



Can Geographical Indications Modernize Indonesian and Vietnamese Agriculture? Analyzing the Role of National and Local Governments and Producers' Strategies

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Summary. — This paper investigates the way Geographical Indications (GIs) are implemented by national and local governments in Indonesia and Vietnam. The two States are active at all stages of GI development, from the selection of the products candidates for GI registration to the supervision of the GI implementation. Thanks to the involvement of national experts from public agencies in the establishment of the Codes of Practices (CoP), they are able to push for the substitution of traditional local techniques with “good practices” (i.e., mostly those recommended by research centers worldwide). Thus, they put GIs at the service of agricultural modernization when GIs apply more conventionally to specific products based on traditional know-how.

However, the implementation of the CoPs and thus the achievement of this objective of modernization depend on the perceived interest of producers in the whole GI dynamic. Indeed, the cases studied in Indonesia and Vietnam highlight the variable level of participation of local producers in the GI. In the four studied cases, the CoPs are mainly based on expert knowledge which differs from the actual practices of farmers and processors. Moreover, GIs are implemented in order to create or reinforce reputations rather than legally protecting preexisting ones. For these two reasons, producers' motivation to invest in GI certification is weak, which makes difficult the necessary collective involvement.

In both countries, the involvement of local governments in GI construction and management modifies the situation. Thanks to their knowledge of local situations and stakes, they are more likely than national experts to identify the most strategic supply chains at local level, enable participatory approaches in GI construction and facilitate the involvement of local producers in the GI managing group. But if competences have been given to local governments in the Indonesian and Vietnamese legal frameworks, the distribution of roles between central and provincial governments in GIs are not clearly enough specified. The nature and the importance of local public intervention differ from one case to another.

Finally, this paper recognizes the legitimacy of State intervention in GI development, at least as long as producers' awareness of GIs is still low. However, this State intervention should not only let enough space for producers in GI governance, but also design a frame for arousing their interest and adhesion and for facilitating their collective involvement. That may be facilitated by a concrete and clearly established decentralization of competences in national policies.

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1. INTRODUCTION

Indonesia and Vietnam are among the countries where State management of agriculture is the strictest. Since Independence and up to the 1980s, national agricultural policies focused first on self-sufficiency and then on cash crops. Exported commodities such as palm oil in Indonesia and coffee, pepper and rice in Vietnam developed rapidly (Booth, 1989), allowing these countries to reach the top ranks in the world market. To achieve these objectives, the two States adopted an interventionist approach. De Koninck (2004), Bui and Duc (2002), Maurer (1993) and Booth (1989) highlight the modalities of State intervention (in Vietnam and/or Indonesia), based on the rehabilitation or expansion of agricultural land as well as national programs for producer training, production intensification, supply chain structuring, and so forth. Thus, over the last four decades, agricultural modernization has been—and remains—a priority in agricultural policies. From a technical point of view, the objective is to substitute “traditional” techniques by “modern” ones, using the most productive varieties or breeds and efficient technical itineraries. From an organizational point of view, gathering producers into organizations is sought to achieve economies of scale during the process and/or marketing of the products. These policies are defined at

national level by the Ministries of Agriculture and at provincial level by local governments, and then implemented at all lower levels, via dense local networks of extension agents.

The specific objectives of this agricultural modernization have progressively diversified. Increasing yields remains a priority (ESCAP, 2009), but food quality and safety as well as, more recently, environmental sustainability have also emerged as new targets (Arifin, 2013; Dufumier, 2000; ESCAP, 2009; Tran, 2014).

Over two decades, Indonesia and Vietnam have also witnessed a new trend toward decentralization. In Vietnam, it was necessary to accompany the economic reforms during the 1990s (Fforde, 2003; Fritzen, 2006). In Indonesia, it was considered crucial to maintain national unity from 1999 onward (Dormeier-Feire & Maurer, 2002; Rasyid, 2004). Both countries have pursued improved and more efficient governance, by “*bringing governments closer to the people*” (Ramesh, 2013). However, the impact of decentralization in Indonesia and Vietnam has remained limited up to now. Even though decentralization began in the 1990s, it remains patchy; central administrations still hold most political power

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(Dormeier-Feire & Maurer, 2002; Fritzen, 2006; Ramesh, 2013). The low quality of decentralized services in Asia is indeed ascribed to this “truncated model of decentralization” (Ghuman & Singh, 2013). In Vietnam, with the current governance structure, “incentives for bureaucratic actors and local leaders to transfer meaningful control downwards are weak or non-existent” (Fritzen, 2006). Ribot, Agrawal, and Larson (2006) go further, identifying the strategies that central governments apply to maintain control in six developing countries (including Indonesia) in which the decentralization process is engaged. This incomplete decentralization process can affect governance and lead to strong competition between national and provincial authorities (Faguet, 2014) and to “particularly volatile socio-legal configurations” (McCarthy, 2004).

Since 1995 in Vietnam and 2007 in Indonesia, the governments also play an active role in the development of Geographical Indications (GIs). Interest and investment in GI development increased rapidly in both countries, and they now figure, alongside Thailand (Ngokkuen & Grote, 2012), and Malaysia, among the most active South-East Asian States in respect of GIs (Benerji, 2012).

The motivations of the two States have to be highlighted. As in many developing countries, GIs appeared as an efficient way to promote agricultural products in a context of globalization and to reduce the risk of the misappropriation of names (Anders & Caswell, 2009; Bramley & Biénabe, 2012; Vittori, 2010). Indeed, as intellectual property rights (IPR), GIs are designed to protect the appellation of regional products wherever a given quality, reputation, or other characteristic of the good is essentially attributable to its geographical origin. In contexts characterized by information asymmetry, where consumers are unable to assess the quality of food products in detail by themselves, GIs can help avoid situations whereby “bad products drive out good ones,” a risk seminally highlighted by Akerlof’s model (Akerlof, 1970). GIs thus protect and sustain quality handcrafted food products in a context of broader competition, notably from agro-industrial products (Rangnekar, 2004; Vandecandelaere, Arfini, Belletti, & Marescotti, 2009).

Aside from the legal protection and quality labeling functions, other potential roles have been highlighted in the literature. The collective management required for GIs to succeed can unite local economic actors and empower local organizations, allowing supply and price controls for agricultural markets and rural development. In some cases, by valorizing natural and cultural heritage, GIs also play a resource conservation role (Gangjee, 2012; Jena & Grote, 2010; Sylvander *et al.*, 2006), which may enhance the development of grass-roots economies (Agdomar, 2008) and support the autonomy of rural communities (Bowen, 2010). GIs have significant ability to steer the trajectories of production systems, as the rules outlined in the Code of Practices (CoP) may, for instance, allow or prevent the industrialization of agricultural production or processing (Allaire & Sylvander, 1997)¹.

