



CONTRASTIVE PARADIGM TO UPHELD AND SECURING THE NECESSITY OF LIFE

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ABSTRACT

Livelihood sustenance refers to the means by which individuals or households secure the necessities of life, such as food, water, shelter, and income. A livelihood comprises the capabilities, assets, and activities required for a means of living. It is deemed sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities, assets, and activities both now and in the future, while not undermining the natural resource base. The sustainable livelihoods approach facilitates the identification of practical priorities for actions that are based on the views and interests of those concerned but they are not a panacea. It does not replace other tools, such as participatory development, sector-wide approaches, or integrated rural development. However, it makes the connection between people and the overall enabling environment that influences the outcomes of livelihood strategies. It brings attention to bear on the inherent potential of people in terms of their skills, social networks, and access to physical and financial resources, and ability to influence core institution. Sustainable livelihood development among tribal communities is a crucial aspect of ensuring their well-being and preserving their cultural heritage. Here are some key points related to this topic:

Natural Resource Management: Tribal communities often rely heavily on natural resources for their livelihoods. Sustainable management of these resources, such as forests and water bodies, is essential.

Community Empowerment: Empowering tribal communities, especially women and youth, is vital. This can be achieved through education, skill development, and creating opportunities for micro-enterprises.

Cultural Preservation: Sustainable livelihood programs should respect and integrate traditional knowledge and cultural practices of tribal communities

Policy Support: Effective policies and frameworks are needed to support sustainable livelihoods.

Challenges and Opportunities: While there are significant challenges such as land degradation, climate change, and socio-economic disparities, there are also opportunities.

The Bonn Challenge is a global effort to bring 150 million hectares of the world's deforested and degraded land into restoration by 2020, and 350 million hectares by 2030. Hence, the present sequel emphasized in the village Jhal Bhangra of Jhargram Forest Beat, Jhargram Forest Range, and Jhargram Forest Division of the Jhargram District of West Bengal, on the process of forest restoration, protection under the framework of Forest Policy guidelines, enhance cultural preservation along with community empowerment of a vulnerable tribal group the Lodha and a settled agriculturist group the Santal who are pursuing livelihood sustenance in the context of uphold the necessity of life at this 21st century.

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The skills, resources, and activities necessary for a means of subsistence make up a livelihood. When it can withstand and bounce back from shocks and strains while preserving or improving its resources, activities, and capabilities, it is considered sustainable, without compromising the foundation of natural resources, both today and in the future (Guhathakurta and Roy, 2000). There are many scientists who have peered into the matter which is still in vogue. Land use of Forest is continuous efforts since time immemorial (Bhowmick, 1963/1994; Bose, 1971). Land is used for different purposes such as agriculture, forestry, mining, building houses, roads, and setting up industries. The claim that stewardship of terrestrial ecosystems, particularly forests, and their rich biodiversity, is essential for sustainable development has achieved broad recognition (Sengupta, 1969). The conservation of life on land is recognized as Goal 15 of the 17 Sustainable Development Goals (SDGs). When the SDGs were adopted by the UN in 2015, all indicators showed that life on Earth was in decline (Mukherjee, 2015), eroding the ability to meet human needs (Danda, 2002). SDG 15 asks for the protection, restoration, and sustainable use of terrestrial ecosystems along with the sustainable management of forests, combating desertification, halting and reversing land degradation, and halting biodiversity loss (Negi, 1994, 1996).

Clearly, the pressures of population growth, economic development, and increased consumption will only intensify the challenges for the maintenance of life on land (Negi, 1996). In this chapter, we examine the opportunities and challenges that merit particular attention if we are serious about SDG 15 and reversing the decline of life on Earth. The present study looked into the matter of sustainable development of the selected tribes for enhancement of the better propagation. The study enhanced the primordial phenomena of the area concerned. It will be looked into the sustainable fact at this 21st century (Mukherjee, 2015).

The Method of Sustainable Livelihoods

One method to think about the goals, parameters, and priorities of development initiatives is through the sustainable livelihoods approach. It is founded on changing perspectives on the lives of the weak and impoverished as well as the significance of institutions and policies. It assists in creating development initiatives that are: People-cantered;

Multilevel; Responsive and Participatory; Integrated with the Public and Private Sectors; Dynamic; and Sustainable (Fig. 1).

Although it is not a panacea, the sustainable livelihoods approach makes it easier to identify realistic goals for activities that are founded on the opinions and interests of everyone involved. It is not a substitute for other instruments like integrated rural development, sector-wide strategies, or participatory development (Bhowmick 1980). It does, however, draw a link between individuals and the broader enabling environment, which affects how livelihood options work out. It draws emphasis to people's innate potential in terms of their abilities, social networks, financial and material resources, and capacity to influence important institutions (Danda, 1991).

