Chapter 26
Terroir-Based Geographical Indications in the Face of Climate Change: The Narrow Path of a Strategic Reinterpretation of the Link to Origin

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Acronyms

GI	Geographical Indications
IPR	Intellectual Property Rights
AP	Appellation of Origin
INAO	National Institute of Origin and Quality
PDO	Protected Designations of Origin
PGI	Protected Geographical Indications
CO	Control Organisation

26.1 Introduction

Climate change is gradually becoming an essential, even existential, issue for geographical indications (GI). A GI is an intellectual property right that reserves for a collective of producers the exclusive use of a name due to the unique and specific aspect of the product linked to its origin. The administration of proof of the link to the place is at the heart of the justification of the instrument. However, the effects of climate disruption are changing the characteristics of the terroir (precipitation, temperatures, etc.) affecting productivity and/or the final quality of the product. This results in increasingly numerous and recurrent requests for derogation from the specifications. The model is pushed to its limits (Clark and Kerr 2017).

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E. Vandecandelaere et al. (eds.), *Worldwide Perspectives on Geographical Indications*, https://doi.org/10.1007/978-3-031-71641-6_26

Faced with the acceleration and increased amplitude of these upheavals, producer collectives adapt, innovate. This situation refers to what the field of strategic management problematises as a "tension between perseverance and flexibility" (Gersick 1994), which characterises the dynamics of organisational adaptation. In this respect, the notion of adoption is particularly used in management sciences to restore the dynamics and processes of interpretation, negotiation and construction of meaning that take place around the instrument, which actors use to develop and reinvent the collective action model that suits the situation (Segrestin 2004). It seems interesting to consider this challenge to GIs by climate change in the light of this managerial problematisation. In the current dynamics of adoption of geographical indications, can the link to the terroir, the heart of the "historical promise" of GIs, be a support for collective learning and of innovations in the face of the need for adaptation to climate change?

We propose to conduct our reflection around the European system *sui generis* of registration and protection of GIs, envisaged as an organisational support for learning and collective innovations (Le Masson et al. 2006; Moisdon 1997). Initially, in a descriptive and synchronic manner, we will detail the different dimensions as they have stabilised in the current system in force. Secondly, in an analytical and diachronic manner, we will revisit the dynamics of endogenous adoption (Grimand 2012) of this European system of origin protection, from a definition of its *adaptive attributes* (Ansari et al. 2010). We will then specify the dimensions of the instrument put under tension during this process, particularly in relation to the link to the terroir. Thirdly, we will consider the effects of climate change as an exogenous disruption of the GI appropriation process, and propose an exploratory discussion on emerging strategies and new learning modalities around a reinterpretation of the link to origin under the constraint of adaptation to climate change.

26.2 Geographical Indications, a Support for Learning and Collective Innovations

The geographical indication makes the recognition of the particular, local, identified conditions of production, the heart of a quality or a unique reputation to protect and promote. The European Commission and the Member States have made this legal tool an economic lever for enhancing a part of their agricultural, food and wine productions on domestic markets and for export. In order to better understand how this legal-economic tool interacts with its users to become a support for innovations and collective learning, we propose to describe it, with Hatchuel and Weil (1992, pp. 122–126) then David (1996) following three dimensions considered dynamically and interdependently: the " *formal substrate* " carrying a " *managerial philosophy* " and " *a simplified vision of organisational relations* ".

The managerial philosophy refers to the " *system of concepts that designates the objects and the objectives forming the targets of a rationalisation* " (Ibid, pp. 124).

In the managerial philosophy carried by geographical indications, origin is at the heart of a double legal and economic rationalisation of the link to place. Legally, the progressive incorporation of GIs into the regime of intellectual property rights (IPR) and the consequent recognition of a differentiated treatment is based on the assertion that a distinctive and unique link exists between a certain category of products and their area of origin. In the European system of registration and protection of GIs, it is therefore from the administration of the proof of this particular link that legal protection is granted to applicants. This link to the origin is also subject to an economic rationalisation as it is at the heart of a mechanism for creating particular value. From the revelation of attributes linked to origin, the product can stand out on the markets, thus justifying the premium price displayed (European Commission, 2021). In an ideal-typical operation, this rent linked to the origin can then be redistributed to all private operators involved in the production of the product, and reinvested in the mechanism of collective quality regulation. This "virtuous circle of quality" has the effect of creating an incentive to maintain local production conditions and to generate positive externalities at the territorial level (Vandecandelaere et al., 2009).

