



Impact of Geographical Indications on Revitalisation of Local Economy: A Case Study of Darjeeling Tea

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Darjeeling is an important tourist destination and situated in the lower Himalayas at an average elevation of above 2000 m. Next to water, tea is the most extensively consumed beverage by human beings. Today, hills of Darjeeling positioned as one of the best quality tea productions in the world. Darjeeling tea has a complex and unique amalgamation of agro-climatic conditions which contributed to its unique savour and quality that has won the heart of millions of consumers across the globe. The unique quality and reputation of the tea attributable to its geographical origin was the major reason for Darjeeling tea to get the first Geographical Indications (GI) status in India in 2004. The basic objective of the study is to analyse the role of Geographical Indications in improving the living standard of the local community. After the analysis, it was concluded that tea is a labour-intensive industry which required a good number of labourers to plant, bend, pluck and manufacture. Darjeeling's fragile ecosystem has been endangered by increasing demand for natural resources. There is an urgent need to make locals aware about the different advantages of GI so that they can avail the benefits of it and improve things in future.

Keywords: Geographical Indications, World Trade Organisation, Queen of Hills, Amalgamation, Natural Drink

The Indications of goods with geographical origin have become a crucial in the trade environment scenario of the 21st century.¹ The Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement was signed by India in 1994.² This agreement assured Geographical Indications (GI) through an unprecedented shield of protection by obliging all member countries of World Trade Organisation (WTO).³ It also provides assured legal protection against misrepresentation, mislead and illegal use of GI tag.⁴ GI of goods is considered as an indication that identifies any product produced in a certain region and country which possess distinguish reputation and quality contributed to its territorial or geographical origin.⁵ When any product gets GI label, then the value of that product increases not only in the domestic markets but also in the international markets.⁶ The name Darjeeling came from Tibetan word Dorje means thunderbolt and Ling mean land or region, therefore called as The Land of Thunderbolt, which is also well-known as the Queen of Hills.⁷ It has one of the most attractive tourist destinations like

natural tea gardens which attracts a lot of tourists from different parts of the country to delight their vacations every year.⁸ The tea is famous for its distinctive quality and flavour that has won the recognition and support of discerning consumers from all over the globe.^{9,10}

Tea production is considered as the main economic activity of Darjeeling where 70% of the tea is exported and the rest is consumed domestically.¹¹ The tea is known for its natural fragrance and organic taste. The tea estates or gardens are spread over an area of 20800 hectares, produces around 9 million kg tea in 2015.¹² It has approximate 87 tea estates with more than 1.2 lakh workers and largely women were employed.¹³ The prestige, influence and quality of Darjeeling tea are crucially attributed to its Geographical origin only and can't be replicated anywhere else.¹⁴ GI tag is given to the tea way back in 2004 but the living standard of the tea growers is becoming more and more pathetic over the years as GI tag did make any significant improvement in their working conditions.¹⁵ The benefits of the GI tag are taken over by the exporters mostly and these tea growers are working on the fields of these exporters

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on a daily wage basis.¹⁶ The exporters didn't increase their wages despite their profits are exponentially increasing over the years.¹⁷ There is an urgent need of interference from the government side to make workers aware about the significant provisions of the GI in their local languages.¹⁸ In this regard, arrangement of sabhas, camps, exhibitions etc. will be helpful to address their wage and living standard issues so that they can also have a dignified life.¹⁹

Origin through the Pages of Time

Major Crommelin and Dr. Campbell (then superintendent of Darjeeling and civil surgeon respectively) are believed to be the first to introduce tea in the hills of Darjeeling during 1840-50.²⁰ Dr. Campbell brought Chinese tea seeds from Kumaon region in 1841 and started cultivating tea in a small patch of lands as an experimental basis.²¹ It was very close to his residence at Darjeeling in Jalpaiguri division.²² Then, several British officers adopted the experiment with similar energies.²³ These experiments became grand successful and very soon several other tea gardens were started functioning on a large commercial scale.²⁴ Darjeeling tea creates magic and echoes mystery in every sip. First commercial tea estates were established in 1852.¹³ In 1986, Darjeeling tea logo was developed and registered in the U.S.A., Japan, U.K., Canada, and Egypt under the Madrid

Agreement, which deals International Registration of Marks, 1891 and 1989.²⁵

Contextual Background

Registration Procedure for Geographical Indications (GI)

First of all, file the application under GI section 2 (1) (e). Make three copies of the form and that should be signed by the applicant along with 3 copies of the map of the place to which the product is related. Then, the examiner will examine the application for any kind of discrepancies (Fig. 1). Then, the team of experts will evaluate the matter of course. Afterward, the examination statement will be issued.²⁶ If the registrar has objection to the application, then, he/she will consider such objection. Then, applicant has to reply within 60 days or can apply for inquiry. The application within the time frame of 90 days of acceptance must be published in the GI journal. Anyone can file a legal notice of objection within that 90 days and the applicant will send a copy of counter opposition within 60 days.²⁷ After that, both parties will prove their evidence respectively through supporting documents and affidavits. Thereafter, the application for GI will be accepted, the registrar will register the GI and issue certificate with the GI registry seal to the applicant. Finally, the registered GI will be valid for the next 10 years and will be renewed when it requires or on payment of renewal of fee of ₹5000.²⁸

