



# SpiceUP - Geodata for sustainable pepper farming

**SpiceUp is the implementation of a financially sustainable information service that supports 100,000 pepper farmers to increase their production, income, food security and optimize the inputs of water, fertilizer and pesticides.**

- 1. Drought/Irrigation advice:** Indicator for farmers on moisture level in soil and expected rainfall. The service will guide the farmer if irrigation is needed for this phase of the crop.
- 2. Fertilizer advice:** Quick field tests supported by lab tests, which allows the creation of accurate soil maps. These maps show the availability of the Nitrogen and Potassium nutrients in the farmer's field.
- 3. Good Agricultural Practices Advice:** Farmers in the targeted area will benefit from more basic instruction on how to grow pepper. The advice will be provided by the information application which will be set up.
- 4. Sustainable Tracing System:** Farmers will become more valued by potential buyers. Traceability in pepper is requested by end buyers of pepper. Farmers can also know who the buyers are and what their buying price is.

The service will eventually be owned and hosted by Verstege Spices & Sauces BV. The services can easily be extended to other countries and products, which is the ambition of Verstege.

## Target User Group

100,000 pepper farmers divided over Bangka-Belitung, Lampung, West and East Kalimantan. In addition, a total of 1,000 users/stakeholders like farmer groups, pepper collectors, pepper exporters, NGOs and governments will be reached.

## Business proposition

The business proposition contains 3 business models; loyalty model, inclusive model and direct revenue model.

- **Loyalty model:** Farmers who sell pepper to Verstege will be able to get SpiceUp services as part of this "loyalty".
- **Inclusive model:** Under the Inclusive Business Model, farmers who purchase farm inputs like fertilizers or pesticides from "SpiceUp" dealers of farm inputs will be able to receive SpiceUp services as a "bonus" for purchasing their products.

SpiceUp uses satellite data in combination with field data on soil and GAP to improve productivity of the Indonesian smallholder pepper farmers.



- Direct Revenue model: Under the Direct Revenue Model, farmers who did not buy inputs from “SpiceUp” dealers or who do not supply pepper to Verstegen, have to buy for the services themselves. B2B clients like pepper collectors and MFIs, NGOs and government agencies, who need to acquire the services or get access to the web portal on behalf of their target clients or constituents, will also have to purchase SpiceUp directly from Verstegen.

#### Partnership

- Akvo (Netherlands)
- Balitro (Indonesia)
- ICCO South East Asia (Netherlands/Indonesia)
- IPB (Indonesia)
- Nelen & Schuurmans (Netherlands)
- PT CAN (Indonesia)
- VanderSat (Netherlands)
- Verstegen Spices & Sauce BV (Netherlands)


#### Contact

**Lead Organisation:** Verstegen Spices & Sauces BV  
Evert-Jan Verschuren  
everschuren@verstegen.nl

**NSO Project Advisor:** Joost van Uum  
J.vanuum@spaceoffice.nl

E g4aw@spaceoffice.nl

I g4aw.spaceoffice.nl

 Find us on LinkedIn



This is a publication of Netherlands Space Office, in collaboration with Ministry of Foreign Affairs © Netherlands Space Office (July 2018)

**Disclaimer:** No rights can be derived from the information provided in this notice.

The policies and provisions laid down in the publication of the G4AW Facility in the Government Gazette are leading.