

Break Out Session 2: Geodata for food: business models, services and needs for financing
Presenting organisations: NSO, ICCO, WaterWatch Cooperative, Agrics, East West Seeds

1) Ruud Grim, Senior Advisor & Coordinator G4AW at Netherlands Space Office, introduced and moderate the session.

“Farmers need more information to be able to make the best decisions.” He highlighted that farmer must be central to these efforts to provide possibilities for scaling up and wider their reach.

He presented the G4AW project as an example showing technology is now out of the research phase and is becoming operational. After a certain point, the programme will not have enough capital (it is now subsidised) and that is where the link with financiers becomes crucial.

2) Kees de Ruiter, Regional Manager, ICCO regional office South East Asia presented the Green Coffee project in Vietnam. Farmers are doubting their economic viability of their farms because of climate risks, quality and pests. They express needs for more information on weather, rain and humidity forecasts, coffee prices and forecast, farming techniques, pests and diseases. All this information has been collected, processed and will be sent to farmers via SMS. Eventually coffee buyers will be in direct contact with farmers to reduce transaction costs. Hopefully B2B revenues can keep subscription fees for farmers affordable, and larger funds can be given through MFIs that connect to the farmers via an App.

First 3 years demanded significant investment (hardware, software), subsidies and funding from NSO, but now investments are needed for year 4 and 5. Amount needed: €1million. Grants and non-interest loans might be options. It is a high risk investment: interesting for social investors, we need to show it can work, we need numbers and scale.

- Question: Is internet necessary? Yes, but data can be stored in the phone and gets uploaded when there is internet.

3) Rien Dam, Consultant, WaterLand Expert presented a seed distribution project in Vietnam. Highlighting that they look at farmers and at different entities and that there is a huge investment potential to step into the value chain. We must also remember it is a two way traffic: information to farmers but also needs and inputs from farmers (via SMS or smartphone App). Information can be customized from the database to farmers' own needs. Taking in feedback from current users is also helpful to improve information services for other farmers. Unlike the Green Coffee project in Vietnam, farmers are the target of loans.

The project is a combination of information services and financial tools.

- Question: What are the costs? €3 million in 3years (70% subsidised). The costs are high at first, software needs to be created and the whole system must be tested.

4) Raymond Chepkwony, Regional Programme Manager, Agrics presented Agrics methods in Kenya and Tanzania. Partners: ICS, Manobi, Wageningen, Biomass research, AGRICS Kenya & Tanzania. AGRICS Tanzania is our client.

Biggest barrier: Access to information. Teams visit each farmer and make a profile (geodata sent to Wageningen), then AGRICS offers credit. In order to partner with farmers you need constant communication, and provide trainings, he showed an example of a Swahili flyer showing good practices. It is key to show that the use of geodata works (e.g. the difference in plant density), this is what will make a farmer decide to adopt different methods. That is why Agrics uses demo-plots.

- Question: What is your method of delivery? AGRICS has organised farmers in farmer groups, and delivers training through this group structure (15-20 farmers, 63% of which are women). Community facilitators visit farmers at least once a week.

- Question: What is your business model? The Combobox includes hybrid seeds and fertilizers. Credit is offered in long term placement (first to the client: AGRICS, and then to the end client: the farmer)

5) Harry Derksen, Director, WaterWatch Cooperative started by stating “Technology will drive the future of agrifood, as well as of smallholder farmers.” He also mentioned some issues with the data revolution. To introduce the project he first affirmed that impact investments are still risky in the Agrifood sector.

That is why the Vegetation database project came to be, an ICT system that would include all information (containing monitoring system, satellites for agridata, cheaper and data update every 3hours, Space certified initiative by UTZ, Crop disease Alert system) steered by FAO and supported by Dutch ministry of foreign affairs, among others. They are eager to work more with universities and private sector.

“We are not yet at the tipping point, we can accelerate these advances by involving the financial sector.”

“Our approach is to bring actors together to work on a larger ecosystem. Smallholder farmers are important but let us not forget other actors in the values chain.”

4) Peter Bekker, Group CIO/Head ICT, East WestSeeds. The company provides seeds to smallholder farmers. Given the growing population, agriculture must grow by 70% to feed all. We rely mostly on smallholder farmers, this presents a challenge but also a business opportunity. Africa and Asia face similar challenges.

R&D on seeds is according to context, it is merely technology to ensure the farmer is more effective (water, soil, market, finance, insurance). Today it takes 8years to design and develop new seeds (quite an investment!)

We need further development and collaboration on this. We are hardly using geodata today, but there is potential.

Q&A

- What would be the risk of having to pay for data?

Ruud Grim explained that free data supplying is guaranteed for 20years, at which point the prices of commercial data will drop → Data continuity will not be a problem.

- How about default?

Raymond Chepkwony explained that the group structure created by AGRICS creates specific group dynamics, of support but also pressure. If one farmer defaults the whole group is blacklisted for a season.

Repayment rates have improved: 85% in 2015, to 93.8% in 2016.

- Do smallholders want change? How can it be cost-effective?

Raymond Chepkwony said hat yes, they do want change. All farmers might not be market-oriented but even then increasing production for security reason is extremely important.

The 2 ways AGRICs deals with this are through 1) group structure and 2) demo-plots that show results.

- Different data is needed according to different context, and also different service companies, how do you deal with that?

Harry Derksen agreed there must be different type of data for different context. Big data is now coming to the agrifood sector, therefore different datasets will follow and by now it is not sufficient to only get information from each farmer individually.

We are on a learning curve to see what kind of data set to provide to specific farmers.

Also: Data must be collected from the beginning for comparison and tracking purposes.

- Negative impact of geodata?

Ruud mentioned that all projects go through an evaluation and have mitigation and CSR as a priority.

- How about risks? Return on Investments?

Berg de Bleecker from ASN responded to this by saying there are different types of risks, not only for banks but also for corporate actors.

She said it is difficult to reach market rates, and highlighted that there should be joint ventures with MFIs since there are similar goals.