Space for Food Security: The Geodata for Agriculture and Water programme (G4AW)

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Since 2013, the Geodata for Agriculture and Water (G4AW) has improved food security in developing countries by promoting the creation of digital advisory and/or financial services based on use of satellite data.

- 4.5 mio farmers and (agro-)pastoralists farmers
- 25 projects & innovations
- 15 countries
- Commissioned by Netherlands Ministry of Foreign Affairs
Examples of agtech/fintech services in G4AW

• More localized weather forecasts
• Yield forecasts / growth stages
• Pest & disease warnings
• Drought and flood warnings
• Index insurance
• Risk profiling supporting insurance and credits
Services:
Routing of herds (avoiding agri zones)
Market information

Channels:
Call center (Orange)

Results:
STAMP (2019):
>75k pastoralists
MODHEM (2020):
>65k pastoralists

Scaling to Niger (since June 2021)

Impact STAMP
Lower mortality rates for cows (23.9%)
Less herd loss: 160 euro (saving)
Services:
Routing of herds (avoiding agri zones)
Market information

Channels:
Call center (Orange)

Results:
STAMP (2019):
>75k pastoralists
MODHEM (2020):
>65k pastoralists

Scaling to Niger (starts June 2021)

Impact STAMP
Lower mortality rates for cows (23.9%)
Less herd loss: 160 euro (saving)
Services: Drought insurance (localized)

Channels: Local insurance companies
Farmers cooperatives
AIC, Planet Gaurantee

Results: farmers insured
67,000 (2018)
289,000 (2021)

Insured versus Uninsured
Less selling assets at distress before drought windows (4% / 21%)
Leaving farm for other work (4% / 15%)
Lower own consumption (16% / 35%)

SumAfrica (Uganda, Mali)
Services:
AgriCoach, Nutrition Coach, Online fertilizer and seeds savings, payment and credit, HealthCoach (Covid-19)

Channels:
G50 ‘Extension officers’
Mobile device app

Results:
~170,000 smallholder families in Burundi
2021: scaling to 400,000 (2.3 mio people)

Impact:
9.3 out of 10
Farmers rating on AgriCoach

227%
Bean productivity (double)

65%
increase in application of GAP’s

GAP4A (Burundi)
G4AW and the SDGs?
Theory of Change

- SDG-2: Zero hunger
- SDG-6: Clean water and sanitation
- SDG-12: Responsible consumption and production
- SDG-13: Climate action
- SDG-15: Life on land
- SDG 17: Partnerships for the goals
Lessons Learned G4AW

- Two stage project
- Implement user-centered approach & digital inclusion using active M&E
- Bundling of services provide benefits (e.g. free advisory with buying inputs)
- Education & trust remain crucial success factor (e.g. farmers are more risk taking rather than to pay for insurance)

- Weather information and forecast crucial
- Better soil data needed for good fertilizer advice
- Develop service delivery to be flexible for adoptions and scaling
Inform and inspire a wide audience:

- (International) policy makers
- Providers of satellite data & services
- Financial institutions / impact investors
- NGOs
- More...

Outreach

Find G4AW resources
SAVE THE DATE

Space for Food Security

G4AW Conference, 3-6 October 2022
Location: Utrecht, NL

G4AW
GEODATA FOR AGRICULTURE AND WATER

Netherlands Space Office

Rabo Foundation

[Image of a person in a field]
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