and strengthen the advocacy and campaigns of civil society around the world.

Governments using GFW – Brazil is a leading example, having had this type of forest monitoring system in place for years, reducing its deforestation by 70% in the past decade. Monthly deforestation alerts are used to target its on the ground investigations, reducing the cost and improving the effectiveness of their ability to detect illegal logging. GFW is scaling up the Brazil model for the entire world.

Private sector using GFW – Major companies, such as Unilever and Walmart, have been making commitments to eliminate deforestation from their supply chains. GFW is working with these companies to build out supply chain monitoring tools and risk assessment tools to help them meet and transparently demonstrate compliance with these commitments.

Challenges:

- **Inherent limitations in this kind of data** – data based on remote sensing and satellite imagery is never 100% accurate. How accurate does the data need to be to be useful and how do you communicate the limitations around data so that it isn't being misinterpreted or used in inappropriate ways?
- **There are some significant data gaps** – In order to make sense of tree cover loss data, one needs to understand how the land is being used, where concessions are located, where the biodiversity hotspots are, where local communities are located, etc. Often this data doesn't exist, is very low quality, or is not being disclosed by governments. GFW must figure out how to push more of this data into the public domain.
- **Crowdsourcing** – Information from the public is important, but how does one create a successful crowdsourcing campaign?



Yasser Ansari, Co-Founder, Project Noah

Project Noah - Project Networked Organisms And Habitats platform

Speaking with scientists who were trying to engage the public and collect valuable pieces of information, Yasser discovered that there wasn't a simple and useful process for this. Project Noah seeks to fix this problem.

Purpose of Project Noah

1. A place for people to *share* their encounters with wildlife
2. A *community* that works together – if you don't know what you're looking at, *that's OK!*
3. A *tool* for scientists and researchers – the community can participate in *missions* that have greater focus
4. A *location-based field guide* – no matter where you are in the world, you can see what the community has shared

Today the Project Noah community has over 250,000 members and has collected over 1 million geo-tagged photos.

The Project Noah Platform

The Project Noah platform is only as valuable as the communities it connects. While Project Noah is about collecting data for the experts, it is also about getting a new generation (the digital natives) involved. This created an interesting interface challenge – it had to create something that was as compelling and useful to an academic as it was to a 13 year-old. One of the keys to achieving this was to ensure it was safe, engaging and fun for a kid to be involved, and therefore more forgiving.

The platform

- Puts people first and data second – focus is on building passion and giving people a sense of ownership
- Puts biodiversity and nature up front – everything is built around showcasing the incredible diversity of life on this planet
- Education based– people won't care for the natural world unless they know what it is

Gamification – Project Noah uses 'patches' to encourage participation and recognize people for their contributions. For example patches are given for amount of observations shared, participating in missions, and achieving different milestones such as identifying a specific number of species. It's important that the rewards have *purpose*, or their value decreases.

What's next for these Watchdog Networks?

For Global Forest Watch...

There are changes taking place in the satellite industry. Usually, when you send a satellite into space, it's this enormous multibillion-dollar piece of technology that stays up there for a very long time. Because of this, the cost of imagery is also very high. The imagery GFW uses is typically from the US government and there is lots of commercial imagery that they don't have access to due to the cost barrier.

There are new models of satellites – called micro-satellites – that are sending up constellations of hundreds of shoebox-sized satellites into the atmosphere that could take daily imagery of sub-meter resolution. These could become available in the next few years, and would have huge implications not only for deforestation, but also for monitoring water resources and many other environmental issues.

For Project Noah...

Project Noah is getting pulled towards a greater emphasis on education. They've just created a custom software version of their tablet app for android devices for a company called Amplify – a news corp. company that's funded to bring an affordable table device to the classroom. Additionally, this past summer Project Noah was brought on board by New York City's Department of Youth and Community Development into 16 after school programs, and there are plans to expand across other cities.

For more information on Watchdog Networks, see the complete GSN research report [here](#).

The web clinic replay is available [here](#).

Contact

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