While these rationalisations are evolving and contested (Allaire et al. 2005; Sylvander et al. 2006), crossed by controversies and divergent interests, they nevertheless find points of momentary stabilisations, which is the case today at the European level, in the Regulation (EU) No. 2024/1143[1] on geographical indications for wine, spirit drinks and agricultural products, as well as traditional specialties guaranteed and optional quality terms for agricultural products—as well as all the delegated regulations that specify their correct application. These texts and their concrete apparatus (e.g. specifications, control plan, European register of geographical indications, etc.) constitute the technical substrate, that is to say the set of artefacts on which the instrument relies to function. It is notably through the specifications specific to each product that the administration of the proof of the link to the place is made—a proof that is then guaranteed by the control plan and the product's traceability monitoring system, throughout its manufacturing chain. To these localised artefacts, resulting from often long collective learnings, stabilisers of local compromises (Bernard-Mongin et al. 2021; Millet 2019; Quiñones-Ruiz et al. 2016) are added national and European artefacts, which ensure the registration and national and then European recognition and protection of GIs. The minimal European foundation is composed of the single registration (or modification) procedure, finalised by publication in the Official Journal of the European Union and entered in the European register of GIs on the basis of a synthetic description of the product and the link to the place, called the "single document". These common European rules are also transposed into the law of the Member States, and broken down into rules and registration (or modification) procedures at the national level,

[1] This new regulation amends regulations (EU) No 1308/2013, (EU) 2019/787 and (EU) 2019/1753 and repeals regulation (EU) No 1151/2012.

which in turn define the content requirements of the specifications, control plan, but also requirements on the nature or organisation of the producers carrying the GI.

Finally, these managerial artefacts also carry a simplified vision of organisational relationships, defining " *a scene whose characters come to explain the roles that a small number of actors, summarily, or even caricaturally defined* " (Hatchuel and Weil 1992, pp. 125). Thus, a restrictive scene is organised, which revolves around these artefacts, composed of "Producer Groups", that is to say the set of producers who organise collectively to apply for the recognition of their exclusive right to use the GI for the product which they justify by a specific link to the origin by a set of specifications and an associated control plan. The producer group is also involved in the defence and protection actions of the product and the terroir and assumes a role of promotion and valorisation of the product (Réviron and Chappuis 2011). The "National Competent Authorities" are responsible for the official approval of the specifications and the associated control plan. They must ensure the conformity of the practices of the producer group to the specifications. They can delegate the inspections of this conformity to a public control body or to an independent private operator called "Certification Body", which intervenes against payment by the producer group. Where national legal regulation so provide, the certification body is itself controlled on its competence to certify conformity to the standards and rules of GIs by an accrediting body, according to the standard currently in force (ISO/EC 17065:2012). Consumers, finally, are the final recipients of the innovation, through the act of purchase, they reveal their preference and their consent (to pay) for a specific quality guaranteed by the GI certification system.

This first key to reading GIs allows us to consider them as legal and commercial instruments, organisational supports for innovations or collective learnings embedded in the sense that the European system *sui generis* provides for derogatory routes to the global free-trade commercial regime, linked to production spaces anchored in their biophysical and cultural-historical environment ("terroir-niche") (Belmin et al. 2018). These unique and differentiated arbitrations, are thus the result of local compromises, of learning processes stabilised in specifications and their control plan.