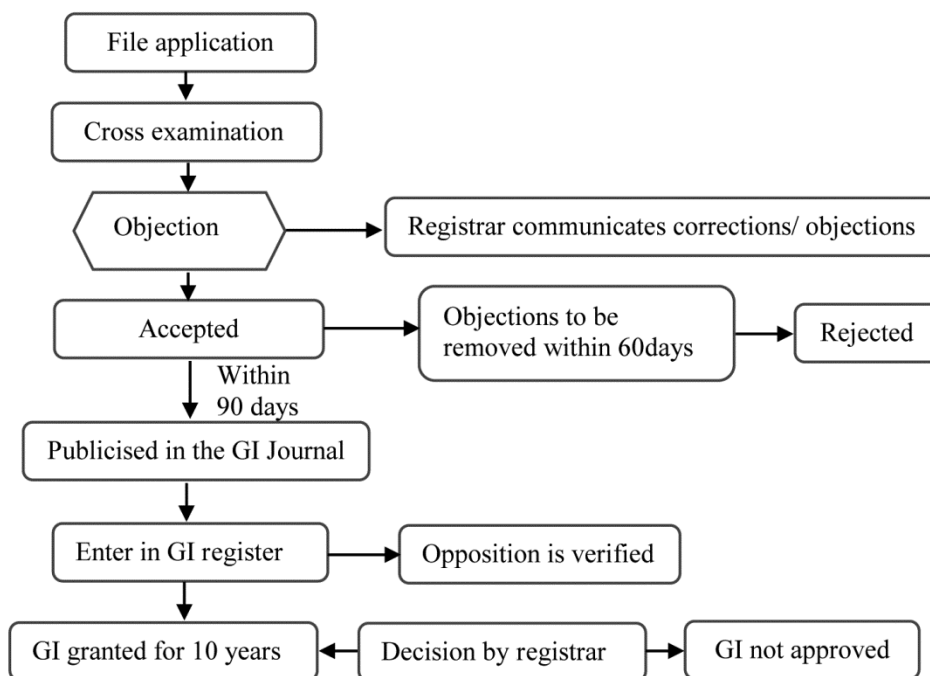


Fig.1 — Registration Procedure for GI

Hierarchy Involved in Registration Process

There are hierarchies of authority through which any products will pass to get registered under GI. In this regard, WTO lies at the apex of the hierarchy that ratified the GI of Goods act of 1999. Thereafter, Article 22 of the TRIPS and Doha Development Agenda (DDA, 2001) which compel all the member countries of which India is one of them to endorse protection of all GI products (Fig. 2). GI is one of the important constituents of the IPR which consists of patent, trademark, industrial design, compulsory licensing, trade secret and copyright.² Each of them has a significant role in their respective fields like copyright has dominance in the literary works, patent in the field of medicine, trademark in the arena of creative brands etc. GI in India is given under 4 broad categories like handlooms/handicrafts which has the highest share followed by agriculture products then man-made or manufacturing products and finally food items acquired the lowest percentage share.²⁹ In India, GI (Registration and Protection) Act, 1999 is the nodal agency for conferring GI to any products. The Controller General of Patents, Designs and Trademarks who is considered as a Registrar of all GI products administers the Act.³⁰ The works of Registrar advocated by the Department of Industrial Policy and Promotion (DIPP) and it is one of the nodal departments under the Ministry of Commerce and Industry. The Ministry manages and controls all kinds GI products disputes like export and import.³¹

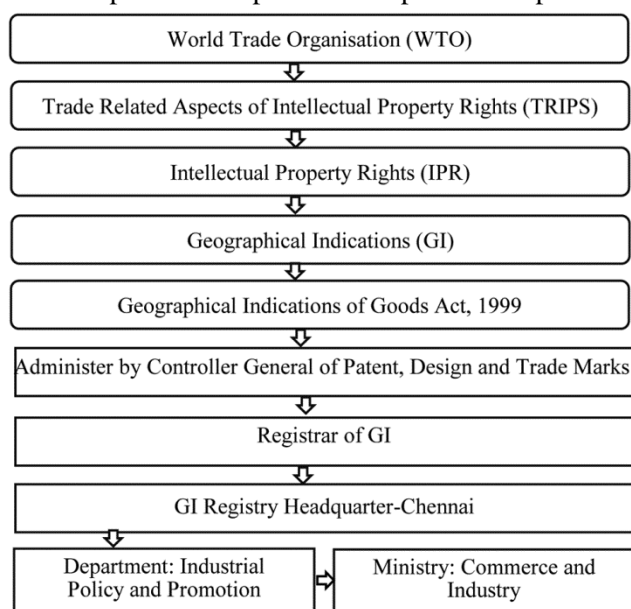


Fig. 2 — Hierarchy of GI registration in India

Advantages of Geographical Indications (GI)

- (i) When a product is conferred by GI certificate, then its price as well as value will boost in domestic and global markets.
- (ii) GI status authorized the producers with an exclusive right over the production and sale of the specific products.
- (iii) The certified producers can start breach or violation action against any institutions that are misrepresenting the GI products.
- (iv) It assured the authorised producers that counterfeit, fake and pirated products cannot infringe their market.
- (v) It guaranteed their consumers with quality assurance and realness of the products that they are purchasing.
- (vi) Promotes tourism-related activities like handicraft products with unique features are all the time attracts both domestic and foreign tourists.
- (vii) Encourages Micro Small and Medium Enterprises (MSME) sector as it empowers them to improve their market and escalate returns.

Unfortunately, the above-mentioned points hardly give any kind of benefits to the Darjeeling tea labourers as all the benefits are taken away by the middleman, tea garden owners and the traders.³² One of the respondents replied that day by day the labourers living conditions are becoming worse. On the other hand, the demand for Darjeeling tea is increasing and the tea is getting more and more expensive in the domestic and international markets. The intermediaries and owners (take the tea gardens on lease) get all the profit margins as workers labour on their fields as the daily wage worker.^{33,34} The role of government is seen as very negligible as the tea gardens were given on lease by the state government itself. Hence, the role of the government is seen as advisory or toothless tiger and not mandatory to increment the worker's daily wage.²⁷

Darjeeling Tea

The eastern hills of Darjeeling have grown tea for the last 150 years.²⁵ The complex agro-climatic and environmental conditions result in bumper tea production in the region with a unique quality.³⁵ Darjeeling tea is so unique that only 87 tea gardens are officially fit for production.³⁶ The tea is cultivated in the certain months of a year like the first flush between February to April, the Second flush between May to June and Autumn flush between October to

November.^{37,38} The Darjeeling tea sector benefits from good physical conditions and terrain for the production of tea, where it has been growing consistently over 100 years (Table 1).³⁹

