LOCALISED AGRO-FOOD SYSTEMS AND QUALITY PRODUCTS IN THE LONG-TERM STRATEGY FOR EUROPEAN AGRICULTURAL RESEARCH AND INNOVATION BY 2020 AND BEYOND

POSITION ON THE COMMISSION STRATEGIC APPROACH

TO EU AGRICULTURAL RESEARCH AND INNOVATION

In collaboration with ERG SYAL

CONTENTS

PREFACE

On September 11th 2015, the Association of Europeans Regions for Products of Origin (AREPO)[i] held with numerous partners[ii] a high-level seminar on ***"Innovating and Organising Research, Education and Training for Sustainable GIs"***. This event, organised in the framework of the **Week of DG AGRI Stakeholders at Expo Milano 2015**, gathered together stakeholders from the research, education and training sectors in order to exchange experiences and practices and to define future priorities for the development of sustainable Geographical Indications (GIs).

The participants in the seminar underlined the need for support and funding at the European level on research, education and training on GIs. The European Commission is a big stakeholder in this context since it provides financial support and funds research projects on GIs. DOLPHINS and SINER-GI[iii] were two of the most important research projects on GIs financed by the Commission through the Framework Programme for Research (FP). Furthermore, starting from 2016, a new research project on EU quality policy in the framework of Horizon 2020 will be implemented[iv]. Nevertheless, **GIs and other quality schemes still need EC support to develop multidisciplinary research, education and trainings**. The existing research should be extended and should explore new issues and targets by enlarging the scope also to localized agro-food systems and rural development dynamics. New disciplines should be mobilised to address the challenges determined by the complexity of these products and to tackle all opportunities they offer to agriculture and rural development.

Therefore, AREPO continued working with the European Research Group (ERG) SYAL[v] (*SYstème Agroalimentaires Localisés*, or Localised agro-food systems - LAFS) and other stakeholders involved in research and education on quality schemes who participated in the seminar, in order to present to the European Commission a **position paper on the conclusions of this common work.**

The **Association of Europeans Regions for Products of Origin (AREPO)** is a network of regional governments and producer associations that deals with products of origin and EU quality schemes. It represents 27 European regions and over 400 associations of producers for over 40% of European GIs.

The **European Research Group (ERG) SYAL** gathers together **thirty research institutions of eight European countries,** promoting research and education on localised agro-food systems at the European level.

INTRODUCTION

The quality and diversity of the Union's agricultural, fisheries and aquaculture production is one of its important strengths, giving a competitive advantage to the Union's producers and making a major contribution to its living cultural and gastronomic heritage (EC 2012b). Localized agro-food systems (LAFS) are a relevant part of the EU agro-food system. Thanks to their characteristics and qualities, LAFS offer interesting opportunities in supporting rural development strategies able to include family farmers, small and medium enterprises operating in other stages of food supply chains, and other small firms operating in connected activities like the rural tourism ones.

The valorisation of products whose quality characteristics are linked to their territory of origin is of paramount importance for LAFS. These products may be identified by a geographical indication (GI), by other official quality schemes, or by private tools like trademarks. Such tools play a relevant role in identifying and differentiating these products on the market, as well as in stimulating collective initiatives in rural areas, both in agro-food chains and in related activities. In some cases GIs are protected against misuses by means of *sui generis* protection scheme, or by other systems like geographical collective trademarks.

Operating quality schemes, which reward producers for their efforts to produce a diverse range of quality products, can benefit the rural economy. This is particularly the case in less favoured areas, in mountain areas and in the most remote regions, where the farming sector accounts for a significant part of the economy and production costs are high. In this way quality schemes are able to contribute to and complement rural development policy as well as market and income support policies of the common agricultural policy.

The enormous potential that LAFS and the valorisation of origin and quality products can offer to sustainable development of rural areas is still underutilized in the European Union. **A renewed attention from researchers, policy makers and other stakeholders is needed to address the challenges and unlock LAFS potential.**

The **scope** of the positon paper is the **whole set of GI products valorisation initiatives and tools, including their legal protection, and their integration in Local agro-food systems dynamics**.

The position paper **aims** at **contributing to the discussion on the long-term strategy for European agricultural research and innovation, assuring that the research needs and issues related to Local agro-food systems and geographical indications will be taken into account and included, highlighting their potential for a sustainable rural development**. It focuses on the primary sector and its links with the food chain and rural development. Furthermore, it establishes relevant links to the bioeconomy strategy. It argues that Localized agro-food systems and quality and origin products can contribute to **sustainable bioeconomy**, thanks to their innovation potential in the **governance of the food system** at local/regional level and in the **sustainable use of resources.**

The first section introduces the **concept of Localised agro-food systems** highlighting its possible contribution to the transition to a sustainable bioeconomy and its essential role in research and innovation, thanks to its interdisciplinary and dynamic nature.

