

Good Practice: Protocol for DNA certification of rice

The “Controlled DNA” trademark for rice in Lombardy Region is an illustrative example for the integration of territorial planning, environmental protection, sustainability and technology. It represents an innovative way of giving value to a local product with historical and economic importance by supporting local enterprises and supply chains. The new protocol for DNA certification has been developed in close cooperation between Parco Tecnologico Padano Science Park, part of the Agrofood RIS3 Cluster of Lombardy, and “Rural District Rice and Frogs” (“Distretto Rurale Riso e Rane”), a cluster of local enterprises active in the rice production.

The protocol for DNA certification is based on a DNA analysis of the rice in each package produced by the brand “Distretto Rurale Riso e Rane” (i.e. Carnaroli, Arborio, Baldo, Roma, Vialone Nano and S. Andrea). The certification guarantees the quality of the locally produced rice and supports its marketing and distribution at a local, regional and national level. As a result, the protocol creates a new partnership between the Rural District enterprises on the one side and the consumers on the other side. Furthermore, it includes the production of “local seeds”, which guarantees the consumers the complete traceability and the identity of the products.

Actors and innovative character

The “Controlled DNA” trademark stems from a long-term strategy of Lombardy Region to acknowledge local rural productive systems with homogeneous historic and territorial identity. The focus on rural productive systems has resulted in the integration of agricultural activities and other local businesses, dedicated to traditional products and delivery of services. In this context, a new legislative framework for aggregation of enterprises in so called Districts (“Distretti”) was developed and entered into force in 2001. The framework aims to strengthen the cooperation of local enterprises, to increase growth, innovation

and internationalisation and to improve their organisation and logistics by sharing resources and know-how.

“Distretto Rurale Riso e Rane” was officially acknowledged in 2011. The District aggregates 23 municipalities located in the south-eastern part of the Milan Metropolitan Area. It includes 60 rice producing farms and covers a cultivated area of about 5.000 ha, 4.000 ha of which dedicated to the rice production. A main motivation for the establishment of the District was the need for some rice farmers to acquire new and better strategies related to the production and marketing of their products. The formation of the District started as a bottom-up action, which developed into its current setting with the support of the local and regional public administrations.



© Distretto Rurale Riso e Rane

The District today relies on its DNA certification system to achieve an economic sustainability. The development of the DNA certification protocol has been funded by Measure n.124 of the Rural Development Programme 2007-2013. The DNA analyses are performed by the Genomics Platform of Parco Tecnologico Padano Science Park. The successful elaboration and implementation of the certification is a result of the close collaboration of the District with the technological and business partners, such as the Science Park, universities, large-scale distribution and food service marketing companies, and the support of the regional government.



What makes the Good Practice a success?

The DNA control procedure is an innovative process of identification and traceability of local products, which could be transferred to other contexts and extended to other sorts of crops and products. It illustrates on the ground how cooperation at local level works for the implementation of challenging and innovative projects.

Firstly, the Rural Districts are a successful example of cooperation between rural enterprises, which join efforts in common activities and projects. Each District is accredited by Lombardy Region and is defined as a local production system. The Districts are characterized by a homogeneous historical and territorial identity deriving from the integration between agricultural activities and other local activities, as well as from the production of specific goods or services, coherent with the natural characteristics and territorial traditions.

Secondly, the integration of the Rural Districts in governance processes is ensured by their commitment to the Official Agreement “Milano Metropoli Rurale”. The Agreement was signed by the Districts and the main public authorities in Lombardy. It sets the framework for the creation of win-win partnerships, based on common goals, objectives and shared projects. It mobilizes potential actors for the development of new projects, opens possibilities to scale up perspective markets and creates critical mass in the discussions with other private and public stakeholders.

Thirdly, the developed DNA control procedure is an illustrative example of how to apply research knowledge and to implement technological innovations in rural enterprises. An essential aspect is the integration of the know-how, on-field expertise and territorial management of the Rural Districts with the innovation skills of the high-tech clusters thus making use of their potential for development of new start-ups and innovative projects like the DNA protocol creation. The cooperation between rural enterprises and RIS3 clusters contributes to strengthening the innovation system in Lombardy in accordance with the Regional Smart Specialisation Strategy.

The Protocol for DNA certification of rice and the cooperation behind it reinforce the economic activities in the rural territories of the Milan Metropolitan Area. It gives a more solid “defence” structure against urban-anthropic-infrastructural influences. By doing so and by fostering the competitiveness of the peri-urban economy, the Good Practice positively strengthens the rural economy and at the same time serves as a protection against real estate expansion and urban sprawl.