The tea gardens are all situated in the 7 valleys of Himalayas at an altitude range from 200 m to 2000 m above the mean sea level. Here, the gradient of the slopes is ranging from 60° to 70° C and very high rainfall distributed over different months is quite good for the tea cultivation. The average minimum temperature ranges from 1° to 10° C and maximum 20° C is a boon for the tea production. The average sunshine of 2 to 4 h per day is very crucial for determining the premier quality of tea (Table 2). Evaporation, humidity and wind speed are instrumental factors in cultivating the unique variety of the tea.⁴⁰ In India, the average carbon content of soil in tea growing zones is <1% while it is more than >5% in Darjeeling.⁴⁰

Theoretical Background

The structuration theory describes perspectives on human behaviour built on a synthesis of agency and structure effects called duality of structure. People perception-based analysis is done to achieve the desired outcome to draw a positive conclusion. Instead of describing the capacity and capability of human (agency) action as being restricted by powerful and dominant societal systems. It includes religious, educational and political institutions or as a function of self-centred expression of will such as agency. The theory acknowledges interaction of values, thoughts, meanings, ideas, standards, social structure, power dynamics and validates a dynamic relationship with these multiple facets of the society.⁴¹ Antony Giddens (British sociologist) developed the concept of structuration. Giddens argues that social structure and human agency (action) are not two separate entities, but together are produced by social interaction and

Table 1 — Physical Features of Darjeeling Tea Gardens

Features	Description
Latitude	26° 31" N to 27° 13" N
Longitude	87° 59" E to 88° 53" E
Altitude	200 m to 2000 m above the mean sea level
Slope gradient	60° to 70°, provides natural drainage system for the substantial amount of rainfall received during the monsoon season
Rainfall	Average annual rainfall ranges from 1600-2500 mm
Soil	Loamy and rich in the uplands, generally gritty, red and residual that is derived weathering of rocks and contain organic matter from nearby forests
Humidity	Very high i.e. >90%, with mist, fog and snow
Sunshine	Normally 2-4 hours per day
Temperature	Minimum 1 °C to 10 °C and maximum 20 °C
Tea growing areas	7 valleys fronting the Himalayas

Table 2 — Yearly trend of atmospheric conditions for the production of Darjeeling green leaf

Year	Temperature min. (°C)	Temperature max. (°C)	Relative humidity (%)	Sunshine hour	Total rainfall (mm)	Productivity (kg/hect)
1995	14.88	18.89	91.77	3.61	494.04	1666.42
1996	14.26	18.88	91.17	3.72	425.77	1664.61
1997	14.64	19.24	91.00	3.47	411.81	1658.52
1998	14.53	19.05	90.79	2.96	558.03	1633.57
1999	14.47	19.67	89.92	3.11	400.72	1605.23
2000	12.58	19.31	89.60	2.70	399.71	1598.77
2001	11.02	18.77	89.38	2.95	398.30	1549.83
2002	11.18	18.47	89.21	2.66	387.15	1535.70
2003	10.73	18.10	87.96	2.92	382.93	1496.39
2004	11.48	18.27	86.29	2.83	382.31	1387.85
2005	10.73	19.16	85.98	3.17	367.55	1458.41
2006	10.05	19.92	82.72	3.19	367.36	1365.30
2007	8.38	19.20	82.07	1.59	362.16	1357.41
2008	7.91	19.65	82.00	2.06	334.78	1354.67
2009	8.30	19.63	81.18	2.31	326.88	1353.35
2010	11.16	18.05	78.20	2.78	226.64	1326.44
2011	13.93	18.23	83.36	3.12	242.76	1207.68
2012	14.93	19.50	76.64	3.71	286.75	1061.12
2013	8.9	18.28	76.12	3.14	399.21	1050.15
2014	10.8	19.20	75.16	3.98	398.65	1000.86
2015	12.6	19.14	75.44	3.86	380.28	989.28

action. Individual's autonomy is inclined toward structure, structures are corresponded and sustained through the effort of agency. The connection at which an actor meets any structure called structuration. Giddens emphasises on 4 aspects of modernity society that from traditional norms of social organisation such as power/agency, trust, distanciation and risk.⁴²

For both approaches (action and praxis), there are paradigms of social action, institutions composed of regular patterns like family and peer groups, and structure like class and patriarchy. Giddens identified three types of structure in a social system. Signification is the first, where meaning is applied in the practice of discourse and language. Legitimation is the second, where normative perspectives are placed as societal values and norms. The last one is domination, described how power is persistently applied, especially in the control of available resources. He stressed space and proximity or distance and how these are facilitated by modern technology and social structures, and time continuity and discontinuity and the association of different activities across time. Praxis is applicable where actors are placed and where social contact occurs. This sort of action is linked to social life both locally and globally. These connections work in both circumstances, social praxis stated that different social structures and institutions are produced and reproduced.^{43,44}

Latour-Barnes Model

The Latour-Barnes model of disciplinary change as the basic methodological and theoretical framework has been applied for the analytical research in the study. It is quite clear that nothing is stabilised in without the existence of non-human across the region. The model distinguishes 4 processes that emphasise on multiple stages of discontinuity or paradigmatic transition within the discipline. However, in the research the first two stages of mobilisation and autonomisation are applicable, which is discussed in the result and discussions at these two stages, different policy strategies are applied in the paradigmatic transformation of the discipline. Mobilisation accepts the presence of an individual or group of followers that draws attention to a new analysis. In autonomisation, the promoters of new paradigm offer others to assimilate, adopt and elucidate it. The objective should be to spread the new paradigm to the maximum, which implies the involvement of other actors, thus prompting the needs for modern reforms like in the field of education.⁴⁵

The politics of disparagement is very assertive and frame on shared rejection of the paradigm of competing, claiming the competitive plan is inappropriate and drops the status of the discipline. The politics critique is less decisive compared to the first one and framed on finding both the weaknesses and strengths of the paradigms to prove the superiority of one over the other, which is strongly competing. The decision of rejection is frame on rapid dismissal of particular factors of well-established practices in the discipline, which are identified as unfeasible. The politics of silence is forwarded when the rejection of a new pattern is assumed. The policy of ignoring stops the large dissemination of new ideas, thoughts, beliefs and values, which as a result leads to some new standard not being discussed and discoursed as a suitable alternative. The politics of accommodation accepts the new model and integrate it into the discipline's portfolio. The politics of unity is an expanded form of preceding strategy, focusing the similarities of contending projects and seeking accord to overcome threats from outside the discipline.⁴⁶