The second section describes the **valorisation of origin and quality products**, introducing the concept of the "virtuous" circle, able to close and effectively achieve the reproduction and renewal of the resources used in a "complete" and sustainable production process.

Finally, the third section will highlight some orientations to **assure that the research needs and issues related to origin and quality products will be taken into account and included** in DG AGRI long term strategy, using the framework of the core priority areas highlighted in the background paper of the European Commission on European agricultural research and innovation (EC 2015b).

1. THE LOCALISED AGRO-FOOD SYSTEMS APPROACH

Localised agro-food systems (LAFS) are defined as *"production and service organisations (agricultural and agro-food production units, marketing, services and gastronomic enterprises, etc.) linked by their characteristics and operational ways to a specific territory"* (Muchnik J., 1996; Muchnik J., Sautier D., 1998).

This concept appeared for the first time in the 90s, at a time when rural societies were in crisis and bigger issues emerged such as food and environmental problems and sustainable development. The originality of the LAFS focus arises largely from the analysis of **social networks that develop links between local resources, including agriculture, the food and the territory**. Thus, the **territory** is approached as a '**region-resource'**, defined as a group of interrelated territorial specific assets, not only a place for the location of economic activities.

This concept has become widespread and various groups and initiatives have contributed to the process: a scientific interest group in France (GIS LAFS)[vi], the European Research Group (ERG) LAFS, the "American LAFS network" and six international congresses[vii]. Under this concept **three meanings** can be identified:

(i) a **concrete object**, i.e. a group of visible agro-food activities that are territorially established;

(ii) a **conceptual approach**, i.e. a way of analysing *in situ* the development of identity based agro-food local resources and their systemic interactions;

(iii) an **institutional tool**, which can be used by administrative bodies in their planning programs.

Far from presenting an unique definition, since different LAFS typologies exist, local agro-food systems may see their potential and sustainability negatively affected by several level of tensions and complexities. To address these challenges, the LAFS approach aims at understanding the **processes of territorial anchorage of agro-food activities,** representing the **variety of their forms** and identifying the **driving forces** of their evolution in time. It adopts a **dynamic focus** on the links between food and the territory, as well as on the **historical processes of localisation/delocalisation/relocalisation** of food production. The LAFS approach also investigates the effects of the LAFS' economic-institutional activity upon rural development, a fact that implies studying the dynamics of **territorial governance**. LAFS studies provide a great wealth of geographical solutions to the governance-related issues inherent to strategies aimed at enhancing identity-based products, which means a wide range of modalities of collective organisation and mechanisms of horizontal and vertical coordination.

From an operational perspective, the LAFS approach is interesting for the following framework:

(i) **Understanding the nature and dynamics of the links** (natural and material, socio-techniques and cultural, socio-economic and institutional) **between the main elements in a LAFS.**

(ii) **Specification of territorial resources** is fundamental to trigger the innovation process contributing to rooting production activities.

(iii) **Activating territorial resources and projects building up:** the territory acts as a factor that connects, like a stakeholder with the qualities and the intelligence to organise collective strategies.

The research on LAFS requires a **multidisciplinary approach** integrating different disciplines from natural and biotechnical sciences to social sciences. Furthermore, LAFS approach is not exclusive but **interacts and dialogues with others approaches in a same territory**, i.e. multifunctional agriculture, agroecology, sustainable intensification, with the common aim to build local sustainable food systems.

This conceptual approach is extremely relevant in the present context to cope with new economic, environmental and societal challenges for European food systems, namely **global food and nutrition security, environment and climate change and growth and jobs in rural territories.**

A transition of the food system is needed in order to address these challenges. This will require reforms and a better alignment of policies as well as new policies, new technical and economic development paradigms, a change in food provisioning practices. At the same time, it relies on **research and innovation** based on **transdisciplinarity** and on an **interactive innovation model**, fully integrating end-users into research and innovation (EC 2011).

The **European Commission** introduced the concept of **sustainable bioeconomy** to foster a "*more innovative, resource efficient and competitive society that reconciles food security with sustainable use of renewable resources for industrial purposes, while ensuring environmental protection*" (EC 2012a). Nevertheless, agricultural and forestry policies aiming at optimising the production of public goods and services could be put at risk without giving adequate priority to the use of biomass as food (EC 2015a). Thus, bioeconomy strategy needs to incorporate the values embedded in our localized agriculture and food production systems, namely high quality products and services, conservation and management of cultural landscapes, preservation of multifunctional ecosystems, support to local economies based on synergy with tourism (Schmid O. et al., 2012).