Another potential function of GIs is product differentiation. In a globalized context, GIs may play an effective role as “decommodifier”, by changing the status of an agricultural product from “commodity” to “origin product” (Galtier, Belletti, & Marescotti, 2013), which can in turn increase the selling price and/or market share. It has been demonstrated that consumers do respond to GI quality labels on a food product, even when unaware of the specificity associated with the indicated geographical origin (Teuber, 2010; Verbeke & Roosen, 2009). In the same way, in China, GIs are perceived as indicators of food safety, creating another kind of differentiation (Zhao, Finlay, & Kneafsey, 2014).

Given their multiple potential functions and even if the impacts are not systematically positive (Barjolle & Sylvander, 2002; Bowen & Zapata, 2009; Galtier *et al.*, 2013), some States (notably European ones) consider that GI protection can play a role in agricultural policies (Josling, 2006; Rangnekar, 2004; Sylvander *et al.*, 2006). By helping combat counterfeiting and strengthening/creating reputations, GIs may raise producer incomes, enable markets to grow (Bowen, 2010) and boost local agricultural activity, leading to spillover effects on other local supply chains or services (Pecqueur *et al.*, 2008). GIs may then be used by governments notably to stem rural exodus and develop marginalized rural areas in which intensive agriculture cannot compete, but also to promote sustainable diversification within the most productive agricultural areas.

If it is admitted that GIs can be used as agricultural policy tools, a question arises with Indonesian and Vietnamese investments in GI development: can this tool also be used for the agricultural modernization which is still at work in Indonesia and Vietnam? In other words, are GIs developed in these two countries for the reasons given above, alongside (and potentially in contradiction with) agricultural modernization, or are they able to contribute to this objective? Classically, GIs apply to specific products processed with traditional know-how (Bérard & Marchenay, 2004) and thus are not directly compatible with the objective of agricultural modernization. But if governments intervene in the selection of products, financially support the construction of the GIs considered as the most strategic and steered CoP writing, they could use them for this purpose. The potential role of GIs in the State-driven agricultural modernization process has hitherto not been highlighted in the scientific literature.

As they are not mandatory regulations but voluntary norms, the use of GIs as agricultural policy tool entails paying close attention to the involvement of local economic actors. Local producers have the choice to comply or not with GIs’ CoP and therefore to use GIs; GIs have no direct binding effect on technical practices or production systems. Using them within an agricultural policy framework requires producers to be won over to the project, which should then be negotiated between States and local economic actors. Given the localized production system on which GI dynamics are based, local governments’ capacity to ensure this negotiation might be considered as higher than central governments’ one and these local governments might be seen as the most appropriate and legitimate level for GI management. However, despite the extensive literature on GIs, including the emerging but growing focus on the role of the State in GI development, remarkably few of these studies have examined the role of local government in the governance of GI systems (Scudeller, 2009).

The aim of this paper is to understand the role of national and local governments in building and managing GIs, to analyze whether and how GIs are combined with agricultural policies, and to explore the consequences in terms of development. We analyze the administrative level(s) at which GIs are managed in Indonesia and Vietnam, and explore whether GIs participate to the decentralization process occurring in these two countries.

We argue that GIs are being developed in Indonesia and Vietnam to serve agricultural policy and, more precisely, agricultural modernization; GIs being voluntary norms and not mandatory regulations, the adherence of local producers is required, and facilitated by the involvement of local government.

This article is based on empirical evidence from an analysis of national GI systems in both countries and of four case

studies. The data analyzed were collected in Indonesia and Vietnam from 2006 to 2013 through various research and research-action frameworks and consulting activities, in which the two authors were directly involved. Direct observation and interviews with public and private actors, both at national and local levels (around 50 semi-direct interviews of local stakeholders for each GI) enabled us to get an analytical overview of stakeholder strategies.

The following section explores the role of the States in designing and implementing GIs in Indonesia and Vietnam, putting forward the high level of State involvement and the different roles played by national and local governments. Section 3 presents the case studies focusing on stakeholder strategies and the effects of GI on local production systems and supply chains. Section 4 discusses the ability of GIs to contribute to agricultural modernization and the governance of the GI system. Section 5 concludes and provides recommendations.

2. INDONESIAN AND VIETNAMESE STATES IN ACTION FOR GI DEVELOPMENT: MULTIPLE MISSIONS AND LEVELS OF INTERVENTION

Indonesia and Vietnam have a relatively short history in the protection of GIs. Interest in protecting GIs emerged following the WTO Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS Agreement, 1994), as in many Asian countries (Wang, 2006). This section analyzes the multiple interventions of the two States in GI development from the establishment of a legal framework to implementation, and investigates the distribution of competences between central and local governments.

(a) *A progressive establishment of legal frameworks*

The first step toward a GI protection system was to develop a legal framework. This development began in 1995 in Vietnam (Vu & Dao, 2006) and in 2001 in Indonesia (Risang Ayu, 2009).² Given the relative flexibility of the TRIPS Agreement regarding GI protection (the legal means are not specified), Indonesia and Vietnam were both obliged to take decisions on specific points of their GI regulations.

During 1995–2005 in Vietnam, and 2001–07 in Indonesia, a succession of circulars, decrees, and draft laws were drawn up, which progressively clarified the legal nature of GIs and allocated responsibility to public agencies. Alongside international consultants, national experts from governmental bodies and universities played a central role by writing the first drafts and ensuring their coherence with the national legal background of IPR and the international GI protection framework.

(i) *Establishment of the Vietnamese GI legal framework*

From 1995 to 2005, GIs were protected under the Civil Code of 1995 (art. 796), as *appellation of origin* (AO). The definition of AO was based on the specific “quality or characteristics” of a product attributable to its geographical origin. Decree 63/CP of 1996 provides detailed regulations and nominates the National Office of Industrial Property (NOIP), under the Ministry of Science, Technology and Environment, as the competent registration authority. Only two Vietnamese AO were registered during this period (in 2001): Phu Quoc *nuoc mam* (fish sauce) and “snow” tea from Moc Chau.

As preparation for joining the WTO, Vietnam revised its IPR regulations and proposed a new law in 2005. GIs could

also now designate agro-food or handicraft products when, in the terms of the TRIPS Agreement, a “*reputation, quality or characteristics essentially attributable to the geographical conditions of the area*” are involved (IP Law 2005, art. 79). NOIP is still the competent registration authority and applicants can theoretically be the organizations or individuals producing the product or the local administrative authorities. But the first two options have become complicated, and all applications for GIs are now made by administrative authorities.

The detailed regulations made the IP Law rapidly operational and GI registrations accelerated. The AO regulation was not nullified but a preference for GIs over AOs appeared.³ Geographical names can also be protected as certification trademarks.⁴

(ii) *Establishment of the Indonesian GI legal framework*

The development of Indonesian GI regulations, in compliance with the TRIPS Agreement, was motivated by the need to protect famous Indonesian names exposed to the threat of misappropriation (Gayo and Toraja coffees for instance) (Mawardi, 2009).

