Changing Institutions to Protect Regional Heritage: A Case for Geographical Indications in the Indian Agrifood Sector

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Abstract

New institutions like Geographical Indications (GIs) evolved in recent years to protect indigenous knowledge in the agrifood sector without hampering ethos of free trade. Proponents regard these as strong tools for protecting their national property rights offering them new export opportunities in the agrifood sector. Opponents, however, consider GIs as barriers to trade. This paper seeks to establish some clarity in the controversy by providing theoretical justifications for GIs. It draws on insights from the New Institutional Economics and then substantiates these by citing experiences from India. Darjeeling tea and Basmati rice are taken as examples to highlight some dynamic institutional aspects of GIs. Forces shaping the new legal framework for GIs mainly arise from the international level.

Keywords: Geographical indication, India, Darjeeling tea, Basmati rice, institutions
I. Introduction

The last two decades saw geographical indications (GIs) often being put into the center-stage in many multilateral and bilateral trade talks. There have been demands by the European Union (EU) and many developing countries to grant higher protection for products other than wines and spirits at the Council of Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization (WTO). They argue that such protection through GIs can help localize economic control, promote rural socio-economic development and assure higher economic returns (Rangnekar 2004). This is crucial for the producers of GI products in developing countries since a lot is at stake for them. However, although this claim is well accepted at least theoretically, there is no adequate empirical evidence to show as to whether and how the benefits of GIs are actually reaching their producers in developing countries (Josling 2005).

Protection of GIs refers to protection of products originating from a certain geographical area. Thus, protection is provided against the use of GIs for products not originating from the geographical area to which the indication refers. Such protection has far reaching implications for both producers and consumers alike. It helps consumers distinguishing goods produced in a particular geographical region from goods produced elsewhere thereby preventing the former from being misled. So the idea is to provide protection for GIs, a kind of intellectual property right, which entitles the enterprises that are located in the designated area to exclude others from using the indication. Moreover, GIs are expected to benefit producers by placing a premium on the product concerned by pushing up its competitiveness and prices. In other words, it seeks trade and commercial advantage on legitimate grounds.

However, everything seems not to be legitimate about GIs. There is a host of countries - many of them are from the developing block itself - which cry foul about extension of GI protection (Grote 2008). They fear that GIs would act as non-transparent protection measures which may lead to the loss of export opportunities. Their concerns relate to the costs of the technical and administrative requirements, the high costs of compliance and monitoring, and having to establish a legal framework to protect other countries’ GIs. They are afraid that especially small-scale farmers are marginalized as a consequence (Zou 2005; IPR Commission 2002). Kerr (2006) points out that the opportunities for price premia will first have to be created in developing countries with given scarce resources; and in the longer run, competition may even erode these benefits again.

This paper addresses some of the controversial issues regarding GIs in the context of India. It is structured as follows: chapter 2 gives a theoretical underpinning of GI protection by drawing especially from the New Institutional Economics literature. Chapter 3 describes the legal framework for GIs at the international level and compares it with the situation in India. Section 4 critically discusses the empirical evidence about costs and benefits of GIs from India taking the examples of Darjeeling tea and Basmati rice. Finally, in the last chapter the major results are summarized and some research questions are raised for further empirical investigation.
II. Economics of GI

In theory, there are some strong economic justifications for why geographical indications merit protection as such. We discuss them in the following section in some detail by categorizing the economic functions of GIs into four sub-categories such as intellectual property rights, institutions, transaction costs, and economic development.

II.1 GIs as Intellectual Property Rights

Some products are unique because they can be produced only in a certain geographical region and they become reputed because they have certain quality traits like in the case of Champagne or Basmati rice. The important issue about these products is the link between their quality characteristics and the geographical attributes of the region where these products are being produced. Such products are mostly agricultural commodities like wine, cheese, rice, fruits, and coffee but also refer to handicraft items such as silk clothes with traditional paintings on them; or it could be even herbal medicines such as Neem and Turmeric.

Property rights are often sought for such goods based on the fact that they are produced in a geographical region which has unique geo-climatic characteristics and uses traditional skills. These render a unique value to the product and make replication of these goods elsewhere impossible. Since goods emanating from another region must, by definition, be different, there can be no justification for using the same geographical term for them. It will ipso facto be a misrepresentation to do so and therefore, a special right makes more sense than an action which requires proof of misrepresentation. In that way there is a much stronger link between the distinctiveness of a GI and the uniqueness of the underlying product, and an even stronger justification for a priori broad property rights.

However, this argument depends on the validity of the proposition that a product can and does uniquely reflect local characteristics and cannot be replicated elsewhere. If one accepts this uniqueness principle, it again demands a system that has stringent product or process standard controls and adheres strictly to the requirement of geographic origin. Otherwise the GI cannot be guaranteed to represent the unique characteristics of the goods of the originating region, and extensive a priori rights will not be warranted.

