Geographic Indications for Javanese teak: a constitutional change.

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Summary: The central issue addressed in this paper is whether Geographic Indication as a tool can be applied to encourage some furniture industries and teak producers to take a collective action in improving teak product quality and increasing global market competitiveness. This paper will explore the possibility of implementing GI on teak as a mean to improve local community rights to manage teak resources, Perum Perhutani revenues and the perception of teak wood products on National and International markets, employment in furniture industry. The paper also discusses the institutional arrangement to enable GI implementation on teak.

After the 1998 financial crisis, Javanese furniture industries experienced a boom but illegal logging in State forest surged as well. Unfortunately this development was disconnected from forest resources capacities. Stakeholders made a living from bad practices and miss-use of forest resources. Due to bad qualities furniture were rejected and wood was wasted. Instead of producing high quality teak products, Java turned into a mass production of cheap furniture for national and international market. As a result wood supply was shrinking, putting today many furniture enterprises and their hundred of thousand employees in jeopardy. Indonesian furniture is getting a bad reputate on international market.

Indonesian people by culture have the perception that teak wood is something special; on world market teak is also the most known tropical species. Other good news: local community enthusiasm to plant teak is growing. Building on this we expect that geographic indications could help maintaining a common interest across the stakeholders.

A geographical indication is a sign used on goods that have a specific geographical origin and possess qualities or a reputation that are due to that place of origin and the knowledge of local communities. Most commonly, a geographical indication consists of the name of the place of origin of the goods. Agricultural products typically have qualities that derive from their place of production and are influenced by specific local factors, such as climate and soil.

Key words: Teak, geographic indications, furniture, community, collective action

I. Teak plantation and furniture industry in Java

1.1 Development of teak industries versus Javanese culture

Teak wood has been important and known for centuries in Java. Reid (1993) notes during the 15th century, ships were made out of teak. In Java floors and walls of traditional houses are made out of teak wood. Javanese people perceive teak and its products as part of their culture; they divide timbers into two groups, teak on one hand, the only one which really means valuable wood and all the others in the other hand.

The teak is produced in Java either on State forest or outside State forest; so there are two groups of teak wood producers. Perum Perhutani, a State Enterprise, is the major producer of teak wood. It manages about one million hectares of teak plantations located on State land, of which 0.6 million ha is under production forests, the remaining is either unproductive due to illegal logging or under protection forest. Teak State forests were taken over by Indonesian government from the Dutch administration after independence. Outside state forest, hundred of thousands smallholders are also producing teak wood. Unfortunately, the data on community forests is relatively difficult to find although the use of teak wood from community forest has been growing. Nevertheless, with one million hectares or so, Javanese teak plantation is the largest of the world, as teak plantation area in the world is about 2.7 millions hectares (Behagel. I, 1999).

The furniture industry is also composed of a multitude of actors. Jepara city, for example, is an industrial district devoted to the production of wood furniture and wood carving; it regroups about 14.000 small workshops and 1.000 medium and large enterprises. Jepara is known for its wood works for centuries (Wiyancoko, 2002). For the last two decades Jepara furniture industries have been driven heavily by foreign buyers. Foreign buyers came to Jepara bringing with them new values, designs, concepts which are transforming Jepara community and its production. In Jepara most of the furniture industry uses teak wood as raw material. For various reasons, Jepara became a place for mass production of low quality teak products, which are sold oversea at a low price. The price of a piece can be so low that it cannot cover the cost of reproduction of the teak wood, it is a tragedy for the teak plantation resources which are affected by illegal logging.

Woodcarvers and furniture industries found themselves highly dependent on wood producers. For the last few years the teak wood demand has been increasing. The increasing demand of teak and the declining supply capacity threaten the future of both the teak forest and the furniture industries. Teak wood has been under very strong pressure since then. The raw material supply is an increasing key constraint for the micro, small and medium enterprises (MSMEs) furniture industry in Java. The overuse of forests and inadequate management practices have in many cases depleted the resource of raw material for the industry and as a consequent undermined the sustainability of the wood based industry. Many stakeholders are currently concerned by the sustainability of teak forests.

Exports of small and medium enterprises generated substantial employment and income growth (Loebis and Schmitz, 2005). Most of the producing enterprises in Jepara as well as other areas in Java are labor intensive. In 1990s employment in Jepara was estimated at 44,000 workers, but it is much more, as about 93% of the industries are informal or unregistered (Posthuma 2003, Loebis and Schmitz, 2005).