Trademarks Act No. 15/2001 devoted three articles to GIs and Source of Origin (Chapter VII, articles 56–58).⁵ Article 56(1) defines GI as “*a sign which indicates the place of origin of goods, which due to its geographical environment factors, including the factor of the nature, the people or the combination of the two factors, gives specific characteristics and quality to the goods produced therein.*” GI protection was not immediately operational after this Trademarks Act; it anticipated the promulgation of a Governmental Regulation to specify registration procedure. Governmental Regulation No. 51-2007 was issued on September 4, 2007. It specifies the GI registration procedure and indicates the Directorate General of Intellectual Property (DG IPR), under the Ministry of Law and Human Rights, as the competent registration authority. DG IPR becomes responsible for the administrative examination; the Regulation also stipulates that an inter-ministerial “team of GI experts” (TAIG) will be created to handle the substantive examination of applications.

The applicant could be “*an institution that represents the people in the area or an institution that is given the authority to do so*”. This has created in Indonesia a different situation from Vietnam: only two Indonesian GIs have been registered by a local government and most applicants have been local associations created for GI development.

In 2011, an internal Memorandum of Understanding between the Ministries of Justice, Agriculture, and Home Affairs⁶ clearly established the collaboration of the three ministries for the development of GIs.

(b) *Beyond the law: the diversification of the State’s role in GI development*

The role of the Indonesian and Vietnamese States in the development of GIs goes beyond the legal framework. The two States also have a major influence on local GI dynamics through stimulating the emergence of GI projects, and to a certain extent, piloting the construction of the GI applications.

In order to be able to play these “additional” roles, the Indonesian and Vietnamese public authorities have proven to be very active in training national GI experts and raising awareness of local actors about GIs. Both States also provide financial support for GI implementation.⁷

The most significant State involvement in GI development is through technical assistance for building GI dynamics. The governments of both Indonesia and Vietnam maintain an

up-to-date national census of potential GI products. The legal framework of both countries requires a CoP from the applicants. As explained above, this document is examined by the national competent bodies and must clearly establish the influence of the local factors on the product's specificity or reputation. In so doing, the CoP also explains the technical rules to be followed by supply chain actors in order to maintain the product's specific quality.⁸ The strategies of the Indonesian and Vietnamese States are proactive: the whole investigation process and writing of the CoP are supervised by public authorities. In Indonesia, the GI experts from the TAIG work in collaboration with local or national specialists to provide technical assistance. In Vietnam, researchers from national institutes specializing in rural development (under the Ministry of Agriculture)⁹ are responsible for conducting these tasks, in collaboration with local public agencies of the Ministry of Sciences and Technology.

(c) *Government participation in GI development: what authority at what level?*

In the context of decentralization in Indonesia and Vietnam, the division of authority between national and local levels regarding GIs is particularly interesting. Interviews with Indonesian and Vietnamese representatives of the national authorities in charge of GIs enabled us to identify this issue as a key point in GI implementation in both countries, as the role of the different administrative levels has not yet been clearly and officially established. Collaboration with local authorities is mentioned and recommended in several decrees or internal notes in both countries; and current practices indeed demonstrate a desire for collaboration between central and local levels in local GI dynamics. But in some cases, excessively centralized (or ineffectively decentralized) GI governance still impedes this collaboration.

The Vietnamese GI system distinguishes between the *right to register* (which belongs to the central State—NOIP—) and the *right to manage*. After registration, the *right to manage* the GI is granted by the central government to a local authority. The NOIP usually grants the *right to manage* to provincial Departments of Science and Technology. The rules are less clear concerning the phases leading up to GI registration. The provinces have gradually become more involved in the identification of potential GIs on their territory, and mobilized human and financial resources to support GI building. However they require funding from the central State. The application process starts only after central authorities grant approval and financial support. Central governments may then block or slow many GIs, as they do not have the resources (or the desire) to support all potential GI products identified by the provinces. Collective trademarks, less expensive and easier to register, are therefore sometimes preferred by local economic actors.

In Indonesia, the role of local governments in GI application is theoretically limited to a *letter of recommendation* as a validation of the GI geographical area. After registration, the GI is officially managed by the applicant. Where the applicant is a GI association (as is most commonly the case), the legal framework specifies that GI management is carried out in coordination with the local Bureau of Agriculture. As in Vietnam, in practice, local governments are strongly involved in the emergence of local GI dynamics (conducting local field studies and meetings on CoP, farmer and buyer awareness-raising), mainly through the provincial and district Bureaus of Agriculture and extension services, but remain financially dependent on central governments.

In both countries, the official distribution of competences between levels appears to be more regulated for post-registration management, especially in Vietnam, than for the pre-registration process. Local public agencies are willing to participate in local GI dynamics but lack the internal resources to do so. In some cases (e.g., Gayo coffee in Indonesia, Thanh Hà lychees in Vietnam), local actors (governments and stakeholders) have overcome this lack of resources by attracting external support from cooperation projects or private funding.

Public governance of local GI dynamics must be based on collaboration between central and local governments, but this inter-level collaboration and the role of local governments remain unclear in Indonesia and Vietnam. This is also observed in Europe according to Scudeller (2009). The case studies presented in Section 3 bring further insights into the implication and strategy of local governments in GI dynamics.

(d) *Registered GIs Indonesia and Vietnam*

Since the implementation of the current legal frameworks, Indonesia registered 28 GIs and Vietnam, 36. These GI products illustrate the diversity of local contexts and the rich Indonesian and Vietnamese heritage of agro-food and handicraft products (Mawardi, 2009; Tran, Figuié, Sirieix, & Moustier, 2012). Indonesia has registered GIs for ten coffees, five fruits/vegetables, three tobaccos, two spices, one rice, one handicraft product, and six other products (including very traditional and specific products such as mare's milk from Sumbawa Island and *purwaceng*, a medicinal herb from Dieng in central Java). Vietnam has registered GIs for 18 fruits/vegetables, four spices, three aromatic rice varieties, three coffees, one handicraft product, and seven other products (e.g., the famous Phu Quoc nuoc mam fish sauce and the conical hat from Huê).

Among these GIs, there are products which have enjoyed a high reputation for decades, for which GI registration is designed to offer protection against counterfeiting or misuse of the name (e.g., Muntok White Pepper, Indonesia). By contrast, other GIs have been registered for less famous products that are not affected by any form of misappropriation. In such cases, the objective of the GI is to create, rather than protect, a reputation.

Market types vary also from local, small-scale markets (e.g., honey from Sumbawa, Indonesia) to export commodities (e.g., Buon Ma Thuot Robusta coffee, Vietnam).