26.3 Dynamics of Appropriations of Geographical Indications

We now propose to revisit the dynamics of adoption of the European GI system by following how the link to the origin, the heart of the historical promise of the instrument, has evolved. The dynamics of adoption test the "game" possible between the constitutive dimensions of the instrument (artefacts, managerial philosophy, simplified organisational relations) by making it evolve in a space defined by two main dimensions: fidelity and extensiveness (Ansari et al. 2010). In other words, *in the ways in which diffusing practices are implemented*, the nature of the initial

version is more or less respected (substitution, modification or hybridisation of the managerial philosophy and/or simplified organisational relations) and the degree of implementation of the innovation is more or less high (more or less significant omission of certain elements of the technical substrate). The plasticity of this learning process is a function of the "adaptive attributes" *(key affordances*) of the innovation (ibid.): the *interpretive viability*, the *divisibility* and the *complexity*. The interpretive viability refers to the latitude of reinterpretation allowed by the instrument supporting innovations. Divisibility refers to the possibility of appropriating the innovation independently of scale. The complexity indicates a difficulty perceived by the actors to use and understand the innovation due to numerous grey areas and uncertainties. If the attributes are given by the material and cognitive dimension of the instrumentation, they are also constructed by the practices, uses and interpretations that are made of it. It is by describing the evolutions in time and space of the innovation that one can appreciate the tension between "perseverance and flexibility".

The concept of GI in Europe is derived from that of appellation of origin (AO), this one carried by the southern Mediterranean countries such as France, Italy, Spain or Portugal. Initially limited to wines and spirits, the appellation of origin was then extended to agri-food products in the 1990s (Bienaymé 1995), which explains the way in which the link to the origin crystallised initially around the notion of terroir in the viticultural sense. As Barham (2003) deciphers, " *Historically, terroir refers to an area or terrain, usually rather small, whose soil and microclimate impart distinctive qualities to food products. The word is particularly closely associated with the production of wine* ". In this understanding, the terroir pre-exists the product and the collective of producers who only reveal its potentialities through their know-how (Bérard and Marchenay 2004). This encoding of the attributes of a product linked to its origin defines an "essentialist" type relationship between the product and its territory of origin.

However, during the Europeanisation (then internationalisation) of GIs, the terroir paradigm had to compose with another understanding of the protection of origin based on the concept of reputation. Gangjee (2017) thus speaks of the "European compromise", to designate the harmonised regime at the beginning of the 1990s which cohabits under Regulation (EU) No 2081/92, geographical indications " *whose quality or characteristics are due essentially or exclusively to the geographical environment including the natural and human factors, and whose production, processing and elaboration take place in the delimited geographical area* ", but which recognises and protects just as well products whose "a *certain quality, reputation or other characteristic can be attributed to this geographical origin and whose production and/or the transformation and/or processing takes place in the defined geographical area"*.

This compromise was maintained (and strengthened) in the successive regulations of 2006 and 2012, leading to two different denominations: Protected Designations of Origin (PDO) for GIs whose uniqueness is given by a close link with a specific terroir (GI-terroir); and Protected Geographical Indications (PGI) for GIs based on a reputation or know-how (GI-reputation). A recent study outlining the

state of the art on GIs in Europe, confirms from a chronological analysis how PGIs have become the predominant mode of registration and protection from the mid-1990s, to represent, since 2012, nearly 67% of registration requests against 33% for PDOs (Zappalaglio et al. 2022). This shift from the concept of terroir towards a simplified relationship with origin was reinforced by the standardisation of the GI control system initiated by Regulation (EU) No 520/2006. This latter, by specifying the nature of the controls, standardises a model of certification by third-party bodies approved (by the competent national authority) and accredited according to the European certification standard. In France for example, this precision of the technical substrate of the European GI system has significantly altered the balance of "simplified organisational relations" that existed before, by giving a more important role to private Control Bodies (CBs) in the evaluation of product conformity. Bodies that operate from a standardised evaluative reference, whereas previously the public authority in charge of control (i.e. the National Institute of Origin and Quality (INAO)) operated with localised, territorialised references, due to its historical presence in production areas (Marie-Vivien et al. 2017).