Furthermore, goods in a market can be categorized based on the nature of activity required from the consumer in order to derive information on the good. In a market where there exists an inequitable distribution of information, producers will be unable to differentiate their goods. Accordingly, being unable to inform customers of the superior qualities of their products, producers would cease to invest in increasing quality, thereby impeding product innovation. The reputation theory logically builds on this basic hypothesis. It argues that a producer has the incentive to invest in the promotion of his or her products’ reputation only if the same can be effectively conveyed to the consumer. A regime seeking to protect geographical indications would therefore seek to bridge the asymmetry of information between the producer and his or her consumers thereby allowing him or her to invest to a maximum into improving the quality and, indirectly, the reputation of the good (Nelson 1970; Josling 2005; Klein and Leffler 1981; Lence et al. 2007; Moschini et al. 2008).
The justification for providing intellectual property rights can be broadly classified as:

- **equity considerations** – the custodians of geographically indicated products should receive some price benefits if marketing of such products leads to commercial gain;
- **conservation concerns** – the protection of GI products contributes to the wider objective of conserving the environment, biodiversity and sustainable agricultural practices (Bérard and Marchenay 2008);
- **preservation of traditional practices and culture** – protection of GI products would be used to raise the profile of the knowledge and the people entrusted with it both within and outside communities (Bérard and Marchenay 2008);
- **prevention of appropriation by unauthorized parties or avoiding “biopiracy”**; and promotion of its use and its importance to development (Correa 2001).

### II.2 GIs as Institutions

Institutions are in principle a set of formal and/or informal rules which lay a framework within which certain activities take place (Rodrik 2002). Institutions not only define rules for activities, they also monitor the implementation of those rules. Institutions such as laws and regulations, codes of conducts and norms, or property rights are crucial in making markets function well. They influence patterns of scientific advance and technological innovation patterns across history (Cardwell 1995; Huff 1993).

We discussed in the last section as to why GI products merit intellectual property rights. However, to govern and protect intellectual property rights, no matter in whichever form they are created, institutions are required. It is an acceptable argument in the New Institutional Economics literature that an entrepreneur would not have an incentive to innovate unless he or she is not allowed to exercise sufficient control over the returns to the assets that he or she produced. As Rodrik (2002) has emphasized what is important is control over the property, not just the ownership rights. Here comes the importance of necessary institutions that provide control over intellectual property to its owner. These institutions could be either formal or informal as well as a mixture of both depending upon the country within which they originate. In fact, GIs need more formal and sophisticated institutions for their efficient functioning since the former is in most cases a tradable commodity.

As institutions, GIs encompass several aspects – most fundamental are of course the legal rules and their implementation. The legal rules are basically of two types. First, countries ensure adequate protection for their own GIs at the national level and second, effective protection is also granted for all GIs at the international level. This is because national legislation, which applies to only one country, is not sufficient in the context of a globalized economy where products keep traveling beyond national borders. This latter type of legislations involves higher complexities given the fact that countries differ in their rules of defining GIs and instruments to implement them. In this context, an argument in favor of creating a multiple register that defines a universal set of rules for GIs to be enforced at the international level is quite justified.
However, this may have substantial financial repercussions, especially for developing countries (Zou 2005; Kerr 2006; Raustia and Munzer 2007).

Apart from legal institutions, GIs also foster social capital. Social capital which refers to the social contacts between economic actors is considered as a crucial factor for productivity increase and value addition to the economic system. The social capital could be defined as community-based institutional arrangements which help in conservation and reproduction of natural capital. It is essentially a trust-based community capital.

Specifically, in case of GI products, social capital plays an important role in augmenting the human and natural capital embedded in the production process. Traditional knowledge or practices have always been passed from old generations to new ones. This knowledge base has been gradually modified by constant practice within the community. This community level interaction has increased the cooperation among the producers of GI products. It also helps building trust among the producers. Sometimes, these trust-based informal institutions serve greater purpose than the formal institutions because the former require less effort to implement the norms and rules.

Technically, to gain GI status, the local community that produces GI products has to confirm the procedural requirements of GI law collectively. For example, the producers of a potential GI product should belong to the mentioned geographical region and should show consistent quality traits in their product. So, producers need to interact closely among themselves in order to pursue their claim for GI on the product. This close interaction increases cooperation among local producers. Further, community level institutions provide information pertaining to international prices, consumer’s perception about the product, and misuse or overriding of the brand name. Further, these institutions help producers by marketing their products in national and international markets.

II.3 GIs and Transactions Cost

Consumers often have to rely on experience when selecting a good that cannot be tested before using. Such a good embodies information cost that is higher if the market for such goods is heterogeneous (Landes and Posner 1987, 2003). Information asymmetry is crucially significant in the context of experience goods, like most foodstuffs, including wine and spirits. Geographical indications play an important role in providing information about such experience goods. In this respect, a GI can function as an important method of market signaling to assure the quality of the product, and thus reduce the degree of asymmetric information between traders (Josling et al. 2004; Rangnekar 2004; Tregear et al. 1998). Legal protection of signs used in relation to these types of goods is prima facie acceptable within the broader framework of the information cost reduction theory (Caenegem 2003).

However, the information cost reduction theory has to prove good enough in reality as opposed to what can be called as perception advertising, i.e. influencing the emotions of the consumer rather than accepting the consumer as a rational maximizer. What is crucial for the goods seeking for GI protection is to ensure that consumers’ perception of the brand closely approximates real, as opposed to perceived product qualities; thus
search cost reduction is maintained as the prime objective of a GI. Registered GI systems that impose product standards as well as origin requirements arguably do just that. However, if the use of the registered GI is not subject to product standards but only origin rules, then the alleged masking effect may potentially be enhanced. Individually registered trademark owners decide on the quality of their products independently. The law does not stop brand-owners from diluting the quality of the branded goods. Here the distinction between a trademark and a registered GI makes the discussion interesting: a trademark owner is indirectly restrained by commercial profit motive. The risk is that the brand’s reputation, and hence ability to generate surplus rents, is destroyed in the process of quality dilution. But since registered GIs are collectively owned there is less restraint on an individual producer to dilute the quality. Unlike the registered trademark’s individual owner, the commercial self-interest of one legitimate user of a GI may not be sufficient to protect all its other legitimate users. Thus, if left unregulated, the independent commercial decision of one registered GI user to reduce quality may negatively affect the value of a GI for all other legitimate users.