The significance of the products in respect of national economic development or food security also varies considerably. While some of these products seem "strategic" (rice, coffee, pepper), the presence among the GI-registered products of "symbolic value" products (e.g., *purwaceng* medicinal herb from Dieng in Indonesia, or the conical hat from Huê in Vietnam) is noteworthy. However, the economic importance on a local scale of these products is sometimes significant. Their presence among the registered GIs demonstrates the central State's interest in using GI to promote national heritage (as it has been shown in other contexts by Biénabe and Marie-Vivien (2015) and by Jena & Grote, 2010) but also reveals the capacity of local governments to boost the selection of local products of regional importance to become GIs. Local governments and stakeholders thus succeed in forcing central States to consider and support local priorities.

Thus, after a relatively long establishment process of the legal frameworks, operational GI systems now exist in Indonesia and Vietnam. In both countries, the number of registrations has clearly accelerated since 2010, largely based on strong public support. The two States' interventions in GI development are

both intense (beyond the original legal aspects) and essential, as they are the only stakeholders able to provide the necessary inputs, the other local economic actors often not being aware of GIs' nature and potential. The GI development process in this context of strong and multi-level State intervention is analyzed in the following section.

3. CASE STUDIES

In this section, we present four GI case studies, two from Indonesia and two from Vietnam. They describe the products' trajectories from a chronological perspective, thereby highlighting changes in pre and post registration processes. The GI building process and management is investigated, focusing on the stakeholders' strategies, in order to analyze: (i) the CoP and the potential orientation given through it to the production system toward agricultural modernization, (ii) GI governance, notably the intervention of local governments and producers' participation and collective action for GI development.

(a) *Kintamani Bali coffee (Indonesia)*

Since the early 19th century, Robusta coffee has been cultivated in Bali, dry-processed by individual growers and sold in local markets (as well as bought by middle-men and exported). For the last 40 years, the provincial government has encouraged Arabica production in the Kintamani mountains and, since the 1990s, wet processing with the help of coffee buyers. *Subak Abian* (village-level cooperatives) were provided with the necessary equipment and technical assistance. The higher quality of Kintamani wet-processed Arabica progressively gained recognition in Bali markets and acquired a small price premium over the dry-processed coffee. Thanks to provincial government facilitation, direct commercial relations between *Subak Abian* and foreign importers have been engaged, but due to irregular supplies and quality as well as lack of international reputation, it remained difficult to export "Kintamani Bali coffee" as a specialty coffee.

In 2001, when the Indonesian Government expressed its intention to protect GIs, Kintamani coffee was selected as a pilot project for its "qualitative potential" recognized by technologists and the existing *Subak Abian* organization. Indonesian and French research centers, in collaboration with the provincial government of Bali, prepared the GI application over a period of 4 years (supply chain and market analysis, regular field surveys...). Producers, who were unaware of the potential of GIs, could obviously not be the initial driving force; however, the heads of *Subak Abian* quickly joined and actively participated in the final establishment of the CoP, which had previously been mainly overseen by local government, with support from researchers, but very little national government involvement. Buyers were invited to the GI building workshops and their technical recommendations were taken into consideration in the CoP.

Legal protection was not an issue as no misappropriation of the Kintamani name had occurred; the primary GI objective was product differentiation and access to the "single-origin" coffee market. After a negotiation process, the final CoP combined "good practices" for coffee production and processes¹⁰, recommended by technologists and promoting agricultural modernization, and to a lesser extent local agricultural practices, which were identified as influencing the specificity of the product¹¹. In accordance with the Indonesian GI system, the applicant, which would be granted the *right to manage* the GI, is an *ad hoc* local association (named the Community of Protection for GI Kintamani Bali Coffee)¹²; but this association,

in the Indonesian context of a State-driven agriculture, had little power over local governments and did not want to be opposed to buyers. It rapidly appeared to align itself with local government and buyers' recommendations (i.e., not to establish a CoP based on traditional local knowledge).

The Kintamani Bali coffee GI was registered by the association in December 2008. In subsequent years, the farmers and cooperatives found that few buyers asked for GI-certified coffee, and consequently only a few producers requested certification (which ensures traceability and quality control, and awards the GI logo). However, from a wider perspective, the Kintamani case looks promising. Even if the coffee is neither systematically certified nor controlled, the Kintamani name has clearly gained a reputation on markets, leading to more widespread use of the name and the GI logo (at selling points and exhibitions) and the appearance of copies of the logo (used for Robusta coffee produced outside Kintamani). A survey of nine national roasters and coffee shops showed that Kintamani coffee is now considered an Indonesian specialty coffee and increasingly appreciated by Indonesian and foreign consumers. Since 2011, new international buyers have asked for Kintamani coffee and paid a premium (some *Subak Abian* printed the GI logo on the bags destined for export). In 2013, the association secured a loan to develop a cooperative designed in part to commercialize all (and exclusively) GI Kintamani coffee and to facilitate product control. Coffee tourism has emerged, such as *Agrotourism B36*¹³ which receives more than 50 national and international visitors per day, who visit plantations and learn coffee tasting.

(b) *Muntok White Pepper (Indonesia)*

Pepper was introduced in Bangka Belitung Indonesian islands at the end of the 18th century, in a context dominated by tin mining¹⁴. Pepper rapidly adapted to local conditions and farmers developed traditional cultivation techniques: slash and burn, the use of stakes from forest hardwood to support the pepper plants and wet process in upstream water¹⁵. The Dutch administration exported the pepper to Europe under the name "Muntok", in reference to the Bangka Island harbor where it was shipped. Muntok White Pepper (MWP) gradually gained a reputation on the international spice market thanks to its particularly spicy taste and specific aroma. Production rose after 1950 but declined rapidly in the 1970s and 1980s, due to pepper diseases, international price volatility and competition from palm oil or rubber. To supply international demand, exporters started to mix MWP with other origins. Despite a national pepper restoration program in the 1980s, the pepper crisis was reinforced in 1999 when tin mining was liberalized¹⁶ and farmers *en masse* started to explore their lands hoping to find tin¹⁷. In a decade, between the 2000s and the 2010s, land under pepper fell from 80,000 to 35,000 ha and production from 22,000 to 14,000 tons¹⁸. International demand remained stable and prices increased drastically (18,000 IDR/kg¹⁹ at the farm gate in 2001; 84,000 IDR/kg in 2012), but tin mining remained more profitable. Misappropriation increased, eroding importer trust in quality.

In 2008, based on its international reputation, MWP was identified for GI registration. A "Body of Management, Development and Marketing of Pepper", named BP3L, has been created to apply for a GI registration, mainly at the initiative of BPTP, an Agriculture Technology research center, under national Ministry of Agriculture authority. National pepper exporters joined in, as did provincial bodies directly under the authority of national Ministries. A farmers' association was involved, but no other local stakeholders.

BP3L expected the GI to reduce misappropriations and encourage producers to adopt sustainable agricultural practices. The CoP would be designed in line with international standards, especially organic farming. It was established in 6 months. Producers, poorly represented in BP3L, and the provincial agriculture extension services, which have extensive knowledge of farmer practices, were scarcely consulted. Consequently, the resulting CoP differs significantly from producer practices. For example, organic production and living trees for pepper support²⁰ are required, but less than 5% of pepper production currently respects these conditions.