This reinterpretation of the endogenous adoption dynamics of GIs shows that the interpretative flexibility of the instrument has allowed the original management philosophy to be adapted, to allow for wider dissemination. This was possible by loosening the relationship with the terroir, and allowing a broader interpretation of the link to origin, also understood as a historical (know-how, tradition) or reputational link to the territory, freed from its biophysical or ecosystemic dimension. However, it is observed that the *sui generis* registration and protection regime for GIs in the European Union has maintained all of its architecture[2] . In other words, this model of origin protection does not easily accommodate partial or "low dosage" adoption, and requires full implementation to function, or even "something more is necessary" (Gangjee 2015). This is explained by the fact that the simplified model of the organisational relations of the GI does not saturate either the meaning or the form of the local arrangements necessary for the GI to perform: by leaving grey areas, and interpretative margins it allows for ad-hoc organisational combinations or assemblies, specific to a given situation. For example, the status of the "group of producer applicants" for the GI, as defined by the European Regulation, is broad and does not predispose its legal form. Thus, several organisational realities coexist under the status of applicant: profit-making or non-profit organisations (e.g. Italian Consorzio (cooperative form) or French defence and management organisation (ODG) (associative form)), local authorities in some cases, several groups of producers in the case of a cross-border geographical area. The instrument also requires collective coordination that actively involves the "shareholders" directly involved in the stages of production, valorisation and protection of the product, but also the stakeholders in

[2]In comparison, it should be noted that the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS, 1992) within the framework of the World Trade Organisation (WTO) and the Geneva Act (2015) of the Lisbon Agreement within the framework of the World Intellectual Property Organisation (WIPO) both recognise a plurality in the modes of organisation of the defence of intellectual property related to origin.

the process, facilitators of its creation and implementation (local authorities, international NGOs, intergovernmental organisations, sector organisations, research structures, etc.). This complexity in turn reinforces the dimension "tailor-made" for the dynamics of GI adoption, by maximising the interpretative flexibility of the instrument, while maintaining the entire technical substrate in a rather rigid manner, as it guarantees the final effectiveness of the instrument, mainly on its legal dimensions (protection of the name, fight against counterfeiting) (EUIPO 2016) and economic (added value, market share gain) (European Commission 2021).

26.4 Emerging Strategic Perspectives for "Terroir-Based GIs" in the Face of Climate Change

Climate disruption now exogenously seizes this adoption process, necessitating strategic reflection on the tool in times of crisis. However, as Clark and Kerr (2017) rightly analyse, not all GIs are questioned with the same intensity. It is essentially the "terroir-based GIs" (*terroir based*), which are particularly affected, as the effects of climate disruption alter the very characteristics of the terroir (rainfall, sunshine, temperatures, etc.) in an unpredictable, jerky manner, reducing productivity or affecting the final quality of the product. The increase in the frequency of these effects makes a conservative stance and strict adherence to the specifications difficult in the long term. Producers' collectives adapt, innovate (new varieties or breeds, modification of the cultural calendar, feeding outside the area, correction of the organoleptic qualities of the product, etc.) at the risk of stretching the link to the place. The terroir-based GI model is therefore pushed to its limits: " *As a result, pressure for altering the legal specification of terroir may arise* " (Ibid). These elements have been incorporated into the ongoing reflection on the different adaptation strategies in the French wine industry, which envisage a difficult future for GIs whose link to origin is essentially based on terroir (Ollat et al. 2021). Would it then be possible to envisage a third way forward for terroir-based GIs (Touzard and Ollat 2022) and propose an interpretation of origin that is not fixed but adaptive? More precisely, it would be the effort to adapt to the terroir and its characteristics—translated by an adaptive co-management of territorial resources—that would (re)-establish the link to the place. This proposal opens the way to a redefinition of origin, in a procedural—and no longer essentialist—conception of the relationship between the product and its terroir.