This positive perspective is extended by appreciative inquiry, which was first created as a tool for industry to steer clear of destructive approaches to issue solving. A community takes charge of creating and obtaining information through the highly inclusive process of appreciative inquiry, which maximizes the positive (as opposed to limiting the negative) and then develops solutions based on the most fruitful prior experiences.

The Sustainable Livelihoods Framework

The framework for sustainable livelihoods aids in the organization of the variables that limit or improve livelihood opportunities and illustrates their interrelationships (Beotra, 1989). The sustainable livelihood approach tries to broaden the fundamental idea that various households have varying access to livelihood assets (Fig. 1). The following are the livelihood assets that the impoverished frequently have to choose between and make trade-offs for:

Human capital, such as health, nutrition, education, knowledge and skills, ability to work, and adaptability
Social capital, including networks and connections (such as kinship, neighbourhoods, and patronage), relationships of trust and understanding and support, formal and informal groups, common behaviours and values, rules and sanctions, collective representation, decision-making mechanisms, and leadership.

Wildlife, wild foods and fibres, trees and forest products, land and crops, water and aquatic resources, biodiversity, and environmental services are examples of natural capital.

Financial capital, such as savings, credit, and debt (formal and informal), remittances, pensions, and wages;

Physical capital, such as infrastructure (transport, roads, vehicles, safe housing and buildings, water supply and sanitation, energy, and communications); and tools and technology (production tools and equipment, seed, fertilizer, pesticides, and traditional technology).

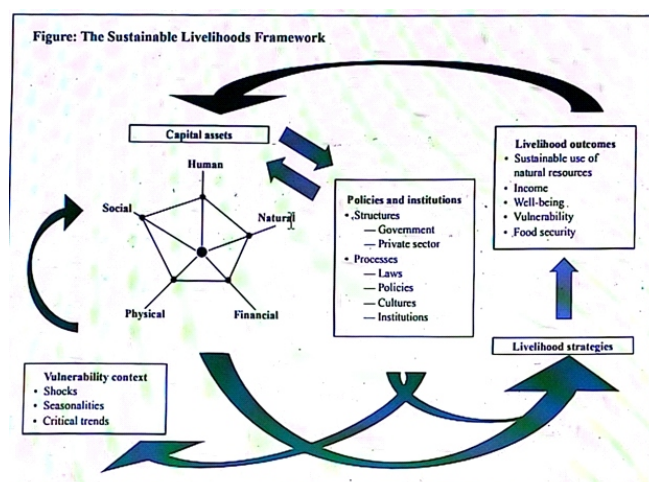


Fig 1: Assets of capital.

Vulnerability Context

Vulnerability is defined as insecurity in the well-being of individuals, households, and communities in the face of changes in their external environment. People move between poverty and adversity, and the concept of vulnerability better captures the processes of change than poverty line measurements. Vulnerability has two aspects: an internal side of defencelessness brought on by a lack of ability and means to cope with these; and an external side of shocks, such as conflict, illnesses, floods, storms, droughts, pests, and diseases;

and critical trends, such as demographic, environmental, economic, governance, and technological trends (Bhattacharya and Dey, 1953; Mukherjee, 2015).

Institutions and Policies

The environment of structures and procedures also changes livelihood choices and results, which are not solely reliant on capital asset availability or limited by the vulnerability setting. Structures are the public and private sector entities that establish and carry out laws and policies, provide services, make purchases, engage in trade, and carry out a wide range of other tasks that have an impact on people's quality of life (Sengupta, 1969).

The laws, rules, policies, agreements, operational arrangements, societal norms, and practices that ultimately dictate how structures function are all included in processes. Without the right organizations and procedures in place to carry out policies, policy-determining structures cannot function effectively. All facets of livelihoods depend on processes. They offer rewards that encourage people to make wiser decisions (Danda, 2002).

The land (Table 1) is among the most important natural resources. It covers only about thirty percent of the total area of the earth's surface and all parts of this small percentage are not habitable. The uneven distribution of population in different parts of the world is mainly due to varied characteristics of land and climate. The rugged topography, steep slopes of the mountains, low-lying areas susceptible to water, logging, desert areas, and thickly forested areas are normally sparsely populated or uninhabited. Plains and river valleys offer suitable land for agriculture. Hence, these are the densely populated areas of the world.

Table 1: The land area under the Forests District in West Bengal (in sq. kms).