Study Area

Darjeeling is renowned for its panoramic beauty worldwide. Darjeeling is one of the northernmost districts of Jalpaiguri division of West Bengal. In the north, it is bordered by Sikkim, Bhutan lies in the east, Nepal in the west and Jalpaiguri surrounds the district from the south.⁴⁷ The district lies between 27° 13" N to 26° 27" N latitude and 88° 55" E to 87° 59" E longitude which is spread over an area of 3149 sq. km (Fig. 3). The district has maximum mean annual temperature of 14°C and minimum of 8.9°C. It has an average annual rainfall of 3092 mm and an average number of rainy days are 126.⁴⁸ Darjeeling tea certified the Trademark Protection Scheme in 1999. The tea registered under the Geographical Indications of Goods (Registration and Protection) Act, 1999 as serial number 1 and application number 1 and 2.¹¹

Database and Research Methodology

The three significant tea estates such as Happy Valley, Singtom, Singbulli and Peshok were taken for primary survey. Happy Valley, Singtom and Singbulli were open tea estates where tea workers were growing tea while Peshok was closed or abandoned tea estates. The primary survey was done after a comprehensive discussion and dialogue with government officials and trade union leaders of

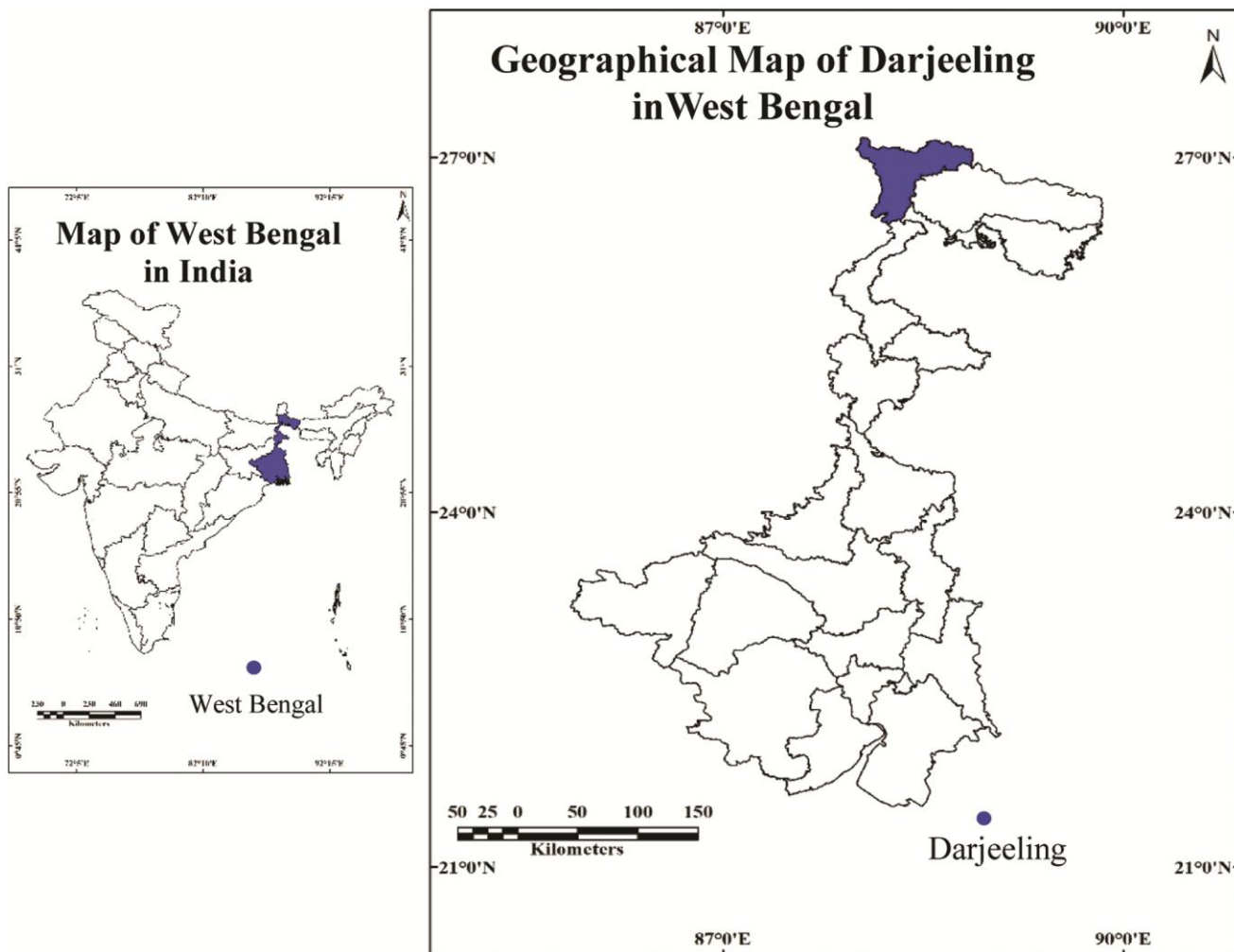


Fig. 3 — Geographical Location of Study Area

Darjeeling Tea Association (DTA). During the discussion, the trade union leaders threw light on the miserable conditions of the tea growers that almost all the growers working in tea gardens and tea estates were sick. Further, according to conversation with labourers, earlier those workers were lying above the poverty line (APL) now, they are lying below the poverty line (BPL) and many workers were trapped in the vicious cycle of debt of moneylender. Those who were working in the Peshok, Putong tea estates have migrated to Happy Valley or Singtom both the estates have been closed since 1995 and 2000 respectively (Table 3). Further, participants replied that worker's purchasing power have declined as they were not getting suitable wages for their labour, they did on the tea estates. The tea growers were also suffering from multiple kinds of diseases like malaria, cholera and diarrhea. The data of such diseases never published

Table 3 — Abandoned Tea Estates

District	Tea estates	Abandoned
Darjeeling	Vahtukvar	1995
	Peshok	1995
	Putong	2000
	Jogmaya	2003
	Sepoydhura	2003
	Thanjhora	2004

officially and several tea gardens were also destroyed due to the mismanagement and unscientific practices in the past few decades. The tea workers (Fig. 4) revealed the fact that closing and opening of the tea gardens (Fig. 5) have become steady event in the current times. A few households were selected with the help of snowball sampling survey method from the village.