In an exploratory manner, we can then sketch out elements of necessary rearrangements for the development of this third way. On the managerial philosophy, first, this adaptative perspective of origin-based quality proposes a reinterpretation of the link to the place under the sign of coevolution under climate constraint, of production practices and terroir. It requires putting the act of production at the heart of the agroecosystem, more systematically highlighting the link of the product to the biophysical environment and the specific resources it mobilises, and

organising the recognition of evolving attributes that are different from the static attributes traditionally highlighted in the specifications (nature, climate, breed, raw materials). The terroir would be tinged with experimental agroecology, and terroir-based GIs would be a support for collective learning, guaranteeing a synergy between adaptation strategies to climate change and agroecological transitions. It would be a matter of increasing the technical substrate of the GI, by introducing into the specifications and the control plan the modalities of monitoring this evolving relationship of the product and its agroecosystem under climate constraint. Some options in this direction have already proposed the development of additional modules in the PDO specifications (PDO+), including elements of sustainability—sustainability of practices and maintenance of certain ecological values at the landscape scale—with financing mechanisms that would be partly linked to the Common Agricultural Policy (Flinzberger et al. 2022). More recently still, the new regulation no. 2024/1143 in its article 7, proposes to include in the specifications, "< *higher sustainability standards than those provided by Union law or national law on environmental matters* " and specifies a number of so-called sustainable practices in paragraphs a and b, which can be quoted here in their entirety: " *a) the mitigation of climate change and adaptation to it, the sustainable use and protection of landscapes, water and soil, the transition to a circular economy, including the reduction of food waste, the prevention and reduction of pollution, and the protection and restoration of biodiversity and ecosystems; b) the production of agricultural products using methods that reduce the use of pesticides and manage the risks resulting from such use, or reduce the risk of resistance to antimicrobials in agricultural production"* . It is then expected from the "producer group" to "provide *advice, organise training and disseminate guidance on good practices for current and future producers, including with regard to sustainable practices, particularly those provided for in Article 7, scientific and technical advances, the transition to digital, the integration of the gender dimension and equality between men and women, and consumer awareness* ". The actantial scheme of the GI would then be augmented with new "actors" of the GI. Not only the producers but also all the operators involved in the co-construction of adaptation choices to climate change in view of the state of the biophysical environment (agricultural advisers, certification bodies, local authorities, research operators, etc.). A terroir engineering informing a governance of local resources, would allow a co-construction of adaptation choices with the Producer Group. It would be a matter of informing along the way the new production practices so that they prove a certain degree of "fidelity" to the terroir in relation with the competent authorities and certification bodies. It would also be a matter of shaking up the stable definition of a quality/typicity of products, based on an objectification of stable organoleptic or physico-chemical characteristics and to obtain from consumers, a consent to pay for a product with evolving characteristics.

This third way designates a strategic possibility of evolution of European GIs that would affect all dimensions of the instrument. This perspective also calls for a reflection on the steering of this "strategic emergence" and on the form of learning processes (Miller 1996) to coordinate: an institutional type of learning at the level of national and European competent authorities, and an experimental learning at the

level of production territories. However, if the institutional type of learning is mostly conducted from the development of standards (regulatory and legislative framework of GI) in a dynamic where choices are guided by values, and where the primary objective is to ensure overall coherence, experimental type learning follows a trial/error dynamic, in which action is central, choices are informed by feedback, and the primary objective is adaptation. These two types of learning do not have the same timing, nor the same tolerance for uncertainty or the same ability to push disruptive innovations. Their very different nature therefore raises the question of the means and modalities of their articulation.

26.5 Conclusion

These analytical elements on the process of appropriating European GIs allow us to define a (narrow) field of strategic emergence, in which the link-to-origin, based on the notion of terroir and currently undermined by climate change, can be reinvented. The delimitation of this strategic field takes into account determination effects linked to the different dimensions of the instrument (technical substrate, managerial philosophy and simplified organisational relations) and the way they have been mobilised, hybridised, transformed, during their adoption within the European Union and internationally. Thus, the interpretative flexibility of the European GIs model has resulted in the coexistence of two variants of a managerial philosophy of the link-to-origin, which is at the heart of the justification of this intellectual property right. These two interpretations (PDO and PGI) are solidly anchored by a technical substrate and a weakly divisible organisational structure, which despite their complexity, ensure a certain extensiveness of the GIs model, as an innovation during its diffusion. The majority adoption is to go for a broad interpretation of the link to origin, mainly based on product reputation (historicity of know-how, production practices). This avoids the thorny issue of terroir subject to changing climatic condition . This trend has been reinforced by the standardisation of controls, a nodal point in the organisation of the technical substrate of European GIs. These elements thus confirm the narrow path of a third way which would combine "perseverance and flexibility" and maintain the historical promise of the instrument. Adaptative terroir-based GIs would continue to base their justification on a strong link-to-origin, but by reinterpreting the notion of terroir. It would then be a question of fundamentally re-inscribing the act of production at the heart of its biophysical environment. The terroir would then be a constantly updated (and verified) assertion of the co-evolution of production practices with their natural environment. This proposal goes against the dynamics of adoption of the GI over the last 20 years. However, it would open up synergistic paths between adaptation strategies to climate change and agroecological transition.

