

Geographical indications of vegetables in India

Geographical indication (GI) is a region or a locality used to identify products that come from these places and have distinctive characteristics. World Trade Organization says that quality, reputation or other characteristics of a commodity or product is attributed to its place of origin. GI registration is granted to a product if the product has a 'link' with the region or locality, which provides the uniqueness to the product. It is a community right and all the producers within the specific region holds the right to obtain benefits. GI's have to be protected in order to avoid misleading the public and to prevent unfair competition. It plays an important role in promoting the conservation of biodiversity among the rural populations. Among 86 horticultural products, vegetables cover 15% share to the total number of GI's. till 13 vegetable goods have been registered covering crops like chilli, brinjal, tomato, garlic, onion and French bean.

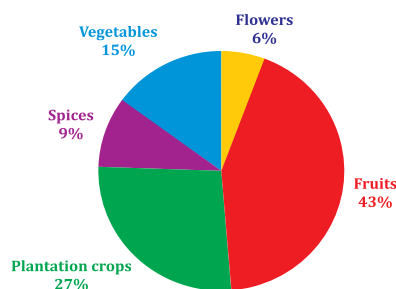
INDIA is a mega-diverse nation, housing around 10% of world's plant species. It has a rich cultural heritage back to thousands of years. Much of Indian biodiversity is intricately related to the socio-cultural practices of the land. Unfortunately, due to population explosion, climate change and lax implementation of environmental policies, several species are facing the threat of extinction. Not only does this affect the food chain, but also the livelihood and the culture of millions of Indians who depends on local biodiversity. It is vital that the common man is made aware of the domino effect of species loss and what we stand to lose. There are various ways to protect and conserve valuable biodiversity *viz.*, government legislation, nature preserves, reducing invasive species, habitat restoration, captive breeding and seed banks, reduce climate change, Geographical Indication and so on.

Geographical Indication (GI)

Article 22.1 of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement of World Trade Organization defines GI as 'indications which identify a good as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin'. Article 22 of TRIPS Agreement guarantees a standard level of protection for the products covered by it. It has also defined by the Section 2 of G.I. Act 1999. In general, it is a name or sign used on certain products which corresponds to a specific geographical location or origin. Indication includes any name, geographical representation or any combination of them conveying or suggesting the geographical origin of goods to which it applies.

The GI tag for the registered products means that their uniqueness has been verified by the expert

Geographical indications of horticulture crops (% share) upto March 2020



committee nominated by Govt. of India. It ensures that only authorized users or community within a geographic region or locality involved in development/production of registered products can use the GI tag to claim benefits out of visual branding and marketing. In India, Darjeeling tea was the first item to obtain a GI tag in 2004. As of now, 361 products have been accorded with GI tags in India, *viz.* handicrafts (194) agricultural goods (109), manufactured goods (24), foodstuffs (16) and natural goods (1). Agricultural products have received significant attention in this regard to preserve their biodiversity and rights of people or community as a whole in conservation of agricultural crops. Among agricultural crops, horticultural crops have been considered major attention with fruit crops being major share in getting GI tags. Mango, citrus and banana have bagged the highest number of GI tags. Elite clones of fruit crops such as grape, pineapple, litchi, strawberry, guava, kokum, fig and custard apple have also obtained GI tags. Chilli followed by brinjal and onion have got the maximum number of GI tags among the vegetable crops. Jasmine and Kewda flowers have got GI brand among flowers.