1.2 Teak as a commodity

Teak has been viewed by traders and buyers as a commodity; it is natural in a context of global market. Furniture exports particularly in Jepara increased substantiality in 1998; the rupiah devaluation attracted many buyers of teak wood furniture to Indonesia. This situation increased local competition since the industry is mainly a buyer-driven chain with limited opportunities for access to export markets for local SMEs. This created a boom of the teak industry based on cheap wood and cheap labor force until 2004. Now in 2006 the situation is very different; rupiah is up, the teak resource has been over harvested, teak became rare, and meanwhile Vietnam and China furniture exports increased dramatically; the Indonesia industry is facing a real crisis (See Table 1).

Table 1. Indonesian Export Performance of Wooden Furniture 1997-2005

NO	YEAR	VOLUME IN	VALUE (MILLION
		TONS BY X ('000)	US\$)
1	1997	360	527
2	1998	158	252
3	1999	478	854
4	2000	587	1091
5	2001	561	1037
6	2002	436	782
7	2003	660	1168
8	2004	609	1172

The tragedy of the teak commodity

Teak tragedy happened because teak has been considered as a commodity for a couple of years by few large companies. Some well-known hypermarket firms, made teak wood affordable for the low and middle classes of Europe and United States. By consequence, volumes of exported teak wood increased but quality of teak products decreased, and teak resource has been overused. Worst, furniture made in Java are getting a bad reputation. Furniture price decrease was actually triggering bad practices as illegal logging.

Now the lack of teak wood as main raw material for furniture industries threatens the viability of many small and medium enterprises (SMEs) in Java. In addition, current increase of oil price and electricity put more burdens. The production cost could become uncontrolled and could jeopardize many industries. While, buyers tend to keep the price low regardless the change of production costs, producers are looking for solutions and alternative sources of wood in substitution to teak. Some industries are trying wood from other planted species as acacia mangium, jackfruit, durian trees or other material as coconut stems, others unfortunately are using more wood from natural forest, as bankirai. Some of them are also trying to produce new designs.

The furniture industry association asks the government to issue a ban on raw material exportation (rattan, wood for natural forest and teak wood) to protect the domestic furniture industries against the harsh competition of Chinese or Vietnamese industries. Meanwhile national green activists require a total forest exploitation moratorium and Perum Perhutani reduced its official production. On short term these last measures create incentives for illegal loggers. As raw material accounts for about 60 percent of the cost of most teak furniture, acquiring cheaper (illegal) wood makes a huge difference on costs (Loebis and Schmitz, 2005). So, some producers adapt to the wood shortage simply by using more illegal wood which is of course an efficient individual way to save cost but also speed up the collective collapse of the industry.

1.3 Certification process

Forest certification is a market instrument introduced to improve forest management and the level of trust between timber products producers and buyers. Certifications original mechanisms were to create market-based incentives for fair forest management, and to enforce market access for certified products, particularly for "ecosensitive" buyers with high environmental awareness. (Bass et al., 2001; Elliot, 2000).

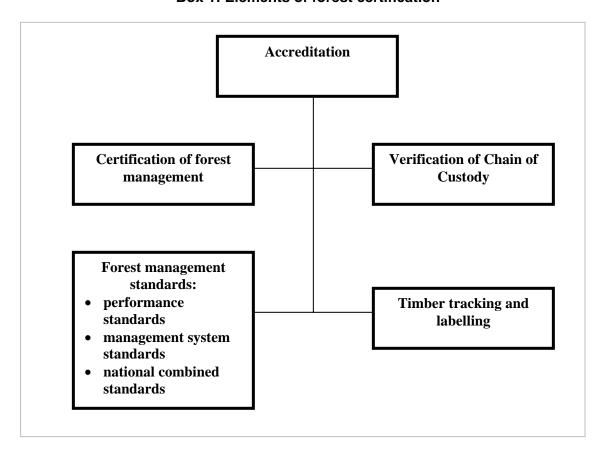
Forest certification is a process in which an approved independent organization issues a certificate, confirming that, based on findings of an audit, the forest is managed in accordance with an agreed standard (Handford and Nussbaum, nd). Forest certification is often followed by a verification to control this claim. A verification process should include a process of tracking products from the forest, through the production process, to the final product—a process called "chain of custody" (Handford and Nussbaum, nd; Bass, nd).

A system of forest certification has five elements. It involves an inspection and evaluation (i.e. certification) of the forest management according to specified standards (See Box 1). The assessment is carried out by an independent certification organisation.

