IPM adoption in my hub

Facilitation approach and progress made in IPM adoption

My group

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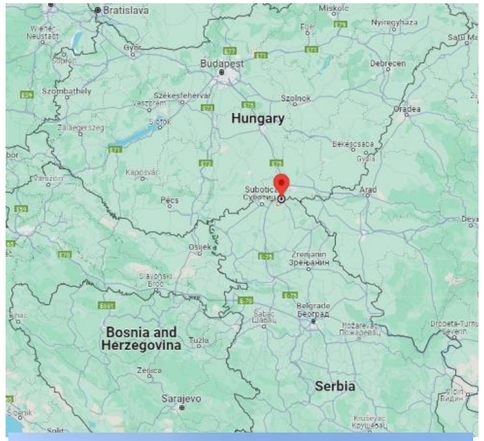
PRESENTATION OF THE HUB COACH ORGANISATION

BioSense Institute cooperates with farmers in Serbia, and has a large group of farmers within its remit. Florian Farkaš works as an external collaborator of BioSense Institute but is also a private consultant in the field of IPM.

The business department of BioSense assumes responsibility for overseeing the operations and management of the HUB.

THE HUB

The HUB consist of 10 farmers in the northern part of Serbia, producing potato and other vegetable crops mainly on sandy lands.



OBJECTIVES AND MOTIVATIONS OF THE FARMERS

Farmers are actively seeking ways to reduce the need for chemical pest control and are embracing Integrated Pest Management (IPM) practices with enthusiasm. Their efforts encompass a broad spectrum of strategies, including implementing specific pruning techniques, exploring mechanical solutions, managing landscapes and biodiversity, and adopting alternative natural products. This multifaceted approach underscores their strong commitment to sustainable and environmentally conscious farming practices.

DRIVERS

Farmers growing potatoes are also deeply committed to sustainable farming practices. Similar to tomato growers, they recognize the environmental challenges associated with heavy reliance on phytosanitary treatments. This includes potential environmental impacts, the development of pest resistance, and regulatory constraints. Therefore, potato farmers are actively exploring and adopting Integrated Pest Management (IPM) strategies. These strategies often include cultural practices, such as crop rotation and planting disease-resistant varieties, as well as biological controls and the use of natural products.

BARRIERS

Farmers are hesitant to explore more expensive methods due to fears of potential losses, especially in a region prone to frequent rainfall. With fungal diseases posing significant challenges, their cautious approach underscores a preference for established and dependable strategies.

IPM challenges and results

IPM Challenges

What were the main IPM challenges?

The climate is ideal for cereal and potato diseases, with limited local trial data available on alternative control methods. There is a narrow timeframe for establishing cover crops, and grass weed issues are escalating in direct drill systems.

The hub's results

What progress has the hub made on these challenges ?

The hub has made significant strides in addressing these challenges. It has actively pursued research and experimentation to explore alternative control options for cereal and potato diseases despite limited local trial data.

What issues still need to be addressed ?

Climate variability adds another layer of complexity, requiring ongoing efforts to develop resilient strategies. Furthermore, improving knowledge dissemination to ensure broader adoption of successful practices is essential for maximizing the hub's impact on sustainable agriculture in the region.

How are the hub farmers going to proceed ?

They plan to enhance knowledge-sharing platforms to facilitate broader adoption of successful strategies among farmers within the hub and beyond. These steps reflect their commitment to continuous improvement and sustainable agricultural practices.

Key conclusions

Interpersonal skills cultivate strong relationships with stakeholders, promoting trust and cooperation essential for sustainable agricultural development. Overall, these soft skills enhance the hub's ability to manage issues effectively, fostering resilience and innovation in agricultural practices.

Demonstrations focused on decision support systems (DSS) aim to ensure applications occur only when necessary, rather than following a fixed calendar. However, farmers express reluctance to fully trust these models, underscoring the difficulty of refraining from preventive measures when mildew poses a persistent threat with potential irreversible effects on plants.

Facilitation approaches

What is the issue the hub work on more precisely?

Organizing group activities, aside from demonstration events, presents challenges due to farmers' busy schedules. Peak seasons, like harvest periods, involve long hours of labor, and the need to respond quickly to weather and pest challenges adds to their workload.

How did you proceed? What did you do?

Since they have a direct communication with the consultant - Florian adjusted the schedule towards the needs of the farmers since he is already familiar with their activities.

Difficulty in engaging farmers

What conclusions can you draw?

Effective planning plays a critical role, especially when farmers need to quickly adjust to weather conditions, prompting changes in their schedules.

My tips for making it work

Field walks are crucial for farmers to engage directly with crops, fostering hands-on learning and comparison beyond mere observation.
Building trust between farmers and advisors is pivotal, creating a collaborative environment where open communication and joint decision-making support sustainable farming practices and ongoing agricultural advancements.

Individual facilitation

Personalized support is facilitated through diverse methods, such as conducting on-site farm visits, gathering data through surveys, and participating in demonstration events.
Additionally, continuous communication via email and telephone ensures a consistent avenue for addressing specific concerns, responding to inquiries promptly, and customizing assistance to suit the individual needs of each participant effectively.

Collective facilitation

Field walks, demonstrations of new technologies, and visits to other farms provide valuable insights into diverse farming approaches, enhancing learning and innovation within the agricultural community.
Additionally, sharing economic information at a crop gross margin level supports benchmarking efforts among farmers, fostering a more informed decision-making process.

IPM adoption & pesticide use

Mechanization of cover crops involves the design and deployment of specialized machinery tailored for planting, maintaining, and terminating cover crops. These machines are crucial for optimizing the integration of cover crops into agricultural practices, ensuring efficient and effective soil health management, weed suppression, and moisture retention. Since cover crops in potato crops were one of the most important topics in the Serbian hub, mechanization as well as simple tools in agriculture played a significant role in the hub presentations

> It's deeply rewarding to see farmers adopt eco-friendly methods, knowing that each positive change contributes to advancing sustainable farming practices. I consider myself a pioneer in Serbian IPM as a farmer who implements the entire circle of agriculture production, with nomadic cattle feeding on the cover crops and the rest of the plants I grow in my field.
>
> **Tibor Turi, farmer**

Isidora Stojačić
BioSense Institute, secundary hub coach

> Through organizing demonstration events, conducting field walks, and testing new techniques for on-farm validation, we have effectively demonstrated Integrated Pest Management (IPM) in practice. Looking forward, our aim is to further close the divide between research and practical application and teach our farmers more about scientific approaches.

A European network of demonstration farms promoting low pesticide use and economically efficient management strategies

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION' HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT N. 101000339