Localised agro-food systems could contribute to the transition to a sustainable bioeconomy. Based on small scale local production areas and on the capability to valorise local specific resources, LAFS can be **highly diversified and multifunctional**. The localised food chains and territorial governance already in place could sustain the transition to multifunctional production based on principles of sustainable yields, cascading and circularity. Local scale, in fact, allows a better management of the hierarchy between high quality (and high value) products - which are the peculiarity of LAFS - and further uses of biomass and reduces the logistic costs related to the organization of circular processes in the space. This multifunctionality and diversification is fundamental for the sustainable development of **rural and especially marginal areas**.

Finally, LAFS **approach has an essential role in research and innovation**, thanks to its **interdisciplinary and dynamic nature**, the **diversity of situations confronted**, and the **growing institutional demands** concerning LAFS concept as a tool to understanding and conceiving territorial innovation processes (Muchnik J., 2009).

2. VALORISATION OF ORIGIN AND QUALITY PRODUCTS

Production processes in LAFS are based on a territory, meaning places of production characterised by **specific resources.** These resources determine the peculiarities of product quality attributes offering opportunities to differentiate the product on the market. Local enterprises and other local actors are therefore required to define the **identity** of **the product specific characteristics**, i.e key features of production process and its links with local, including human, resources. **Innovation and competences are very important in this step**. Once local stakeholders collectively agree on a common strategy the product has to be "validated" by the outside. The society (consumers, citizens, public institutions, etc.) has to recognize the values connected to the product; this qualification can be supported by communication and quality signs.

Based on the EU experience, this recognition of origin or quality products allows the market to remunerate producers, through the price mechanism. Due to the specificity of the production process, some extra-price is normally necessary to remunerate farmers and allow them to reproduce local specific resources. **In this way, a "virtuous" circle is activated** (Belletti and Marescotti 2011), **able to close and effectively achieve the reproduction and renewal of the resources used in a "complete" and sustainable production process.**

All the phases of this circle, from the identification and definition of the GI product up to the reproduction one, ask for **appropriate governance**, able to involve all the relevant stakeholders, including the less empowered ones. At the same time, **public policies** should support the functioning of this virtuous circle, considering the positive effects of public interest that this circle is able to generate (Belletti, Marescotti and Touzard, 2015).

In this perspective, the EU Food Quality Policy is a very important tool that contributes to origin and quality products qualification and valorisation. It recognises that the quality and diversity of the production in the EU is one of its important strengths, making a major contribution to its living cultural and gastronomic heritage. The EU quality schemes for Geographical Indications (PDO, PGI) and for Traditional Specialties Guaranteed (TSG), together with the optional quality term for "mountain products" and EU's organic farming regulation have supported the transition towards product quality differentiation.

The EU recognises that quality schemes which reward producers for their efforts to produce a diverse range of quality products can benefit the rural economy, particularly less favoured areas, in mountain areas and in the most remote regions. In this way quality schemes are able to contribute to and complement rural development policy as well as market and income support policies of the common agricultural policy (CAP) (EC 2012b). Thus, **quality policy is a major pillar of the EU Common Agricultural Policy (CAP) and quality and origin products should be considered as a pillar of future European sustainable food system.** They represent a great potential that can be unlocked through further research and innovation addressing the challenging and strengthening their positive impact.

3. ORIENTATIONS FOR THE LONG-TERM STRATEGY FOR EU AGRICULTURAL RESEARCH AND INNOVATION BY 2020 AND BEYOND

Far from being fixed and defined by an immutable tradition, quality products and GIs are driven by multiple innovation processes: sociotechnical, governance, commercial and cultural innovation underlies their development. **Innovation needs to go hand in hand with the evolution of the tradition.** Research and innovation should support the **improvement of those products and their LAFS,** and use them as **case study to extend good practices** to other sectors, especially concerning their **governance and collective organisation**.

Furthermore, quality products and GIs have certainly a role to play within the transition to sustainable bioeconomy, since they **embody the principles described in the *4th SCAR Foresight Exercise*** (EC 2015a).

First of all, quality schemes through the qualification phase lead the stakeholders to establish powerful local governance that presents a great potential in term of protection of **rural landscape and sustainable reproduction of natural resources** (*sustainable yields* principle).

Secondly, quality schemes, GIs in particular, embrace **cultural and socioeconomic diversity** as well as **biodiversity**, respecting the need to create bottom-up solutions that are adapted to the local specific context (*diversity* principle).

Thirdly, high quality food products with a regional identity, produced using traditional recipes and processing methods, could contribute to **food security**, granting the access to local nutritious and healthy food (*food first* principle). Moreover, their high quality could assure the **generation of added value** from the use of biomass (*cascading approach* principle). Besides, innovation strategy boosted by the strategic capacity of the collective organisation of GI producers may help the local producers to develop alternative use of other biomass produced in the region.