In April 2009, Muntok White Pepper was registered as a GI. Four other farmers' groups joined but the five farmers' groups included in the BP3L account for less than 5% of the total pepper farmers. The changes in practices requested by the CoP require a strong capacitating program for farmers. A demonstration plantation applying the CoP has been set up, but it can only be visited by BP3L members.

In 2012, the exporters began to declare their exports to the GI association to facilitate controls but no actual GI certification occurred. However, one important exporter started to use the GI logo on pepper bags (albeit without a formal certification control). The local agricultural extension services gradually became involved and started to inform farmers about the CoP in 2012. They hold village meetings where "good practices" are described but the GI project itself is hardly explained, local extension agents themselves not being informed on this topic. No producers interviewed had information on the GI, even those who had received training in the local "new living trees project".

(c) *Buon Ma Thuot coffee (Vietnam)*

Buon Ma Thuot (BMT) Robusta coffee has been produced in Dak Lak Province in the central highlands plateau of Vietnam since 1911. The Ê-dê people (the local dominant ethnic group at the time) have gradually enhanced its specificity thanks to a local roasting technique: after dry processing, the coffee is mixed with salt, rice and alcohol, left to ferment, put in a textile bag together with local aromatic herbs and mushrooms and plunged into boiling water.

At the unification of Vietnam in 1975, it was produced over an area of 3,700 ha. In three decades, thanks to massive migration, the involvement of State companies commercializing the product and the intensification of agricultural practices (including irrigation), land under coffee reached 259,000 ha for an average annual BMT production of 403,000 tons. Nowadays, BMT accounts for half of national coffee production and 70% is exported to 80 countries. Trung Nguyen Company, a giant successful company, commercializes 75% of regional production, mainly via export.

BMT coffee has become internationally famous. The success of BMT coffee is a source of national pride, but its price is still USD 60/ton lower than the international price due to its relatively low quality. Local trading practices offered farmers no incentives to focus on quality.

In 2005, Buon Ma Thuot coffee was identified for GI registration by the NOIP. The provincial government provided funds, asked its Department of Science and Technology (DOST) to prepare the application and applied for GI registration in the same year. Local stakeholders expected the GI to increase reputation and prices and to create the first "Robusta quality coffee".

The registration decision was issued in October 2005 and the *right to manage* was transferred to the DOST. The CoP indicates that BMT coffee's specificity is attributable to the basal-

tic soil and altitude. The production rules are similar to the current production model trained by agriculture extension services but differ from local practices²¹. Both dry and wet processes are allowed and roasting is not regulated (the traditional Ê-dê know-how in roasting is not valorized and its "evolution" highlighted by the Trung Nguyen Company slogan "*the most modern technologies added to the mystery roasting knowledge of Orient*" neither). The GI area of production includes 107,000 ha of land suited to coffee (a reduction in surface area being one of the local authorities' objectives).

In 2009, the Province funded the Program of Development of Sustainable Coffee (PDSC) designed to improve coffee sustainability through quality (wet processing), resource management and marketing strategies (international standards). Local private companies rapidly joined in. The other objectives of the PDSC are to enhance tourism²², valorize the Ê-dê culture and support the Ê-dê minority.

The Buon Ma Thuot coffee association, created in 2010 thanks to NOIP and Province support, became responsible for GI implementation. In 2013, it had 81 members (producers and companies). Nine companies received the GI Certificate (the producers being unable to ensure traceability). One of them exported 1,000 tons with the GI logo in 2013. The national reputation of BMT coffee has apparently been enhanced thanks to the GI but its international reputation is still poor. However, the local impact of GI and the associated PDSC is significant, thanks to the development of tourism and the reinforcement of trust among GI-members. The setting up of a PDSC program and GI association by local government led to greater local stakeholder participation in GI development.

(d) *Mèo Vac Mint Honey (Vietnam)*

Ha Giang province, in the northern part of Vietnam, boasts a specific geology featuring a karst plateau where wild mint blooms from October to December. A local species of bee (*Apis cerana*) produces a specific wild mint honey, traditionally collected by the H'Mong ethnic group. Over time, they have developed specific know-how for the extraction of honey directly from natural tree trunks and a special technique to capture wild beehive colonies and keep the bees alive during the cold winters. The specificity and quality of this honey is widely recognized in the province, where it is used as a medicinal product. It allows H'Mong people to diversify their income by selling part of their small family production on local markets. In the 1990s, the reputation of the product grew along with the development of tourism when the karst plateau was recognized as a UNESCO-supported Global Geopark and started to attract visitors from all over Vietnam and from the frontier region of China. The names of Dong Van and Mèo Vac, the two most productive districts, increasingly became used to designate this local honey while misappropriations and mixing practices with standard honey or sugar also emerged.

In 2003, the People's Committee²³ of Mèo Vac district started to support honey production in order to increase quantity and improve purity. Agriculture extension services facilitated the development of an intensive production system and introduced standard wooden hives and centrifugal extractors. This led to the emergence of new types of producers, mainly migrants able to invest in wooden hives. This innovation was not adopted by the H'Mong people. In 2005, the People's Committee of the Mèo Vac district created a cooperative to extract and commercialize honey and registered "mint honey, specialty of Mèo Vac" as a collective trademark. In 2013, the

cooperative employed 35 seasonal workers and commercialized 25% of the production of the whole plateau, resulting entirely from the intensive system of production.

The GI dynamic was initiated in 2008 by the Ministry of Agriculture. The Center for Agrarian Systems Research and Development (CASRAD), based in the capital, Hanoi, was selected to lead this project, while the local People's Committee took care of the administrative aspects. The agriculture extension services would assist the CASRAD researchers during their field missions. The registration of GI "Mèo Vac Mint Honey" had three objectives: (i) to provide a legal means of reducing misappropriation of the "Mèo Vac" name; (ii) to preserve local biodiversity, culture, and identity; and (iii) to increase honey production, stimulate its commercialization and increase the income of local producers. Research conducted by CASRAD established the link between the honey and local natural factors (mint and bees). Local human factors were mentioned but were not explicitly used to explain the specificity. The rules of production in the CoP were defined by a university expert; it refers to a "model of honey production" based on the use of wooden hives similar to the intensive system of production developed since 2003. In 2009, a workshop brought together the local GI leading group (People's Committees, the cooperative of Mèo Vac, and some producers, all implementing the new system of production; no traditional producers or traditional sellers were invited) for CoP validation. The DOST of Ha Giang province subsequently applied for the GI registration in December 2011.

