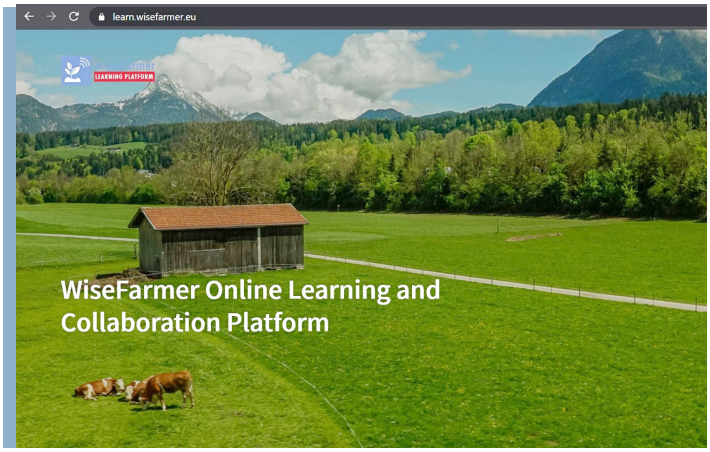
WiseFarmer LEARNING PLATFORM

ERASMUS+ 2019-1-HU01-KA204-061083 PROJECT
01 September 2019 - 31 August 2021
Coordinator: GAK Nonprofit Ltd @ St Istvan University, Hungary



NEWSLETTER 03 HIGHLIGHTS:

- Main components of the learning and collaboration platform
- Using mobile applications and devices
- Highlighted technologies set up and combined
- The WiseFarmer Knowledge Base - a repository of good practices using ICTs for smallholders and family farmers
- Harnessing the opportunities of interoperability

Main entry points for farmers

Registration form for the learning programme
https://learn.wisefarmer.eu/farmer-pre-registration

The WiseFarmer Knowledge Base
https://learn.wisefarmer.eu/kb

Developing the Participant Collaboration Platform (IO3)

We created the WiseFarmer online learning and collaboration management platform, as a combination and integration of various digital tools, to best support the actual needs and possibilities of participants of the pilot learning programme, as well as taking into attention the updated learning methodology, highlighting certain limitations but also opportunities, caused by the pandemic.

The main components of the learning and collaboration platform were set up, according to the revised concept:

- Learning management system, based on the technical framework of Drupal CMS (same as the main project website)
- User registration system
- WiseFarmer Knowledge Base (created as a new content type under Drupal)
- Opigno LMS as a Drupal module (for testing)
- Selection of mobile apps, suitable for interoperability with the learning platform
- Testing and setting up mobile apps and web applications according to the list suggested by the previous worksteps
- Developing data communication interfaces between selected apps and the WF learning platform
- Web-conferencing (video/audio chat) system tested and set up as found suitable for the project: Big Blue Button and Skype
- Because of the need of some level of system integration, we preferred the usage of Android platform, which was expected to be more open source and interoperable
- As the Survey showed, most farmers use Android devices requiring Google account, therefore the learning process was planned to be supported on Google tools as well

Getting ready to work with mobile applications and devices!

- We selected the appropriate communication tools for chatting, video conferencing, online collaboration, with the ability of saving recordings, including activities (date, time, chat, audio, video, presentations, list of participants).
  - For the online meetings, the open source Big Blue Button was installed on the server of the coordinator (also implemented at St Istvan University) which seemed like a reasonable option, and was tested with good results in smaller groups.
  - For mobile communications, requiring shared screen, the BBB was not functional enough, therefore we recommended for the learners to use Skype.
- We selected and configured a Web to App solution, which provided the means of using web based applications in a familiar way, similarly to mobile applications.
- To support the problem solving oriented learning exercises, we ensured that some of the mobile apps can be combined with the project learning system, connected with the farm management system:
  - Creating projects, forms, using API of the field observation data collection mobile app.
  - Web map interface to upload and display log files (KML, CSV) created by the GPS tracking mobile application, processing and displaying data sent to URL on the server side.
- We also supported the setting up of the android devices (tablets) procured in the project with the applications mentioned above and below, as well as by providing written guidelines on the installation steps.

