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## **Environmental Labeling, Protected Geographical Indications and the Interests of Developing Countries**

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Among developing countries, one can identify both proponents and opponents of extending the use of geographical indications (GIs) beyond wines and spirits. Such an extension is currently being discussed under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization. While labeling is mostly based on private initiatives, GIs are considered to be long-term public rights. Proponents therefore regard GIs as the stronger tools for protecting their national property rights and offering them new opportunities to develop their export markets. Opponents, however, consider GIs to be new barriers to trade that impede their export opportunities. This article clarifies these positions and pulls together some evidence on costs and benefits related to GIs versus labels.

Keywords: developing countries, geographical indications, labeling, WTO

## Introduction

In the context of trade liberalization, and with the globalization of food markets, concerns arise about the protection of national intellectual property. The possibilities for protecting intellectual property are diverse. This article focuses on two approaches, namely environmental labeling versus geographical indications. Among developing countries, one can identify both proponents and opponents of the use of GIs versus environmental labels. While common labels like “Blue Angel” for industrial products, or “shade-grown” for coffee, generally signal environmental quality, GIs go beyond, to also indicate the place of origin of the product.

The focus on these two approaches is especially relevant in the context of the recent dispute between the Ethiopian government and Starbucks about the use of GIs and labels to protect coffees from the regions of Sidamo and Harar in Ethiopia. The Ethiopian government wants to protect coffee originating in these specific regions by using GIs, as opposed to labeling as proposed by Starbucks (*Der Spiegel*, 2007). Darjeeling tea and Basmati rice from India as well Jasmine rice from Thailand are other examples of goods for which the respective developing countries are seeking increased protection via GIs.

The ongoing negotiations of the Doha Development Round of the WTO further illustrate the relevance of this topic. Not only are the positions on GIs very diverse among developing countries, but also it is not clear to what extent the issue should be taken beyond the TRIPS Agreement into the agricultural negotiations.

To shed more light on this debate, this article raises three major questions: first, what are the major differences between conventional environmental labeling and GIs? Second, what are the interests of developing countries in promoting use of GIs versus labels? Third, what are the economic impacts of employing GIs versus labels? The evidence from very different branches of the literature – namely from studies on environmental labeling, on GIs and on the role of labeling in economic development – is summarized, and the article is structured along the three questions.

## Regulatory Frameworks for Labeling and Geographical Indications

A lot of confusion has surrounded the term “labeling”, which has almost become generic for the use of any signs for products. In the context of this paper, the term is used in its original, narrow sense, as will be further defined below. Departing from this term would not be helpful, owing to its general use in the development literature and to the increasing role it plays in discussions concerning trade and developing countries.

Both labeling and GIs are used to differentiate products in export markets. In a market of differentiated goods, a failure due to information asymmetry can be

overcome through use of labeling or GIs. Consumers receive additional information about the quality characteristics of a product, for example, taste or traditional process methods, and producers receive a price premium for their differentiated products. However, there are substantial differences in the definitions of, historical development of and regulatory frameworks for labels and geographical indications.

### ***Historical Background***

The first environmental label was the Blue Angel label, introduced in Germany for industrial goods in the year 1978. Nowadays, environmental labeling programs are in operation not only in most OECD countries but also in many developing countries. Examples include the labels “fair trade”, “organic” or “Marine Stewardship Council (MSC) certified” or “Forest Stewardship Council (FSC) certified”. The complexity of environmental labels has increased over time with the inclusion of additional environmental and quality attributes, social conditions and traceability. A proliferation and multiplication process for labels in different markets is ongoing, and it has resulted in decreased transparency and labeling fatigue from the perspective of consumers (Basu et al., 2004). Some labeling organizations, for example the Fairtrade Labelling Organizations (FLO) International, have registered their labels as trademarks in order to achieve a higher level of protection. Thus, a differentiation cannot always be made even between labels and trademarks.

