

# Geographical Indication (GI) as a means of craft tourism: a case of Muga Silk in Assam, India

# Indicação Geográfica (IG) como meio de turismo artesanal: um caso da seda Muga em Assam, Índia

Niranjan Das

**RESUMO:** Geographical Indications (GI) is one of the tools of Intellectual Property Rights (IPR) that protects name of a good as originating in the territory of a WTO member country, a region or locality in that territory, where a given quality, reputation or other characteristics of the good is essentially attributable to its geographical origin. Muga Silk has been and continues to be an integral part of Assamese life and tradition. Assam is literally a 'Silk country' and silk culture is deep-rooted in the rural life and culture of Assamese people where Muga silk (Antheraea assamensis) is grown. There are 100 per cent of India's Muga silk production is originated in Assam and hence Assam silk occupies a unique position in the sericulture map of the world. Considering the ecological conditions, food plant distribution, presence of eco-types and species of diverse nature in co-existence, it is speculated that this region is home of origin of Muga (Antheraea assamensis). Muga cloth has 85.8 per cent absorption capacity of ultra-violet ray of sunlight. Muga, the unique golden-yellow silk of Assam was granted the Geographical Indication (GI) registration in 2007. The present research will be highlighted the geo-environmental condition, craft tourism prospect of Muga silk as well as its contribution on livelihood generation in the Brahmaputra valley of Assam. This paper tries to emphasize the possibility of craft tourism in Muga rearing areas of Assam, so that the host community might earn their livelihood from tourism activity.

ABSTRACT: Muga Silk; Traditional Knowledge; Geo-Ecology; Craft Tourism And Livelihood.

PALAVRAS CHAVE: A Indicação Geográfica (IG) é uma das ferramentas do Direito de Propriedade Intelectual (DPI) que protege o nome de um bem como originário do território de um país membro da OMC, região ou localidade desse território, onde determinada qualidade, reputação ou outro características do bem é essencialmente atribuível à sua origem geográfica. A seda muga foi e continua a ser parte integrante da vida e tradição Assamese. Assam é literalmente um "país da seda" e a cultura da seda está profundamente enraizada na vida rural e na cultura do povo assamês, onde a seda muga (Antheraea assamensis) é cultivada. Há 100 por cento da produção de seda muga da Índia é originada em Assam e, portanto, a seda Assam ocupa uma posição única no mapa da sericultura do mundo. Considerando as condições ecológicas, distribuição de plantas alimentícias, presença de ecotipos e espécies de natureza diversa em coexistência, especula-se que esta região seja o lar de origem da muga (Antheraea assamensis). O pano de Muga tem 85,8 por cento de capacidade de absorção de raios ultravioleta da luz solar. Muga, a única seda amarelo-dourada de Assam recebeu o registro de Indicação Geográfica (IG) em 2007. A presente pesquisa destacará a condição geoambiental, a perspectiva do turismo artesanal da seda muga, bem como sua contribuição na geração de subsistência na região. Vale Brahmaputra de Assam. Este artigo tenta enfatizar a possibilidade do turismo artesanal nas áreas de criação de muga de Assam, para que a comunidade anfitriã possa ganhar seu sustento com a atividade turística.

**KEYWORDS:** Seda Muga, Conhecimento Tradicional; Geo-Ecologia; Turismo de Artesanato e Meios de Subsistência.

#### Introduction

Handloom industry has been playing a vital role in the tradition, economy, and culture of Assam. Traditionally every handloom fabric created was unique because the colours and designs varied from weaver to weaver who used to put the images of birds, animals' creepers, flower, people in the pattern or embroidering the motifs on the finished articles.

Assam is literally a 'Silk country' where silk culture is rooted in the rural life and culture of Assamese people (HUGON, 1837). This is the only state in India and the world where Muga silk (Antheraea assamensis) is grown. There are 100 per cent of India's Muga silk production is originated in Assam and hence Assam silk occupies a unique position in the sericulture map of the world (PHUKAN, 2010). Muga production has been an effective means for generating gainful employment in rural Assam and it has enormous potential in the context of building the rural economy and generating livelihood of this region. The Muga silk is golden-yellow in colour. Muga possesses the highest tensile strength among all the natural textile fibers (CHOWDHURY, 2001). Muga cloth has 85.8 per cent absorption capacity of ultraviolet ray of sunlight.