Finally, origin products could contribute to **circular economy**. From one hand, the virtuous circle incorporated in the production process fosters the sustainable reproduction of local resources. From the other hand, origin products are characterized by geographical concentration and continuity of local food production and have a strong collective governance of the food chain already in place. This **governance** should be enhanced and exploited to develop at the same time different productions (scope economies), as well as, to recycle waste and by-products of the production process (*circularity* principle), e.g. recycling whey after cheese production or using olive oil mill vegetable water (wastewater) and pomace as fertilisers or bioenergy.

Using the framework of the priority areas described in the European Commission draft paper on "*A strategic approach to EU agricultural research and innovation*" (EC 2015c), this section will highlight the potential and challenges of quality products and will define some **research orientations** to **assure that the needs related to LAFS development and quality products will be taken into account and included** in DG AGRI long term strategy.

3.1 QUALITY AND ORIGIN STRATEGIES WITHIN THE TERRITORIES

A. CREATING VALUE FROM LAND: SUSTAINABLE PRIMARY PRODUCTION

POTENTIAL AND CHALLENGES

LAFS and quality products may offer interesting opportunities for preserving many kinds of local resources. In particular, they can be thought of as ways of conserving biological resources such as animal breeds, plant varieties or types of ferment and of **maintaining both biodiversity and traditional knowledge** (Barjolle et al., 2011).

This may promote biodiversity conservation directly through the use of a specific genetic resource or indirectly through production and management practices that include landscape and ecosystems considerations. For instance, in the Alpine region the PDO allows farmers to carry on the production of Alpine cheeses by heating milk over a wood fire, using wood harvested from the pastures around the cottage, even though electricity could displace this traditional technique. In doing so, the maintenance of Alpine forests is ensured, which is a great service rendered by alpine farmers.

Direct benefits in terms of sustainability derive from the fact that governance and market success contribute to the viability of rural livelihoods that are directly linked to sustainable use of specific biological resources (Larson, 2007; Thévenod-Mottet, 2010).

A recent study on olive oil sector (Belletti et al. 2015) demonstrates that even if protection of GIs cannot be considered an environmental tool *per se*, it can potentially play a positive role in environmental conservation, acting as a barrier to the increasing intensification of the olive-oil sector and thus preserving traditional farming systems. Furthermore, GIs provides the opportunity for territorialisation of environmentally friendly production rules, taking into account the multiplicity of local specific resources.

Nevertheless, it is important to highlight that several tensions and challenges are still present. In particular, LAFS and quality products are experiencing indirect delocalisation, as in the case of imported feed, in case of meat or cheese production. Moreover, further research is needed on sustainability assessment, in order to identify and improve the environmental local specificities of quality products.

EXEMPLAR RESEARCH AREAS

- **Technological research** aiming at evaluating, measuring and demonstrating the effects of specific local resources on specific quality characteristics (nutritional, organoleptic, etc.).
- Investigating the **functioning of LAFS' and GIs' governance systems** to understand how they sustainably manage collective local resources and to identify and develop new technics for recycling waste and by-products of the production process (**circular economy**).
- Developing **new models** for a fair remuneration of ecosystem services.
- Developing solutions to **incorporate all sustainability dimensions** in GIs recognition and protection processes.
- Analysing the attitude of **consumers** towards GIs and their sustainability.

- Analysing the **multidimensional and multifunctional performances** of LAFS and GI production systems, also collecting **empirical evidence** for their effects.
- Developing new strategies and policies in support of the **re-localisation of productions systems** (e.g. feed production) in order to protect local specificities and resources.

B. NEW OPENINGS FOR RURAL GROWTH

POTENTIAL AND CHALLENGES

Localised agro-food systems, GIs and quality products can contribute to enable rural areas to better capitalise on their assets and to meet new societal demands concerning (i) food quality attributes (authenticity, healthy, local/regional supply, etc.); (ii) new sustainable biomass uses; and (iii) the increasing values placed by society on public goods (EC 2015b).

Localized food systems, GIs and quality products can play an important role in safeguarding employment and keeping traditional production systems alive, especially those systems based on small and medium enterprises, and located in marginal areas (Bérard and Marchenay 2004; Barham and Sylvander 2011). They can actually contribute to **territorial, local, regional and rural development** (Sylvander, Isla & Wallet, 2011; Barjolle, 2016).