Name of GI and Tag number	Scientific name	Area	State	Year of Registration	Unique Characteristics	Representative photograph
Naga Tree Tomato (GI tag. 374)	<i>Solanum betaceum</i>	Kohima, Wokha, Zunheboto, Kiphiri, Tuensang, Mon and Phek region	Nagaland	2015	The Naga tree tomatoes are locally known as <i>sei bangenuo</i> . The fruit looks like tomato with oval or egg shape which is a 'traditional food item of the Naga people'. The fruit is rich in vitamin A and C as well as an excellent source of calcium, iron, potassium, phosphorous and magnesium. Naturally, it helps in controlling high blood pressure and to bring down cholesterol levels	
Byadagi Chilli (GI tag. 129)	<i>Capsicum annum</i>	Byadagi region of Haveri	Karnataka	2011	Chilli is known for its deep red colour and got the highest colour value of 1,50,000 - 2,50,000 CU. It is not very pungent and is used in many food preparations in India. This chilli is characterized by wrinkles on the pods, low pungency and sweet flavour. The two main types are Bydagi Kaddi and Bydagi Dabbi	
Guntur Sannam Chilli (GI tag. 143)	<i>Capsicum annum var. Longum</i>	Guntur, Prakasam, khammam	Andhra Pradesh	2010	It has long fruits (5 to 15 cm in length) and diameter range from 0.5 to 1.5 cms. It has thick skin. The chilli is hot and pungent with average pungency of 35,000 to 40,000 SHU. The content of Capsaicin is about 0.2260/0. This chilli is rich in Vitamin C (185 mg/100g) and Protein (11.98g/100g)	
Mizo chilli/ Mizoram's Bird Eye Chilli (GI tag. 377)	<i>Capsicum frutescence</i>	Mizoram	Mizoram	2015	Fruit is small sized pods and very high pungency. Color of mature fruit is blood red. Fruit size is not more the 4.5 cm It is one of the hottest chillies in the world. (SHU- 50000 to 100000)	
Bhiwapur Chilli (Doda chilli) (GI tag. 473)	<i>Capsicum annum</i>	Bhiwapur, Umred and Kuhi taluquas of Nagpur	Maharashtra	2016	Bhiwapur Chilli is known for its pungency. The colour is dark red. Outer covering is thick hence less chances of breakage and long shelf life. It length approximately measures 1.5 inch which describes its short size. The red colour of Bhiwapur chilli is darker than other Chillies like Guntur chillies. It is main ingredient in popular 'Varhadi Thecha' (spicy red chilli chutney)	
Khola Chilli / Kholchi Mirchi (GI tag. 618)	<i>Capsicum annum</i>	Canacona region	Goa	2019	Chilli is characterized by attractive red in colour with long in length and having medium pungent taste and thus is widely used in making papad. 'Khola/Canacona' chillies have been cultivated in Khola village during <i>Kharif</i> entire village community is involved in their conservation.	

Name of GI and Tag number	Scientific name	Area	State	Year of Registration	Unique Characteristics	Representative photograph
Jalgaon Bharit Brinjal (GI tag. 501)	<i>Solanum melongena</i>	Jalgaon	Maharashtra	2016	The golden-brown colour and tempting taste after roasting the brinjals make this variety popular among people. Jalgaon Brinjal is specifically used for making traditional spicy dish 'Khandeshi bharit'	
Udupi Mattu Gulla Brinjal (GI tag. 199)	<i>Solanum melongena</i>	Udupi region	Karnataka	2016	It has very thin skin and small spines on the fruit surface. It has unique taste and virtually gets dissolved while cooking and also less astringent and less bitter when compared to other variety of Brinjal	
Lasalgaon Onion (GI tag. 491)	<i>Allium cepa</i>	Nashik, Lasalgaon region	Maharashtra	2016	Lasalgaon light red onion variety is popular due to its colour, pungent taste, long shelf life and bigger size	
Bangalore Rose Onion/ gulabi eerulli (GI tag. 212)	<i>Allium cepa</i>	Districts of Bangalore Urban, Bangalore Rural, Chik-kaballapur and Kolar.	Karnataka	2014	Grown mainly for export purpose. It has scarlet red colour, anthocyanin, phenols and high pungency. The pungent property of these onions makes them suitable to be used in pickles	
Waghya Ghevada (GI tag. 476)	<i>Phaseolus vulgaris</i>	Koregaon, Khatav Tehsils, District Satara	Maharashtra	2016	Faint pink colour having red lines on it which resembles tiger skin. High nutritional content-rich in carbohydrates and protein. Tastes sweeter as compared to other Rajama varieties. Ghevda beans also contain protein, calcium, dietary fiber, iron and several other essential nutrients. These beans have impressive amount of antioxidants and even provide cardiovascular benefits	
Naga Mircha (GI tag. 109)	<i>Capsicum chinense</i>	Manipur, Arunachal Pradesh, Assam, Mayanmar	Nagaland	2008	Commonly known as the Ghost Chilli (Bhut Jolokia Mirchi). Naga Chilli is the World's hottest chilli ever found on this earth. It is 110 times hotter than the Hottest Guntur Chilli and 400 times hotter than the mildest Chilli's. Finely wrinkled skin with thin flesh. Fruity aroma and distinctive pungency. Exquisite unique taste. It has vitamins which prevents cardiac arrest. Acts as antibiotic. Used as pain killer, insect and pest repellent and anti-venom	
Kodaikanal Malai Poondu Syn. Kodaikanal Hill Garlic (GI tag. 616)	<i>Allium sativum</i>	Dindigul district	Tamil Nadu	2019	Kodaikanal Malai Poondu is known for its medicinal and preservative properties. It has anti-oxidant and anti-microbial potential. It has a presence of higher amount of organosulfur compounds, phenols and flavonoids compared to other garlic varieties. It's usually white or pale yellow and each bulb weighs 20-30g on an average	

