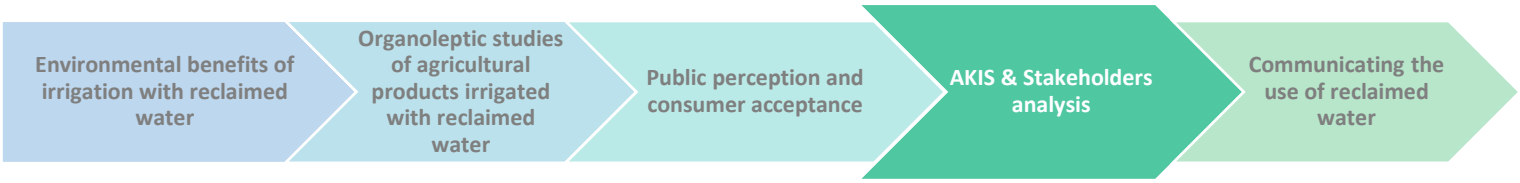
Sustainable **Water treatment** and
Agricultural reuse options in Europe

Info-package 5
Consumers and General Public

Fact Sheet 5.4 – **AKIS & Stakeholders analysis: Improving knowledge transfer channels to foster innovation: facts and figures**



SUWANU EUROPE is a H2020 project aiming to promote the effective exchange of knowledge, experience and skills among practitioners and relevant actors on the use of reclaimed water in agriculture. This factsheet is part of a total of 5 factsheets in Info-package 5 aimed at consumers and general public, that describe the knowledge flow and the effective information and communication channels, used by key stakeholders in each region, regarding water reclamation and reuse.

1. Introduction:

In the frame of SUWANU EUROPE, a stakeholder assessment was carried out following the Agricultural Knowledge and Innovation System (AKIS) methodology. The AKIS team performed a stakeholder consultation in order to gather, process and evaluate information of stakeholders with a role in the water reuse and agricultural sectors. This work enables the identification of stakeholders and the assessment of their knowledge, interests, influence, existing and potential alliances and conflicts, impact of their activity, etc. Specific attention has been paid to the identification of the effective communication channels used by each stakeholder in each region. The main aims of AKIS are the following:

- Identification of stakeholders in each target area (Universities, Research Centers, RTDs, Public Authorities, Associations, NGOs, Opinion Leaders, etc.).
- Assessment of their knowledge, interests, influence, existing and potential alliances and conflicts, impact of their activity, etc.
- Identification of the effective communication channels used by each stakeholder in each region.
- Classification and characterization of stakeholders in a matrix (Typology).
- Development of a database of stakeholders in each target area.
- Design and description of knowledge transfer and flows in each target area.

2. Methodological framework:

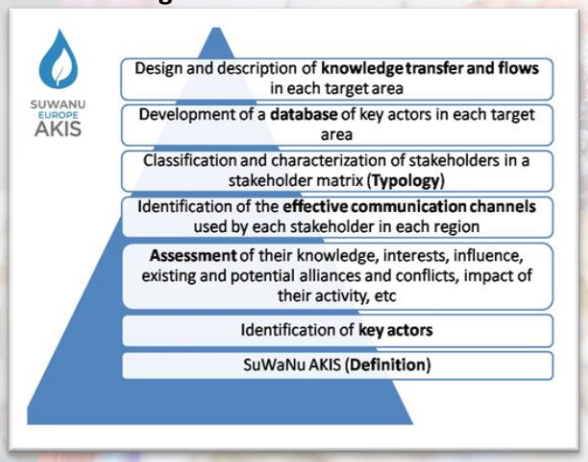


Figure 1: General methodological framework

3. WR² AKIS definition:

Figure 2: SuWaNu Europe adaptation of AKIS

4. Target Regions:

Nine (9) EU regions included as target case studies in the WR²-AKIS : (a) ANTWERP AND LIMBURG (BELGIUM), (b) PLOVDIV (BULGARIA), (c) OCCITANIE (FRANCE), (d) Braunschweig (GERMANY), (e) THESSALONIKI (GREECE), (f) Po Valley (ITALY), (g) Alentejo (PORTUGAL), (h) Andalusia (SPAIN) & (i) NICOSIA (CYPRUS)

Figure 3: SuWaNu Europe Target Regions

5. Discussion and Conclusions:

WR²-AKIS consists on a novel system to reveal information and knowledge transfer opportunities and weaknesses regarding water reclamation and reuse. In this Task nine (9) case studies have been analyzed in detail in order to synthesize the WR²-AKIS. A total of 88 key players were involved in the whole WR²-AKIS survey with a response rate exceeding 95%. More details about the countries of origin and the specific category of each key player are given in the following figures 4 & 5.