Structured questionnaire was used to conduct the primary survey. Besides primary survey, semi-

structured interview was also done with managers of the tea gardens. The counter views of local activists, experts and NGOs in the framework of prospects and challenges of Darjeeling Himalayas was of great concern. The associated dynamics of tea estate labourers and tea management authorities in the Himalayas have been incorporated. The focused group discussion with the tea workers was another instrumental primary source which supplemented the

available information related to the opportunities, challenges and suitable steps taken by the management that were previously untouched and unexplored. To explore further, in-depth interview was conducted and synergy with different methods like analytical and descriptive to obtain the desired qualitative data (Fig. 6). Working within the jurisdiction of qualitative research involves organic relation with the study area. Interacted with



Fig. 4 — Females Working in Tea Garden



Fig. 5 — Harvested Tea Garden

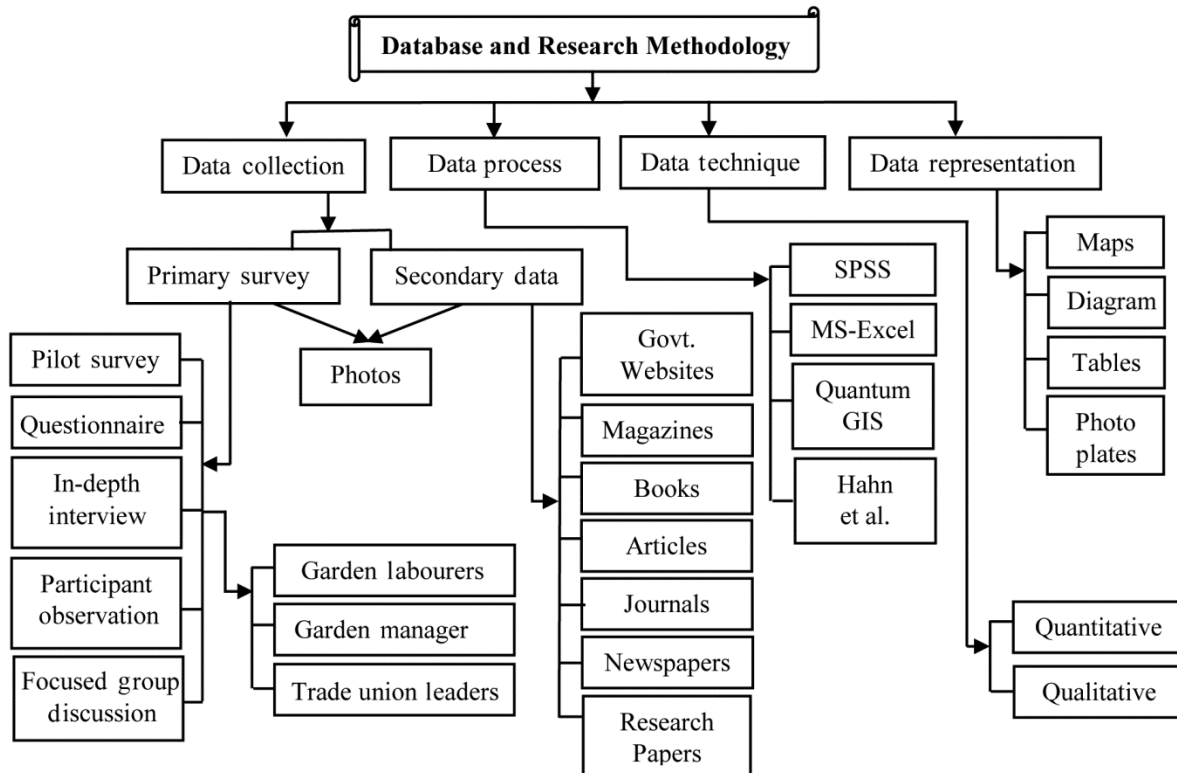


Fig. 6 — Diagrammatic Representation of Database and Research Methodology

indigenous community and acquired their own perspective about the world-famous Darjeeling tea. Observations were also made based on the media and news reports, personal interaction with some of the locals who were connected with tourist and tourism. The constructive discussion was conducted with tourist officials, travel agencies, NGOs and so on.

The component scope of each unity is standardized due to its difference from unit having minimum value divided by difference between maximum value and minimum value as follows.

Standardized

$$I^s = \frac{I - \min(I)}{\max(I) - \min(I)}$$

- S Standardized value of I and satisfy $0 < I^s \leq 1$.
- I Indicator of unit.
- $\max(I)$ Maximum value of I .
- $\min(I)$ minimum value of I .

Results and Discussion

Darjeeling Tea and Mounting Challenges

The once-thriving tea estates in the highly fertile and prosperous Dooars of Darjeeling have fallen on the difficult times. The tea industry is renowned as the third largest employer but many of the tea estates gardens have shut down, labourers are being by the agents who abuse, exploit, trafficked them and their children. The industry undermines the labour's rights and deprives their families with the most basic needs like food, shelter, clothing, education, primary health and water.⁴⁹ Some of the challenges faced by tea labourers are discussed below.