Geographical indications have a much longer history. Brick-makers in ancient Egypt used them to indicate the origin-related resistance of the bricks and stones with which pyramids were made. They were also used in ancient Greece as signs of quality for wine from the island of Thasos. The use of GIs such as Parmigiano or Comté dates back to the 13<sup>th</sup> century (van de Kop and Sautier, 2006; INAO, 2005; Origenandino, 2008). Many such areas, including also the Champagne region in France, used to be poor and depressed, and benefited substantially from the development of their specific GI products (van de Kop et al., 2006). Increased attention to GIs is, however, a recent phenomenon, driven partly by globalization and the introduction of the TRIPS Agreement under the WTO (van Ittersum, 2001). The increasing registration of products as GI products has added a new dimension to the discussion of labeling. But since GIs clearly differ from the more simple labels or trademarks, a distinction is considered necessary and useful and corresponds with the historical evolution of the labeling literature from the field of development economics.

### ***Environmental Labels***

Environmental labeling is generally defined as the practice of providing information to consumers about a product that is characterized by improved environmental performance compared with similar products. A typical environmental claim on food or agricultural products can refer to anything from the nonuse of certain inputs such as

pesticides to the description of a whole life cycle, including the production and process methods (PPMs) (Basu et al., 2003; Grote et al., 2007). Labeling is often a voluntary, market-based instrument initiated by the private sector, but sometimes it also takes the form of a public-private partnership.

An environmental labeling program is characterized by a registration process that has been kept relatively simple. In the case of the Blue Angel label, for example, the private institution RAL, which is the German Institute for Quality Assurance and Certification, acts as the certifying institution. It administratively and financially manages the labeling program. The German Federal Ministry for the Environment, Nature Protection and Nuclear Safety, however, is the holder of the environmental label and is liable to protect it against third-party abuse. It is responsible for the development of requirements for the award of the Blue Angel. Worth mentioning also is the fact that there is no direct monitoring, but instead the system relies on control by competitors (Müller, 2002).

The International Standards Organization (ISO) defines labeling by distinguishing between three types of programs: type I encompasses voluntary, multiple-criteria, third-party programs; type II encompasses “self-declared” information labeling by producers; and type III encompasses declarations based on a full life-cycle approach. As some eco-labels are also increasingly registered as trademarks, it should be mentioned in this context that a trademark is defined as identifying a private manufacturer who is also the owner and protector of the right. A trademark is intended to market a product that was developed based on human creativity. A trademark can be sold; if it is not sold, it exists for the life of the owner (Rangnekar, 2004; Josling, 2006). From the legal perspective, labels and trademarks are clearly distinguishable from GIs (see, for example, Josling, 2006 or Rangnekar, 2004).

At the international level, environmental labeling is covered under several WTO agreements, in efforts to ensure that labels do not create unnecessary barriers to trade. The Technical Barriers to Trade (TBT) Agreement of the WTO was adopted to clarify the treatment of product standards and technical regulations under the GATT. It applies to both mandatory and voluntary product labeling standards. The Agreement on Sanitary and Phytosanitary Measures (SPS) covers labeling standards that address human, plant or animal health issues (Grote and Engel, 2004). In addition, there is currently debate about whether food labeling issues should be addressed within the context of the WTO Agreement on Agriculture.

The Committee on Trade and Environment (CTE) of the WTO deals with issues and conflicts arising from the use of labeling programs. The final declaration from the WTO Ministerial Conference in Doha, Qatar from 2001 instructs the CTE to study the issue of “labeling requirements for environmental purposes” and to make recommendations concerning whether there is a need to clarify the status of

environmental labels under WTO rules and whether they should be a subject of future trade negotiations.<sup>1</sup> The status of labeling standards is the subject of continuing discussion within the TBT Committee.

### *Geographical Indications*

GIs designate products that originate from a particular region or country and have a unique character due to their particular qualities and production methods. A GI is considered a public right, owned by the state or a parastatal entity, with the government being in charge of registering and administering it.

A plurality of regulatory systems under which GIs are protected can be observed across countries. At the international level there are several agreements, including the Paris Convention for the Protection of Industrial Property (1883), the Madrid Agreement concerning the International Registration of Marks (1891), and the Lisbon Agreement for the Protection of Appellations of Origin (1958). The first multilateral agreement is the TRIPS Agreement (1995) of the WTO, which deals with various forms of GIs. Apart from these international agreements, there are also a number of bilateral and plurilateral agreements in which GI provisions have been incorporated, for example the North American Free Trade Agreement (NAFTA) and the Mexico-Chile Agreement (IPC, 2003).