High quality food products with a regional identity can contribute to **food security**, both by delivering good local food, by supporting the welfare of farmers, generating income for producers allowing them to buy complementary food. They also represent an important contribution to **food safety,** thanks to the mechanisms included in the specifications to assure product **traceability.**

Furthermore, the preservation of local specific resources, both material and immaterial, can exert positive effects on the local system as a whole. These **resources can be used in other production processes, mainly services production** (like tourism, restaurants, etc) or **bio-based production**, both on-farm and in other sectors in the territory. This can generate important opportunities to other rural sectors and activities: e.g. tourism, agritourism, bio-based circular economy etc.

GIs can effectively support the **diversification of rural economy**, both inside the same farm and at territorial level. In this respect, the extension of GI protection to non-agricultural products could have a great potential. A high number of these products have a strong link with agricultural or at least rural activities (production of wool, wood, etc.). Therefore it would be relevant to include them in the research and innovation strategy, also from the perspective of the bio-economy strategy.

Finally, origin products are characterized by geographical concentration and continuity of local food production and have a strong collective governance of the food chain already in place. This **governance** should be enhanced and exploited to develop at the same time different productions, as well as, to recycle waste and by-products of the production process.

Research and innovation are necessary to unfold the potential described and elaborate solutions to the abovementioned challenges. LAFS approach has a great potential to unravel the link between the complexity of food system and their efficiency, resilience and sustainability.

EXEMPLAR RESEARCH AREAS

- Analysing LAFS contribution to rural economies.
- Analysing and collecting empirical data on economic performance of GIs.

- Developing monitoring and evaluation of the effects of GIs (and GIs protection) at firms', production system and territorial level with a holistic approach (not just "single product approach"). Investigating all the dimension of sustainability in LAFS and GIs products: environmental (resource efficiency, waste reduction, climate change), economic (business approaches, incentives and behaviours) and social as they may provide solutions towards increased sustainability.
- Investigating how to strengthen and develop GIs local governance, building agreements among heterogeneous actors and integrating their interests to create more participative governance. Investigating good practices for a fairer distribution of GI value along the chain.
- Exploring how to integrate research results in territorial development strategies and related public policies, in particular EU rural development policies; in a wider sense: how to integrate Intellectual Property Right policy with other linked policies able to support the whole "origin-linked quality circle" and foster a sustainable rural development approach.
- Exploring innovative pathways to integrate GIs – tourism – services – biomass production – etc.
- Investigating role of consumption and intermediary buyers.
- Understanding the dynamics of GIs supply chains and their components and the interactions between them and non-food chains, using a system-based approach for the provision of biomass for all uses (food/feed, industrial applications, traditional and new users), without endanger environmental sustainability and food and nutrition security. Investigating possible uses of quality products residues, co-products and waste on farm and along the value chains.

C. DEVELOPING THE HUMAN AND SOCIAL CAPITAL IN RURAL AREAS

POTENTIAL AND CHALLENGES

The development of human and social capital is essential to successful innovation in GIs and quality products. Dealing with the complexity of these products implies to mobilise all available knowledge sources, including tacit knowledge at farm and business level. The implementation of solutions to the abovementioned challenges requires the involvement of all relevant stakeholders in a process of knowledge co-creation and appropriation.

On one hand, **higher education has a fundamental role in that**. LAFS, GIs and quality schemes need reliable experts trained in several disciplines and able to anticipate the future needs of food-supply chains and to dialogue with all the stakeholders of the territories. Experts are particularly needed to develop the right policies and to implement differentiation and protection strategies to support quality schemes.

In several EU countries, different formative offers already exist. For instance, several masters in food science, marketing and economics include courses on GIs. Nevertheless, in most cases, only one and limited dimension of GIs and quality schemes is taken into account resulting in a fragmented vision, while a more general and comprehensive formative offer is rarer. Actually, a **transversal approach** would **train GIs experts,** able to understand the whole complexity, characterisation, construction and development of a GIs in all its dimensions.

On the other hand, **vocational trainings are fundamental to strengthen the governance of the value chain and support knowledge exchange and co-creation among producers.** The recent popularity of GIs raises a number of risks and dangers due to the **lack of harmonisation** among GIs and due to the presence of different strategies at local and global level. Some GIs, especially in third countries, are registered too quickly, sometimes with a **top-down approach**. Therefore, the supply chains are inadequately prepared, the specifications are not consensual and the control systems are non-operational. Vocational trainings are essential to address these problems.

C.1. ORIENTATIONS FOR EDUCATION

- Redefinition of the formative offer to train **two profiles of experts, complementary** and indispensable to address these needs:
  a) **Experts in a specific disciplinary field** (agronomy, animal sciences, food science, food technology, microbiology, ecology, economics, sociology, geography, anthropology, marketing, law and political science, among others).
  b) **Generalists trained on local and traditional products,** with a transversal multidisciplinary approach.
- Strengthen the **transversal, multidisciplinary and holistic approach** to train professionals able to analyse origin and quality products together with their territory (territorial approach), defined by specific political, environmental and socio-economic conditions.
- Maintain and strengthen the **link of the formative offer with research** to ensure excellence in education.
- Developing tools to **strengthen** the **network and the connection between the formative offer and the economic actors**, e.g. through the inclusion of academics and professionals in the definition and management of the formative offer (**shared governance**).