Socio-Economic Apathy of Tea Labourers

India is the second largest tea producing and exporting country after China in the world. The tea market is declining due to multiple inevitable factors both in the global markets. It includes rising competition, oversupply in the production, cost of production has increased and changing consumption pattern contributed to decline in the demand of tea. In this regard, Darjeeling tea has not been an exception. More than a million tea workers are living in the Darjeeling district where most of them belonging to BPL category. In the barred estates, more than 1000 workers' lives have been lost due to starvation since 2002. No vital steps were taken even after the death of the labourers; it shows the complete negligence from the side of tea estate owners and the state government. Pathetically low wages have produced an environment of shortage, which is unjustified when

domestic demand for the tea is mounting and retail brands are earning higher profits in the markets. Orthodox natural tea types from the wonderful tea gardens of Darjeeling are mainly exported at prices that garden holders do not want to disclose at all. The tea exporters are not spending even a single penny to improve the labourer's living standard. Most of them are living in a rented house or in their hut. Though, they know about the Pradhan Mantri Awaas Yojana but very few of them have got the money to construct their house. The main reason is that the village Mukhiya will only forward his/her Aadhaar card for the verification of the yojana, if she/he gives ₹10000 out of ₹2.5 lakhs as a commission. However, the government is reiterated that everything is digital and works through the direct benefit transfer but the government never even tried to see on such type of inhumane activities being performed at the Panchayat level as well. These labourers are living a life without any kinds of freedom and expression as whenever they demand for very meagre increment in their wage then, the field's owner fired them out. They don't have any kind of social and economic security about their work as it falls under the purview of the informal sector.

Lack of Infrastructure

The hill slopes of Darjeeling tea gardens are very steep where ploughing can be performed manually only hence require large number of tea workers results increase in the cost of production. Over the period of time the yield of the tea gardens has declined due to ignorance from the side the garden owners. The owners didn't properly inspect the fertility and the required organic fertilizers requirement to the soil. Results in low yields of the tea in comparison to other parts of tea production in India, is one of the significant factors adding to high costs. Darjeeling tea yield is very low like 400-500 kg. per hectares in comparison to the national yield of 1800 kg. per hectares. Poor quality of infrastructures like bridges and roads, results in the loss of working days and decline in the quality of tea. The biggest sufferers are the tea labourers as they are working on daily wage basis. During the monsoons, it becomes very difficult to reach the garden as they are living away from the field and the roads are washed out with the heavy rainfall. The condition becomes worse as most of the tea labourers are women and they travel in a group with their field friends by foot. They are not using any mode of transport to reach the

estate as none of them can afford the transport fair and most of them belong to the BPL category. With such kind of poor-quality road, the transportation of tea and any other necessary products become very costly, difficult, risky and time-consuming as the roads are very narrow. The construction and after maintenance of the road falls under jurisdiction of local administration but they are not doing their basic job in a proper manner. Poor quality of roads caused road accident several times. The electricity and water supply in the region is very irregular.

Hotbed of Human Trafficking

Human trafficking states the movement of children, men and women from one region to another either by pressure, employment or fraud into the circumstances of their sexual, mental and economic exploitations. The problem of human trafficking has become frequent in the tea gardens of Darjeeling hills. Participants during the interview have replied that human trafficking has become a common phenomenon in the tea gardens. One of the participants replied that there are few people in his village who mainly come from the big towns or metropolitan cities like Delhi, Mumbai and Kolkata. Their main aim is to target children from the village and in garden take the children in their confidence by luring them about the fake promises. It includes better living conditions, high paying job, higher income, less working hours, well-furnished accommodation in the multi-story buildings etc. Then, they took that child in the city without informing their parents, neighbours, friends and villager. When these children reached the city, then they get to know that the agents betray them. Then, the trafficker forced the children to work in the highly miserable conditions. Where girls force in the sex workers, building construction works, home servant while male children are forced for begging, house helpers etc. without any pay. Wherever they go, they live a life without any kind of dignity and liberty as they lost their dignity and liberty the moment, they became ready to leave their village's home and ready for the city life. Most of the time, they are beaten up by their new owners and coerced to live in inhumane conditions and compromise with their self-respect which sometimes depicts the dark side of such a rich human civilization. They are called as the slaves of this modern world. They even don't know where they are living and when they try to express to their plight to any trusted guy then, they are given life threaten warnings by the traffickers.

During the focused group discussion, they responded that few months back five children were trafficked by these traffic agents in the same day but from different locations of the village. These children were trafficked to Delhi on the fake promises like less working hour, very high salary etc. Then, one of the parents of five children anyhow reached Delhi but he returned back within two days as all his savings were spent. Next time, he collected enough money and more knowledge about the trafficker as they nabbed out one of the traffickers in his village itself when he was eating in the dhaba. Now, he reached the exact location as dictated by the trafficker and returned away from the location. Next day, he tried to contact the local NGOs working in the rescue operation of Bachpan Bachao Andolan. Then, the NGO contacted with the local police and they schedule a day for rain on the spot. When they raided the place, they find 10 children in that only 4 children from the Darjeeling and one child is still missing. The NGO, police and their informers tried their best but didn't rescue that one missing child. The family members of the missing child are still in the hope that one day their child will come back.

Conflict of Interest

The Tea Board of India (TBA) board is a state agency working under the seal of the government of India. It is constituted to encourage plantation, processing, marketing, trade and export of tea to abroad. The TBA has provided vigorous co-operation and support to Darjeeling Tea Association (DTA) to achieve legal protection not only in India but also in many countries of the world.⁵⁰ The Darjeeling logo has been acknowledged as a legal trademark in various countries as all the member countries should follow the protocol under the Article 22 to protect the GI products of each other. Unfortunately, Darjeeling tea not so far been accepted under GI product in many countries as they have their own concern about the tea. Sometimes, it became very difficult to find out that the product is registered or not under the GI in a particular country.⁵¹ Though, India has raised her concern about the GI violations in the WTO platform at several occasions and received the positive outcome about such issues.⁵² In this aspect, application forms with full necessary clause have been sent to several countries. Some countries have resolved the issue while in some countries are still in process or pending. Back to India, in the registration of the symbol under the GI requires a huge amount of money. DTA, most of the time lacks sufficient funds

and have to depend on the TBA despite of conflict of interest, as it is the only legal authority to provide funds to the tea associations in states and the country. However, TBA headquarter is situated in Kolkata, West Bengal itself. The board also has some concern the association like the association is not properly utilizing the funds as per the protocol. Sometimes, the funds are underutilised and sometimes there is news of corruption. The same situation prevails in most of the states in the registration process as well.³⁹

Opportunities

Among the tea grown in India, the instrumental one comes from Darjeeling. The Darjeeling tea is well known for world's finest tea flavour. The hills have been growing the tea dated back to more than 150 years. The provision of GI tag to the tea has increased the tourism activities to the wider extent in Darjeeling. The medicinal value possessed by the tea also attracts large number of people which result increase in demand for the tea. Some of the opportunities generated by the Darjeeling tea are discussed below.