Main digital tools, applications, technologies combined to support the learning process:

Drupal

OneSoil

GPSLogger for Android

epicollect5

Google Classroom

H5P

Pl@ntNet

webGN EU-Info

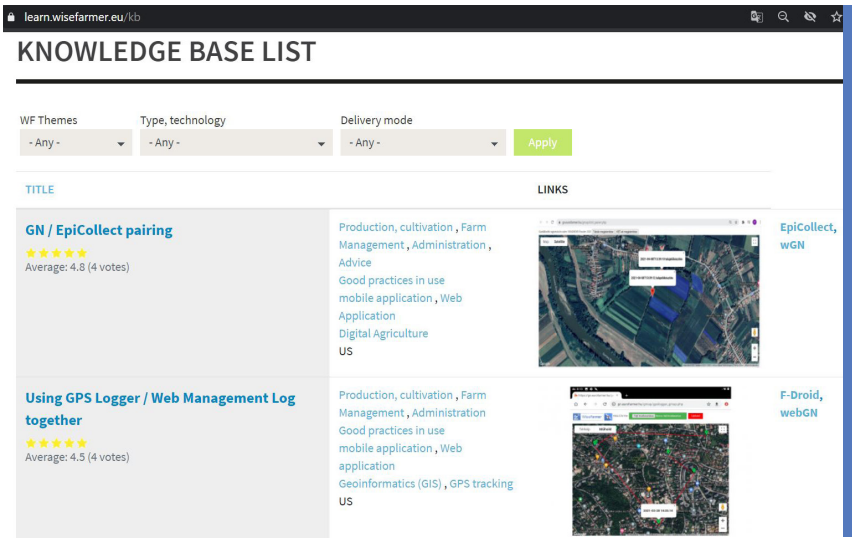
Filtering categories

- Based on the main language selector, visitors are presented only with the records of their own language
- WF Themes, according to the WF methodology (see Newsletter 2)
- Type of technology (GIS - GPS, EO - satellite data, IoT - sensors, etc.)
- Delivery mode (mobile app, web application, desktop software, etc)
- Business model (fully free, free and fee, part of a service, etc.)

THE WISEFARMER KNOWLEDGE BASE

Repository of good practices using digital tools at the level of small and family farmers

The online learning platform accommodates a user-friendly interface to access practices and related exercises, to be applied during the pilot learning programme. The description of the entries is available in English, as well as in the languages of the piloting countries, Serbian and Hungarian.



The good practice result page includes the title, description, URL, download links, picture, multimedia files, embedding YouTube video, document attachments (such as a more detailed instruction for the certain exercise linked to the practice), and a H5P interactive (micro-) learning component, which can provide dozens of additional options for different content types. Users can also rate the practices by clicking on a simple 5-star widget, giving instant feedback.

Harnessing opportunities of interoperability (by open data standards)