The Mèo Vac Mint Honey GI was registered in March 2013 after examination by the NOIP. The effects of the GI registration are still hard to analyze. Before GI registration, during 2000–13, the production had already been multiplied by three (from 22,000 to 70,000 l/year, mainly due to the development of the cooperative) and prices had doubled, becoming five to ten times higher than standard honey prices. Some local public stakeholders attribute the price increase to the GI project, which began in 2008, although the link is not obvious. The evolution of local GI dynamics is uncertain because collective action is compromised: stakeholders from Dong Van district, who do not recognize the legitimacy of "Mèo Vac" as a GI name, are not active participants. A competing cooperative working with H'Mong people launched in 2010 and registered a collective "Mèo Vac" trademark (the NOIP asked for its cancelation after the GI registration). Traditional honey producers are excluded from GI dynamics as H'Mong people cannot easily afford the wooden hives and want to pursue their traditional methods. The traditional honey cannot be GI-certified, which may have a future impact on its commercialization.

These case studies show the strengths and weaknesses of GI development in Indonesia and Vietnam. A great potential exists for products' differentiation by origin and GIs' development seems promising. However the interest shown by local economic actors in GIs' development and the collective actions carried out for that purpose are very variable; and in all cases, a reluctance of most producers to pursue GI certification manifests itself up to now. The following section will bring elements of explanation.

4. DISCUSSION

We can note an important heterogeneity among the cases studied that reflects the one put forward when considering the whole Indonesian and Vietnamese registered GIs (cf. Section 2(d)): prior reputation from which the studied products

benefited before GI registration was very variable (from quasi-inexistent to strong, but also declining) and it existed at different scales (local, national, or international). Targeted markets are also different (local/national or international).

There are however some regular features, among which a major State involvement in the GI process, which can be considered as a constant in GI development in Indonesia and Vietnam. This involvement of the two States can be explained by their understanding of the potential contribution of GIs to agricultural policies. They make a conventional use of these tools to combat misappropriation or counterfeiting at international level, which have been significant for Muntok White Pepper as seen above as well as for other products (such as Toraja Coffee in Indonesia or Phu Quoc nuoc mam in Vietnam). But their main use of GIs is to facilitate the development or re-development of export (or sometimes national) supply chains for less famous products, GIs thus being aimed at creating differentiation (and in turn at enhancing reputations and increasing market share). Providing important resources for GI implementation, they use these tools (among others) to frame strategies for agricultural development, prioritizing some products at the expense of others in each region.

In this section, we discuss the reasons that drove Indonesian and Vietnamese States to put GIs at the service of agricultural modernization, their advantages and limits as well as the need for stronger local government involvement, which become evident when analyzing producers' mobilization and collective action capacities.

(a) *What contribution from GIs to modernization of agriculture in Indonesia and Vietnam?*

A major result of the case studies concerns the orientation given to the CoPs. In each case, the CoPs are defined on the basis of expert knowledge rather than traditional local practices. The modernization objective of the Indonesian and Vietnamese agricultures, described in the introduction, appears in the design of the GIs. GIs are built and implemented mostly as a tool to encourage producers to adopt innovative practices. It is expected that the ability of GIs to differentiate products will result from this modernization.

Using the modernization approach to differentiate is more a political choice than a necessity: another option would have been to base the CoP on traditional practices. However the governments have strongly encouraged the abandonment of these traditional practices in the CoP of the four GIs projects studied, irrespective of whether such know-how had created a reputation for the product in the past.

Designers of GIs try to use the local social capital created by the historical specialization of the production system (through formal—like the Balinese *Subak Abian*—or informal networks, as ethnic groups) to facilitate the development and diffusion of innovations, by reinforcing the interactions between producers, cooperatives, local public authorities and other supply chain stakeholders. They thus attempt to create what Porter (1998) described as "cluster type" dynamics designed to favor innovation processes. They also use GIs as a way to add value to innovative techniques, encouraging producers to adopt them.

From a development perspective, the use of the GI tool as a catalyst of innovation processes is understandable. The main objective of both States is to introduce new practices which governments believe are more sustainable. These new practices aim to: (i) minimize environmental impacts; (ii) increase product quality (mainly food safety); and (iii) access a wider

market. However, according to Thomas (2012), the GIs' role in resource protection and biodiversity preservation remains controversial in Vietnam.

In other contexts, GIs have been repeatedly criticized for their supposed negative impact on the adaptive capacity of production systems (Bowen & De Master, 2011; Niederle & Gelain, 2013). Production techniques' formalization within the CoP (and their constrained evolution after GI registration) would be the main cause. Representing a "significant brake on innovation", GIs are deemed to be inappropriate for production systems where localized and traditional production methods are not well established—and even where they are—as both may have to achieve "rapid adaptation to changing competitive environments" (van Caenegem, 2003). Rather than creating "museums of production" (Bowen & De Master, 2011), the Indonesian and Vietnamese governments are trying to set up competitive production systems, even though the capacity of innovation can be weakened after GI (and CoP) registration²⁴.

However, this modernization objective may create difficulties. Not including traditional production and/or processing methods in the CoP entails creating a "new" product that will not necessarily benefit from the potential of existing markets of the "traditional" product. And if modernization consists of the adoption of "standardized" techniques (as in the case studies) and/or varieties or breeds recommended by experts and international standards and disseminated worldwide, it could undermine the "differentiation-by-origin" objective.

Moreover, these innovative CoPs can be a source of stronger exclusion, as evidenced in Mèo Vac or Muntok, compared with a situation where they would have been more based on local practices. Indeed, the accessibility of the GI system is linked to producers' capacity to innovate, which depends on financial, human, and social capital. This compromises GI compliance by the most vulnerable producers.

Finally, GIs being voluntary norms, the success of their contribution to agricultural modernization also depends on producers' capacity of mobilization for the GI development. The following sub-section will analyze the conditions requested for that.

(b) *Can local government involvement ensure producers' collective mobilization?*

Interestingly, the differences between the Indonesian and Vietnamese legal frameworks (cf. Section 2) do not have a major impact on GI dynamics in the field: in the case of Buon Ma Thuot, the "public management" of GIs in Vietnam allows local stakeholders to invest in GI dynamics; and in Indonesia, management of the GI by a local association does not preclude a State-driven process, as illustrated by the case of Muntok pepper. Building upon the case studies, a deeper analysis of local producer involvement in GI construction is done considering (i) the difficulties associated with collective action in various situations and (ii) the potential of local government involvement to create a more favorable framework for GI success.

(i) *GIs and producers' collective action*

The Indonesian and Vietnamese States can create strong incentives, provide technical assistance, training programs and funds, but the final decision to adopt the techniques required for GI production belongs to producers. Importantly, as GIs are collective assets, this decision is linked to the capacity of coordination and collective action that exists within the local producer community. Analyzing the conditions for the socio-economic success of a GI, Barjolle and Sylvander

(2002) highlighted the motivation of producers to work together as one of the five factors of success.

