

produce queen bees for export. Such intensive beekeeping will ultimately result in the total hybridization of the already small and critical native bee genetic pool, apart from increasing the risk for spread of diseases and competition for the already limited foraging area available.

Beekeeping in Malta is one of the oldest traditions. In fact, the Greeks and Romans called the island Melite which derives from the Greek word *meli*, meaning honey. If things don't take a drastic turn for the better soon though, part of the apicultural heritage will end up as history as the native bee will be lost forever.

Despite facing an uphill struggle, Thomas Galea a concerned and enthusiastic Maltese beekeeper and one of the administrators of Breeds of Origin, got in touch with SmartBees, a collaborative research project on bees across Europe. Dr. Aleksandar

Uzunov of SmartBees has proved to be a great ally for this project. Together, in collaboration with the University of Malta and the Maltese Beekeepers Association, a strategic plan to protect the *Apis mellifera ruttneri* has been set in motion. Our main goal is to safeguard this endangered and unique bee species and ultimately ensure the maintenance of the already limited biodiversity.

Apis mellifera ruttneri is more than just a bee, it is OUR bee!

We are convinced that indigenous breeds and species are part of our national heritage and it is our obligation to ensure their survival. Extinction is forever!

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TREASURE a H2020 Research and Innovation Project on Local Pig Breeds

Marjeta Čandek-Potokar, KIS, Slovenia



Local pig breeds, autochthonous to different European regions, represent a heritage of biodiversity. Their conservation nowadays is often assured through special policy measures (subsidies) and via gene banks. In order to be self-sustaining, the socio-economic benefits of agricultural usage of these breeds should be promoted. The key innovation potential of TREASURE resides in the idea that sustainable pig production systems can be built on local pig breeds, locally available feeding resources and traditional products which comply with societal demands for biodiversity, environmental protection, local food chains, animal welfare and consumer demand for high quality and health benefits of the products.

Rationale of TREASURE

After the 2nd World War, agricultural systems in the western society undertook an "industrial strategy" of intensification, specialisation and large scale production. Many autochthonous (local) pig breeds that were not profitable became endangered. In the context of the internationally binding conservation of biotic diversity, the interest for autochthonous (local) breeds was revived. However, these breeds are still largely supported by special policy mechanisms in order to ensure their conservation. The best conservation strategy is the one that makes the breed self-sustaining without the use of external subsidies. In theory, local pig breed should be self-

sustainable by sale of their products (characterized by an extra added value) which, in return, assures breeding of a sufficient number of animals to have an adequate genetic diversity. This condition is rarely true in the local pig breeds in Europe. A sustainable use of local breeds is possible with better exploitation of their image and reputation as well as quality attributes associated with their products. Therefore, the activities to increase market potential and value of products are the key strategy in support of in situ conservation of the breed. Traditional pork products represent culinary heritage of the regions and have an excellent image by consumers due to specific quality, which cannot be obtained with pigs from conventional intensive husbandry. Exploitation of local pig breeds in their specific production systems providing products with quality demanded and appreciated by the consumers is the basis for sustainable value chains.

Basic information

•Start of the action: 01/04/2015

•Duration: 48 months

•25 partners from 9 countries

Coordinator:

Agricultural Institute of Slovenia
(KIS)

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

Challenge of TREASURE

The economic potential of local or traditional breeds and their production systems is far from being optimally exploited and represents a challenge and opportunity of pig sector in the future. This is also the key challenge set for the project; to improve the knowledge, skills and competences necessary to develop existing and create new, sustainable pork chains based on European local pig genetic resources (local breeds), which correspond to the highest consumer demands for quality and health of pork products, and to the societal demands regarding animal welfare, environment and rural development. To improve market potential of high quality products from local pig breeds it is essential to gain scientific proof of their singularity, productivity and product quality, as well as to develop traceability/authentication tools and to perform relevant assessments of their nutritional needs, local feed resources, management practices, impact for environment and consumer

acceptability, and marketing strategies adapted to regional circumstances which is all being assessed in TREASURE.

The project started a year and a half ago and in this first period the genetic material has been collected and methodological and experimental setup assured for further project activities. An important focus was also on communication to varied public and stakeholders to give an identity to the project and to raise general public awareness about the project and its goals. The project is open to new collaborations with stakeholders dealing with local pig breeds and their products, in particular with the protagonists of the breeds not covered by the project.

Marjeta Čandek-Potokar, coordinator of TREASURE meta.candek-potokar@kis.si

European interventions: Calabria's autochthonous Breeds

Floro de Nardo, R.A.R.E. – ARA Calabria



Calabria is the toe of Italy's geographical boot. It borders on Basilicata in the north and is surrounded by the Mediterranean Sea. Due to its strategic positioning with the two coastlines along the Tyrrhenian and Ionian Seas, the region was occupied by different conquerors over the time. Greeks, Romans, Teutons, Goths, Lombards, Franks, Sicilians, Saracens, French, and Spaniards have left a mark on the language, agriculture and cuisine. The conservation of rare livestock breeds in Calabria underlies strict rules given by the

regional government and according to the EU rules. This system of support and control is explained in the following article of the Italian partner R.A.R.E. of the SAVE Network. This example might be of interest also for other European Regions:

On the basis of the data of the National Data Bank (BDN) for the registration of husbandry, which was established by the Ministry of Health of Teramo at the National Institute of Animal Services, in the Region Calabria the data as shown in table 1 are registered:

Ethnographically, the cattle breed Podolica, the goat breeds Rustica di Calabria, Nicastrese (picture) and Capra dell'Aspromonte are most important. The goat breeds are recognized by the Ministry. The name of the pig breed Apulo-Calabrese was changed via decree of the Ministry of Agriculture and Forests in "Nero Calabrese" or

Species	Number of animals		Number of Farms	
	Calabria	Italy	Calabria	Italy
Cattle	113.648	5.533.297	6.895	130.316
Buffaloes	1.522	387.792	12	2.341
Sheep	271.597	7.215.857	7.102	92.985
Goats	150.792	1.157.863	4.401	55.928
Pigs	46.235	8.425.531	5.299	138.520
Horses	6.276	375.511	2.979	142.739
Asses	497	66.984	63	14.001
Mules	32	5.944	9	1.131