



TREASURE, a Horizon 2020 multi-actor project on traditional resources for agricultural diversity and the food chain ... local pig breeds and their value chains)

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Main data on the project

call SFS-07a-2014 „Traditional resources for agricultural diversity and the food chain“ 11/12/2013



Start of the action: 01/04/2015



Duration: 48 months

Budget: 3.4 mio EUR



Coordinator:



Marjeta Čandek-Potokar,



KIS-Agricultural Institute of Slovenia



25 partners from 9 countries



Linked TP: breeders' associations

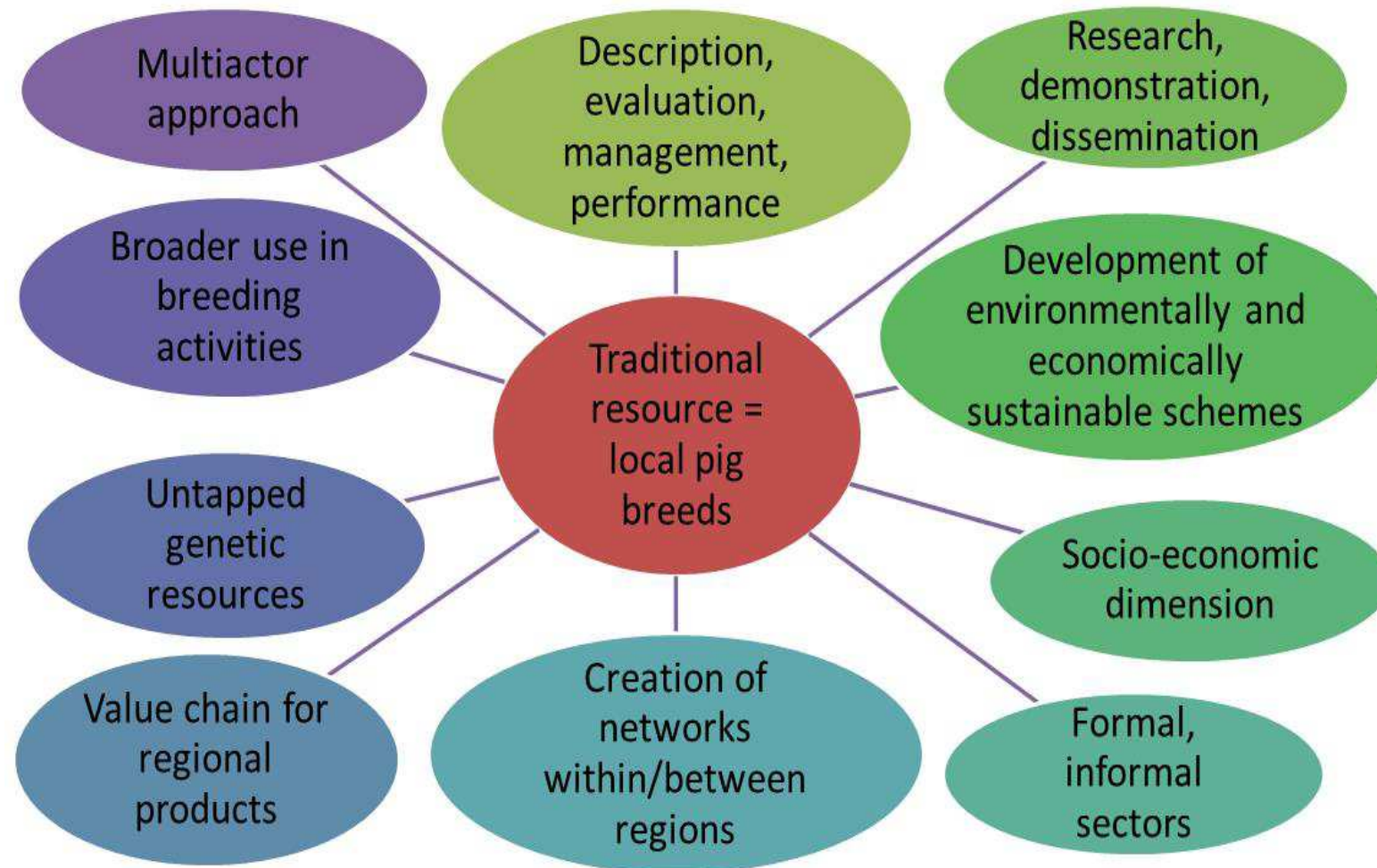


A brief introduction to project How did it all start for us?

- The seed of TREASURE is in the network „Symposium on Mediterranean Pig“
- Last organised in Slovenia in Oct/2013
- Participants discussed the forthcoming H2020 call SFS-7a-2014
“Traditional resources for agricultural diversity and the food chain”
- call SFS-07a-2014 was published on 11/12/2013
- The call was tailor-made for our network. Will we seize the opportunity?