In the "conventional" theoretical scheme of GIs, in which the product has a long regional history and the GI aims mainly to combat misappropriation or counterfeiting (Bérard & Marchenay, 2004; Rangnekar, 2004), the reputation of the product (and its associated know-how) as a "collective resource" is the basis of collective action capacity. Local producers perceive the collective dimension, understand their interdependence and the common property of the resource, and are thus encouraged to take collective action. The more specific the product, the more feasible the collective action, as producers understand the scarcity of the resource (Allaire & Sylvander, 1997). If the GI is entirely dedicated to the protection of this collective resource, on the basis of a CoP describing traditional commonly implemented techniques, collective action and producers' coordination is likely to occur.

However the situations described in the case studies differ: there is either no perception of a preexisting collective resource as there was no real preexisting reputation (Kintamani), or the reputation is long established but quality has become controversial (Buon Ma Thuot, Muntok), and traditional know-how is sometimes marginalized (Buon Ma Thuot and Mèo Vac). The GIs are mainly constructed on bases other than traditional know-how. Collective action then becomes more uncertain. The decision whether to invest or not in the GI dynamic and apply for actual GI certification is taken by producers on the basis of (at least) two different factors: assessment of existing or potential markets for origin-labeled products and perception of the reciprocity guarantees of other local producers. Product certification only benefits a producer if a minimum number of producers adopt it. Otherwise, the number of labeled products in the market will not be sufficient to create a reputation, and the certification fees paid will not enable the GI managing group to undertake the necessary communication and promotion campaigns. This situation is similar to the "prisoner's dilemma" in game theory (Axelrod, 1984). The risk of certifying products, with no guaranteed return on investment, cannot easily be assumed by an individual producer. It has to be taken collectively and requires strong coordination capacity among producers.

The Indonesian and Vietnamese governments' approach to GIs may limit the perception of the GI project as a way to protect and/or valorize a collective resource as part of a local heritage; and consequently also reduce the local producers' perception of the need for collective action at all stages of the GI process. The actual implementation schemes of GIs create a perception of "top-down" exogenous projects for most local producers.

(ii) *Is the involvement of local governments a solution?*

The case studies show that the individualistic strategies induced by the perceived "top-down" approach of the GI project are not the only possible solutions. Decentralized management of the GI project, making it "closer to the people", appears in the case studies as a key to change. Section 2 explained that competences have been given to local governments, first through legal frameworks and then largely through the implemented practices. Indonesian and Vietnamese regulations do not clearly specify the distribution of roles between central and provincial governments in GIs, particularly during the pre-registration phase. Indeed, in the studied cases, the nature of local public intervention differs from one case to another. In Kintamani and Buon Ma Thuot, a local GI dynamic is emerging and a central/local synergy in public intervention is observed, whereas in Muntok and

Mèo Vac, the local GI dynamics are still uncertain, lacking in synergy and characterized by contentious interactions among public stakeholders. Producers are still hesitant regarding formal GI certification, but a collective investment for GI development is already emerging in Kintamani and Buon Ma Thuot. Thanks to local governments, new GI organizational devices have played a federating role, reinforcing local development dynamics (Fournier, 2008). These phenomena do not appear in cases where GI construction has been conducted almost entirely under the authority of central governments (Muntok and Mèo Vac).

These case studies thus support the argument that local producers' involvement in GI construction and management is easier when local government involvement is stronger. Local government facilitated the "negotiation" between producers and experts and the possibility of a compromise between local and "good" practices. This negotiation appears as a success factor of GI implementation after registration, thanks to producers' gradual adoption of GI.

This does not mean that national and local government strategy regarding GIs are different: both aim to use GIs to orient production systems in the way they judge most appropriate, i.e., agricultural modernization. However local governments have certain advantages that enable them to implement GIs more appropriately. The first and most important factor is that local government management enables some forms of participatory approach to the GI project. In Kintamani and Buon Ma Thuot—the two cases in which local government involvement has been the strongest—local governments were able to interact and negotiate with producers and their representatives to define the GI project. The modernization objective required by local governments might have been "non-negotiable", but at least several meetings were organized to make it acceptable to and implementable by local economic actors (producers and companies).

Second, local governments are more likely to identify important supply chains at local level. The case of Muntok White Pepper shows that while pepper production is considered strategic by national government, for local stakeholders it became secondary, which of course did not encourage them to participate in the GI project.

Third, local governments are in a better position to promote local producer involvement in the GI managing group. Historical difficulties in developing producer organizations have been demonstrated in Vietnam (Moustier, Tam, Anh, Binh, & Loc, 2010) and Indonesia (Neilson, 2008). These organizations are nonetheless essential if collective action issues are to be resolved, as they facilitate dialog and mutual consultation among producers (Ostrom, 2010). In Section 2, we highlighted the fact that Indonesian and Vietnamese regulations do not systematically require the creation of producer organizations as GI managing groups. The creation of such organizations could in this context be facilitated by local governments, which have expressed an interest in having these organizations as interlocutors (Bowen, 2010).

5. CONCLUSION

Public management of agriculture has been viewed above all as a strategic issue by Indonesian and Vietnamese States since Independence. In view of their national agricultural policies, recent commitment to GI development may be surprising: GIs are usually considered as legal tools to protect renowned traditional products. While they contribute to local development, they are usually not considered in the scientific literature in line with the main objective of Indonesian and Vietnamese

agricultural policies, i.e., modernization. We have shown however that Indonesia and Vietnam have developed GIs in that way. As in many other contexts, they recognize the use of GIs as differentiation tools (Galtier *et al.*, 2013), practicable for various types of products. At the same time, through their active involvement in GI building and management and by pushing for the substitution of traditional local techniques with "good practices" within the CoP, they put this tool at the service of agricultural modernization.

Nevertheless, modernization will be achieved only if GIs' voluntary norms arouse sufficient interest among the producers. Our empirical analysis shows that a perceived "top-down" approach can reduce their motivation to adopt GI certification and invest in its development (as is the case in Muntok and Mèo Vac). In some cases however (as Kintamani and BMT coffees), GI producers consider that modernizing practices will open new markets and increase their incomes, and are therefore interested in working with public "supervisors" on the development of GIs. Our analysis reveals that the main distinguishing factor between these two contrasted situations is local government involvement. Indeed, while local government shares the same objective in GI construction as national government, i.e., agricultural modernization, its proximity with farmers and knowledge of their practices facilitate negotiations, which can be more difficult to initiate when national governments and experts are wholly in charge of GI implementation.

This article illuminates the importance of accompanying GI development in national policies with a concrete and clearly established decentralization of competences. The analysis of the Indonesian and Vietnamese legal frameworks highlighted the competences given to provinces, which are mainly involved in the post-registration phase. However, in both countries, the provinces go beyond these competences. They get involved in the identification of potential GI products and in GI building, even without the necessary resources. We believe that the development of GIs in Indonesia and Vietnam would benefit from increased roles and resources given to local governments.

