Komal Chaul – A Potential Candidate for Geographical Indication

Shefalika Ghosh Samaddar† and Arun B Samaddar Motilal Nehru National Institute of Technology, Allahabad 211 004, Uttar Pradesh

Received 23 February 2010, revised 13 April 2010

It is essential to protect bio-cultural products from being unduly patented and from biopiracy. Identification of a Geographical Indication (GI) itself is not a measure to stop bio-cultural biopiracy and is not an automatic protection to any bio-cultural product; it must be tested against the characteristics of GI. Identified GI must be seen through the bio-cultural protocol that makes it a ready candidate for GI application. This paper presents a step-by-step procedure for identifying and testing of a GI candidate and a walk-through GI candidature, application and registration steps. The case study taken for the purpose of identification is for 'Komal Chaul', a suitable candidate for GI from Assam, located in North-Eastern part of India, yet to be registered for GI. The case-study testing proves that this bio-cultural product, i.e. 'Komal Chaul' may be registered for GI successfully.

Keywords: Geographical indication, Komal Chaul, bio-cultural product, bio-cultural protocol, GI registration, Aghanibora, Vogalibora, Dhakua

Protecting a bio-cultural product is not only of commercial interest but also a social, ecological and environmental responsibility. Protection of this kind of intellectual property (IP) promotes a resource efficient green economy — a cry for developing and least developed nation. Such mechanism of protection affects uniformly the urban and rural community as most of such products are closely connected to the traditional knowledge of the region concerned. Some of them are Traditional Cultural Expressions (TCEs) themselves.

The protection initiative of a regional bio-cultural product generates multiple economic, social and environmental benefits and is a promise sustainability to the community concerned. The challenge now is to lead these bio-cultural products that are eligible for GI protection to the goal of successful registration within a minimum period identification. A single GI can initiate individuallytailored business and a number of support services. It will increase their impact on marketability and thus will provide sustenance to all, who can come under the GI umbrella. The benefit of GI registration will reach the lives of producers as well as of customers. Building economic network would be easy if the prospect of such identified items is determined before hand with proper participation of the community. Sometimes training for participation is required to enhance the

economic possibility of such network. Such activity may be taken up by an organized community having clear guidelines to proceed in such planned direction. The customers will also have wider access to relevant expertise and traditional technical assistance on a uniform pattern.

A number of successful projects have been taken up in India and abroad, but the methodologies remain project specific and partially successful in reaping the benefit of involvement of the community in a broader way. For example, the project on Spider Web Silk Textile using golden web of Madagascar spiders only involves a handful of the community to achieve its goal. Network among the community for such biocultural product is yet to get established.¹ Indian move in building such a network is through participatory involvement of the farmers/ growers/ manufacturers and researchers and can be seen through participatory programs of manufacturers/ producers.² It requires a generic guideline for involvement of the community concerned for developing an economic and social network to achieve economic success out of such biocultural or biological product of geographical origin.

Geographical Indication

The Geographical Indication of Goods (Registration and Protection) Act, 1999 is the first Act in India to provide for registration and better protection of GI to goods. The definition of GI as per the Act is:

[†]Email: Corresponding author: shefalika@mnnit.ac.in

GI, 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 characteristic 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.3 The goods eligible for GI registration thus may be, agricultural products, natural ready-tobe-used resources, manufactured or man made goods, handicrafts, industrial goods and food stuff. Each of these items may belong to one or more classes of the Fourth Schedule - Classification of goods - Name of the Classes; having 34 classes³ of GI of Goods Act 1999. It may be noted that territorial, regional or local flavour in such goods is required to be established for qualifying for GI registration.

Identification of Geographical Indication

Any candidate for possible GI should be one of the items with territorial / regional or local geographical characteristics. Such geographical characteristics in items that are manifestation of:

- (a) weather/climate or environment of a locality
- (b) soil or water induced products
- (c) biological attributes of the locality
- (d) cultural attributes of the locality
- (e) bio-cultural attributes of the locality
- (f) traditional age-old practices of the locality
- (g) traditional expression having local bindings
- (h) social/ environmental/ spiritual/ religious beliefs or practices

The steps for identifying a possible GI are:

- 1 Attributes of a GI candidate should be categorized into one or many of the above geographical characteristics. This happens to be the first step towards identification of a GI candidate.
- 2 The second step is the marketing and production feasibility assurance of the good(s). There are standard procedures of survey of samples for both feasibility studies and experimental marketing.