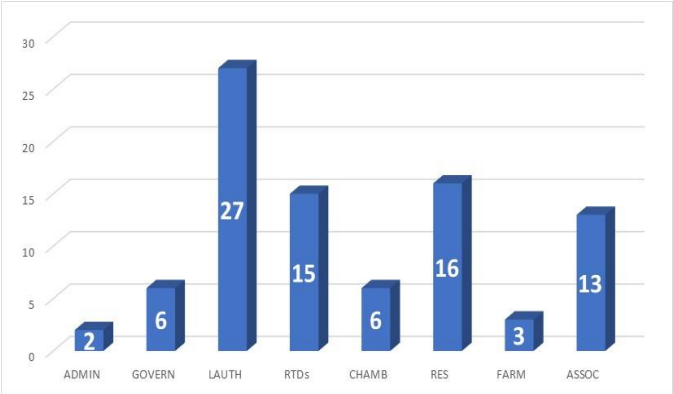


Figure 4: Key players per category

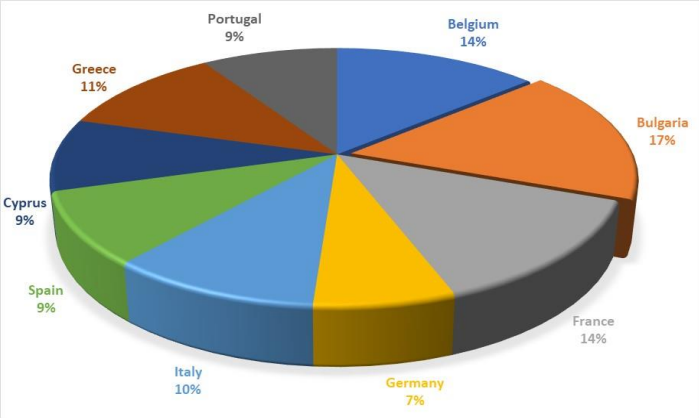


Figure 5: Key players per country

Concluding, the WR²-AKIS analysis reveals that four of the target regions have established an increased communication and cooperation network (Germany, Italy, Spain and Cyprus) while almost all of them presents communication dynamics (except Greece). On the other hand, the typologies of the Actor Linkage Mappings cover a wide range of possible scenarios. Although, there are some similarities in case of the leading key players in the national networks (Type II: Bulgaria, Italy and Cyprus & Type IV: Germany and Greece) the whole mappings presents important differences and have to be analyzed more carefully taking advantage of the special features of each target region. An AKIS can be an adequate vehicle for empowering farmers and reclaimed water users to investigate new options to make their business more sustainable. An AKIS should be able to propose and develop practical ideas, to support innovation, knowledge transfer and information exchange. In an ideal world AKIS would function as a closely related and interconnected system. However existing AKIS are often fragmented. This raises coordination issues. Education is often weakly connected to research, extension and business. Applied research is often reviewed on scientific output (which places great emphasis on peer reviewed publications), much less on practical relevance (research is often not sufficiently related to farm).

Reference/further readings

- Lubell, M., Niles, M., & Hoffman, M. (2014). Extension 3.0: Managing agricultural knowledge systems in the network age. Society & Natural Resources, 27(10), 1089-1103.
- Klerkx, L., & Leeuwis, C. (2009). Establishment and embedding of innovation brokers at different innovation system levels: Insights from the Dutch agricultural sector. Technological forecasting and social change, 76(6), 849-860.

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THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION' HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT N. 818088