



# **Good Practices for Agrobiodiversity Management**

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# 4. Geographical Indication

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### A. Introduction

Agricultural products are generally associated with their place of production and are i

nfluenced by specific local, geographical factors such as climate and soil. A geographical indication (GI) is a sign (or name) used on products that have a specific geographical origin and possess unique qualities or a reputation associated with the product of the origin (WIPO 2004). The qualities, characteristics or reputation of the product should be essentially due to the place of origin. GI is an intellectual property that protects the product of the area and ultimately helps to promote conservation of agrobiodiversity



on-farm and boost economy of local community. The well-known examples of GIs in South Asia include Darjeeling tea, Basmati rice, Himalayan water, Alphonso and Sindhri mangoes, Bhutanese red rice, Pakistani shu (wind proof woolen fabric) and Ajrak (designs from Sindh), jasmine (Hom Mali) rice. Until now, there is no any GI protected products in Nepal. Government of Nepal has approved the National Intellectual Property Right Policy (2017) which includes Copyrights, Patents, Industrial design, Trademarks, GI, Varietal protection, Trade secrets and Traditional knowledge policy (MoICS 2017). Among these policies, GI gives exclusive right to a region or a landscape (eg village, town, region or country) to use a name for a particular product with certain characteristics that corresponds to their specific location. There are more than 100 agricultural products (Joshi et al 2017) which have already established their reputation representing their Gls. Malla and Shakya (2004) have identified and listed 87 potential products for geographical indication (GI) protection in Nepal. Most of the products possess greater cultural and age-old traditional values. Important indigenous crop landraces and their products linked with particular geography, which should therefore, be protected with GI by developing suitable legislation for their market promotion, on-farm conservation and livelihood enhancement of local communities. For GI promotion, Geolinked popular crop landraces and their traits need to be found out for their potential trade promotion and value addition.

# **B.** Objectives

- To identify and verify the geo-linked genes and traits of native agricultural genetic resources and products associated with particular location
- To use geographical indicator for the promotion of landraces and products
- To register geo linked products and link GI for on-farm conservation of agrobiodiversity

• To help farmers get benefit through application of GI (considering products for purity, tasty, quality and nutritious) and respect their locations and traditions

## C. Methods and Process

The first and most important part to obtain GI right to the particular agriculture products, research is necessary to identify particular crop landraces and agricultural products that possess particular geo-linked traits preferred by the consumers. Such traits should be verified and identified growing crop landraces in geographical areas where GI is applicable so that expression of geo-linked traits can be assessed and ascertained in a particular landrace. Research should be designed after the extensive survey on potential GI related Agricultural Plant Genetic Resources (APGRs). Three methods are in use to identify the geographically associated agricultural genetic resources and their products.

# Survey

Household survey, Focus Group Discussions (FGDs), Key Informant Interviews (KIS), market and literature survey are used combining second sources of information to list the existing practices, genetic resources and quality of products associated with geographical indication. Major question in such survey is what native products with unique quality are available in the specific localities that are not similar to any products originated from other localities.

#### Field and lab evaluation

After identifying potential genetic resources for GI from preliminary survey, such materials are tested in original location as well in other similar production domains. Materials from other localities are also included in field test preferably in scientifically designed experiments such as Replicated trials. To verify the GI for particular trait in specific genetic resource, both field and lab test are conducted. Agromorphological traits, organoleptic tests, quality and nutritional test as well post harvest processing and other appropriate tests based on the type of the products are carried out and analyzed for verification. Testing methods are documented and labeling of such product is based on the results.

# Identification of geo linked genes and traits

If possible further study at genetic level in combination with experimental studies in specific soil and climate conditions of the geographic locations should be carried out to identify the genes and traits associated with geo location. Different kinds of markers (morphological, biochemical or DNA) based analysis as well as soil and climatic analysis need to consider for this work. Though this method is not generally carried out for this purpose, it is the best method to verify and claim GI on a right way.

# Registration

GI can be protected in accordance with international treaties and national laws under a wide range of concepts eg Sui generis system (special regimes of local protection), using

collective or certification marks and methods focusing on business practices, including administrative product approval schemes. Department of Industry under Ministry of Industry, Commerce and Supplies (MoICS) is the responsible body for granting GI in Nepal. Concern authority with sufficient information need to apply for getting the GI on their products.