3 The third step is to consolidate an organized effort through 'any association of persons or producers or any organization or authority, established by or under law, representing interest of producers of the concerned goods'. This is required to fulfill the 'need to ensure equitable treatment to producers of the goods concerned, that the consumers of such goods shall not be confused or misled in consequence of such registration'. GI, being a collective right, identification of an association is a must.

Case study of 'Komal Chaul' for Identification and Testing of GI Registration

Identification Process of 'Komal Chaul'

The rice variety 'Komal Chaul' is an agricultural product of Assam region of North-East India. Rice is the staple diet for almost all sections of the Assamese community. This indigenous variety of rice does not require cooking or boiling to make it edible. Soaking the rice in cold water for half an hour makes it ready for serving, hence the name 'Komal Chaul' or 'Soft Rice'. The typical recipe of 'Komal Chauler Jalpan' ('Komal Chaul with curd and jaggery) is simple. 'Komal Chaul', parboiled rice from waxy paddy can be consumed after soaking in water for some time. Soaked and drained 'Komal Chaul' mixed with curd and jaggery is ready to be consumed. This cereal based recipe has been analysed for its nutrient composition per 100 gm as in basis and has been compared with another 12 cereal based recipes commonly consumed in Assam, India.4 The study reveals that 'Komal Chaul' may fit into the category of health food.

Every kind of rice contains a glucose form, called amylose which makes the rice sticky. Polysaccharides are carbohydrate polymers consisting of tens to hundreds to several thousand monosaccharide units. All of the common polysaccharides contain glucose as the monosaccharide unit. Natural starches are a mixture of two types of polysaccharides - Amylose and Amylopectin. Amylose is a larger linear chain whose glucose units are connected by a 1:4 linkages. Amylopectin consists of many Amylose chains joined together to form a highly branched structure. 10 But 'Komal Chaul' of Aghanibora type contains only 4.7% of amylose making it edible within an hour after soaking. Boiling milk takes only few minutes to prepare rice-pudding of 'Komal Chaul'. Such preparation of rice-pudding is a traditional one in Assam region, especially during 'Bihu' festival.¹¹

The 'Boro' tribes of Assam, who had a nomadic life cycle, cultivate this rice and use it as a ready food without any cooking. There are three flavours of 'Komal Chaul'—Aghanibora, Vogalibora and Dhakua. Aghanibora happens to be the most popular one and it was named so by 'Boro's to indicate the season of harvesting.

Komal Chaul's reputation of most wanted staple food has been emphasized by its native consumers through literature of this part of the world from last five hundred years.⁵ It had even been used by Indian soldiers fighting in Siachen located in the peak of Himalayas, the highest battle-field of the world in 1960s. Siachen with a sub-zero temperature, surrounded by frosty ice and snow is not an ideal place to cook food by using fire for a long period of time. The soldiers were using 'Komal Chaul' which just needed to soak in water and therefore very convenient to use in battle-field.⁶ However, such usage of 'Komal Chaul' had its existence even in the early medieval period of Assamese history.⁷ The military systems of Ahoms of this period specifically mentioned Komal Chaul as soldiers' food. Out of a number of native varieties of rice cultivated in Assam like Joha, Bora and Komal Chaul, Assamese farmers have rediscovered the prospect in these native varieties. The prospect has even been tested at international level like BIOFACH International Exhibition in Germany in 2005.8

The survey of the present status of 'Komal Chaul' indicates that 'Komal Chaul' can even be cultivated in the climatic conditions of West Bengal and Orissa. In fact, Fulia Agricultural Training Centre, West Bengal, has successfully grown 'Komal Chaul'. The centre cultivates 145 varieties of native paddy varieties through organic farming without the use of chemical pesticide. 'Komal Chaul' had also been cultivated successfully in Bankura Paddy Preservation Farm. The importance of cultivation of such varieties may be viewed for fighting global warming by eliminating the use of cooking fuel.

Other varieties of rice from Nagaland and Maharashtra with special characteristics are also being examined for their unique quality at Fulia centre e.g. 'Kalichal' which contains a high percentage of iron and vitamins. 'Pokkali' of Kerala can even thrive in salty soil. 'Pokkali' rice of Kerala has been granted GI recently. The study of characteristics by the Central Rice Research Institute, Cuttack, under the Indian Council of Agricultural



Map of Assam (Source: www.indianrealtynews.com)

Research (ICAR) helped to identity 'Komal Chaul' as a possible GI candidate in the north-eastern region of India, including West Bengal and Orissa other than Assam and Nagaland through their various substations in these provinces. ¹³ These research institutes have already started cultivation on an experimental basis and made these native varieties of rice popular by giving support through seed distribution, training and marketing help.