Analyse the call - special care to "key words" and „expected impacts“



Initial dilemmas & tough nuts

Initial dilemmas

- Focus on species “*sus scrofa*” ? - can we succeed with key word (“pig”) which has a negative connotation ?
- Do we have all the competences to answer the scope and challenges of the call?
- How to create/expand the consortium? Who will be the motor?
- We started as Mediterranean network => „research network“, already (too) big – expand yes, but how ?
- How to find & involve non-academia partners ? Do we understand multi-actor approach?

Tough nuts

- How to split/assign roles between science and practice; find a „place“ for each partner esp. non-science partners
- Local breeds (often endangered) = very small populations – difficult to get enough material for genetic characterisation; difficult to organise experiments (with farmers) i.e. have scientifically sound approaches.
- Key word „untapped genetic resources“ – finding a place for the pioneers with developed chains (e.g. „iberico“) => role model, different type of research activities



What did we propose?

How were project's objectives targeted to needs, problems, opportunities of end-users, and the complementarity with existing research?



RATIONALE

Public opinion is not favourable to intensive pig production which is confronted with environmental and animal welfare issues.

Local pig breeds and their respective production systems meet high criteria and expectations of modern society in regard to the environment, animal welfare and food quality.

KEY CHALLENGE

The key challenge is a development of sustainable pork chains in geo-agro-climatically different regions of Europe by using the biodiversity resources encompassed in European local pig breeds.

CONCEPT

TREASURE is built on the inherent value encompassed in local pig breeds, their production systems and product qualities. The idea is a new paradigm of pig production that meets societal demands regarding environment, genetic diversity, ethical and social aspects and economic value.



Table 2: List of local pig breeds involved in the project

Country	Native name for pig/breed	Alternative name (found in the literature)
DE	Schwäbisch-Hällisches	Schwäbisch-Hällisches
ES	Ibérico	Iberian
ES	Negre Mallorquí	Black Majorcan
FR	Gascon	Gascon
FR	Basque	Basque
HR	Crna slavonska	Black Slavonian
HR	Turapoljska	Turapolje
IT	Cinta Senese	Cinta Senese
IT	Mora Romagnola	Mora Romagnola
IT	Sarda	Sarda
IT	Apulo Calabrese	Apulo Calabrese
IT	Casertana	Casertana
IT	Nero Siciliano	Nero Siciliano
LT	Lietuvos vietinės	Lithuanian indigenous wattle
LT	Senojo tipo Lietuvos baltosios	Old type Lithuanian White
PT	Bisara/Bisara	Bisara
PT	Alentejano/Alentejana	Alentejano
RS	Mangulica	Mangalitsa
RS	Moravka	Moravka
SI	Krškopoljski/Krškopoljska	Krškopolje

What did we propose?

How were project's objectives targeted to needs, problems, opportunities of end-users, and the complementarity with existing research?



Pig genetic resources – breeds
are mainly „untapped“

Local breeds in Europe (majority) are conserved thanks to the support of public money (**gene banks**).

In order to be **sustainable** it is important to make them self-sufficient, **economically viable**

➤ **research** needed because there is a big void of scientifically proven evidence of their qualities (e.g. characterisation) and of their needs (e.g. nutrition)

➤ **interaction** of different actors needed to build up „pork chains“

Research and development activities were proposed to improve **knowledge, skills** and **competences** necessary to develop existing and create new **sustainable pork chains** based on European **local pig genetic resources** (local pig breeds).

- Scientific challenges
- Exchange of knowledge/experience btw partners
- Joint ventures („trade mark“)

Aim, main objectives



WP1

Genetic characterisation of local pig breeds, esp. untapped, and development of DNA tools (authentication, traceability, conservation and breeding programs)

WP2

Multicriteria evaluation of production systems, nutrition (nutritional requirements of local pig breeds, use of locally available feeding resources), innovative **management** strategies and **environmental impacts**

WP3

Quality and healthiness attributes of regional pork products in line with consumer demands including innovations in traditional products

WP4

Socio-economic perspective: Cost/benefit analysis at different levels of the chain and for the society, and research of market potential and strategies for regional high quality products

WP5

Measures to maximise impact – activities of dissemination and knowledge exchange between actors



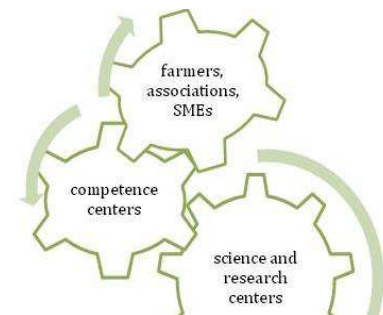
How did we employ multi-actor approach?



Choice of key actors with complementary knowledge (scientific and practical), sufficient knowledge exchange activities and a clear role for the different actors

- Scientific questions original/innovative: key centres of knowledge in respective research areas, countries
- Farmers' associations involved in collection of genetic material, organisation of experiments, data collection, surveys
- Diverse knowledge transfer activities involving farmers' associations, competence centres and advisory services
- Focus on strengthening networks (science/practice, countries/regions)
- Joint venture (umbrella trade mark ... co-creation and co-ownership)

25 partners & 13 linked TP



How did we employ multi-actor approach?



