



Research, innovation and technology transfer in the agri-food sector in the Western Balkan countries/territories: Case study description for Albania

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Case Description

Problem encountered

- Apple cultivation is an important economic activity, most cultivated and most consumed fruits in the country.
- Albania produces about 10% of Western Balkan production
- Korca region produces 70% of production.
- One main problem for farmers are costs on inputs due to high prevalence of pest diseases (apple scab and powdery mildew)
- Number of spraying interventions is in average 15 times per year.

Solution

- Providing farmers with information on weather forecasts in Korca region.
- A prognosis system was introduced in 2011 by establishing weather monitoring stations in various areas of Korca.
- The RIMpro prognosis software analyze weather conditions data which predict appearance of apple scab in a timely manner.
- The technical system of the prognosis center consists of:
 1. a weather station, which collects data on weather conditions (temperatures, rainfall, air humidity, solar lighting, etc.);
 2. a spore detector, which detects whether spores have been released;
 3. a computer server where the weather data is retrieved and stored;
 4. a computer program that simulates the possibility of the occurrence of diseases based on weather data.
 5. Farmers can use SMS or call a specific phone number in order to receive advise regarding spraying time and chemical to be used.

Functions and tasks of actors

- Korca Agriculture Technology Transfer Center is responsible for preparing the technical recommendations
- Korca Regional Department of Agriculture extension service is in charge of diffusing to farmers.
- Input providers also diffused information to clients.
- In the future farmers were planned to pay a user fee



Impact

- The prognosis center was established to provide information to more than 1500 farmers.
- The software help to reduce by 4-6 the number of chemical treatments, thereby lowering the cost of production by 12 %, as well as protecting the environment from excessive pesticide contamination.
- The use of the software contributes to an increase of 15-20 % of the fruit quality for market, thereby contributing to faster sales with higher prices, or 2-3 ALL more per kg (refer to apple).



Approach and characteristics of RITT

Implementation problems

- The prognosis center has been established in 2011 by Institute of Organic Agriculture (from a Swiss Project of FiBL)
 - ✓ than remained non operational for the first half of 2012, mainly due to organizational issues.
- RimPro software license was renewed for 2012 by Promali and a physical transfer of the stations toward ATTC and capacity building
 - ✓ In the later years (from 2013 to 2015) the system was not operational due to financial limitations to purchase the RimPro software license and weak accountability.
- In 2016 GIZ/SARED supported ATTC by updating the software license and increased the number of stations from 1 to 4
- In 2019 with the support of Rural Development Project (SRD) RimPro cloud service software was installed which made possible from 3 operational stations before 2013, currently there are being under operation 8 stations.



Implementation problems

- Data pull from DSS, using modem and software RimPro operation, using Team Viewer (internet needed) and information is available in web based system and social media.
- Currently, a very good cooperation that has been established for this service between ADAD Malore (Association of Fruits Producers), Regional Agency for Agriculture Extension Services and ATTC Korce.
- Yet the system is financially depended on donor funding.
- Yet is not known the sustainability of the project after the closure of SRD project (no users fee are in place).



Actors involved and their role(s)

Name actor	Type of actor	Sector	Role(s)
Ministry of Agriculture and Rural Development	Government	Public	Partner
SNV ProMali	Donor aid	Private	Implemented and supported the innovation in 2011
Institute for Organic Agriculture	Research Institute	NGO	Provided expertise for implementing the innovation
GIZ	Donor aid	Private	Continue to support the innovation by using an updated version (RimPRo cloud service) and increasing the number of operating weather stations through two subsequent project SARED (in 2015) and SRD (in 2019)
Farmers' organisations (ADAD Malore)	Interest groups, representative organisations	Private	Requested assistance for re-establishing and expanding the innovation in other areas of the country in 2018.
Agriculture Technology Transfer Center (ATTC) Korce	Consultancy	Public	Assisted to the implementation of the innovation and are currently using it.
Regional Agency for Agriculture Extension	Consultancy	Public	Promoted the use of the innovation



Innovation spiral

Phase	Description
Initial idea	First reaction by ATTC Korce after a proposal made by the Institute for Organic Agriculture in 2011
Inspiration	The form of service was introduced to the ProMali project and then the project replicated the idea.
Planning	ProMali project defined the work concept and made a budgetary and implementation plan.
Development	The approach was tested by ATTC but failed to be maintained while being depended from ProMali for 2 years (2011-2013)
Realization	12 advisors around the region worked with farmers and also input providers were provided with up to date information.
Dissemination	No possibility to expand due to financial limitations in 2013/2015.
Embedding	<p>Currently the system covers 2300 farmers through the operation of 8 stations, which are located 4 in Korca Elbasan, Berat, Diber and Kukes regions.</p> <p>The use of prognosis system now is being replicated also by Vodafone Albania / costs are assessed at 2000 Euro (for the establishment of the prognosis tools) and a modest service for informing farmers via the use of a simple prepaid card.</p>



Analysis of the case

SWOT-analysis

Strengths

- Close cooperation among ATTC and donors
- Increased trust due to a closed cooperation with extension service and private advisory services (input providers)

Weaknesses

- Lack of financial self-sufficiency and dependence from donor funding
- High dependency from the company providing the service
- Less knowledge support (advice) and unfamiliarity for farmers?

Opportunities

- Involvement of input providers and future engagement of telecommunication companies (Vodafone Albania)

Threats

- ATTC have a rigid structure for decision-making and are highly depended by the Ministry of Agriculture and Rural Development
- Farmers willingness to pay for the service is not known and no information exist also on the market demand from private advisory services

Ways to overcome Weaknesses and Threats

- The case study illustrates the cases of failures in embedding a certain innovation which although very beneficial is not supported by market-based principles.
- In the context of a transition country, where institutions are fragile, cooperation is weak and institutional memory is remoted by frequent reforms, it is difficult to maintain a service which is not based entirely on self-sufficiency.
- A tripartite engagement is required between research, policymakers and users in order to enable a sustainable provision of services in the future.
- Bottom-up engagement, possibly using LEADER like or EIP/Agri Operational groups like combined by a top-down involvement of Ministry is required
- Analyses of willingness to pay for information by type of user.
- Preparation of an action plan for the marketability of the information.

Literature

- SNV ProMali annual report 2012
- Interview with Engjell Skreli (professor at AUT and former SNV senior consultant)
- Interview with Klodjan Rama (GIZ SRD Project)



For more detailed information

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Time for discussions !