GISWASTE Project. Why INSPIRE is important to develop real environmental applications

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GISWASTE Project

The agrifood sector in the Basque Country currently generates around 4 million tonnes of organic by-products and waste. Agrifood by-products vary widely in nature, but they are characterised by their high organic content. Managing the by-products as waste is a difficult and expensive task; also, due to their high nutrient content, classifying and managing them as such entails losing a raw material which could be put to valuable use elsewhere.

The GISWASTE Life project offers an IT tool which assists users in choosing the option which makes best use of vegetable, meat, and dairy by-products from the agrifood sector, rather than treating them as waste products. In addition to the environmental benefits, there are also economic benefits associated with the creation of a new sub-sector which will give rise to the creation of new firms specialising in waste management and recovery. Life GISWASTE is a local-level demo project which can be applied to any other European region which is struggling to manage its agrifood by-products.

The aim is to develop a GIS-based methodology and IT tool which simulates the technical, economic, and environmental viability of the recovery alternatives for the agrifood by-products (chiefly vegetables, meat, and dairy products) in the Basque Autonomous Community.

The recovery alternatives which are evaluated in the Life GISWASTE project focus on two specific areas: biogas generation and animal feed production.

INSPIRE

To achieve the goals, GIS datasets are very important. The pilot project is in one region, but to apply it in any region around Europe, the availability of spatial datasets is the key. We could say that INSPIRE Directive is the difference between the success or the fall of the project.

Due the logistics, the geographic information is mandatory to get a realistic study. Spatial datasets such as transportation network, cadastral parcels, land use, hydrography and protected sites are the main datasets used in the project. All these datasets are included in the INSPIRE annexes.

At the beginning of the project, 3 years ago, there were not harmonised datasets available, which changed the strategy of the data. However, nowadays INSPIRE is opening new possibilities to the tool.

The presentation will show what datasets are needed for the project, how they were 3 years ago, and what are the benefits for the project of a real implementation of INSPIRE, in a practical way.

PALABRAS CLAVE

GISWASTE, Valorization, waste management, INSPIRE datasets

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