Muga possesses excellent characteristics as an organism. There are numerous characters in all stages of silkworm that are heritable. The morphological characters like body colour, shell weight, cocoon weight, etc. has been traditionally used to identify a strain. Considering the ecological conditions, food plant distribution, presence of eco-types and species of diverse nature in co-existence, it is speculated that this region is a possible home of origin of *Antheraea*. This species has the lowest number of chromosome (n=15) compared to other species of *Antheraea* and also considered to be endangered in near future.

Geographical isolation of Muga silkworm is indicative of its special requirements for geo-climatic conditions that prevail in this region i.e. high humid temperate climate and forest vegetation of primary and secondary host plants. Thus, this species is phylogenetically (evolutionary development) less adaptive reaching its ecological isolation that is indicative of being on verse of extinction. The declines of Som (*Machilus bombycina*), Soalu (*Litsaea ppolyantha*) plantation areas in rearing and sericulture farms have pushed Muga silk towards the verge of extinction. Encroachment in government Som plantation areas is one of the prime causes of decreasing food availability of Muga silk worm. If measures are not taken the Muga (*Antheria assamensis*) heritage of Assam may face extinction in the next decades. To save the Muga heritage it will need a comprehensive effort covering common people and everybody will have to work toward improving the general environment.

The present study has been conducted in the upper Brahmaputra valley (Lakhimpur, Dhemaji, Tinsukia, Dibrugarh, Sibsagar and Golaghat district) of Assam as the Muga is endemic to the area. There is a great scope of improving the quality of the Muga silk production which is always an important possibility for exporting.

## **Review of Literature**

Handicrafts are offering an important avenue for women, the poor and indigenous communities to earn income from tourism. In spite of many possible linkages the World Tourism Organization is convinced that the synergy between

tourism and handicrafts is still, in most countries, far from its full potential (YUNIS 2006).

Muga identified with Assamese traditional knowledge, expressions of folklore and culture since antiquity. The scientific name of Muga silk (*Antheraea Assama*) itself shows its origin. The term 'Muga' unlike Pat (*Pattaja*) and Endi (*Eranda*) is an Assamese term connoting the rich amber colour of the cocoon.

The first official records of Muga worm and Muga silk culture appeared in 1662. The culture of silkworm could be traced out from the notes of great writer 'Shihabuddin Tallish', in his famous book 'Fathiya-i-Ibriyya' who was accompanied by Mirjumla at the time of invasion of Assam. There was mention in his describing on the dresses, the people of Assam used during that period. Barua (1969) stated that 'Bhaskarverma' sent to 'Harshabardhan' through 'Hamsabhega', about 1300 years ago (mentioned in Harchacharita), silk cloths, while as autumn moonlight loin cloths smooth as the birch bark, which included the Muga silk.

Tavernier, John Baptists '*Travels in India*', (1662) who made special mention on silkworm variety from Kamarupa (Assam) that remained on trees all year round, meaning nothing but the conventional outdoor rearing of Muga worm even today. Shihabuddin Tallish (1662) accompanying Mirjumla during the same time observed the same tradition. Bogle, George (Treaty with Bhutan, 1775) mentioned that Bodo tribal's traded *Munga* silk (*Anthera assama*) with Bhutan through the Buxa pass. Helfer (1837) in his book '*On the indigenous Silkworms of India*' mentioned that rearing of silkworms is the main occupation of many castes of Assam. Barua (1969) quoting various sources states the following that Assam enjoyed a good reputation for producing natural silk of fine texture; that Muga was a stouter and more durable fabric than other silk; that Muga silk from Assam was very much in demand in Europe and that it formed a trade of the East India company during the 18<sup>th</sup> through early 19<sup>th</sup> centuries.

The ancient kings of Assam patronised the development of Muga silk in the state. The Ahom kings as an economic incentive exempted the rearers from the payment of land revenue and separate administrative machinery was set up to look after the silk production. During the regime of Pratap Singha (1603-1641) it became obligatory on the part of every household to contribute one seer (0.94kg) of home spun silk to the king exchequer (CHOUDHURI, 1982, SAIKIA, 1999). In the Ahom kingdom, royal dresses such as Shupkan, Gomesang, Karship, Sisupat and Bankara etc. were made form Muga. During British regime, the British rulers did not pay much attention for the development of the golden silk (KUMARESAN, 2002). Whatever attention was paid remained confined to the technical up gradation of mulberry culture (SAIKIA, 1999).