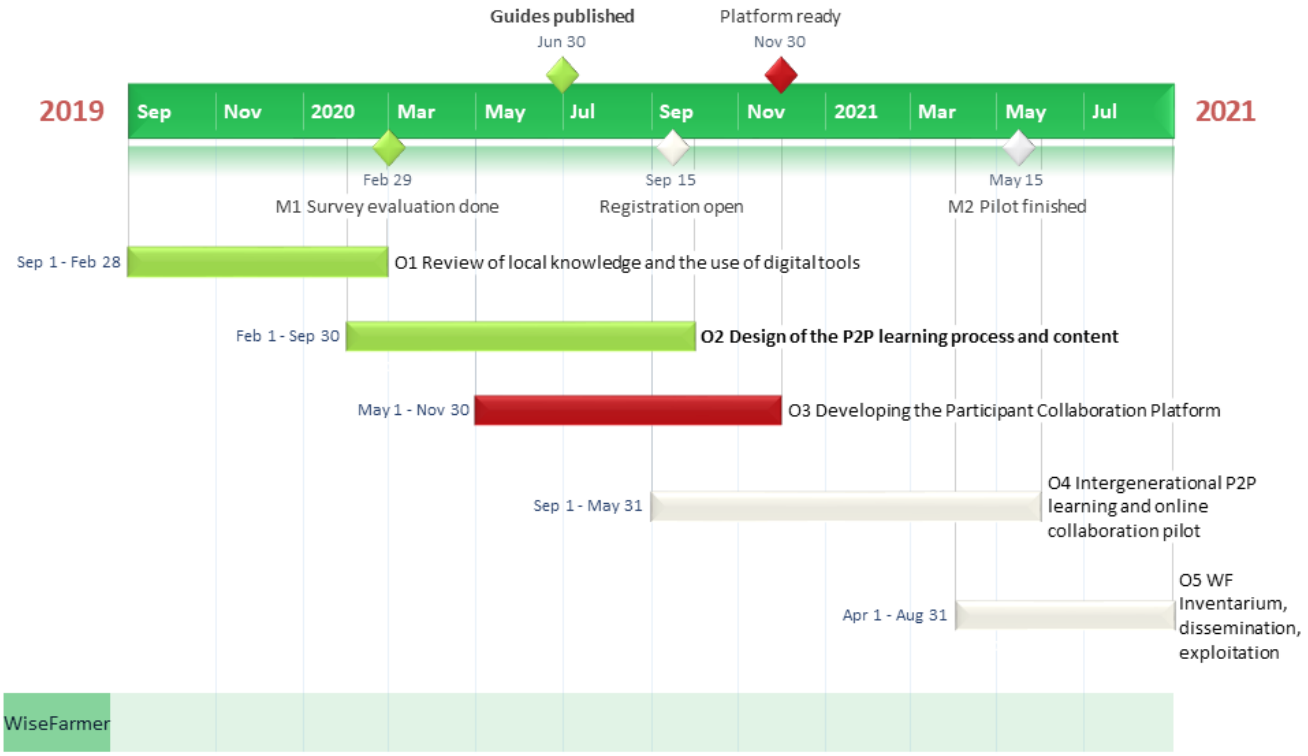
Several of the chosen mobile and web applications make it possible to access their data, recorded by the users, in different ways, by providing various levels of interoperability (file download, API, web-service, etc.).
In the case of our project it means, that we can connect those applications with the IT system of our learning platform, to automate some processes, reducing the amount of workload of data entry, integrating the best functionalities of the separate platforms, ect, in order to better demonstrate the advantages of using these tools and motivate our learners.
Examples:

- EpiCollect field data observation app - provides an API which we can use in the connected farm management system
- GPSLogger for Android - can send the recorded GPS coordinates to a URL (to be processed on the server side), and the saved files are also open format (KML, CSV, OpenGTS, GeoJSON, GPX)
- IrriSat weather based irrigation scheduling service - has a rest API for NDVI data and other satellite layers
- Onesoil - the field parcel boundaries can be downloaded, as well as the precision application files are available in open (KML, ISO XML) formats.

WeAreNet, leader of IO3, is member of the GODAN network.

GODAN Global Open Data for Agriculture & Nutrition

Output 3 in the project process flow



ABOUT THE PROJECT

WiseFarmer goal is to connect farm generations for learning

The project aims to develop the knowledge and skills of smallholder farmers of younger and older generations.

Participants collaborate in a common learning program for the exchange of knowledge, from one side in the use of digital tools, from the other side the crucial farming practices based on local knowledge.

FURTHER INFORMATION

Contacts of the project coordinator

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WiseFarmer

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WiseFarmer Project

CONNECTING FARM GENERATIONS IN THE DIGITAL AGE

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