C.2. ORIENTATIONS FOR VOCATIONAL TRAININGS

It is necessary to develop trainings aiming at addressing the following needs:

- **Supporting and assisting producers' choice,** in order to check the balance between the objectives of producers and GIs**.**
- Increasing **knowledge of the supply chain**.
- Clarifying **producer groups' mission.**
- Increasing the **awareness of importance of quality, tasting and sensory analysis.**
- Assisting the **development and writing of specifications:** producers should take ownership of specification as a tool for production, not just as an obligation to register a GI.
- Raising awareness on **control methods.**
- Developing **mechanisms of transmission and sharing of knowledge and experiences.**

Emerging issues:

- **Preliminary information** for potential producers: all the potential producers of a GIs should be trained before the formal submission of a specification.
- The introduction of **a sustainability assessment** should be accompanied by **training.**
- Need to harmonise and introduce **only one concept of "origin".**
- The possible introduction of **non-agricultural GIs** should be accompanied by new trainings because the structure and governance of non-agricultural supply chains is not comparable with the agro-food ones. As a consequence, these supply chains should be addressed in different ways.

C.3 POTENTIAL OF A GI AND QUALITY SCHEMES NETWORK IN THE EIP AGRI

AREPO is working to restructure its network in order to implement the **interactive innovation model**, involving all the relevant actors in a process of knowledge co-creation and appropriation in the sector of quality products and products of origin.

Until now the network has been composed by our members regions and producers. The association is in the process to create a **scientific committee** composed by actors from **research, education and training sector**. AREPO role would be to facilitate the exchange between the committee and our member regions and producers, in order to foster knowledge exchange and cooperation, and to create adequate tools to implement research results in regional policies and producers strategies.

Furthermore, AREPO is working together with **ERIAFF** (European Regions for Innovation in Agriculture, Food and Forestry) to coordinate the action of our regions on the cooperation measure of Rural Development Programmes. Our main objective is to create **synchronised operational groups at multiregional level on specific issues concerning GIs and quality products**.

3.2 LEGAL AND INSTITUTIONAL TOOLS AS PARTS AND BASIS FOR PUBLIC POLICIES

POTENTIAL AND CHALLENGES

Legal protection of GIs can offer opportunities for supporting the operation of the virtuous circle. The rationale for GI legal protection concerns the control of market failures that may result from the nature of "public goods" of the geographical name, characterized by limited excludability and limited rivalry. GI regulation aims to control free-riding and prevent over-exploitation of the name, allowing economic benefits to local producers engaged in maintaining GI product identity and reputation and in managing local specific resources (Belletti, Marescotti and Touzard, 2015). In this way GI legal protection can support also rural development, environment preservation (e.g., biodiversity) and the protection of cultural traditions (Sylvander et al, 2006).

In order to be able to talk about GIs as development tools, we fist have to analyse their legal nature and distinguish it from trademarks and labels. Many challenges can thus be identified from the **legal perspective:**

- **Very low harmonisation** both at national, EU and international levels: different systems for different categories of goods, interpretation of the definitions, formal and substantial requirements, procedures, enforcement, etc.
- **Complex relationship** and, sometimes, **confusion** between policies, institutions, **agricultural legal framework and IP legal framework.**
- Highly **contested topic at international level.**
- **Confusion** in terms of standards and quality signs between **trademarks and GIs**, **GIs from different countries and different products**. This is a risk of damage for the most "highly requiring" GIs.

ORIENTATION FOR RESEARCH ON GI LEGAL ASPECTS

- Justification for the legal protection: **guidelines for the recognition of GIs**.
- **Identification of the owner** of the title of intellectual property (distinction between the right over and the right to the GI; role of the state).
- **Rights of consumers** in the definition of the characteristics of the goods benefiting from a GI.
- **Legal issues related to certification** (responsibility, possibility to withdraw and withhold the right to use the denomination).
- **Relation between GIs** (legal instrument), **traditional knowledge, genetic resources and traditional cultural expressions**. How these elements can be protected and their use be remunerated?