Medicinal Value

Darjeeling tea contains 2 antioxidants viz., the arubigins and the aflavins which help human body to fight against the radicals. Antioxidants also play a vital role in removing oxidative stress. The tea contains amino acid, which secretes a clear, calm and healthy state of mind and also helps in the treatment of gastric ulcer.⁵³ One cup of Darjeeling tea contains 180-200 calories and has a good quantity of caffeine which other teas lack. Caffeine content in the tea not only boosts human beings' mood and energy level but also stimulates thermogenesis and reduce appetite.⁵⁴ You will burn more of your body fats by taking the tea, hence for the proper physical exercise results, drink a cup of tea every morning before you go to the gym. The tea may check cancer as it carries polyphenolic which has potential to prevent the growth of tumour by antioxidant mechanism. Consistent drinking of the tea prevents several heart diseases well.⁵⁵

Reverse Migration

Previously, when the tea gardens were not running competently then, few tea gardens were shut down and due wages were not paid to the tea labourers for the long time. After that, the labourers left the gardens and migrated to other metro cities like Mumbai, Ahmedabad, Bengalure, Chennai, and Delhi or towns in search of a job for their survival.⁵⁶ To stop the out migration from Darjeeling's garden and improve the

living standard of the migrants the Department for Industrial Policy and Promotion granted GI status to Darjeeling Tea in 2004. Since 2004, not even a single tea garden has been shut down as it marks the beginning of GI tag registration in the country. With this Darjeeling tea became the first GI product awarded a GI tag in India. During the survey, it was observed that after the GI to the tea, there is a significant improvement in the income and expenditure level of the labourers.

It includes increase in the demand of the tea, diversification of the markets, and increment in the earning as compare to earlier meager earning. As a result, out migration to the larger extent has been stopped after 2004. Though some labourers are migrating to other states due to some other reasons and not due to distress in the tea gardens. The reverse migration is going on in the hills as more and more people know the benefits of GI status. After 2003, there is a constant increase in the per cent of permanent labourers in the Darjeeling tea estates.⁴⁰ Darjeeling tea has been growing in the region from a very long time and requires indigenous know-how, traditional knowledge and skilled workforce. Employment on the tea gardens is handed over within families to make such task a traditional household profession. More than 75% of the tea growers are women and their percentage are increasing year by year (Table 4).

They are mainly engaged in the leaves plucking and picking i.e. considered as a very specialized task as it requires abundant care year.²¹ Male workers are involved in the work of processing, packaging and distribution of the tea. Women consider the tea bushes very sensitive and perform their duty efficiently and effectively. The proficiency is a traditional skill that transferred from one generation to the next one. The technique requires picking up of one bud shoot and two leaves in combination have to be followed throughout the process of picking. This unique technique is not followed in other parts of India in the process of picking.⁴⁰ The production of Darjeeling tea is reaching a new height year after year which is evident from the data that (Fig. 7) in 2004, the tea production was 8000 kg that has increased to 11400 kg in 2013. The figure shows an increasing trend of tea production in the Darjeeling tea estates which is very important for the tea workers as well as the traders.⁵⁷

Tourism

Darjeeling is an important tourist destination and tourism opens several new avenues for income

Table 4 — Year-wise number of permanent labourers on Darjeeling tea estates and demographic component

Year	Number of workers	Share in % from 1999	% More or less than 1999	Standardised demographic component
1995	58887	115.55	+ 15.55	0.659662343
1996	53740	105.45	+ 5.45	0.286718354
1997	49783	97.67	- 2.33	0
1998	50289	98.67	- 1.33	0.03666401
1999	50964	100.00	0.00	0.085573509
2000	51515	101.08	+ 1.08	0.125498152
2001	51938	101.91	+ 1.91	0.156148105
2002	52671	103.35	+ 3.35	0.209260199
2003	52547	103.11	+ 3.11	0.200275342
2004	53363	104.71	+ 4.71	0.259401493
2005	53412	104.80	+ 4.80	0.26295196
2006	53492	104.96	+ 4.96	0.268748641
2007	54202	106.35	+ 6.35	0.320194189
2008	55000	107.92	+ 7.92	0.378016086
2009	61397	120.47	+20.47	0.841533222
2010	61854	121.37	+21.37	0.874646765
2011	62120	121.90	+21.90	0.89392073
2012	62878	123.38	+23.38	0.948844287
2013	62989	123.60	+23.60	0.956887182
2014	63142	123.90	+23.90	0.967973335
2015	63584	124.76	+24.76	1

