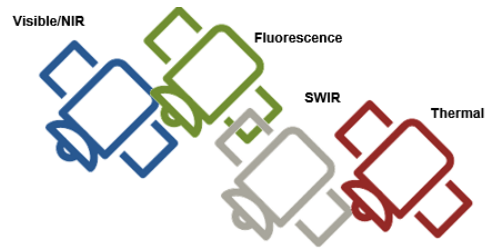


WG3

Sensor synergies



Round table discussion with representatives from four companies: Veronica Sobejano Paz (Aerial Tools, Denmark), Carlos Ferraz (HEMAV, Spain), Etienne David (HiPhen), Florian Werner (HYDROSAT)

Barcelona 29/03/2022

Lead question: How can SENSECO help the industry?

Further key questions:

- What do end-users need/where is the gap
- How to transfer our results to practice (valley of death)
- what would you expect from a collaboration
- how do you see a company's role in a COST action?
- what setting is working for a company and what not in the context of meetings and workshops (better virtual?)

=>Literature research provides recent knowledge on technologies, methods, etc., and review papers provide visibility for which companies typically don't have resources.

=>Discussion channels on slack may tackle issues relevant to companies.

=>Common projects: Scientists should come up with an interesting research question. A problem for companies is often the relatively long timeline from project definition to project outcomes=> Proposal process too slow for urgently needed solutions

=>Scientists often have an innovative method or model (e.g. new retrieval method for a plant trait), but have difficulties when someone uses it.

=>Research as a source of knowledge ⇔ software/code developed anyway again on their own

=>Companies often have no resources for future research activities

=>End-users need to be involved with farmers, FAO, Worldbank, agencies (forestry, agriculture), Breeder

To be considered:

- Needs of farmers might change quickly, for example, price of fertiliser goes currently up-> research on fertiliser saving, last year-> pests
- Companies need quick solutions for the farmers because they are the customer, but the time of the researchers is not the same that the company needs. For that reason, it will be

interesting that in the new following up SENSECO will have relevant topics that are interesting for the farmers and try to advance in these topics and try to help other companies

Distribution of roles in a joint project:

- Project concept: Scientists at research institute, e.g. University or RTO
- Implementation and business: Private company
- With the aim to serve: Stakeholder, e.g. farmer or agricultural extension

Common problems:

- Intellectual Property (IP) rights, competition between research institute and company caused by IP issues, licencing
- Impact of research:
 - o what from the publications is used in practice (like for example an vegetation index) but acknowledgment is missing=> better communication in both directions =>needed to build up trust
 - o Exchange of improvements on tools (open-source software which is improved and information is given back)

Ideas for collaboration in a project:

- Research projects should target risky ideas that a company cannot afford to look at.
- Scaling up of method/tool/product from small to large scale (e.g. larger spatial extent)
 - o To be considered: FAO is often good enough and robust in contrast to fancy tools with slightly higher accuracy but just turns out to work under certain conditions
- Provide funding for larger joint campaigns, to create larger datasets, to bring a pool of instruments together in a campaign
- Organic farming and certifying organisation not interested in technologies, however, big associations try to go in the direction of conservative farming, conservation agriculture, =>These systems are more complex like for example having crops fitting good with each other
- COST Action: Mobility grant (STSM or other) between company and research institute. (STSM HEMAV did it, had a PhD student for 4 weeks, very good experience)

Next steps within Senseco:

- Survey for end-users (anonymous)
- Continuation with the survey on stakeholders, still publishing in all social media (linkedin and twitter)