Besides manufacturing of Muga Silk cloths, the industry is also giving employment to thousands of peoples, and the Silk industry is plying a leading role in the economy of the state (RAHMAN, 2004). As Brahmaputra Valley is also known for tourist destination, tourists are visiting the valley every year and now the Muga Silk has reached each corner of the country and also in the other parts of the world Tamuli (1997-1998).

### **Objective of the Proposed Research**

- to highlight the nature and production of Muga in the upper Brahmaputra valley;
- ii. to analyze the socio-economic impact of Muga production on livelihood in the area;
- iii. and to make an assessment of Muga silk as a means of craft tourism in the state

### Research Questions

- i. Whether Geographical Indication (GI) for Assam Muga silk is adequate to protect & promote the economic return through craft tourism
- **ii.** Whether there is a scope of craft tourism in the state that enhances long term financial sustainability?

## **Research Methodology**

#### **Data Collection**

The methodology is a combination of doctrinal as well as non-doctrinal approaches for the research topic. Doctrinal is involving legal text, books, journal, published and unpublished study material; some online material also involved. Non-Doctrinal involve visit, interviews, discussion & data collected from the association 'Assam State Technology and Environment Council' (ASTEC) of Assam and also from the local people involved in production of Muga Silk.

The research is also based on empirical observations as it also using interview tools and open questionnaire to collect the data. The non-doctrinal part of the research gave the first-hand information i.e. primary data to realize the legal issue and economic feasibility which is very important for the research topic.

## Data Processing

Six districts (Sub-divisions of concerned district) of upper Brahmaputra valley (Lakhimpur, Dhemaji, Tinsukia, Dibrugah, Sibsagar, Golaghat) is selected where Muga production is dominantly practiced as compared to other livelihood activities. A total of 40 per cent households in the surveyed area are selected based on their participation in Muga production. The questioner mainly focused on Muga production, host plant cultivation, pre-harvest concern, post-harvest losses at different stages of handling and production constraints and its importance as tourism activity or product of the Muga. The data has collected through focus group discussion (FGD) and field observation on farming site via formal and informal survey.

#### Discussion

Assam enjoys global monopoly in terms of Muga silk (also known as golden silk) production. The state accounts for around 95 per cent of global Muga production. Moreover, Assam is the country's major Eri silk producer (accounts for 65 per cent of the country's Eri silk production). Under State Budget 2020-21, Government allocated Rs. 289 crore (US\$ 41.35 million) for the handloom and textiles. In tourism sector during 2018, foreign tourist arrivals in the state reached around 5.85 while domestic tourist visits stood at 36,846 persons.

An experimental project with 'craft tourism as a means of rural development' was initiated in a village called Gondhmou, around 6 kms form the Sualkuchi (Craft) village. This project is now placed entirely in the management of the local people, and has yielded dividends. The ones engaged in this project have themselves admitted that it has provided employment to around 65 families of that village, and has also indirectly enabled the up-gradation of the infrastructure of the place which was previously lacking behind. They have also pointed out that the period from November to March witnesses a major inflow of tourists, and hence has become an ideal time period for a flourishing business.

Muga silkworms show diversity within the species which indicate the possibility of isolation of new inbreeds lines and development hybrid in the species. Although, the species shows heterozygous nature, there is no any improved muga silkworms breeds for commercial exploitation. As old aged traditional practices of Ahom Kings, seeds were collected preferably from forests of Garo Hills through rearing in jungle in *In-situ* habitats which was further multiplied as commercial crop in valley during Kotia (October-November) and further multiplied through selection breeding in pre seed crop (December-January) and seed crops (February-March) till Jethewa (April-May) commercial crop where, bumper cocoons were harvested. The historic muga crop management practices of Ahom kings indicated the needs of In-situ conservation of muga silkworms and improvement of breeding strategies. The breeding of muga silkworms from P4 stock to PI stock is directly correlated with dfl production systems which need details investigation of breeding technologies of species. Thangavalu (1988) reported muga management system from P-4 stock (seed rearing) to P-I stock (commercial rearing), it indicates the modification due to changes of global climates and rapid deforestation in Assam.

### Craft Tourism Potential of Muga Silk

Handicrafts always possess tourism potentiality and for the economic development of a society or a place. It enhances the livelihood of the host community apart from the other tourism activity. After getting GI tag to muga silk of Assam, its demand has been risen up in the international market as a 'traditional product with indigenous knowledge'. Its durability and resistance capacity has popularized the product since time immemorial. Rearing of host tree plantation is a common activity in muga farming areas. These pre harvest rearing require man power to cleaning and planting of seedlings.