In addition to the term “GI”, these agreements also use the terms “indication of source” and “appellation of origin”. All three terms link a product to a certain geographical region, but they differ in their stringency. An indication of source such as “made in Germany” requires only that a product originates from a certain geographical area. Goods with GIs and appellations of origin must have certain quality characteristics that derive from their geographical origins. The TRIPS Agreement specifies the minimum standards of protection WTO members must provide for GIs. According to the agreement’s article 22(1), GIs are a kind of intellectual property, defined 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 geographic origin.” Thus, the TRIPS Agreement generally protects all products against the unjustified use of a GI in which the public is misled or an act of unfair competition is involved. A higher level of protection is provided under article 23 for wines and spirits that originate from a specific place as indicated by the GI. This protection is much more effective, because it prohibits the incorrect use of a GI whether or not the public is misled or an act of unfair competition is involved. There is an ongoing debate over whether the level of protection that exists for GIs for wines and spirits should be extended to foods. Another subject of discussion is whether the

proposed multilateral notification and registration systems under negotiation for wines and spirits should be extended to foods (IPC, 2003).

Most developing countries have recently implemented national regulatory frameworks to protect their intellectual property. This is their obligation under the TRIPS Agreement. However, the definitions for the term “geographical indications” and the regulatory frameworks for their protection vary to a large extent. While some countries, such as Bolivia and Colombia, distinguish between “indications of source” and “denominations of origin”, other countries, such as Costa Rica, Guatemala, Honduras and Mexico, differentiate between the terms “GI” and “denomination of origin”; Indonesia, like the United States, protects its GIs under trademark laws (Josling, 2006).

Apart from this relatively new international framework as set by the TRIPS Agreement, the EC Regulations nos. 509/2006 and 510/2006 were recently established at the European level. They distinguish between protected designations of origin (PDOs), protected geographical indications (PGIs) and traditional specialty guaranteed (TSG) (European Commission, 2006 and 2008). The requirements for a PDO, where all stages of production must take place in the defined geographical area, are more stringent than those for a PGI, where only one stage must take place in the specified area. As Daviron and Ponte (2005) note, the PDO concentrates on the whole value chain, with the characteristics referring to not only physical and geographical but also cultural attributes; by contrast, the PGI is linked to the production process in a certain area. The TSG does not refer to the origin, but rather highlights traditional character either in the composition or the means of production.

### *Comparing Labels and GIs*

Both GIs and labels rely on the same economic rationales, namely protection against free riding by third parties, reduction of consumer search costs and prevention of market failures that would otherwise occur due to asymmetric information. Nevertheless, there are differences between them; these differences may be summarized as follows:

- GIs make clear reference to a place of origin. Labeled products can be produced anywhere.
- A GI is granted for a product if the quality of the product is well known, as documented by historical data, newspaper articles or records of awards. Also, the quality or reputation of the product must originate from the particular characteristics of the geographical region, for example, soil, climate or production methods, and the GI product must be differentiated from like products from other regions. As Daviron and Ponte (2005) note, it is important that quality characteristics not only are determined by

technological and physical features but also are based on reputation and product identification with the location of origin. Therefore, GIs create value for a product. A label, on the other hand, is granted if the quality or environmental friendliness of a product is to be increased and/or ensured over time. The same label can be applied in different regions of a country and in different countries.

- Labeling systems are often initiated and owned by the private sector, whereas GIs are mainly considered a public right and are owned by the state or a parastatal entity.
- Labels are often subject to renewal, whereas GIs are continuous as long as the conditions at the place of origin do not change. In addition, in contrast to labeling designations, GIs cannot be sold or licensed (Josling, 2006; WIPO, 2008a).

Because of the differences enumerated above, GIs are often considered more valuable than traditional labels. Whether or not they truly are more valuable is a question that needs to be investigated in more detail.

## **Positions and Interests of Developing Countries**

Labeling has become a commonly accepted instrument for conveying environmental protection information; this is the case in most developing countries as well as elsewhere. It is difficult to identify clearly the proponents and opponents of environmental labeling among the developing countries. The reasons for introducing environmental labels in developing countries are diverse. The motivations of many NGOs arise from the goal of sustainable production. Very often, labels have also been introduced to increase and/or sustain access to export markets. Other reasons for the use of labels include benefits such as receiving a price premium. Labeling programs are expected also to offer opportunities for upgrading and improving practices and strengthening technical support, benefits which accrue mostly to producers.