As mentioned earlier, a key factor in the growth of brands and their legal regulation is the separation between consumer and producer. In the last century this distancing process accelerated rapidly for manufactured goods, but less for agricultural goods. Now however, with modern packaging, transport and global trade, the separation between consumer and producer has rapidly increased in agriculture too. In such circumstances, registered GIs are one method by which a small-scale producer, far away geographically from the consumer, can reach through to that consumer with a consistent quality message. Naturally, that can also be done by way of ordinary trademarks, and the choice between trademark and a GI-based strategy is a significant question.

GI registration also promotes rationalization of costs of promotion, because advertising expenditures can be shared by a number of non-competing producers. If those producers already supply homogenous products, duplication of the costs of promotion is avoided. The tentative conclusion flowing from the above is that there may be a reasonably sound theoretical basis for a system of registered GIs. But this is only the case if such a system requires, first, adherence to strict rules of origin, and second, strict product standards.

II.4 GIs and Development

GI products have significant implications for producers of developing countries. One important aspect of such traditional products and activities is that they relate to community engagement. Millions of people in the developing world depend upon such traditional activities for their food security and health. In many countries, traditional medicines provide the only affordable treatment available to poor people (WHO 2002).

Considering the fact that GIs generally draw upon products such as agriculture, fisheries, handicrafts, and artisanal products, any trade advantage obtained from the GI status is basically pro-poor. This is in contrast with the other forms of intellectual property rights such as patents and trademarks where the gainers are mostly rich people (ICTSD 2004). Better protection and marketing of GIs could directly
contribute to reduction of absolute poverty through increased local inflow of incomes and employment opportunities. Therefore, GIs have a role to play in reducing vulnerability to poverty, which refers to the first of the Millennium Development Goals (MDGs). Since higher incomes also affect the other indicators such as reducing disease burdens as well as child and maternal mortality, there are indirect connections to other MDGs. Crucially, international rules on GIs could be made much fairer to honor the spirit of MDG 8 (fairer global partnerships) as well. Therefore, GIs can significantly contribute to promote human development by helping countries to meet the targets set under the MDGs (ICTSD 2004).

Further, some basic properties of a GI are likely to benefit the local producers and the regional economy. First, GIs are held in perpetuity with no time limit as long as local knowledge is sustained and the indication is prevented from being generic. This means the marketing costs are needed only to reach out to consumers with the message of further innovations in the product. Second, the right is granted to a collective body of producers and not to an individual producer. Therefore, the whole community is going to benefit, and this in turn may spur the regional economy. Third, unlike patents and copyrights, GIs are not created but only recognized which means that investments are related only to building a reputation of a product already existing, whereas patents and copyrights relate to creating products in the first place.

By providing an assured and continuous source of income through its reputation channel, GI certification reduces vulnerability to poverty of rural poor and thereby reduces migration from rural to urban areas by retaining the rural farmers on their farm lands. This has two significant implications – first the local indigenous knowledge does not perish, in fact it grows into a more polished form and second the reduction in migration rate reduces the burden on urban areas which are often overcrowded in developing countries. Moreover, GIs may spur tourism in the region. There could be a two-way interaction between GI products and the geographical location. In one way, the GI goods’ quality characteristics could be attributed to the environment in which they were developed and at the same time the popularity of the GI goods creates an image for the region that helps the tourism sector to develop. And this development of tourism can be ploughed back to support local businesses and community development.

III. Protection for GIs under TRIPS and in India

Before the advent of TRIPS in 1994, there was no multilateral agreement for GI protection at the international level. However, three international conventions marked the existence of protection for the geographical origin of goods. These include the Paris Convention for the Protection of Industrial Property (1883), the Madrid Agreement (1891) and the Lisbon Agreement for the Protection of Appellations of Origin and their International Registration (1958). Nevertheless, given the restricted scope of protection afforded by these multilateral treaties and the limited number of signatory states, none of these treaties could render any significant impact on the global protection of geographical appellations (Das 2006).

In such a context, the comprehensiveness and wide coverage of the TRIPS agreement holds significant importance for the international protection of GIs. There is a two-tier system of GI protection in the TRIPS agreement, which is contained in Articles 22
and 23. Article 22 spells out the general conditions and regulation for GI protection. According to this article, a member country has to provide legal means to prevent use of indications which mislead the public as to the geographical origin of the good and which constitutes an act of unfair competition within the meaning of Article 10bis of the Paris Convention (Article 22.2, TRIPS/WTO). The registration of a trademark which uses a geographical indication in a way that misleads the public as to the true place of origin must be refused or invalidated ex officio if the legislation permits, or at the request of an interested party (Article 22.3, TRIPS/WTO). Article 23 provides a higher level of protection to wines and spirits as compared to the protection provided through Article 22. According to Article 23, “interested parties must have the legal means to prevent the use of a geographical indication identifying wines for wines not originating in the place indicated by the geographical indication. This applies even where the public is not being misled, where there is no unfair competition and the true origin of the good is indicated or the geographical indication is accompanied by expressions such as “kind”, “type”, “style”, “imitation” or the like. Similar protection must be given to geographical indications identifying spirits when used on spirits. Protection against registration of a trademark must be provided accordingly” (Article 23, TRIPS/WTO).