3.3 QUALITY SCHEMES AT INTERNATIONAL LEVEL

POTENTIAL AND CHALLENGES

Quality and origin products exist worldwide, with significant impacts on employment, sustainable food systems, heritage and the local economy, including tourism. International interest in the registration of quality and origin products has been fostered by inclusion of GIs in the WTO TRIPS agreement. The growing membership of emerging countries in the WTO also contributes to the development of GIs. Furthermore, the European Institutions and several national research institutes (AFD, INRA, CIRAD, FiBL, etc.) are working with FAO, UNIDO and other international organizations (WIPO, UNCTAD, etc.) to adapt the quality and origin schemes to the context of other countries. GIs are more developed than other schemes.

Despite this positive development, we can identify some risks and negative aspects that could create uncertainty or at least weaken GIs future evolution at international level, namely:

- Many countries are experiencing that GI registration is not enough and that **GI management is a critical issue which requires sound institutions and governance**, as well as experience.
- In many cases GIs are **registered by official authorities with a top-down approach** that created "empty" GIs: registered names without connection with or support of a producers' association.
- **Lack of strategy:** most GIs are considered just an IP title with a high risk of cancellation or extinction, while the added value and the potential in term of territorial development are not taken into account.
- Applications to register GIs are increasing worldwide, but **lack of harmonisation and diversity of products** result in non-comparable GIs.
- Serious **lack of enforcement** of GI protection by the concerned authorities.
- Finally, many countries have a very idyllic and erroneous vision of GIs, thinking that this tool will solve all the problems of the producers and their territories. There is a need to convey a more pragmatic message.

ORIENTATION TO STRENGTHEN QUALITY AND ORIGINS SCHEMES AT INTERNATIONAL LEVEL

There is a critical need for an international forum to strengthen research and trainings on GIs and quality schemes as instruments for rural development and food security. To achieve this objective we should:

- **Reinforce and professionalise the European expertise**, extending the vision to all the good experiences on quality schemes.
- Present **European quality schemes as tools for development of territories** attached to a real strategy.
- Promote GIs **ensuring a common understanding and a shared concept.**
- Endorse an international initiative to assess ongoing experiences and promote policy dialogue.
- Develop methodologies and technical assistance in order to better integrate GI in LAFS development, market access policies and in pro-poor policies in LCD countries.

BIBLIOGRAPHY

Arfini, F., Mancini, M.C., and Donati, M. (eds.) (2012). Local Agri-food Systems in a Global World: Market, Social and Environmental Challenges. Cambridge Scholars Publishing.

Barham, E. and Sylvander, B. (eds.) (2011). Labels of Origin for Food. Local development, Global Recognition. Wallingford, UK: CABI International.

Barjolle, D. (2016). Geographical indications and Protected Designations of Origin: Intellectual Property Tools for Rural Development Objectives. Research Handbook on Intellectual Property and Geographical Indications, edited by Dev Gangjee. Edward Elgar publisher, UK.

Barjolle, D., Sylvander, B., & Thévenod-Mottet, E. (2011). Public Policies and Geographical Indication. In Barham, E. and Sylvander, B. (eds.), Labels of Origin for Food. Local Development, Global Recognition, 92-105. Wallingford, UK: CABI International.

Becattini G., Rullani E., (1995). Système local et marché global: le district industriel. In Rallet A., Torre A. (eds.), Economie industrielle et économie spatiale, Economica, Paris.

Belletti, G., Casabianca, F., Marescotti, A. (2012). Local Food Quality and Local Resources. In Arfini, F., Mancini, M.C., and Donati, M. (eds.), Local Agri-food Systems in a Global World: Market, Social and Environmental Challenges, 71-95. Cambridge Scholars Publishing.

Belletti, G. and Marescotti, A. (2011). Origin products, GI special protection schemes and rural development. In Barham, E. and Sylvander, B. (eds.), Labels of Origin for Food. Local Development, Global Recognition, 75-91. Cambridge, USA: CABI International.

Belletti G., Marescotti A., Touzard J.M. (2015). Geographical Indications, Public Goods and Sustainable Development: The roles of actors' strategies and public policies, World Development.

Belletti G., Canada J.S., Marescotti A., Vakoufaris H. (2015), Linking Protection of Geographical Indications to the environment: Evidence from the European Union olive-oil sector. Land Use Policy, 48, pp.94-106.

Bérard, L. et Marchenay, P. (2004). Les produits de terroir. Entre cultures et règlements. Paris: CNRS editions.

Callon, M., Méadel, C., & Rabeharisoa, V. (2002). The economy of qualities. Economy and Society 31: 194-217.

Courlet C., Pecqueur B., (1992). Les systèmes industriels localisés en France: un nouveau modèle de développement. In Benko G. et Lipietz A. (eds.), Les régions qui gagnent. PUF, Paris.

EC (2011). Sustainable Food Consumption and Production in a Resource-constrained World: 3 rd SCAR Foresight Exercise. EC, Brussels.