The identification of an authority or organization for GI registration can get fulfilled through these research institutes. For example, in this case of pursuing GI registration interest on behalf of all growers, CRRI may be considered as a representative body. The CRRI can represent the interest of the growers/farmers/breeders of this variety of rice in the region of Assam, Orissa and West Bengal. The CRRI may provide growers the requisite training in commercial production and marketing. The other two contenders, namely, Fulia Agricultural Training Centre, West Bengal and Bankura Paddy Preservation Farm, West Bengal, are more focused towards training in cultivation and preservation of rice variety rather than the commercial interest of the genuine producers (owners of the production rights) of Komal Chaul. Moreover, the CRRI has made certain moves towards ascertaining the commercial potential of Komal Chaul. This makes CRRI as the appropriate representative body as an authority for GI registration of Komal Chaul. Therefore, they can be considered as the authorized breeders and may include farmers of the regions under formulated terms and conditions, as the registration process of the breeders/ growers demands, through various participatory programmes as registered producers.

Procedure for GI Registration of 'Komal Chaul'

GI registration is taken up usually by an organization or an association representing authority towards equitable treatment to all the producers or those concerned with production through support services. Application for registration of a GI is filed by such an organization. Application is to be made by the authorized organization on prescribed form set forth in the Second and Third Schedules of the Geographical Indication of Goods (Registration and Production) Rules 2002. Requisite fees may be paid to the Registrar of Geographical Indication. The application must contain a statement as to how the GI serves to designate the goods as originating from the concerned territory of the country or region or locality of the country, in respect of specific quality, reputation or other characteristics which are due to exclusively or essentially to the geographical environment, with its inherent natural or human factors, and the production, processing or preparation of which takes place in such territory region or locality. Identifying the class of goods to which GI shall apply is done by referring to the look-up table in 'The Fourth Schedule -Classification of Goods' – Name of the classes of the same Act. The locational geographical map of the identified location from a standard publisher from where the goods originate or are being manufactured must be supplied with the application. A representation of GI through words or figurative elements or both is to be formulated which will have similar characteristics (but not the same!) of trademark and service mark. An optional provision to indicate particulars of producers to be registered of the concerned goods for initial process of production of registered GI goods is also available.

The registration of GI allows the registered proprietor of GI, namely, the identified association and its authorized users to have rights against infringement and right to have economic benefit from production/manufacture or other support services of GI registered goods. The steps are being mapped for the GI candidate, 'Komal Chaul'. It may be noted that 'Komal Chaul' is not a registered GI as on 30 July 2009¹², though there are moves from different associations and Government of India to get this unique rice registered.¹⁴

(a) The application for the registration of GI shall be made in the prescribed form GI—IA¹⁵ to be included in one class, namely class 30 of the Fourth Schedule — Classification of Goods—Name of the classes.³

The application is required to be signed by the applicant (association represented by authorized person e.g. Director in case of a research institute) or his agent. It must be made in triplicate along with three copies of a Statement of Case. Section 5.1 can serve the purpose of Statement of Case. An amount of Rs 5000, a crossed bank draft in favour of Registrar of Geographical Indication is to be submitted.

- (b) The graphical representation must be made for this GI having the words 'Komal Chaul' encircling 'Aghonibora', 'Vogalibora' and 'Dhakua'. Other figurative elements of trademark like rice-like flower petals may be included.
- (c) The class 30 of Fourth Schedule is identified as most appropriate class.
- (d) The copies of locational map of north-eastern region of India including West Bengal and Orissa are prepared to narrow down the geographical region. The research centres at Fulia and Cuttack are required to be indicated with arrow as there may be registered users or producers. The original region at Assam is highlighted using a color legend. The certified copies of the map must show clearly the title, name of the publisher and the date of issue.
- (e) The graphical representation in this case is same as given in (b).
- (f) Statement of user in application: The application may contain a statement of the period during which and the persons by whom it has been used in respect 'Komal Chaul'. 130 identified farmers of Fulia Centre, who are participating in the cultivation programme, can be mentioned as authorized users. The applicant shall file an affidavit testifying to such user with exhibits showing GI as used. It may mention even the volume of sales under GI, the definite territory (through locational map) and other particulars as the Registrar on perusal of the application may call for, from the applicant.
- (g) The particulars of the research organization filing the application (e.g. address of centre and office, authorized representative of the organization, nationality and designation etc.) must be mentioned in the application.