This issue of additional protection to wines and spirits has been the centre of controversy for some time now. One group of members at WTO particularly led by the EU seeks to extend the Article 23 beyond wines and spirits to cover all kinds of GIs. Major supporters to this view from the developing world are India, Thailand, Sri Lanka and Kenya. On the other hand, the opposing group of members led by the United States (US) does not approve this proposal. The latter’s argument is that the present protection system for GIs is sufficient to protect the producers’ interests. Any extension of protection would actually distort the free trade by obstructing competition in the international market.

Apart from Articles 22 and 23, Article 24 spells out some exceptions according to which member countries are not obliged to provide protection for GI claims. Two significant exceptions are that first, a product has already become generic and second, the product does not have national GI protection.

**III.1 Legal system of GI protection in India**

In India, the legal system for GI protection has very recently been developed. The Geographical Indications of Goods (Registration and Protection) Act was enacted in 1999 and has come into force in September 2003 (hereafter called GI Act). Before this Act, there was no separate legislation for GIs specifically. However, there were three alternative ways in which the then-existing legal systems of the country could have been preventing the misuse of GIs:

- under the consumer protection laws,
- through passing-off actions in courts, or
- through certification trademarks.

Among these laws, certification trademarks (CTM) were more focused on recognizing and protecting indication of sources. In the Indian context, the most common geographical name protected under the CTM system, prior to the GI Act, was “Darjeeling tea” (Pettigrew 2000). A certification trademark is understood as a
mark administered by a proprietor who certifies the goods as to their origin, material, mode of manufacture, or performance of services, quality, accuracy or other characteristics, and thereupon allows use of the mark.

Under the CTM system, a proprietor of the mark who proposes to merely administer the mark but not use it him- or herself, applies for the registration of the same together with a set of elaborate regulations detailing the process of certification for the use of the mark in relation to the goods in question. It is absolutely imperative in the CTM system that the person claiming proprietorship over the mark does not him- or herself use the same in conjunction with his or her goods or services. It is therefore usual to find that a central agency or association usually administers the mark in question and acts as the certifying authority, which in turn authorizes the use of the mark by producers/manufacturers in relation to their own goods.

The need for separate legislation for GIs in form of the GI Act was felt in India due to two reasons. First, the controversial patenting of Basmati rice by a US-based company, Rice Tec. and the widespread report of tea from other countries being passed off as Darjeeling tea. India realized that if it needed to protect its own geographical indications globally, it needed to protect them at the national level to begin with. The second reason is related to institutional commitment. Being a signatory to the TRIPS agreement, India is obliged to set into place national intellectual property laws which also include GI laws.

The new Indian GI Act has an elaborate procedure for registering GIs at an office located in the southern city of Chennai. Authorities claim that this Act has two key characteristics: (i) protection of producers against counterfeiting and misleading commerce, and (ii) striking of balance between trademark and GI protection (Ravi 2003). According to this Act, once a GI is registered, any person claiming to be the producer of the good designated by the registered GI can file an application for registration as an authorized user. The GI Act is to be administered by the Controller General of Patents, Designs and Trade Marks – who is the Registrar of GIs. The registration of a geographical indication is for a period of ten years. Renewal is possible for further periods of ten years. If a registered GI is not renewed, it is liable to be removed from the register.

Various stages of filing and granting of geographical indications are explained in the Figure 1. In the first step, the producers’ organization or a collective body of producers, like the Tea Board of India for example, has to file an application in the prescribed form to the GI authority in India. This application will be examined by experts appointed by GI registry; if accepted then the application will be advertised in the GI journal for public scrutiny. However, if the application is objected by experts then a hearing will take place in special courts designated for GI purposes. If the court refuses to recognize the genuineness of the application then the applicants can further appeal to the Intellectual Property Appellate Board (IPAB).

After advertised in a GI journal, if the application did not receive any objection from any public organization or individual, then it is deemed as accepted to be awarded GI certification. However, if any individual or producer organization or NGO objects the validity and genuineness of the GI, then again the applicants can appeal to IPAB and a
hearing takes place. If allowed, then the application goes for acceptance and a registration certificate is issued.

Figure 1: Granting procedure of Geographical Indications in India

III.2 A comparative assessment

All the member countries of WTO are required to follow the fundamental principles of GI law as outlined by the TRIPS agreement. However, there exist significant divergences among countries with regard to the modes and the purpose of protection of geographical denominations at the national level. Often these differences in approaches are related to the historical developments in the respective countries. Notably, TRIPS leaves it up to the member countries to determine the appropriate method of implementing the provisions of the Agreement, as long as compatibility with the TRIPS agreement is being kept (Das 2000).