EC, (2012a). Innovating for sustainable growth: a bioeconomy for Europe. Commission staff working document. European Commission (EC), Brussels, Belgium.

EC, (2012b). Regulation (EC) No 1151/12 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and food stuffs. European Commission (EC), Brussels, Belgium.

EC (2015a). Sustainable Agriculture, Forestry and Fisheries in the Bioeconomy. A Challenge for Europe: 4 rd SCAR Foresight Exercise. EC, Brussels.

EC (2015b). Towards a long-term strategy for European agricultural research and innovation by 2020 and beyond. Background paper. EC, Brussels.

EC (2015c). A strategic approach to EU agricultural research and innovation. Draft paper. European Commission (EC), Bruxelles.

EC (2015d). Green paper: Making the most out of Europe's traditional know-how: a possible extension of geographical indication protection of the European Union to non-agricultural products, 15.7.2014. COM(2014) 469 final. European Commission (EC), Bruxelles.

European Parliament (2015). Report on the Possible extension of geographical indication protection of the EU to non-agricultural products (2015/2053(INI)). Committee on Agriculture and Rural Development. Brussels, Belgium.

Fischler, F., et al. (2015a). The role of research in global food and nutrition security. Expo 2015 EU Scientific Steering Committee, Discussion Paper. EC Brussels.

Fischler, F., et al. (2015b). Expo 2015 EU Scientific Steering Committee Recommendations: Research and innovation in global food and nutrition security, Draft Report. EC Brussels.

Larson, J. (2007). Relevance of geographical indications and designations of origin for the sustainable use of genetic resources. Study commissioned by the Global Facilitation Unit for Underutilized Species. Rome, Italy.

Muchnik, J. (Coord.), (1996). Systèmes agroalimentaires localisés : organisations, innovations et développement local, proposition issue de la consultation du Cirad « Stratégies de recherche dans le domaine de la socio-économie de l'alimentation et des industries agroalimentaires », doc. Cirad N° 134 / 96, 27 p.

Muchnik, J. (2009). Localised Agrifood Systems: concept development and diversity of situation. Paper presented at the Annual Meetings of the Agriculture, Food and Human Values Society and the Association for the Study of Food and Society. State College, Pennsylvania, 28-31 May 2009.

Muchnik J, Sautier D., 1998. Systèmes agro-alimentaires localisés et construction de territoires. ATP CIRAD, 46p.

Otsuki, K. (2014). Social economy of quality food. International Journal of Social Economics 41: 233-243.

Porter, Michael E. (1998). Clusters and the New Economics of Competition. Harvard Business Review, Boston.

Schmid, O., et al. (2012). The bioeconomy concept and knowledge base in a public goods and farmer perspective. Bio-based and Applied Economics 1(1): 47-63.

Sylvander, B., Allaire, G., Belletti, G., Marescotti, A., Thevenod-Mottet, E., Barjolle, D., & Tregear, A. (2006). Les dispositifs français et européens de protection de la qualité et de l'origine dans le contexte de l'OMC : justifications générales et contextes nationaux. Revue canadienne des sciences régionales, 29(1), 43-54.

Thévenod-Mottet, E. (2010). Geographical Indications and biodiversity. In Lockie, S. and Carpenter, D. (eds.), *Agriculture, Biodiversity and Markets*, 201-212. London: Earthscan.

ENDNOTES

[i] For more information consult AREPO website: http://www.arepoquality.eu/en

[ii] For more information on the seminar consult the following link: http://www.arepoquality.eu/it/event/1313

[iii] For more information: http://www.origin-food.org/2005/index.php?r=1&Largeur=1366&Hauteur=768

[iv] Horizon 2020, Call SFS-20-2015, Sustainable food chains through public policies: the cases of the EU quality policy and of public sector food procurement. For more information on the call consult the following link .

[v] For more information consult ERG SYAL -LAFS website: http://syal.agropolis.fr/

[vi] GIS SYAL -LAFS (Localised agrifood systems) created in 2001 in France by six institutions: INRA, CIRAD, the University of Versailles - Saint Quentin, University of Montpellier I, Sup Agro de Montpellier and Agropolis International.

[vii] Congresses: I "SYAL: products, businesses and local dynamics", Montpellier – France, Octobre 2002; II "Rural and territorial Agroindustry" (ARTE), Toluca – Mexico, December 2004; III "Food and territories" (ALTER), Baeza-Spain, Octobre 2006; IV "Food, Family Agriculture and Territories", Mar del Plata-Argentina, October 2008; V "Spatial dynamics in agro-food systems: implications for sustainability and consumer welfare", Parma-Italy, October 2010; VI "Facing opportunities and challenges in the new global context", Forianopolis-Brazil, May 2013 .