

Biodiversity and rural development: the case-study of the “Shepherd’s walnut”. An action model for sustainable rural development shaped on the peculiar features of a rural area

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Abstract — Walnut tree, for nutritional value, wood and its connections to local culture and society, is a very typical product of the Apennine rural areas. Anyway, the economical value of the traditional/local varieties is today very reduced and this may expose rural areas to a loss of biodiversity, cultural values and landscape elements. FIMONT is a research project which aims to calibrate action models to increase the value of mountain traditional food products. The research, starting from some specific morpho-genetic analysis carried out by IBAF, has considered the possibility to increase the value of local walnut calibrating a model based on the peculiar features of the rural territory. An ancient path for sheeps transhumance has been chosen like a “red line” for the model.

Index Terms — Biodiversity, local resources, rural development

1 RESEARCH BACKGROUND

Rural areas can be considered like a complex puzzle of different elements that, all together, tend to rend unique and peculiar the structure of the territory. This way, the simultaneous conservation, valorisation and consideration of each one of the elements of the rurality has to be assumed

like a milestone for a sustainable rural development. In Italy, agriculture and local foods are the pillars of the rural systems, and all the different development processes have to be based on them for a big part. However, we should not forget that local culture, customs, history, people and biodiversity are also important pixels of the rural puzzle. Their valorisation is a *conditio sine qua non* of a sustainable development and it is also a good opportunity to contribute in increasing the value of food and local products. But, how to transform biodiversity in an active element for rural development?

2 THE WALNUT TREE

Walnut tree, for nutritional value, wood and its connections to local culture and society,

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is a very typical product of the Apennine rural areas. Anyway, walnut is produced today only in few and specialized areas (with commercial varieties) and quite completely neglected in many parts of the Apennines. The economical value of the traditional/local varieties is today very reduced and this may expose rural areas to a loss of biodiversity, cultural values and landscape elements.

3 THE PROJECT

FIMONT is a research project promoted by the Italian Mountain Institute which aims to calibrate action models to increase the value of mountain traditional food products. In the frame of this project, IBAF-CNR has been engaged to deal with the case-study of the spontaneous walnut growing on mid-southern Apennines. Some of the researches are developed in the frame of a PhD with the Department STAT of the Molise University

4 THE RESEARCH

The research, starting from some specific morpho-genetic analysis carried out by IBAF, has considered the possibility to increase the value of local walnut calibrating a model based on the peculiar features of the rural territory. An ancient path for sheeps transhumance (Regio Tratturo), that connects Candela (Apulia) to Pescasseroli (National Park of Abruzzo) crossing the Apennines for 210 km, has been chosen like a "red line" for the model.

To explain the genetic similarities found in fruits collected in different Apenninic areas, actually, the path has been supposed to be the road through which shepherds spreaded walnut's genes during the ages. In the supposed model, moreover, the Regio Tratturo plays a very useful role: it provides a "physical" defined basis for the research (in a very wide area); links differ-

ent administrative areas (provinces, municipalities, regions...);

represents a strong element of culture, history and identity and this can contribute to stress the value of a traditional product like the walnut is. But local development means also economy and market, so, how to do with a product without economical value like local walnut? From this point of view, a Win-Win model, based on the association "Tratturo-walnut", has been developed adding also the element "agriculture/local food/rural tourism". The idea is to link walnut with the different rural economical systems growing up along the path, to create connections with stronger and well known local products (i.e. cheese, bread, sweets and turistic systems).

5 FURTHER PERSPECTIVES

In the frame of a PhD with the Department STAT of the Molise University, specific researches will be carried out to know the structure of the rural system growing along the Tratturo and to value the possibility of interaction between walnut and local products. Specific attention will be reserved to the active participation of local communities for the definition of a development model. Focuses will be realized upon specific rural areas, with particular attention to areas such as Pescasseroli and the Abruzzo Park.

With its structure, the case-study "Shepherd's walnut" stands as an action model that can be applied in other contexts and that can contribute to make biodiversity an active element for rural development.

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