According to the TRIPS agreement, GIs are defined as indications that 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 (Article 22.1). As opposed to this, the definition included in section 2(1)(e) of the Indian GI Act is as follows:

geographical indication in relation to goods, means an indication which identifies such goods as agricultural goods, natural goods or manufactured goods as originating, or manufactured in the territory of a country, or a
region or locality in that territory, where a given quality, reputation or other characteristics of such goods is essentially attributable to its geographical origin and in case where such goods are manufactured goods one of the activities of either the production or of processing or preparation of the goods concerned takes place in such territory, region or locality, as the case may be.

Note that whereas the TRIPS definition refers to goods in general, the Indian GI Act specifies the goods to be either agricultural goods or natural goods or manufactured goods that can qualify as a GI. Further, in the Indian Act, if a producer applies for a GI for a manufactured good, he or she must make sure that at least one of the activities of either the production or processing or preparation of the good must take place in the territory. In that sense, the GI Act is more restrictive than the TRIPS definition.

This can be explained by taking “Darjeeling tea” as an instance. Darjeeling tea involves manufacture because the green tea leaves plucked from the tea bushes have to go through a range of rigorous processing stages before turning into the final product (called “made-tea”), which is ultimately sold in the market. Now, even if the tea leaves are plucked from the Darjeeling region, the GI Act will not allow the final product to be designated as Darjeeling tea, unless the processing also takes place within the Darjeeling region. The TRIPS definition will, however, allow the final product to be designated as Darjeeling tea, even if the processing takes place outside Darjeeling, because no matter where the processing takes place, the given quality or characteristics (such as flavor, etc.) of the final product will essentially be attributable to its geographical origin.

While drawing a comparison between GI laws under the TRIPS agreement and in India, it is interesting to note that although Article 23 of TRIPS affords a higher protection to GIs denominating wines and spirits only, the corresponding provisions in the Indian Act do not restrict themselves to wines and spirits alone (Das 2006). Rather, it is left to the discretion of the Central Government to choose to which product they will provide such higher protection. So, it is clear that although wines and spirits need to be granted special protection in all member countries of WTO, the member countries have the liberty to grant such special protection to other products in their countries if they wish to do so.

IV. Socio-economic impacts of GIs in India with reference to Basmati rice and Darjeeling tea

Evidence on the socio-economic impact of GIs in developing countries is still scarce. In fact, assessing and measuring the actual impacts of GIs is difficult. One recurrent finding in studies is the difficulty to obtain data and to compare the impacts of different schemes, especially since they use different methodologies and focus on different issues (OECD 2005). Moreover, there are difficulties of isolating the effects of GI certification from effects caused by other factors, such as general technological progress in a sector, or other policy measures. However, there is anecdotal evidence which suggests that GIs have significant implications for producers in developing countries. In this section we draw upon the experiences from India with respect to the socio-economic costs and benefits of GI protection.
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<td>Mysore sandal soap</td>
<td>Soap</td>
<td>52</td>
<td>Karnataka Bronze Ware</td>
<td>Handicrafts</td>
</tr>
<tr>
<td>22</td>
<td>Bidriware</td>
<td>Handicrafts</td>
<td>53</td>
<td>Molakalmuru Sarees</td>
<td>Textiles</td>
</tr>
<tr>
<td>23</td>
<td>Channapatna toys &amp; dolls</td>
<td>Handicrafts</td>
<td>54</td>
<td>Monsooned Malabar Arabica Coffee</td>
<td>Coffee</td>
</tr>
<tr>
<td>24</td>
<td>Coimbatore wet grinder</td>
<td>Wet Grinder</td>
<td>55</td>
<td>Monsooned Malabar Robusta Coffee</td>
<td>Coffee</td>
</tr>
<tr>
<td>25</td>
<td>Mysore Rosewood Inlay</td>
<td>Handicrafts</td>
<td>56</td>
<td>Spices-Alleppey Green Cardamom</td>
<td>Agri. product</td>
</tr>
<tr>
<td>26</td>
<td>Kasuti emboidery</td>
<td>Textiles</td>
<td>57</td>
<td>Coorg Green Cardamom</td>
<td>Agri. product</td>
</tr>
<tr>
<td>27</td>
<td>Mysore traditional paintings</td>
<td>Paintings</td>
<td>58</td>
<td>E. I. Leather</td>
<td>Leather</td>
</tr>
<tr>
<td>28</td>
<td>Orissa Ikat</td>
<td>Textiles</td>
<td>59</td>
<td>Salem silk</td>
<td>Textiles</td>
</tr>
<tr>
<td>29</td>
<td>Srikalahasti Kalamkari</td>
<td>Textiles</td>
<td>60</td>
<td>Kovai Kora cotton</td>
<td>Textiles</td>
</tr>
<tr>
<td>30</td>
<td>Kondapalli Bommallu</td>
<td>Toys</td>
<td>61</td>
<td>Arani silk</td>
<td>Textiles</td>
</tr>
<tr>
<td>31</td>
<td>Madhubani paintings</td>
<td>Paintings</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GI registry of India
As far as domestic protection of Indian GIs is concerned, the establishment of a national system of registration under the purview of the GI Act is a significant step forward on the part of India. By April 2008, 61 GI goods have already been registered by the GI Registry in Chennai. The year 2007-08 recorded a surge in the registration of GIs. During the year, 31 GIs were registered. This is more than the total number of GIs registered during all the previous years since the registration process commenced in India. Some of the GIs from India include Darjeeling (tea), Pochampalli Ikat (textiles), Chanderi (saree), Kancheepuram silk (textiles), Kashmir Pashmina (shawls), Kondapalli (toy), and Mysore (Incense stick) (See Annex Table 1 for further details).