- (h) The principal place of business will be the territory of Indo-Gangetic plain and people of north-eastern region of India who are traditional rice-eaters. The service and support centres may be given at Fulia, West Bengal and Cuttack, Orissa.
- (i) The queries from the Registrar must be answered within stipulated time.
- (j) Once GI registration of 'Komal Chaul' is obtained further processing to secure economic right may be taken up as per GI Act.

The application shall contain a representation of GI of 'Komal Chaul' in the space provided on the application form.

The graphical representation of 'Komal Chaul' on application and on each of its copies shall correspond exactly with one another. As 'Komal Chaul' is a word phrase which may contain characters other than Debnagari and Roman; a transliteration and translation to the satisfaction of the Registrar shall state the language to which the words belong and shall be signed by the applicant or his agent. The application must be accompanied by an affidavit as to how the applicant (research organization in this case) claim to represent the interest of the association of persons or producers of Komal Chaul or any organization or authority established by or under any law.

The application shall have statement for standard benchmark for the use of GI 'Komal Chaul' as regards the production, exploitation, making or manufacture of the goods having specific quality as mentioned earlier. The geographical origin with detail description of human creativity involved (can be extracted from anthropological history of Boro tribes of Assam) may also be defined. The particulars of mechanism to ensure standards, quality, integrity and consistency may also be provided to ensure sustenance of this particular variety and the relevant inspection body in this area may be mentioned. The particulars of the special human skill involved (e.g. training in cultivation process) and uniqueness of geographical environment (already detected from research) may be provided. The acknowledgement of receipt of application shall have an official number allocated on the application duly entered thereon. The particulars of inspection structures (e.g. strictly organic farming without any use of pesticide) to regulate the use of GI 'Komal Chaul' should be mentioned. The application for registration of a GI for 'Komal Chaul' should be addressed to the Registrar of Geographical Indication.¹⁶

Once GI Komal Chaul is registered, the intended-to-be-producers or producers can file an application for registration as an authorized user in Part B of the GI application form. The procedure for such registration is more or less similar to the above process other than the one-time particulars required to be furnished at the time of GI registration only.

Conclusion and Future Direction of Research

The purpose is to find one of the many ways of identifying and processing of GI registration. The other successful way is to work out a project for production of goods using traditional local means and viability of such project will lead to various intellectual property generations including GI. One such effort having a rich possibility of GI registration is shown by Sam Higginbottom Institute of Agriculture, Technology and Science (SHIATS), Allahabad, Uttar Pradesh. 17

The move of United Nations Environment Program (UNEP) through SEED Gold Award is laudable and can be taken up by the local GI to reach a global platform. 2009 SEED Gold Award¹⁸ recognizes need to develop bio-cultural protocols with different local indigenous communities. Such protocols are expected to provide a model whereby local communities can share the benefits if local resources (including geographical, social, human, and environmental) and expertise (traditional and industrial) are developed for economic prospect. UNEP has provided funding for the developments of the two bio-cultural community protocols in India and documentation through publication of a book.¹⁹ The other projects of 2009 SEED awards are equally interesting like 'Access and Benefit Sharing Capacity Building Initiative for Southern Africa', 'Innovative organic farming and production of essential oils, made from indigenous Tarchonanthus camphoratus bush in Zimbabwe, Solar conversion to traditional kerosene hurricane for electrification in Bangladesh, etc. ²⁰

Raika Bio-Cultural Protocol ¹⁹ sets out the biocultural values highlighting development and preservation of unique breeds of livestock and associated traditional knowledge for balancing ecosystem of Rajasthan's forest for sustainable use. Research and study of such protocols worldwide is likely to yield rich fruit in terms of GI, TK, TCEs and Biological Diversity (BD). In view of existence of such interrelated systems, it may not be possible to isolate a single IP protection, namely, GI. But GI form of IP can be identified and will provide parts of protection to the community through a planned Access and Benefit Sharing (ABS) mechanism.

The other benefit of GI protection is to reap economic benefit through fair competition for authorized knowledge that has been passed over from one generation to other spanning over few centuries, if not millennium, in India. Building up an invention on locational traditional knowledge can convert an underdeveloped economic scenario into a thriving business opportunity.