While WTO members generally agree that labeling schemes can be useful, there is strong opposition from almost all developing countries to the call for new negotiations on labeling as currently discussed in the context of the Doha Declaration (TACD, 2003) and to inclusion of non-product related PPMs, which could limit their market access on environmental grounds (WTO, 2008). Many developing countries have raised concerns also about the increase in, and the growing complexity and diversity of, environmental labeling schemes.

In contrast to the situation with labeling, developing countries are divided in their positions in the debate over extending GI protection under the TRIPS Agreement to



food products. Proponents and opponents can be identified clearly. This debate will be further discussed in the following sections.

### *Proponents of GI Protection*

Many developing nations are sympathetic to geographical indications. India, Pakistan, Egypt and Indonesia, among others, have submitted proposals to extend the protection to products like Basmati rice, Darjeeling tea and Alphonso mangos. Other countries that have demanded better GI protection are, for example, Jamaica, Kenya, Mauritius, Nigeria, Sri Lanka and Vietnam (European Commission, 2003; Grant, 2005). In addition, Thailand has registered GIs in the EU for a few products. China also is sympathetic to the idea of extending the use of GIs. It has recently applied for ten PGIs/PDOs at the European level. As of December 2005, South Korea had officially registered 13 products as GI products (Suh and MacPherson, 2007). Table 1 shows examples of other developing-country goods eligible for GI protection. In addition, a number of networks and NGOs have evolved to support the idea of GIs in developing countries. For example, a network called ORIGIN was established by more than a hundred producers from 24 countries with the aim of protecting and promoting GIs.

In comparison with conventional environmental labels, GIs are expected to provide additional protection against counterfeiting and free riding. They offer the possibility to establish niche markets, and they provide long-term benefits due to the long-term duration of GIs. They are assumed to play additional roles as rural development tools and as protectors of traditional and indigenous knowledge as a public good. Benefits are expected to arise for the region, since labour and other production factors are retained in the geographical area. Furthermore, GIs are considered to be conservation tools for biodiversity and promoters for tourism (Correa, 2002). Effective GI management enables companies to use their intellectual property assets to improve their competitiveness and strategic advantage.

**Table 1** Examples of Potential GI Products from Asia and Africa

| <b>Asia</b>         |   |
|---------------------|---|
| <i>Sri Lanka</i>    | Ceylon tea, Nuwara Eliya tea, Dimbulla tea, Uva tea, Udwa Pussellawa tea, Kandy tea, Ruhuna tea, Ceylon green tea |
| <i>Thailand</i>     | Silk, Thai fragrant rice (Thai Hom Mali Rice), Jasmine rice   |
| <i>India</i>        | Darjeeling tea, Basmati rice, Kohhlapari slippers   |
| <i>Pakistan</i>     | Rice  |
| <i>Vietnam</i>      | 'Nuoc nam' (a fish-based sauce from the island of Fu Quoc)  |
| <i>China</i>        | Long-Ging tea   |
| <b>Africa</b>       |   |
| <i>Burkina Faso</i> | Shea butter and Bobo for plank masks  |
| <i>Cameroon</i>     | white honey   |
| <i>Chad</i>         | high-grade cotton   |
| <i>Congo</i>        | Kivu and Ituri for coffee   |
| <i>Gabon</i>        | sweet potato  |
| <i>Guinea</i>       | Pineapple, banana Conakry, chili de Mamou   |

|                    |   |
|--------------------|---|
| <i>Ivory Coast</i> | Korhogo fabrics   |
| <i>Kenya</i>       | Mt. Kenya coffee, Gathuthi tea, Kisii tea, Kericho tea, Kangeta, Miraa, Meru potato, Kikuyu grass, Mombasa mango, Machakos mango, Asembo mango, Muranga bananas and Kisii bananas   |
| <i>Madagascar</i>  | Mananara vanilla  |
| <i>Mauritius</i>   | chilis and pickles, honey, beeswax, Petit piment confit, Aigre-doux de limons, Piment de manges, Piment de limons, Piment de papayes, Achard Bilimbi longue, Achard de carambole, Achard de limons, Piment de Tamarin, Pâte de piment rouge, Pâte de piment vert, Achard de fruits de Cythère |
| <i>Morocco</i>     | Argan oil   |
| <i>Tanzania</i>    | Konyagi (alcohol), Kilimanjaro coffee, M'Bigoiu for sculptures  |
| <i>Uganda</i>      | Waragi (alcohol)  |
| <i>Zimbabwe</i>    | tobacco and chipinga coffee   |