The list of already registered GIs shows that India is home to many GI products which further strengthens the implications of GI policies, both nationally and internationally, for India. However, one of the most fundamental benefits of GI registration for producers is to cash in on the reputation theory which fetches them a price premium in the international market. But the actual profitability of the GI product crucially depends on the size of the market for these products. Without a sizable international market, a GI label and the expected price premium would fall short of the costs that need to be incurred to continue with the production. Among the existing Indian GIs, Darjeeling tea and Basmati rice are the front runners in terms of international market and exportability.

Basmati rice is considered as one of the most valued GIs of India having substantial export potentials. Nearly two third of total Basmati rice produced in India is exported. Total export earnings from Basmati rice during 2006-07 were close to Rs. 28 billion (approximately US$ 617 million) which accounts for about 40% of total rice exports (see Table 2). The share of Basmati rice in total agricultural exports from India was about 5%, which is quite significant. Furthermore, the exports have been growing at an annual average rate of 13% during the period 2003 to 2007, which shows the increasing demand for Basmati rice overseas.

### Table 2: Percentage share of export of Basmati rice from India

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Items</th>
<th>2006-07 (in million Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total national exports</td>
<td>5,716,419</td>
</tr>
<tr>
<td>2</td>
<td>Total agricultural exports</td>
<td>566,280</td>
</tr>
<tr>
<td>3</td>
<td>Total exports of rice</td>
<td>70,389</td>
</tr>
<tr>
<td>4</td>
<td>Total exports of Basmati rice</td>
<td>27,928</td>
</tr>
<tr>
<td>5</td>
<td>% share of Basmati to total agricultural exports</td>
<td>5%</td>
</tr>
<tr>
<td>6</td>
<td>% share of Basmati to total exports of rice</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: Own calculation based on data from CSO (2007), APEDA (2007)

Darjeeling tea is another major GI from India in terms of its exportability. Around 98% of Darjeeling tea produced in India is exported. In 2006, the total exports of Darjeeling tea was 11.5 million kg, which fetched around Rs. 917 million (approx. US$ 20.3 million) as export earnings (Table 3). Furthermore, the exports grow at an annual average rate of 4%, which is significant given the fact that Darjeeling tea production is subject to a restricted geographical region. It is produced only in the Darjeeling district of the state of West Bengal in India. Further, Darjeeling tea
receives a high price premium at the price auctions for tea in India; for example, in 2006, the price premium for this tea varied between Rs. 11.7 to Rs. 49.3 per kg, which is in the range of 17% to 162% (Tea Board of India, 2007).

Table 3: Percentage share of export of Darjeeling tea from India

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Items</th>
<th>2006-07 (in million Rs.)</th>
</tr>
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<td>2</td>
<td>Total agricultural exports</td>
<td>566,280</td>
</tr>
<tr>
<td>3</td>
<td>Total exports of tea</td>
<td>20,065</td>
</tr>
<tr>
<td>4</td>
<td>Total exports of Darjeeling tea</td>
<td>917</td>
</tr>
<tr>
<td>5</td>
<td>% share of Darjeeling tea to total exports of tea</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

Source: Tea Board of India, 2007)

These statistics show that the two GIs of India have significant implications for their producers in terms of export-led income earnings and for the regional development as well. However, clearly more analysis is necessary to be able to say anything conclusive about the net socio-economic benefits received by the farmers in case of Basmati rice and tea plantation workers in case of Darjeeling tea. Some insights in both the sectors are provided in the following sections.

Unlike rice or coffee plantations, tea plantations in Darjeeling hills are mostly big estates owned by large corporates on huge tracts of land. Presently, the Darjeeling tea sector comprises of 86 tea producing companies spread over an area of around 19,000 ha and producing approximately 10 million kg of Darjeeling tea every year. According to the Tea Board of India, the total number of laborers employed in the Darjeeling tea sector in 2005 was about 53,400 out of which 26,000 were women. The high percentage of women in the tea plantations is partly explained by the fact that many men migrate to the cities due to better employment opportunities.

The value chain of tea in Darjeeling is characterized by the production system consisting of the tea estates. These estates then sell their tea to the auction in Kolkata (and to some extent in Siliguri), from where the tea-purchasing companies buy it, blend it, brand it and then sell it. The tea-purchasing companies which are almost completely controlled by foreign blending companies are the dominant players in the value chain receiving a considerable share of the net income along the value chain (Sharma and Das 2009).

Tirkey (2005) analyzed the net income received by the tea plantation workers (tea pickers, cleaners, sprayers, and sundry workers). She finds that they receive the lowest margin in the tea value chain and the minimum benefits enumerated in the Plantation Labour Act (1951). Both, men and women workers are paid the same wage irrespective of years of work experience – their benefits only vary depending on the gratuity and there is a provident fund depending on the years of work at retirement. According to her findings, the labourers in the Darjeeling hills receive an average wage of Rs. 45 (in the year 2004) per day plus 4 kg of rice and 2 kg of flour every 12 days; this amounts to approximately 1$ a day. However, there have been some
additional benefits like further 2 kg of rice and flour for every child (below 18 years) in the family.