Acknowledgement

The authors are thankful to the Director, Central Rice Research Institute, Cuttack, Orissa, for extending help in collection of data. The data collected by Rabindra Kumar Barik, Research Scholar, GIS Cell by taking an active interest in the work is a real support to validate the case-study.

This research was financially supported by the Department of Information Technology, Ministry of Communication Information Technology, and Government of India under the project 'Development of Educational Content and Associated Repository of Web Services for Intellectual Property Rights' of which authors are Chief Investigator and Co-investigator respectively. Support of DIT is further acknowledged as the first author is a faculty under Information Security Education and Awareness (ISEA) Project sponsored by DIT. The authors are indebted to IPR Cell, Knowledge Management and Technology Watch Group of the Motilal Nehru National Institute of Technology, Allahabad, for encouragement to take up the study.

References

- Mills Tony Allen, Spiders Spin £300,000 Shawl (Times of India, Allahabad), 28 September 2009.
- 2 Times News Network, *Miracle wheat future hope for agriculture* (Times of India , Allahabad) , 4 November 2009.
- 3 Singh Raghbir, *Law Relating to Intellectual Property*, Second edn, Vol. 2 (Universal Law Publishing Co Pvt Ltd, New Delhi), 2008, p. 1421-1538.
- 4 Das P, Neog P, Laishram P D & Gogoi M, Nutrient composition of some cereals and pulses based recipes of Assam, India, *Journal of Human Ecology*, 17(4) (2005) 237–246.

- 5 Barthakur Himendra, 'Doi aru Komal Chaul': Our Long-lost Delicacies, http://assamnet.org/pipermail/ assam_assamnet. org/2007-May/012202.html (12 January 2010).
- 6 assamnet.org,http://www.mail-archive.com/assam @ assamnet.org/msg11165.html (12 January 2010).
- 7 Bhuyan Surya Kumar, The Military Systems of Ahoms in *Discovery of North-East India (11 Volumes)*-Assam Geography and Ancient History Vol. 3, edited by Suresh Kant Sharma & Usha Sharma (Mittal Publications, New Delhi), 2005, p. 08.
- 8 Kashyap Samudra Gupta, Assam 'Nose': Aromatic Rice Goes Global, 14 April 2006, http://www.indianexpress. com/ news/ assam-nose-aromatic-rice-goes-global/2359/2 (12 January 2010).
- 9 Dutta Milan, Komal Chaul Dudhe Fel-lei Payesh, Chas hochhe ae rajyeo (Ananda Bazar Patrika, Kolkata), 12 November 2009, p. 10.
- 10 Course material of Department of Chemistry-Imperial College London, http://www.ch.ic.ac.uk/vchemlib/mim/bristol/glucose/glucose_text.htm (12 January 2010).
- 11 Cuisine of Assam, http://www.ebharat.in/cuisine-assam (12 January 2010).
- 12 FAQ on Geographical Indications, Centre for WTO Studies, Indian Institute of Foreign Trade, http://wtocentre.iift.ac.in/ GI_FAQ.pdf (12 January 2010).
- 13 Central Rice Research Institute, Cuttack, http://crri.nic.in/ (17 January 2010).
- 14 Govt. to seek GI rights for eri, Komal Chaul, Assam Tribune, Guwahati, 24 August 2007, http://www.assamtribune.com/scripts/details.asp?id=aug2507/at01 (12 January 2010).
- 15 http://ipindia.nic.in/ (12 January 2010).
- 16 The Gazette of India–15 September 2003, http://www.patentoffice.nic.in/ipr/tmr/cg.pdf (12 January 2010).
- 17 NIP News Correspondent, Sarpagandha Cultivation: Boon for Farmers (Northern India Patrika, Allahabad), 5 January 2010, p. 10.
- 18 Press Release November 2009, http://www.unep.org/Documents / (12 January 2010).
- 19 Bio-Cultural Community Protocols: A Community Approach to Ensuring the Integrity of Environmental Law and Policy, edited by Barikalte Kabir & Jonas Harry (United Nations Environment Program (UNEP), Kenya & National Justice, South Africa), 2009, p. 20–57.
- 20 Grass root initiatives from Bangladesh to Zimbabwe are the Gold Winners of the 2009 SEED Awards, http://www.seedint.org (12 January 2010).