Most certified forest areas are located in rich countries. The process is tedious for smallholders of timber plantations as they have difficulties to comply with the certification standards (Tolfts, 1998; Bass et al., 2001). Standards are often not relevant with the local situation. Therefore most of the current certified community forests are supported by donors (Markopoulos, 2000; Bass et al., 2001). Today under the Forest

Stewardship Council (FSC), community forest certification is only 2.85% of the total certified forests (FSC, 2006).

The whole process is based on believe that some market instruments can change actors' behaviors down to the forest level. Market signals from the consumers to the wood growers are weak as few consumers are actually willing to pay and also as many others are confused with a variety of norms and standards related to the physical qualities of the products.



Box 1: Elements of forest certification

1.4 Teak as an attribute of Indonesian culture

So far teak furniture prices have been dictated to Indonesian people by the international market. A teak chair sold at less than 10 US\$ in Jepara, is actually against Indonesian values. The question we are exploring below is whether it would be possible to just reverse the situation and make the world to share Indonesian views about teak.

Instead of battling against China and Vietnam on the same field, Indonesian actors of the teak value chain should work together to build on their specificity, their values. They should point out that Indonesian teak is valuable firstly because it is an attribute of

Indonesian cultural heritage and also because it has been planted for centuries and its harvest doesn't arm any natural forests.

Indonesian people would impose to the world their views and timbers would be split into two groups in one hand the teak from Java in the other all the others. Why not? The question now is how Indonesian people should proceed.

II. Teak geographic indication: a new institution

2.1 Definitions of institutions and representations

Changing people shared representations is actually changing deeply the rules of the game as it is changing people constitutional choices. It is about institutions; an institution is simply defined as "the rules actually used (the working rule or rules-in use) by a set of individuals to organize repetitive activities that produce outcomes affecting those individuals and potentially affecting others" (Ostrom 1990). Weber (1995) defines institution by contrast with agreements issued by an organization. An institution is an agreement, which compels more people than the members of the group, which issued this agreement. An organization produces agreements, which are applying only to its members. The constitutional rules influence the nature of the rules in use.

Actors 'representations' refer here to the inherent value of the teak perceived by the actors, including spiritual beliefs about their lives and their link to the teak forest, it is an anthropologic term. Behaviors regarding environment or a renewable resource as teak depend firstly upon the representations of nature shared by the group (Weber, Reveret, 1993). These shared representations of nature, is linked directly to the system of values specific to the society, correspond to what Elinor Ostrom calls "constitutional choices" (Ostrom, 1990).

These shared representations of nature about teak would create a common set of constitutional choices across the different actors, which would enable them to issue consistent agreements about the choice of normative, economic or administrative tools to manage their resources and their lives. In short it would enable change in actors' behaviors towards more coordination and collective actions.

How stakeholders can coordinate in a context of competition? It could look like some form of competing interests. Such situation has been already observed in the industrial development context, it refers to the concept of *local collective goods in context of competition*. These local collective goods are a condition of the development of industrial districts like Jepara. Local coordination and collaboration is a competitiveness factor in a globalize world market but market mechanisms alone usually fail to create these collective behaviors (Gales, 2005).

This shows that changing people perceptions or revealing existing perceptions is key and is about creating a new set of institutions in a sense of acting on people constitutional choices (Ostrom, 1990).

2.2 Definition of GI and PDO

Two concepts, protected designation of origin (PDO) and protected geographic indications (GI) have been developed initially in Europe. They could help to create local collective good in context of competition for teak. These concepts developed first for agricultural products as cheese or wine, they have been used also for other products as special oak wood in France and batiks in Malaysia.

PDO, the protected designation of origin, identifies a processed product which draws its specificity from its geographical origin. PDO guarantees a close link between the product and the place of origin, which is a defined geographical area with its own physical attributes as soil and climate, as well as the particular rules self-imposed by the people in order to get the best out of their land and resources. This geographical area is called terroir in French; it is a concept which bind together both the natural and human factors of this area, and indicates the product may not be reproduced outside this specific area. PDO protects an established terroir reputation, which is the result of the skills, the history and the culture of the people living in this place. The terroir reputation is a collective good restricted to the people of this place. Production, processing and preparation of the products should take place in the geographical area designated by the PDO.

PGI protected geographic indication identifies a relationship between the product and its origin, which give a reputation to the product. But this relationship is not as strong as within PDO concept as only certain phases of production, processing and preparation processes should take place in the geographical area designated by the PGI.

The WTO Agreement on Trade Related Intellectual Property Rights (TRIPS) defines Geographic Indications as ".. indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin.." (Section 3, Article 22).