Sources: Otieno-Odek (2005), *Food & Drink Weekly* (2003), IPR Commission (2002).  
Origin at <http://www.origin-gi.com/categories.php?catid=7> (accessed 04.02.2008)

### ***Opponents of Enhancing GI Protection for Foods***

The developing countries opposing the promotion of GIs include Argentina, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Namibia, the Philippines and Taiwan (*Food & Drink Weekly*, May 12, 2003; Grant, 2005). Apart from the developing countries, the big food producers and exporters – the United States, Canada, Australia, New Zealand and Japan – also are opposed to the idea of extending GI protection to foods.

Many developing countries are afraid of the potential for GIs to act as non-transparent protection measures that may lead to the loss of export opportunities. Their concerns relate to the costs of meeting technical and administrative requirements, the high costs of compliance and monitoring and the fact they would need to establish a legal framework to protect other countries' GIs. They are afraid that, especially, small-scale farmers will be marginalized as a consequence.

Apart from the economic arguments, many developing countries oppose the idea of GIs for political reasons. There is the concern that they will need to make concessions in other areas under negotiation at the WTO, like the Agreement on Agriculture. In the ongoing Doha Round, a new debate has started about including GIs in the agricultural negotiations. GI protection was specified for wines and spirits especially based on pressure from France and Italy in exchange for accepting reductions in export subsidies. However, many developing countries consider GIs to be not an agricultural trade issue but rather an intellectual property rights issue to be discussed under the TRIPS mandate and not under the agricultural mandate.

### **Impacts of Labeling and GI Protection**

Evidence on costs and benefits with respect to labeling as well as GI protection is still scarce. In fact, assessment and measurement of the actual impacts of environmental labeling and GIs are difficult undertakings. Studies frequently refer to

the difficulties of obtaining data and comparing the impacts of different schemes, especially since they use different methodologies and focus on different issues (OECD, 2005). Moreover, it is difficult to isolate the effects of an environmental labeling scheme from effects caused by other factors such as general technological progress in a sector or other policy measures.

Most of the studies focusing on the impacts of environmental labeling schemes look at impacts on producers, consumer behaviour, markets and the environment. Generally, investigators find that impacts vary widely, often depending on the nature of the production process affected. In addition, impacts have been heterogeneous, depending on countries and regions as well as sectors (agriculture, aquaculture, textiles, fisheries).

### ***Benefits from GI Protection and Labeling***

Benefits for developing countries from labeling and GIs are expected to arise mainly from improved market access for their products. Indeed, many high-value food and non-food agricultural products from developing countries have been successfully introduced in developed countries' markets. Examples of eco-labeled or GI-declared products from developing countries that are typically found on the shelves of developed countries' markets are coffee, tea, rice, spices, oils, fruits and vegetables. In the coffee sector, for example, various environmental labels can be found worldwide; examples are "bird-friendly", "organic", "fair trade", "Utz Certified" and "wild". With respect to GIs, three have been registered so far: "Café de Colombia" is registered as a protected denomination of origin for green coffee beans in Colombia, and "Café Chiapas" and "Café Veracruz" in Mexico are registered as appellations of origin under the Lisbon Agreement. Beyond food products, certain handicraft products also can be found as labeled products. All these products also have been mentioned in the context of potential GI protection (table 1).

Benefits from labeling and GIs are expected to arise also from price premia for producers in developing countries. Carambas (2007) studied the impact of labeling organic rice in Thailand. Her results reveal that a positive price premium has been achieved through labeling. She also finds that for eco-labeled rice, both at farm and export levels, profits are generally higher than for conventionally produced, non-labeled rice. The organic banana sector furnishes further empirical evidence. A price premium is paid for organic bananas, though it does appear to be decreasing over time as scarcity decreases (UNEP, no year). A report by the International Trade Centre (ITC, 2003) shows that organic products achieve price premia of 20 to 40 percent compared to conventional products. However, the report acknowledges it is unclear to what extent the price premia accrue to middlemen in the value chain as opposed to producers. The ITC report also concludes that the price premia depend on the relative

growth rates of supply and demand. In their study on value chains in the coffee sector, Kaplinsky and Fitter (2001) find that price premia are more likely to be captured by retailers and distributors than by producers.