Although it is difficult to establish a link between productivity and GI certification, it should be noted here that the yield of Darjeeling tea production increased over time. According to the data provided by the Tea Board of India, the productivity of Darjeeling tea has gone up from 545 kg per ha in 2003 – the year in which it was registered as a GI in India - to 650 kg per ha in 2005. However, compared to the productivity of tea at the national average level and at the levels of other tea-producing states, Darjeeling tea yields are still very low. For example in the plain Terai regions of West Bengal, yields of 1,864 kg per ha were reached in 2005 (Sharma and Das 2009). On a similar token, the productivity of Basmati rice is also lower than the productivity of other varieties of rice. From an own survey done on a sample of 300 rice farmers in Uttarakhand in 2008, it is found that Basmati rice yields 225 kg per bigha, compared with 327 kg of other rice varieties in the same region. From both these examples, it can be observed that GI products often have lower productivities in comparison to their peers within the same product group.

Compared to Darjeeling tea where tea estates are big and mostly owned and controlled by corporates, Basmati rice is being produced by both small and large landholding farmers in the six Northern states of India such as Haryana, Punjab, Uttar Pradesh, Uttarakhand, Rajasthan, Jammu and Kashmir. A sizable number of these farmers are small and marginal landholders whose livelihoods crucially depend on the income generated from Basmati rice cultivation (APEDA 2007).

The value chain analysis from the own sample of 300 Basmati rice farmers from Uttarakhand shows that most often the small and marginal landholders are not directly linked with the exporters. Rather the farmers negotiate with exporters through some cooperative organizations or they sell their rice in the open market. The cooperative organizations are autonomous bodies, partly funded by the central government of India and partly by the corporate social responsibility (CSR) branch of private companies. At present, there is no direct farmer representation in such organization which leads to little trust between the farmers and the cooperative. Nevertheless, they work with the cooperative since that is often the only way to get into a price negotiating table with the exporters; they feel they do not have enough bargaining power. Farmers selling their Basmati rice in the open market get lower prices. They have to sell to the middlemen who collect such small amounts and then finally sell to the exporters in bulk.

It is important to note that there could be substantial costs to be incurred for registration and maintenance of GI. Many authors have highlighted the costs of registration of GIs and their implementation in national and international level (Grote 2008; Raustiala and Munzer 2007; Kerr 2006). Apart from the institutional costs of maintaining GIs, additional costs need to be incurred for advertisement and promotion of GI products. So, what makes a GI a profitable tool for rural producers is whether or not its benefits surpass its costs. In the following section, some cost aspects of GI are explained drawing from Indian experiences.

First, many developing countries have weak protection systems for geographical indications in their respective countries. To illustrate this point let us come back to the
controversy about Basmati rice in India. Despite being internationally known as a specialty product from the north-western regions of India and having considerable export potentials, Basmati is not yet certified as a GI in India. This not only dents its economic benefits, it also downplays India’s demand for international recognition for Basmati as a GI since it is not yet registered in its land of origination.

Furthermore, not being certified as a GI at home, Basmati also runs the risk of becoming generic. As mentioned before, the US-based company Rice Tec. has patented some variety of Basmati type rice as Basmati rice in 1997. They based their claim on the fact that they have developed a novel variety of rice line which has similar properties as Basmati has. This subsequently raised a furor in India and a successful challenge by Indian authorities made the US patent office to cancel most of the claims of Rice Tec. Though this issue was done and dusted at the official level, it has raised many concerns about the protection of genuine GI products which are rooted in certain regions and are rendered the geographical attributes to become unique.

The main reason for the delay in getting Basmati rice registered as a GI is related to the selection of right varieties. Over the years, scientists have developed several varieties naming them as Basmati. This has led to the problem that many of these aromatic rice varieties do not contain any parental line of the traditional Basmati. This has created enormous confusion regarding the authenticity of different varieties of Basmati (see Sharma 2005). For example, scientists in India have developed varieties of Basmati rice having parental lines of traditional varieties like Pusa Basmati-1, Haryana Basmati, Kasturi and Mahi Sugandha. Other aromatic rice varieties were developed which do not contain immediate parental lines of traditional varieties like Pusa Basmati 2 and 3, Pusa RH-10, Pusa-1121, Vasumati, Pusa Dhan-15, Haryana Mahak, and CSR-30.

In 1999, the EU contested the claim of Pusa Basmati-1 saying that it is a developed variety and not a traditional variety and denied duty derogation of Euro 250 per ton on its imports. However, the EU recognized Basmati-370, Basmati-386, Type-3 (Dehraduni), Tarori, Basmati-217, and Ranbir Basmati as traditional varieties from India, fit for getting benefits of duty derogation. Indications are clear that the EU is prepared to reduce its high tariff barrier to facilitate easy entry, but only for the traditional Basmati. The EU has recently decided to conduct DNA fingerprinting tests to determine the presence of traditional strains in imported Basmati.

Another major difficulty in the process of smooth functioning of GIs is free-riding. It has been highlighted on many occasions that the legitimate right holders of Darjeeling tea have long been adversely affected by the free-riding of many commercial entities, who have been misusing the reputation associated with this premium quality Indian tea (Das 2006). For instance, authentic Darjeeling tea produced in India is about 10 million kg; however, according to a rough estimation, around 40 million kg of tea is being sold worldwide as Darjeeling tea every year (Tea Board of India 2006). Other varieties of tea from countries like Kenya, Sri Lanka or even Nepal have often been passed off around the world as Darjeeling tea.