In some countries, legislators requires by law that all applications to benefit from a PGI should be associated with an official sign of quality. Most commonly, a geographical indication consists of the name of the place of origin of the goods but it could be reflected in words, phrases, symbols, images. It is a form of intellectual property, like copyrights and patents, which bears intangible properties related to pieces of information that can be incorporated in tangible products. Last but not least PGI and PDO are collectively owned by the people of the designed geographical area.

In Indonesia, GI is protected under *Undang-Undang No. 15 Tahun 2001 Tentang Merek*, Article 56-60. Following the *Undang-Undang No. 15 Tahun 2001*, Government of Indonesia has been preparing a detail elaboration of the GIs articles through Government Regulation (peraturan pemerintah).

Geographical indications may be used for a wide variety of agricultural products, such as, for example, "Tuscany" for olive oil produced in a specific area of Italy (protected, for example, in Italy by Law No. 169 of February 5, 1992), or "Roquefort" for cheese produced in France (protected, for example, in the European Union under Regulation (EC) No. 2081/92 and in the United States under US Certification Registration Mark No. 571.798) (Kumar, 2003). Although, so far, in many cases GIs applied to agricultural products, the use of geographical indications is not limited to them. They may also highlight specific qualities of a product which are due to human factors that can be found in the place of origin of the products, such as specific manufacturing skills and traditions. That place of origin may be a village or town, a region or a country. "Switzerland watches" is perceived as a geographical indication (WIPO, 2006). In Indonesia wood carving designs are specific from Madura islands, Central Jawa and Bali and Batik designs from Solo, Jogjakarta, Cirebon and Banyumas, Lampung or Kalimantan have different styles. These products have a potential to be protected through GIs.

2.2 Champagne!.... as a model of common property

Champagne refers to a French region with poor soils but today many people know only the wine produced in this region. The creation of the Champagne is a very fabulous story from which we can draw some lessons. It is a process, which brought a standard white sparkling wine, to a high quality product known and recognized worldwide.

Two centuries back Champagne wine was not a so good wine, with very different qualities. Champagne was one sparkling wine amongst many others. Today, people of Champagne managed to change the consumers' perception regarding this product and they made it a luxury good (Barrere, 2002).

The creation of this luxury wine is a process of a permanent collective improvement of the wine quality. With time all the sparkling white wines of Champagne became regular and of high quality.

Today Champagne is a model of actors' coordination. Actors are divided into two main groups: the wine growers who produce the grapes and the traders, who buy the grapes, make the wine, process it and sell it. They are about 18.500 wine growers many of them are small, about one hundred are bigger and sell their own wine. The big merchants are about ten only but they leaded the changes.

Champagne people could reach this level of coordination thanks to the creation of a new legal system, the control label of geographic indication. This geographic indication emerged from a change in Champagne people perceptions, that they have some common interests as they are sharing the same region, the same type of land and the same culture (Barrere, 2002) The great invention of the people of champagne was this feeling of belonging to the same location; by naming their wine Champagne, they translated this feeling into the concept of geographical indication. Thus people of Champagne created a constitutional change, which allowed themselves to accept and agree progressively on a number of standards and norms self-defined and designed to improve collectively the quality of their wine.

Over time people of Champagne, leaded by few large wine merchants, created collective forms of organizations as the Wine Champagne Trade Union, which managed to control their

members, fight against market piracy, against cheaters who introduced in their wine grapes from outside Champagne region, face collectively crisis as wars and vineyard diseases, and influence judicial and political systems. The Wine Champagne Trade Union became an institution.

2.3 Teak geographic indication: its implications

Let's step into the future and examine a possible path for the Javanese teak industry. We are now in 2015; few large furniture companies and Perum Perhutani the main teak wood producer have already create an Union to protect the reputation of the Javanese Teak. They have understood that the viability of their business is linked to the reputation of all the Javanese teak growers and processors as they share the same region. Thus they have involved the hundred of thousands of small teak growers outside State forest and the hundred of thousands of small wood workshop owners. The government supports this Union as it contributes to maintain the livelihood of million of people in Java. Competition with Vietnam and China shift to other wood products but Javanese teak Geographic Indication creates a form of monopoly of the Javanese people, an exclusive rights, which recognizes local people knowledge.

Progressively stakeholders have understood that cheating pay less than contributing to the common Javanese teak reputation. Thus, norms and system of control were progressively self-enforced by the different actors and illegal logging of teak in Java have been dramatically decreasing.

The Union have chosen the name 'Javanese teak' as Java was known in old time as the Teak Island. As all the teak in Indonesia is grown in plantations, Javanese teak is defined as a teak from plantation grown in Indonesia (or Java) and processed in Java. It gave an opportunity to teak plantation smallholders and small wood carpenters to compete on a global market beside the large actors as Perum Perhutani and the few large teak wood processors.