Price premia were found for labeled coffee in a small sample of retail coffee prices in Germany (table 2). While conventional coffee costs around €1.5/250g, retail prices for organic and wild coffees amount to up to €8.50/250g. The multiple uses of labels also seem to have an effect on the price level and price variation. This sample also shows that conventional and organic coffees always achieved higher prices if the country or region of origin was mentioned. This may indicate that GIs play a role in determining retail prices in Germany. To what extent producers in developing countries benefit from the retail price, however high the premia, cannot be established from this example.

**Table 2** Retail Prices for Selected Coffee in Germany, 2007 (in €/250 g of 100% Arabica Coffee)

|   | Country / region<br>of origin<br>specified | Average prices<br>and price ranges |
|---|--|------------------------------------|
| Conventional (4)                          |  | 1.5                                |
| Conventional (4)                          | X  | 2.6                                |
| Organic (1)                               |  | 2.0*                               |
| Organic (2)                               | X  | 2.4                                |
| Organic & Fair Trade (4)                  | X  | 4.9                                |
| Wild Coffee &<br>Organic / Fair Trade (4) | X  | 5.8                                |

Source: Based on a survey by Stellmacher 2007.

Consumer surveys and experiences related to price premia for products from developed countries give some indication of possible benefits from GI protection. Two surveys were conducted in 1996 and 1999 among over 16,000 consumers in the EU. Compared with 11 percent in 1996, 20 percent of the consumers in the 1999 survey indicated they often bought GI products. Around 60 percent bought them sometimes. In the 1999 survey, the motivations for buying such products ranged from the guarantee of origin (37 percent), quality (35 percent), place and method of production (32 percent) to, finally, tradition (16 percent). Furthermore, around 43 percent of EU consumers said they are ready to pay a price premium of 10 percent for a GI product – compared with 8 percent who said they are ready to pay a price premium of 20 percent (Berenguer, 2004). Also, there is evidence of a market for regional GI products in

developing countries, even if they are not yet labeled as such. For 265 products, urban consumers in Vietnam associated a higher quality with the place of production (Tran, 2005).

Suh and MacPherson (2007) conducted a case study on Boseong green tea in South Korea. Their results show that within only six years the GI has promoted the image of the product, resulting in increased production and development of the tea-related industry and region. In sum, production doubled, and the number of tourists visiting the Boseong region has tripled since the GI was introduced in 1999. Tea-related income derived from production, processing and tourism has also increased over time, with prices of the green tea growing by more than 90 percent.

Further evidence on price premia has been found for many products from developed countries. French GI cheeses for example are sold at an average price premium of €2/kilo compared with French non-GI cheeses. French Poulet de Bresse has a market price four times higher than regular French chicken. Producers of milk used for Comté cheese receive a price premium of 10 percent. Producers of Italian Tuscano olive oil have managed to increase prices for their olive oil by 20 percent since it was registered as a GI in 1998 (Origenandino, 2008). In Mexico the GI product Tequila increased the price of agave and other domestic inputs, which resulted in increased profits for Mexican producers (Babcock and Clemens, 2004). For wine, several studies have established that the regional reputation influences the price (Cardebat and Figuet, 2004; Schamel and Anderson, 2003).

There is some evidence that benefits can be derived from counterfeiting GI products. Origenandino (2008) provides details on losses due to counterfeiting. The Origenandino web site states that fake whiskey caused estimated losses around the world of €22 million in 1996. Furthermore, the region of Antigua in Guatemala produces some 6 million pounds of genuine Antigua coffee, while some 50 million pounds of coffee are sold under the “Antigua” denomination around the world. Indian Darjeeling tea producers export 10 million kg of such tea, generating some €30 million for the region. Yet some 30 million kg of such tea are traded around the world under the denomination “Darjeeling”. The figures grow exponentially when one speaks of “Basmati” rice, which generates some €300 million for the Indian economy.