Each partner (academia or non-academia) with a clear and visible role in the project i.e. various actors (e.g. farmers) involved from work planning to dissemination, demonstration



Photos from on-going experiments in Croatia, France, Slovenia



Field experiments are (mainly) conducted in „real life“ situations working directly with farmers e.g. linked TP => cross-fertilisation of knowledge/ideas

How did we employ multi-actor approach?



Inter-dependency between partners and tasks (shared efforts) to reach project goals

Examples:

WP2
Management & performance of local pig breeds in their production systems

- WP2.1 task comprises visits of farms to collect data (surveys) for multicriteria evaluation of production systems (for WP1, WP2, WP4) + genetic material (for WP1)
- WP2.3, WP2.4, WP2.5 comprise experiments – supplying WP3 (with products for quality evaluation), WP1 (gene expression studies, pilot study on intestinal microbiota) ...

Important role of farmers associations

WP1.5
DNA markers

- Authentication
- Traceability

- WP1.5 results important for WP3.4 that concern development of breeding programmes for local pig breeds

Important role of farmers associations

How did we employ multi-actor approach?



Diverse knowledge transfer and networking activities involving various actors

- Many dissemination/demonstration activities with/by farmers' associations
- Training school how to make quality meat products (e.g. farmers who make their own products and sell on-farm)
- Study visits (farmers)
- Kuleniada – local competition of salami type product quality



Goals

- Sharing experience, views => strengthen competences
- Strengthen networks within/btw regions
- understanding „difference in culture“ (science # practice)

Reviewers:

Very valuable initiatives for transfer of knowledge ...

The consortium needs to give more attention to its plans for scientific publication



Event in Firenze organised by partner and its linked TP - Cinta Senese breed association with participation of Spanish partner



Event involving Slovenian advisory service with participation of Italian, German (non-academia) partners



Project achievements so far

- **WP1** – In RP1, the collection of genetic material accomplished – the real genetic analysis/breed characterisation starts now
- **WP2** – data collections (surveys with farmers) and almost all experiments accomplished (majority in field conditions not on experimental farms)
- **WP3** – common toolbox for quality evaluation established, consumer sensory tests almost finished, database on carcass and meat quality for breeders associations being developed
- **WP4** – data collection for cost/benefit analyses (farm, product, society), surveys with consumers to evaluate their preferences for traditional and innovative products from local pig breeds
- **WP5** – continuing process of communication (project visibility), dissemination, knowledge exchange, TM development – survey of options, brainstorming with partners

Remaining work and dissemination phase



- **WP1** – genetic analysis with High density chip for breed, gene expression studies, microbiome analyses
- **WP2** –analyses of data collected with surveys (analytical review of productive traits; life-cycle analysis) and results from experiments (to evaluate innovations in management and local feeding resources), → dissemination
- **WP3** – analyses of collected results, database on carcass and meat quality for breeders associations, dissemination
- **WP4** – cost/benefit analyses (farm, product, society), consumer preferences for products from local pig breeds
- **WP5** – continuing process of dissemination, knowledge exchange events, TM development (rules on TM, registration of TM, roadmap for TM)

Prospects, networks and practical-oriented material sustainability



- In many cases we create „new“ data for breeds, but often it will be difficult to publish them in „top“ scientific journals
- Many activities for project promotion at regional events
- 9th symp mediterranean pigs – the event was marked by first Treasure results; 2 events are foreseen this year in Central-East part
- Big expectations for umbrella trademark
- Networking – best when people are working together; networks of breeders' associations + their advisors
- Consortium makes efforts to reach farmers

Follow us

<http://www.treasure.kis.si>



A screenshot of the TREASURE project website. The header features the project logo and a navigation menu with items: HOME, PROJECT, SPILLS, PARTNERS, NEWS, MEDIA, CONTACT, and PARTNERS. Below the header is a large photograph of a pig in a snowy outdoor enclosure. Underneath the photo is a text box describing the project: "TREASURE - Diversity of local pig breeds and production systems for high quality traditional products and sustainable pork chains is a Research & Innovation Action financed by European Commission under the Horizon 2020 - grant agreement no. 634476." It also lists the start date (01/04/2015), duration (48 months), budget (3,500,000.00 EUR), and the coordinating institution (Kmetijski inštitut Slovenije - Agricultural Institute of Slovenia (KIS)). A list of project aims is provided, including description and evaluation of local pig breeds, performance in different agro-climatic conditions, and analysis of consumer attitudes. At the bottom of the screenshot, there are sections for "Event Calendar", "Recent News", "Subscribe to Newsletter" (with an email input field and a "Subscribe" button), and a "Login" form (with fields for Username and Password, and a "Log In" button). The footer includes the copyright notice "© 2015 Treasure" and a logo for the European Union Horizon 2020 grant agreement.

THANK YOU FOR YOUR ATTENTION