References

Allaire G, Sylvander B, Belletti G, Marescotti A, Barjolle D, Thévenod-Mottet E, Tregear A (2005) 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. Paper presented at the Symposium international—Programme transversal de l'INRA "Pour et Sur le Développement Régional" PSDR, Lyon, France.

Ansari SM, Fiss PC, Zajac EJ (2010) Made to fit: how practices vary as they diffuse. Acad Manag Rev *35*(1):67–92. https://doi.org/10.5465/amr.35.1.zok67

Barham E (2003) Translating terroir: the global challenge of French AOC labeling. J Rural Stud *19*(1):127–138. https://doi.org/10.1016/S0743-0167(02)00052-9

Belmin R, Meynard J-M, Julhia L, Casabianca F (2018) Sociotechnical controversies as warning signs for niche governance. Agron Sustain Dev 38(5):44. https://doi.org/10.1007/s13593-018-0521-7

Bérard L, Marchenay P (2004) Du terroir révélé à l'indication géographique. In: Bérard L, Marchenay P (eds) Les produits de terroir : Entres cultures et règlements. CNRS Éditions, Paris

Bernard-Mongin C, Balouzat J, Chau E, Garnier A, Lequin S, Lerin F, Veliji A (2021) Geographical indication building process for Sharr Cheese (Kosovo): "Inside Insights" on sustainability. 13(10):5696. https://doi.org/10.3390/su13105696

Bienaymé M-H (1995) L'appellation d'origine contrôlée. Revue de Droit Rural 236:419–424

Clark LF, Kerr WA (2017) Climate change and terroir: the challenge of adapting geographical indications. 20(3–4):88–102. https://doi.org/10.1111/jwip.12078

David A (1996) Structure et dynamique des innovations managériales. Cinquième Conférence de l'Association Internationale de Management Stratégique, Lille, 12–15.

EUIPO (2016) Infringement of protected Geographical Indications for wine, spirits, agricultural products and foodstuffs in the European Union. Retrieved from Alicante, Spain. https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/Geographical_indications_report/geographical_indications_report_en.pdf

European Commission (2021) Study on economic value of EU quality schemes, geographical indications (GIs) and traditional specialities guaranteed (TSGs), Final report, Directorate-General for Agriculture and Rural Development, Publications Office. https://data.europa.eu/doi/10.2762/396490

Flinzberger L, Cebrián-Piqueras MA, Peppler-Lisbach C, Zinngrebe Y (2022) Why geographical indications can support sustainable development in European Agri-Food landscapes 2. https://doi.org/10.3389/fcosc.2021.752377

Gangjee DS (2015) Proving provenance? Geographical indications certification and its ambiguities. World Dev. https://doi.org/10.1016/j.worlddev.2015.04.009

Gangjee DS (2017) From geography to history: Geographical indications and the reputational link. In: Calboli I, Ng-Loy W (eds) Geographical indications at the crossroads of trade, development, and culture: focus on Asia-Pacific. Cambridge University Press, Cambridge, pp 36–60. Available at SSRN: https://ssrn.com/abstract=2923892

Gersick CJG (1994) Pacing strategic change: the case of a new venture. Acad Manag J *37*(1):9–45. https://doi.org/10.2307/256768