One of the reported triggers for developing country support of enhanced GI protection for foods was the registration of U.S. patents on “Basmati” and “Jasmine” rice lines. In response to the attempted registration, India established a Basmati Development Fund to monitor trademark applications for Basmati rice or other deceptive variations, which has subsequently successfully identified and challenged fifteen registrations. According to Adlakha (2004), around 100 trademark cases in over 30 countries have been fought dealing with use of the term “Basmati” in products like baby foods, ancillary services, saffron, coffee, spices, juices, etc.

### ***Costs of GI Protection and Labeling***

Labeling and GI schemes often contain elements that pose problems and thus result in costs for developing countries. Many developing countries have only limited capacities to implement SPS standards, establish the relevant institutions and carry out the inspections required by the labeling schemes. The administration involved is extremely costly and is beyond the means of some developing countries. Argentina, Chile and Guatemala argue that extending GI protection to additional products would impose financial and administrative burdens and that these would outweigh any trade benefit (IPR Commission, 2002). It is difficult to expand on these arguments, as the evidence on costs for labeling and GIs is even scarcer than that on benefits.

What is often ignored is that the costs for marketing need to be deducted from the price premium that is received by the producers. According to IPC (2003), the authorization of a GI does not bring immediate benefits. In addition, costs associated with more traditional production processes or costs associated with ensuring the existence of the quality attributes in the region are often ignored and may add to the total costs (Kerr, 2006).

Suh and MacPherson (2007), on the other hand, argue in their case study on Boseong tea from South Korea that since GIs often use already well-known names of regions, marketing costs at the early stage are often not very high. Nevertheless, their study also shows that a concerted effort by the government, research institutes and the private sector is needed to promote the development of the GI product.

Further costs and administrative burdens are associated with preventing counterfeiting. Without appropriate legal protection systems and their enforcement, the free-riding incentive is quite high. The existence of a GI for a particular food means there will be even more incentive to counterfeit protected products. And in fact, under international law, a country must enforce GIs within its home market in order to place its own GIs under international protection. Currently, there are not many non-European countries with systems in place to protect GIs. Hong Kong submitted a cost estimate for modifying existing intellectual property systems or developing new systems to accommodate a GI registration to the WTO. They estimate the staff costs and the cost of establishing the computer systems, including server and software, at US\$10,800, plus an annual recurrent cost of US\$253,900. Assuming 10,000 registered GIs, they calculate for each GI registration a cost of US\$180, which seems to be in line with fees charged in other countries to register trademarks (Babcock and Clemens, 2004).

### **Summary**

**E**nvironmental labeling has multiplied and has become more complex and diverse, resulting in reduced transparency and label fatigue. Thus, more attention is being

paid to GIs now, partly driven by the introduction of the TRIPS Agreement under the WTO. Among developing countries, one can identify both proponents and opponents of extending the use of GIs beyond wines and spirits. While labeling is mostly based on private initiatives, GIs are considered to be long-term public rights. Proponents therefore consider GIs the stronger tools for protecting their national property rights and offering them new opportunities to develop their export markets. Opponents, however, consider GIs to be new barriers to trade, impeding their export opportunities. Their concerns relate especially to the costs of the technical and administrative requirements, which are likely to outweigh any price premia.

The empirical evidence, especially from developing countries, on the impacts of labeling and GIs is still scarce. There are examples that show both approaches, labeling and GIs, to have resulted in price premia for producers and regional development in developing countries. However, the costs are often underestimated. For example, the costs of registering, marketing and monitoring GI and labeled products are often not mentioned.

As stated by the World Intellectual Property Organization (WIPO, 2008b), the effective management of intellectual property extends to a company's ability to promote and commercialize such products, including effective monitoring and enforcement of its intellectual property rights. In the case of GIs, the government undertakes this role in cooperation with other stakeholders. Concerted action is needed to ensure that GI registration results in price premia. Not every GI product will be successfully marketed as such, but registration might confer opportunity.

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## Endnotes

1. See the Ministerial Declaration at par. 32 (adopted 14 November 2001), WT/MIN (01)/DEC/1. The status of environmental labeling programs has been one of the central items on the work program of the WTO’s Committee on Trade and Environment since it was created in 1994. See item 3(b) of the Decision of the Ministers Regarding Trade and Environment (14 April 1994), reprinted at 33 I.L.M. 1267-69.

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