A collaborative approach for multipurpose land cover data

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106th DGINS conference on Earth observation for official statistics Warsaw, Poland, 27-28 October 2021



The context

- 1 bag of money (tax payers)
- 9 national agencies with...
- 100 different needs and...
- 529,000 km² to cover

spatial planning monitoring land use infrastructure ecosystems agriculture greecosystems agriculture areas forestry research environmental Agenda 2030 statistics



Split the money and do your own thing, or...



...form a consortium to work on a joint solution? **Co-funding** VINNOVA SLU Sweden's Innovation Agency Swedish University of Agricultural SKOGSSTYRELSEN **Sciences** SWEDISH FOREST AGENCY **Statistics Sweden Consortium** Swedish Agency Swedish Civil for Marine and NATUR **1SB** Contingencies Water Management Agency VÅRDS 🚈 VERKET 😤 Environmental protection agency (lead) LANTMÄTERIET **Production** Jordbruks verket Board of agriculture **Min** SWEDISH TRANSPORT ADMINISTRAT Remot sensing consultant



A collaborative approach

- Define a common core of data useful to all stakeholders
- Bring your "hobby horses" to the table (to keep everyone onboard)
- Agree on what is "need to have" and stucture data accordinly
- Agree on what is "good to have" but is out of scope (could be handled as downstream products)
- Kill your darlings...



How to enable multipurpose use of data?

- A flexible output is key
- Enable exctraction of valuable data along the production process
- Organise final output in stacks of data instead of overcrowding one single product







Wetness

Land use features
Productivity (forest land)
Object density (trees)
Object height (trees)
Base layer (land cover)

SCB

- A single national consolidated, robust and maintained data source for land cover
- Agreed semantics and definitions that fits well with other data sources for statistics (e.g. FAO definition of forest)
- A strong community of experts, exchange of experiences and knowledge
- Management of raw EO data and processing outside the statistical production process



Production pipeline for urban green space statistics before





Production pipeline for urban green space statistics after



- The National Land Cover Data directly incorporated in official statistics products
 - Urban green space and urban green areas
 - Land cover within designated areas
 - Formally protected forest land
- Indirectly supporting other statistical products with data
- Contributing to reporting on a number of SDG indicators
- Used in experimental products, such as land accounting