Without putting at stake the objective of agricultural modernization assigned to GIs *per se*, our analyses pleads for stronger negotiation of the CoPs among the various stakeholders (possibly led by local government) and for a compromise between "good practices" and local know-how for at least two reasons: (i) this may reduce the exclusion generated by over-innovative practices, facilitate the adhesion of producers and reinforce the local capacity of collective action; and (ii) it can maintain a place-based specificity, which is useful for the objective of differentiation on the markets sought for many GIs. This negotiation appears to play a determining role in the impact of GIs on rural development (Barham, 2003).

Finally, this paper, like many others (see for example Belletti, Marescotti, & Touzard, 2015; Biénabe & Marie-Vivien, 2015; Bowen, 2010; Marie-Vivien, 2010), recognizes the legitimacy of State intervention in GI development. While producer participation is a necessary precondition, it may not be sufficient to create effective GIs in the current Indonesian and Vietnamese contexts. As long as producers' awareness of GIs remains low, State intervention is necessary to engage and financially support GI dynamics. State intervention may be particularly significant to empower small farmers (Bowen, 2010), including regarding marketing issues (Anders & Caswell, 2009). However it appears clear that the governance of GIs will necessarily be mixed, given that private stakeholders are the best guarantors of GI success. State intervention should not only let enough space for producers in GI governance, but also design a frame for arousing their interest and adhesion and for facilitating their collective involvement.

NOTES

1. The case of Comté (France) cheese is noteworthy: as it is forbidden in the Code of Practices of this GI to transport milk over more than 25 km before processing it, the size of the processing units necessarily remains small. It would be impossible for a large unit to collect the amount of milk it would need to make itself profitable within a radius of 25 km.
2. Before 1995 in Vietnam and 2001 in Indonesia, the legal framework of both countries referred to Geographical Indications as IPR, but without providing detailed regulations. We can consider that the protection of GIs was ineffective in the two countries at the time (no registrations occurred).
3. Since 2007, all registrations are GIs, no AO has been registered.
4. IP Law 2005 allows for the registration of descriptive signs (e.g., a geographical origin), as collective trademarks. Most countries have chosen clearly between GI *sui generis* protection or a protection by the Trademarks regime. Vietnam is one of the rare countries (with China) where both protection regimes are enforced.
5. Until now, Indonesia has not enforced the Source of Origin.
6. Internal note No. 520-285/2011.
7. In Vietnam, since 2005, the NOIP (Program 68) provides fund for IPR (including GIs) development. The average support for a GI registration is 702 million VND (USD 33,286). After registration, GI management projects receive on average USD 58,117. In Indonesia, the Ministry of Agriculture provides IDR 100 million (USD 8,261) per GI project. In both countries, counterparts are given by local governments.
8. On average, it takes three and a half years of research, expertise, and workshops with local actors to develop a sufficiently precise CoP in Indonesia and Vietnam. This detailed document gathers the results of agronomical expertise on soil, climate and varieties, bio-chemical analysis of the product, and a description of production and process techniques. Decisions must be made in dialog with a diversity of actors with sometimes divergent interests (cf. Section 3).
9. CASRAD (Centre for Agrarian Systems Research and Development), RUDEC (Rural Development Center), FAVRI (Fruit and Vegetable Research Institute).
10. Terraces, maximum density of 1,600 trees/ha, permanent shade trees, selected varieties, mineral fertilizers and pesticides prohibited, selective picking and wet-processing.
11. The diversification of coffee with other crops is traditionally done by farmers, mainly with tangerines. However, the CoP does not impose this diversification—only recommendations are provided. The traditional organization of the production (*Subak Abian*) is valorized and maintained in the CoP.
12. The local GI Association was created in 2007. The members are farmers, *Subak Abian* and processors. Local authorities, main buyers and research centers constitute an advisory board. The head of MPIG is a coffee farmer (elected by the association for duration of 5 years).
13. *Agrotourism* B36 was founded in 2011 at the initiative of a local coffee trader. The site received a visit from the Minister of Agriculture in 2013
14. To provide charcoal for tin mining, the forest was progressively opened by slash and burn and pepper and rubber were settled on the recently opened lands.
15. The dry process produces black pepper; the wet process, which consists of washing the corns for several days before drying, produces white pepper.
16. Decree of the Minister of Industry and Trade No. 146/MPP/Kep/4/1999 of 22 April 1999. The decree States that the tin is categorized as a “free good”, and revokes its former status of strategic commodity. The direct consequence was the end of monopoly of tin mining; so far hold by PT. Timah, a State company.
17. In the district of Southern Bangka alone, 80% of local families experimented with small-scale tin mining and 50% of them totally abandoned pepper. As an illustration of the attractiveness of tin mining in Bangka Belitung: in 2012, Indonesia produced 32% of world tin (stat: International Tin Research Institute). Bangka Belitung accounts for more than 60% of Indonesian tin production.
18. Agriculture and Livestock Department, Bangka Belitung Province, 2013.
19. In June 2015, 1 USD = 13,339 Indonesian Rupiah (IDR) approximately.
20. Pepper is a liana and needs support to grow. Using living trees or stakes of hardwood has important influence on the quality of the product. The shade created by the living trees modifies the temperature and the time of maturation process
21. Windbreak belt to reduce irrigation, shade trees is “strongly recommended”. The use of chemicals is not restricted. Only recommendations are given, and “it is recommended to apply herbicides of *Glyphosate* to control *Imperata*” which is not a common practice nowadays in the region. A red cherry harvest is required (95% ripe cherries), which is not the common practice of the farmers located outside the collect zone of companies.
22. Promotion of Buon Ma Thuot coffee and region is carried out by the local government: Coffee Festival initiated in 2009 has become a national tourist event; several events are organized to improve the reputation of the coffee (Coffee Week, Coffee Exchange, Coffee Months. . .). Trung Nguyen Company built the Village coffee, a tourist attraction for learning about the production and history of the coffee in Buon Ma Thuot. The village café offers cup taste trainings, and a coffee tour to visit the region (rainfall, elephants, Ê-dê villages).
23. People’s Committees is the name of executive public authorities in Vietnam. Each administrative level is governed by a People’s Council, elected by the citizens. The Council is assisted by the People’s Committee, which is the executive authority.
24. In Indonesia, the case of Amed natural sea salt is illustrative of the potential tensions between “museums of production” and innovative production systems. Amed is a famous area of Bali Island, where in 2013 only 30 families still produced salt in a highly traditional way, using ancestral methods and wooden equipment. The salt production of the surrounding areas has evolved in recent decades, introducing progressively more modern materials and techniques. A GI registration for Amed salt has been under consideration since 2009 but divergence of objectives among stakeholders has slowed down the project: some actors expect the GI to create a “salt museum” in relation to the intensive touristic activities currently being developed in Amed, while others want to introduce modern techniques in order to increase production.

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