Since the tourism activity in the present-day situation is means of actively participated in production activity, the production of muga silk has growing opportunity in these regards. A muga rearing farm can offer packages to intending

tourist to visit during muga rearing period. The package includes collection of cocoons from the field, processing of cocoons for threading, weaving, traditional dying and ultimately manufacturing of finish product or muga cloth.

During the activity the local people or farm owner can provide local cuisine to the tourist in an eco friendly location. Locally available raw materials would be use while preparing the tourist guest house or more commonly home stays. Home stays provides a very good affordable accommodation facilities mainly in the rural areas. It is another way of livelihood generation by the local youths. The educated youth may take part as a local tour guide to promote the area with sufficient knowledge about the resources available in the place. Since the rural economy always flourish with agriculture, the production of organic foods has a ready demand among the tourist. Villagers can sell the ready organic food staff to the tourist and earned for subsistence. These types of tourism activity not only sustain the rural flocks but also maintained 'Sustainable Tourism' for a better future.

#### Conclusions

This study has been an effort to portray the role of rural tourism in local economic development, taking muga silk weaving in the village of Sualkuchi as an example. Although the owners of the handlooms are the indigenous people, most of the weavers are from places outside this village. At present there is felt a scarcity of weavers, often 1 out of every 6 loom remains without a weaver. There has also been a shortage of raw materials particularly muga. Previously, the cocoon from which the raw material was extracted used to be reared in the village itself; hence, there was no question of procuring it from outside. But the present situation is quite grave in the sense that not only the cocoon is not reared in Sualkuchi, its presence is seen diminishing in the other adjoining places. This has led to a serious demand - supply anomaly. In order to rectify this, the Government has to play its part. Encouragement from the government to the local handloom industry, especially this muga silk weaving industry, which is both labour intensive and tourist attracting, is the need of the hour. Acknowledgement: I take the opportunity to express my deep gratitude and acknowledgement to ICSSR (Indian Council of Social Science Research) New Delhi, induce me to pursue the present research problem. I am also thankful to Prof. Chandan Goswami, Head, Department of Business Administration, Tezpur University for his uninhibited guidance and encouragement in preparation and completion of this manuscript.

## References

BARUA, B.K. A Cultural History of Assam (Early Period), v.1, pp.103-104, 1969.

BOGLE, G. Treaty with Bhutan, 1775.

CHOWDHURY. SN. **Sericulture and weaving (an overview)**. Designer Graphics Press Dibrugarh, Assam, India, 2001

CHOWDHURY, S. N. Muga silk industry. **Directorate of Sericulture & Weaving, Gauhati Assam**, v.178, 1981, p-46.

HELFER, T.W. On the indigenous Silkworms of India, **The Journal of the Asiatic Society of Bengal** (Calcutta), VI (I), 1837: 38–47, pl. V–VI. 104, rearing of silkworms is the main occupation of many castes of Assam,

HUGON. T. Remarks on the silkworms and silks of Assam. **Journal Asiatic Society**, Bengal 1837, v.6, pp.21–38.

KUMARESAN, P. **Quality Silk Production**: Some Economic Issues, Economic and Political Weekly, Vol.37, No.39, 2002, pp.41-46.

PHUKAN, R. Muga silk: problems and prospects of Muga silk industry of Assam, India. **VDM Verlag Dr. Müller, GmbH, Saarbrücken**, 2010, pp -146.

RAHMAN, A. Prospect of Muga Silk Industry in Non-Traditional Areas of Assam, **Journal of North-East India Council for Social Science Research**, April, 2004, pp.20-24.

SAIKIA, P. The Muga Silk Industry and its Status, **Proceedings of All India Symposium of Sericulture Science**, University of Agriculture Science, Bangalore. 1999

TALLISH, S. Fathiya-i-Ibriyya or On Account of Assam, 1662.

TAMULI, M.K. **Economics of Muga in Assam**: A case study of Dhakuakhana subdivision of Lakhimpur district), OKDISD, Guwahati, 1997-1998.

**Niranjan Das**: Senior Fellow, (ICSSR) Indian Council of Social Science Research, Department of Business Administration, Tezpur University, India.

E-mail: das niranjan2002@yahoo.com

ORCID: <a href="https://orcid.org/0000-0001-6213-1207">https://orcid.org/0000-0001-6213-1207</a>

Data de submissão: 30/08/2021

Data de recebimento de correções: 09/10/2021

Data do aceite: 09/10/2021 Avaliado anonimamente