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Significance of Geographical Indication

Legal protection: It confers legal protection to GI products in India. It prevents unauthorized use of a registered GI's by others. It provides exclusive rights to community/authorized users for GI products. It also enables seeking legal protection in other WTO member countries.

High market price and demand: GI's provide an effective platform for getting premium market price and more demand. Consumers are willing to offer better price for GI's as they are branded products. GI's increase better revenues for local producers and small scale entrepreneurs.

Conservation of biodiversity and traditional knowledge: GI's protect the biodiversity in plants and traditional knowledge of local people, community and tribal areas involved in developing handicrafts, natural goods, artifacts and manufactured goods. It offers huge market potential and better income for the people in villages or community. GI's enhance socio-economic conditions and livelihood of rural communities.

Improve tourism industry: GI's are unique products coming from demarcated areas. Cultivation or manufacturing process itself can attract many tourists. Handicrafts and handlooms with special characteristics are always attractive to tourists. Regions can attract tourists to taste the special GI foods or drinks or buy the unique products with discounts leads to strengthen market potential and export earnings.

Registration of GI products

The registration and administration have been envisaged to be discharged by the geographical indications registry under the GI of Goods (Registration and Protection), Act, 1999. The Geographical Indications Registry is located at Chennai. Any person who produces the goods in case agricultural commodities and includes processes or packages such goods, exploits the goods in case of natural goods, manufactures the handicraft or industrial goods or a person who trades or deals in such production, exploitation, making or manufacturing of the goods can be apply for registration.

GI registration provides the registered proprietor and the authorized user the exclusive right to protect the registered GI on the specified goods. Monopolization of the market enables the producers to control prices, i.e., can charge premium prices, thereby enhancing profits. It has been revealed that 80% consumers are ready to pay

20-30% higher prices as they believe that GI products are having better qualities over other goods.

GI protection for vegetables

India is a rich source of diversified vegetables possessing unique quality characteristics which are cultivated and conserved since many years by the local farmers and tribal community in specific geographical regions. Indegenous species/varieties of vegetables acquired distinctive quality characteristics like taste, aroma, high antioxidants, pigments, proteins, dietary components etc. as they are cultivated in specific location and climate. Government of India has recognized the wide diversity in vegetable sources like chilli, tomato, brinjal, onion, gralic and beans and accorded GI tags to popularize and enhance their economic potential. Till today, GI tags have been granted to 13 different vegetable varieties including chilli (6), tomato (1), brinjal (2), Onion (2), garlic (1) and French bean (1).

SUMMARY

Protection of intellectual property rights through GI is an important instrument in promotion of cultivation and conservation of vegetable varieties. Various institutions, state departments, govt. agencies and NGO's are involved in ensuring legal protection for Indian GI products. Granting GI tags to popular vegetable types will help to promote local people, rural communities/enterprises to ensure wider access to markets.

Govt. of India recently proposed 'One Product One District' (OPOD) approach, an action plan for promoting horticulture crops. It involves linking the said initiative with registration of GI products. It was already implemented in Japan and Thailand and has contributed to the rural development in both the countries. This approach would recognize to local products, traditional knowledge, bring down unemployment rate and more income for the rural community. GI products of vegetables have huge economic potential to reach global market and earn higher foreign exchange thereby enhance national income of country. Effective post-GI mechanism may be implemented to avoid unethical marketing practices and intervention of middlemen in domestic markets.

For further interaction, please write to:

Varun M Hiremath, SRF, PPV&FR Authority, New Delhi.
Email: varunhiremath1992@gmail.com

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– Editor