With a view to combat such passing-off, the Tea Board has taken a number of steps. A logo for Darjeeling tea was developed in 1983 and registered in 1986 in a number
of overseas jurisdictions as a trademark and/or CTM (United Kingdom (UK), USA, Canada, Japan, Egypt and a number of European countries). Domestic protection was sought by registering the logo and the word *Darjeeling* as a CTM under the Trade and Merchandise Mark Act from 1958 in the late 1980s. Later, the Tea Board – the owner of the logo and the CTM on *Darjeeling* – also secured protection over the word *Darjeeling* in key overseas markets/jurisdictions such as the UK, the US, Japan, and Ireland. In a significant step towards ensuring the highest level of protection for *Darjeeling* as a GI, the Tea Board has already registered both the word and logo with the Indian GI registry under the purview of the Indian Geographical Indications Protection Act\(^4\).

All these legal processes are not without costs. The Tea Board has expended substantial amount of money to secure protection of GI for Darjeeling tea. It has also hired the services of an international watch agency, the Belgium-based *Compumark*, to keep it informed about any attempt in any corner of the world to register the word *Darjeeling*. However, the cost of hiring such monitoring agency is quite high; for example during the period 1998-2002, the Tea Board of India had spent approximately US$ 200,000 for these purposes (Srivastava 2004). This amount does not include administrative expenses like for the relevant personnel working for the Tea Board, the cost of setting up monitoring mechanisms, software development costs and so forth. Similarly, India has established a Basmati Development Fund to monitor trademark applications for Basmati rice or other deceptive variations. This has subsequently successfully identified and challenged fifteen registrations (Grote 2008). According to Adlakha (2004), around 100 trademark cases in over 30 countries have been fought about using the term Basmati in products like baby foods, ancillary services, saffron, coffee, spices, juices, etc. It is worth considering that such huge costs for maintaining a GI is not possible for every GI right holder to incur.

Except for some “single-estate” teas, a large proportion of Darjeeling tea reaches the end consumer under the brand names of those foreign blenders/packers, but not under the name “Darjeeling tea”. It is thus this predominance of the foreign blending companies in the value chain that makes the process of GI protection for Darjeeling tea more difficult. Notably, most of the teas sold worldwide are in “blended” form. The blenders/packers maintain a level of tasting consistency and price stability in their respective brand(s) by mixing teas procured from different sources. Although there is no process change involved in this blending stage, the blenders/packers justify the considerable mark-up in the retail price on the ground that they have to make considerable investments in propagating their blends in the form of different brands.

**V. Summary**

There are strong theoretical justifications for GI protection. The experiences of GI products from India show that GI status can indeed open access to export markets, boost export earnings and can improve the livelihood of producers who heavily depend on such products. However, the livelihood impact of GIs on their producers crucially hinges on the fact whether or not the benefits actually reach the producers.

The major benefit of GI protection from the producers’ point of view is of course the price premium which these products may receive due to their geographical origins.
What needs to be considered, however, is that there are costs which need to be incurred in maintaining a GI. In addition to the marketing costs associated with promoting the GI product there may be production costs associated with ensuring the existence of the quality attributes that consumers associate with the GI. These extra costs will have to be subtracted from the premium to determine the net contribution of GIs to profits. Existing empirical literature is almost silent on this issue.

Another issue about GIs is the ‘trickle down effect’ of benefits. The price benefits need to be filtered through the product value chain and reach the producers who sit at the bottom end of the value chain. Institutions have to play a big role in order to ensure realization of potential benefits of GIs. Empirical evidence on this aspect is also scarce.

As a result, this paper highlights several empirical questions about GIs which need to be further investigated. First, maintaining and promoting GIs need substantial costs at the macro level. So, the question is – do the developing countries have enough incentives to spend their scarce resources on this effort. It is to be noted that the benefits of a GI product depend on the market for it. Thus, developing countries have to consider the marketability of their GI products. Second, the specialty of GIs - as opposed to patents and trademarks - is that GI is a collective property right and the right holders are poor producers. So, GIs in principle should contribute to poverty reduction. Therefore, empirical research needs to provide evidence in support of this claim. Third, quite close to the second issue is the community development aspect of GIs. By creating external economies, GI product marketing should enhance secondary economic activities in the GI region to boost regional economic development.

From a rational point of view, developing countries have to give a careful consideration about the net benefits of GIs. We are neither optimistic nor cynical in suggesting developing countries to join the EU in demanding higher protection for GIs; rather we suggest that more empirical research is needed to resolve this deadlock.
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End Notes

1 Alternative regional certification systems have arisen which promote the production in certain regions for export. An example is the Cojote Rojo ecolabel for avocados produced in the highlands of Michoacán, Mexico (Friedmann and McNair 2008).
2 See Combes and Guillaumont (2002) for a discussion of the impact of the impact of commodity volatility on vulnerability to poverty.
3 Under the TRIPS Agreement, for a country to take advantage of any system of global protection for its indications, they need to be guaranteed protection domestically to begin with. The TRIPS Agreement merely defines the concept of the geographical indication and then goes on to provide for the minimum level of protection that Member nations are expected to provide.
4 See the website of GI registry in India for further details. www.girindia.in