Grimand A (2012) L'appropriation des outils de gestion et ses effets sur les dynamiques organisationnelles: le cas du déploiement d'un référentiel des emplois et des compétences. Revue management et avenir 4:237–257. https://doi.org/10.3917/mav.054.0237

Hatchuel A, Weil B (1992) L'expert et le système. Gestion des savoirs et matamorphose des acteurs dans l'entreprise industrielle. Editions Economica, Paris

Le Masson P, Weil B, Hatchuel A (2006) Les processus d'innovation. Conception innovante et croissance des entreprises. Hermès-Lavoisier, Coll. « Science Publication », Paris

Marie-Vivien D, Bérard L, Boutonnet J-P, Casabianca F (2017) Are French geographical indications losing their soul? Analyzing recent developments in the governance of the link to the origin in France. World Dev 98:25–34. https://doi.org/10.1016/j.worlddev.2015.01.001

Miller D (1996) A preliminary typology of organizational learning: synthesizing the literature. J Manag 22(3):485–505. https://doi.org/10.1016/S0149-2063(96)90033-1

Millet M (2019) From Ossau and Iraty to PDO Ossau-Iraty: The long-term construction of a product based on two distinct places. Br Food J *121*(12):3062–3075. https://doi.org/10.1108/BFJ-10-2018-0719

Moisdon J-C (1997) Du mode d'existence des outils de gestion : les instruments de gestion à l'épreuve de l'organisation. Editions Seli Arslan, Paris, 286 p

Ollat N, Zito S, Richard Y, Aigrain P, Brugiere F, Duchêne E et al (2021) La diversité des vignobles français face au changement climatique: simulations climatiques et prospective participative. Climatologie *18*:3. https://doi.org/10.1108/BFJ-10-2018-0719

Quiñones-Ruiz XF, Penker M, Belletti G, Marescotti A, Scaramuzzi S, Barzini E et al (2016) Insights into the black box of collective efforts for the registration of Geographical Indications. Land Use Pol *57*:103–116. https://doi.org/10.1016/j.landusepol.2016.05.021

Réviron S, Chappuis J (2011) Geographical indications: collective organization and management. In: Barham E, Sylvander B (eds) Labels of origin for food: local development, global recognition. CAB International, On-Line, pp 45–62

Segrestin D (2004) Les chantiers du manager. Edition Armand Colin, Paris

Sylvander B, Allaire G, Barjolle D, Thévenod-Mottet E, Belletti G, Marescotti A, Tregear A (2006) Qualité, orgine et globalisation: Justifications générales et contextes nationaux, le cas des Indications Géographiques. Can J Reg Sci XXIX(1):43–54

Touzard JM, Ollat N (2022, 10/16) Les vins d'appellation vont-ils disparaître ou renaître avec le changement climatique? The Conversation.

Vandecandelaere E, Arfini F, Belletti G, Marescotti A, Allaire G, Cadilhon J-J et al (2009) Linking people, places and products. A guide for promoting quality linked to geographical origin and sustainable geographical indications. FAO-SINER-GI, Rome. 193 p

Zappalaglio A, Carls S, Gocci A, Guerrieri F, Knaak R, Kur A (2022) Study on the functioning of the EU GI system (March 18, 2022). Max Planck Institute for Innovation & Competition Research Papers, München. Available at SSRN https://ssrn.com/abstract=4061160

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ISBN 978-3-031-71640-9 ISBN 978-3-031-71641-6 (eBook)
https://doi.org/10.1007/978-3-031-71641-6

This work was supported by Food and Agricultural Organisation

The original submitted manuscript has been translated into English. The translation was done using artificial intelligence. A subsequent revision was performed by the author(s) to further refine the work and to ensure that the translation is appropriate concerning content and scientific correctness. It may, however, read stylistically different from a conventional translation.

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Acknowledgement

This book is the result of many rich contributions prepared by different authors to provide crossed views on geographical indications development in the world. All the authors (see list page 168) are all thanked for their great contributions on various topics, their specific knowledge and their interest in sharing their experience or research, as well as for their patience in addressing the editor committee requests.

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