Let's step back and examine the implications of this possible parth. This would create a pro-poor situation as it would support the many small holders who are growing teak wood in Java. It is a trade advantage that draws on local knowledge; the reputation of Javanese teak products would be based on teak plantation and teak carving histories, that is essentially attributable to a geographic area. Kumar (2003) believes that PGIs can potentially aid human development objectives by allowing communities to exploit premiums through "right of exclusion".

Javanese teak GI would provide trade and commercial advantages to wood processors small and large in Java on a legitimate grounds; Javanese teak GI would be a distinctive sign, the use of which would be reserved to the enterprises located in Java. Thus it would be an intellectual property right, which entitles the Javanese enterprises to exclude others from using this indication.

A teak geographic indication would provide simple and clear information to consumers in Indonesia and abroad who are confused today by a number of standards of different

natures (environmental certification, norms of quality...). Consumers deserve to be protected against misleading practices. Javanese teak GI progressively will incorporate a number of standards of quality, social and environmental responsibility, which will strengthen its reputation. For instance as Javanese plantations are the largest of the world, there is little chance that other teak wood which do not originate from the geographical area could be introduced and misled the consumers.

Obviously Javanese teak has potential to be easily understood by consumers to identify the origin and the quality of Javanese people teak products. But we can observe also that many products which have acquired valuable reputations are copied by dishonest commercial operators. False use of geographical indications by unauthorized parties is detrimental to consumers and legitimate producers (WIPO, 2006). PGI, which is recognized by WTO signatories' countries, is a potential tool to protect the producers as the consumers.

III. Discussions and conclusions

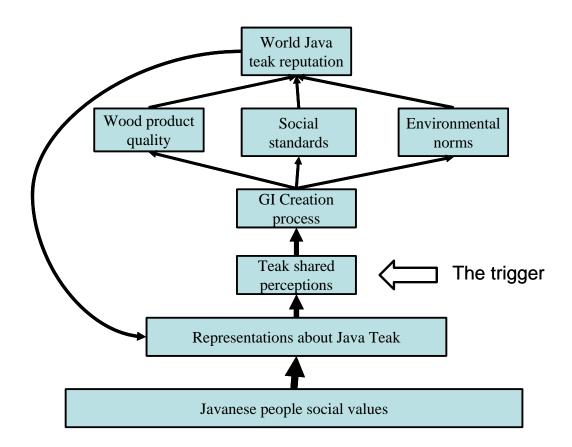
We explored the opportunities to create from teak a sustainable source of wealth for Indonesia despite the current gloomy situation of the Javanese furniture industry due to strong international competition from China and Vietnam. As Java has already a genuine culture related to teak and hundred of thousands hectares of teak plantations, Indonesia should build on these comparative advantages to mark its specificity on the international and domestic market.

Indeed, all the current strategies, ban, alternative wood resources, moratorium, new designs, are doomed to fail if behaviors in Indonesia furniture value chain don't change. These strategies consider teak wood as a commodity, and found Indonesian furniture comparative advantages on cheap labor and easy access to raw material. But for instance in Asia designs can be rapidly copied by competitors in China or Vietnam; without changing the rules of the game between the different actors, wood producers, furniture producers and furniture buyers, any new source of raw material will create a small industrial boom and bust and rapidly furniture producers will have no choice else than importing their raw material or looking for jobs in another sector.

This paper is only an exploration of the idea to create a PDO or a PGI for Java teak. Many questions should be further discussed, as the limits of the geographic area, the choice between a PDO or a PDI itself, the potential actors who could lead the process.

We found that the challenge in the current situation of the teak furniture industry in Java is not only about to change some norms, to create some new standards; in isolation these measures would not create a durable effect. It is about agreeing on a constitutional choice which will create real stakeholders' behavior changes. This should start by facilitating actors of the teak value chain in order to share a set of common perceptions regarding teak. We expect that this common perception might trigger a durable process of quality improvement. The work is already half done as people in Java already share the

sentiment that teak is very special to them, the challenge lies in revealing it as a common asset.



GI is a process managed by local stakeholders, motivated by the creation of a monopoly based on product geographical attributes. It is a decisive advantage for small and medium enterprises and wood producers to compete on a globalized world.

This process through GIs is not about exacerbating nationalism sentiments but about sharing values and creating new perceptions - and incidentally new products. By elaborating a geographic indication about teak Indonesian people would bring to the knowledge of other people around the world how much teak wood is great.

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