# D. Advantages and Disadvantages

# **Advantages**

- Legal protection of agricultural genetic resources and their products and preventing from unauthorized use
- Support for on-farm conservation and maintain identity continuously
- Benefits for local producers, improve farmer's income, boost the local economy and support rural development
- Reduces unfair practices of trade preserving local culture and resources
- Consumers understand and appreciate importance to the quality of foodstuffs in their diet
- Helps consumers differentiate between products coming from a particular region and similar products coming from a different region
- · Good impact of GI on price, consumers willing to pay premium price
- Marketing tools in the local products that have a specific quality and is exclusive to or essentially due to the geographical environment in which the products are produced

# **Disadvantages**

- Long process to get agricultural genetic resources and products registered
- Resource and time demanding to verify and identify geo linked genes and traits
- Extra work on labeling and branding and regular monitoring for any duplicates in the market

# E. Success Cases

There are many practices of selling agricultural products by the name of locality of origin in the country. For instance, Jumli Simi and Jumli Marshi Dhan from Jumla are very famous among the consumers and they are willing to pay more because of their unique taste and qualities of the geographic origin. All the visitors to Jumla looks for these products to buy and bring to home with them. In the market, such products are sold by the name of crop and name of location such asJumla ko simi (bean from



Jumla), Jugu ko Simi (bean from Jugu, Dolakha) (Joshi et al 2017). Some potential such geo related agricultural genetic resources popular among consumers and developed in certain geography has been considered with geo-linked property. They are listed in **Table** 1.

Most of such landrace have very good taste and sold in the market with high price and consumers pay premium price mainly for taste, nutrition, purity and deliciousness. Such products are sold at higher price in certain places (**Table** 2) and visitors prefer to buy some of them mainly because of good taste and popularity of the product. Most of the local markets related to location specific are seasonal and can be found in certain pockets areas along the road and hat bazar. Most of such products are not well labeled, packed and cleaned.

**Table** 1. Geo-linked popular crops and their important traits

SN	Crop	Location	Important traits	Geo linked crop name
1.	Apple	Marpha, Dolpa and	Very delicious, juicy,	Marpha ko shayu
		Jumla	high demand and	
			market value	
2.	Apricot (local)	Humla	Oil from seed has	Humlako Chuli (local
			medicinal value	apricot)
3.	Bean	Jumla, Mustang,	Very delicious, good	Jumla ko simi, Mustang
		Humla, Rasuwa	cooking quality,	simi, Lukla ko simi
		and Lukla	nutritious, high demand	
4.	Potato	Mude, Dolakha;	Soft, tasty, farrapareko	Mude ko aalu, aalu
		Langtang, Hemja	after boiling	
5.	Rice	Jumla	Adapted to cold areas,	Jumli Marshi (red rice)
			tasty, nutritious.	

**Table** 2. Geo-linked popular crop landraces and their important traits

SN	Crop	Landrace	Location/	Geo-linked trait	Value of this	Geo-
6.	Banana	Ghiu Kera	address Lamjung;	Scented green, long	Quality and	Sub tropical
			Tanahun	storage life	market value	
7.	Bean	Jumli bean	Jumla	Good taste, high	High market value	Cool
				cooking quality		temperate
8.	Black	Himali Jira	Jumla	Good spice	Medicinal value	Cool
	cumin					temperate
9.	Black	Kalo Maas	Lamjung,	Very tasty and good	High demand	Sub tropical
	gram		Tanahun	cooking quality		
10.	Colocasia	Hattipau	Lamjung and	Large size, many eyes	High value	Sub tropical
			Tanahu	and good cooking		
				quality (soft and tasty)		
11.	Mountain	Mountain	Jumla	Good spice, good	High market value	Cool
	dill	Sauf		smell		temperate
12.	Potato	Mude	Mude, Dolakha	Easy cooking, tasty	High market value	Warm
					and demand	temperate
13.	Rice	Jumli	Jumla	Cold tolerance, taste,	High market value	Cool
		Marshi		reddish		temperate

**Table** 3. Some market places of geo-linked products for sales in Nepal

SN	Market	Address	GI products	Geo-location of GI products
1.	Chipledungha	Pokhara, Kaski	Jethodbudo rice, black	Kaski, Gorkha, Lamjung;
			gram, Manakamana ko	Tanahun, Mustang
			Suntala, Banana, Apple	
2.	Damauli bazar	Damauli, Tanahun	Banana, black gram,	Lamjung, Tanahun
			Makai Bodi	
3.	Food	Thapathali,	Jumli beans	Jumla, Humla
	Cooperation	Kathmandu		
4.	Nepalgunj	Nepalgunj, Banke	Apple, beans, Jumli	Jumla, Humla, Dolpa
	bazar		Marshi, buckwheat	

### F. References

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