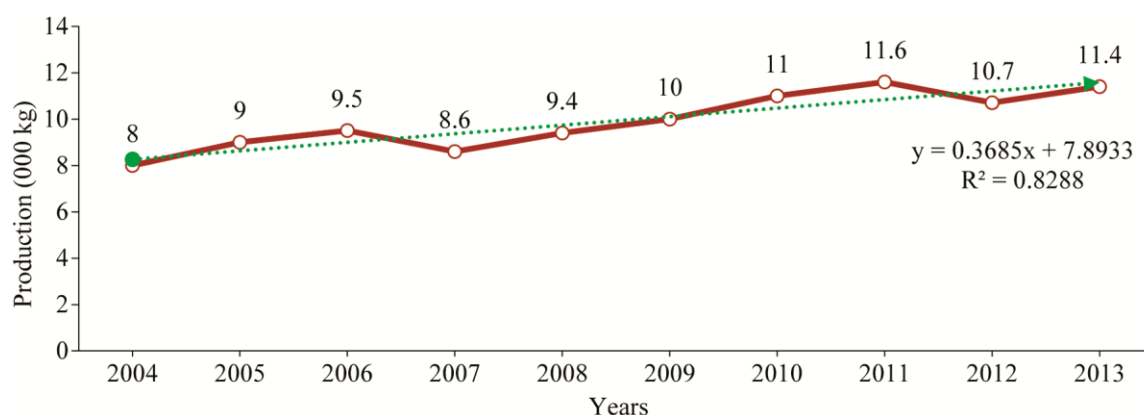


Fig. 7 — Production of Darjeeling tea

generation like toy train (UNESCO World Heritage Site), the city itself recognised as the Queen of Hills and heart touching tea gardens. Several tea lovers, buyers and others from different parts of India and across the world visit the city every year from the month of March to November. They stay in resorts or hotels, eat in the restaurants, do shopping in the city malls, shops and outlets. The number of tourists (foreign) is substantially increasing including the tea tourists which create better career opportunities for local communities (Fig. 8). In the tourism sector, there is a lot of capital generation, which leads to the sustainable development of the region.⁵⁸ In case of Darjeeling, the number of foreign tourists is showing increasing trend while domestic tourists are in decreasing trend.

Role of Government

West Bengal Government fully owns all 87 tea gardens permanently. The state government leases out the gardens to the cultivators on a certain fixed-rent basis for maximum 99 years and minimum 30 years and will be renewed after the expiry of lease.⁹ The lease can also be sold or transferred to other cultivators. The Tea Board of India (TBA) tried to protect Darjeeling tea in 1986 and because of it the tea gets registered in 2004 under the Geographical Indications (GI) of Goods act of 1999.⁵⁹

The board took the first decision to protect original Darjeeling tea from the duplicates within the country around 20 years ago. The Darjeeling logo and word have been registered as the proved trademark under Trademarks act of 1999.²² Finally, word and logo

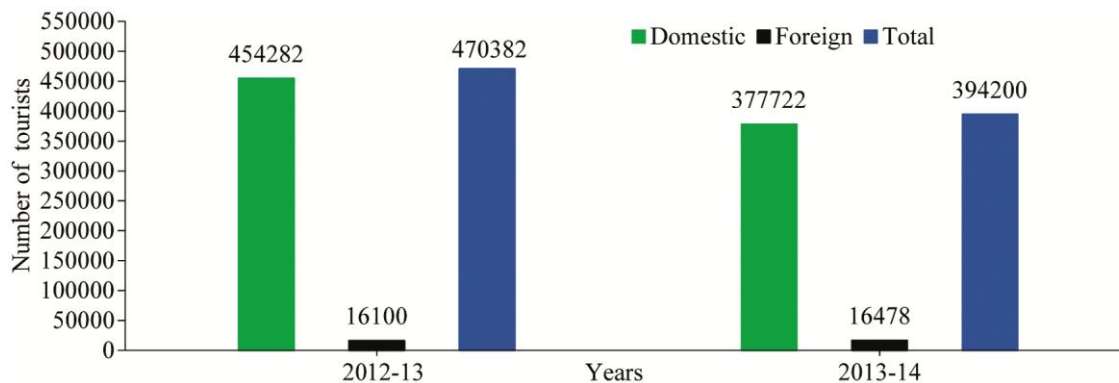


Fig. 8 — Tourist inflow in Darjeeling

registered as GI tag under the Geographical Indications of Goods (Registration and Protection) act of 1999, headquartered at Chennai in Tamil Nadu, India. In 2018, Ministry of Commerce and Industry has launched the official logo for all the GI products in India to promote the sale of the products under the umbrella of Make in India campaign (Fig. 9). The logo also contains a tagline- Invaluable Treasures of Incredible India. For the inclusive development of the Darjeeling tea sector, the Ministry of Commerce and Industry has announced tea-producing zone as an agriculture export zone with the aim to make important developmental activities under Agricultural and Processed Food Products Export Development Authority (APFEDA). However, Memorandum of Understanding (MoU) still needs to be signed among all the stakeholders.⁶⁰ It includes Darjeeling Tea Association, West Bengal State Government and Tea Board of India for comprehensive development of the zone. The state government has ordered all the tea estate holders in the state to hike the per day wage of labourers to ₹ 150 from existing ₹ 133 as a provisional measure.⁶¹

Recommendations

- (i) Production and supply of high-quality tea both in the domestic and global markets should be augmented to bridge the gap between demand and supply.
- (ii) Tourism and recreational activities have wider potential and have to be developed but without disturbing the local ecology.
- (iii) To boost the collective action the concerned departments should take the important steps to include non-member tea gardens with the main one as soon as possible.
- (iv) To increase the per hectare labour productivity, the labour department should inspire, promote and



Invaluable Treasures of Incredible India

Fig. 9 — India's GI logo and Tagline

attract the workers via regular increment in their wages, good facilities for their children as well.

- (v) Outdated machinery for the processing of finished tea should be replaced with latest, cheap

Conclusion

Darjeeling tea has an important potential to get benefits from under Geographical Indications protection as the tea has a unique and distinct savour and colour. The tea has concrete association with the local community and is produced in a similar manner as it was produced few centuries ago. A potential weakness in the tea industry is due to absence of synergy. There is a trust deficit in co-operation, collaboration and coordination with the several stakeholders like locals, contracting companies and government. The politics of knowledge is another reason as most of the governing body is trying their best they and night to exploit the tea labourers. Most of them don't have the feeling that that what can I give and busy in what can I take, and from there the process of corruption starts. Strict legal actions must be taken to protect the tea from fake or counterfeit products. The word and logo of the tea are misrepresented in several countries. It creates confusion among consumers besides destroying the valuable reputation of the tea and dilution its brand

image as well. Despite being registered under the TRIPS the tea has not yet been registered in multiple importing countries and mainly the developed one. There is an urgent need to get the tea registered worldwide, then only they will get the maximum benefits of the GI.

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