Sl. No.	District	Reserved Forests	Protected Forests	Unclassed State Forests & Others	Total Area
1	Darjeeling	1115	-	89	1204
2	Jalpaiguri	1483	217	90	1790
3	Cooch Behar	-	42	15	57
4	Bakura	80	1311	91	1482
5**	Purba Medinipur	8	1166	535	1709
6**	Paschim Medinipur				
7	Burdwan	3	192	82	277

8	Purulia	112	729	35	876
9	Birbhum	8	54	97	159
10	Hooghly	3	-	-	3
11	Nadia	5	3	5	13
12	Murshidabad	1	7	-	8
13	Malda	8	5	7	20
14	Uttar Dinajpur	8	4	6	18
15	Dakshin Dinajpur				
16	24-Parganas(N)	43	-	-	43
17	24-Parganas(S)	4177	42	1	4220
18	Howrah	-	-	-	-
19	Calcutta	-	-	-	-
Total		7054 (59.38%)	3772 (31.75%)	1053 (8.87%)	11879 (100%)
All India		423,311	217,245	127,881	768,437

**Purba Medinipur & Paschim Medinipur Figures have been computed together.

Bonn Challenge and Forest Land

The Bonn Challenge is a global goal to bring 150 million hectares of degraded and deforested landscapes into restoration by 2020 and 350 million hectares by 2030. Launched by the Government of Germany and IUCN in 2011, the Challenge surpassed the 150-million-hectare milestone for pledges in 2017. The Bonn Challenge brings together countries that share borders, ecosystems, and economies in regional platforms to collaborate on common goals and challenges. These platforms help catalyze political will and ambition in restoring degraded lands.

Objectives of the Challenge

- The Challenge was launched by the Government of Germany and the IUCN Initially, the Bonn Challenge was launched with 2020 goals in Bonn, Germany in 2011.
- Afterward, at the 2014 UN Climate Summit, the goals were extended to 2030 by the New York Declaration on Forests.
- As of June 2021, 74 commitments have been made by various national governments, private companies, etc. The pledges total to 210 million hectares.
- The Bonn Challenge is aligned with the Sustainable Development Goals (SDG) in relation

to Aichi Targets, the Paris Climate Agreement, and the Land Degradation Neutrality (LDN) goal.

- The Challenge helps countries in the achievement of national priorities of food and water security and rural development. At the same time, it aids countries in achieving their commitments to mitigate land degradation, climate change, and biodiversity loss.
- The Challenge exhorts the achievement of their narrated goals through an approach to restoration called forest landscape restoration (FLR). FLR restores ecological integrity while enhancing human well-being.

The Village Jual Bhanga

The Forests of all categories maintain two tiers of canopy lairs to protect the environment. Trees are the first and shrubs the second canopy which protects the environment continuously, while assistance for maintaining livelihood sustenance of the forest dwellers is the other phenomenon, for protection of life and environment, in sighted in the Jual Bhanga village of Jhargram District, West Bengal. The tribes Lodha and the Santal are the residing communities with different socio-economic and socio-cultural nomenclature (Table 2).

Table 2: Forest-covered areas of Jual Bhanga.

SI No.	Forest covered areas	Ares in sq.ft	Lodha's dependence	Santal's dependence	Total dependence Lodha+Santal
1	Actual	1100sq.ft	49%	40%	2.8%
2	Floor area	1235sq.ft	30%	40%	2.2%
3	Canopy	900sq.ft	21%	20%	1.3%
4	Total	3200sq.ft	3.2%	3.2%	6.3%

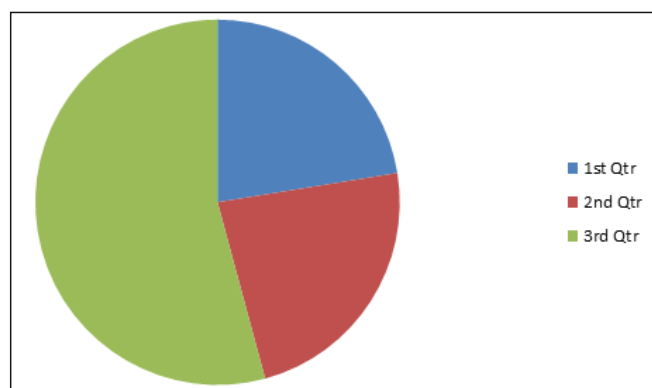
Table 2 exhibits the actual forest-covered areas of the village of Jual Bhanga. Total areas in sq. ft denotes 3200 sq. ft which is 6.3% of the total Jhargram Forest Covered land areas. The actual forest cover area is 2.8%, the floor area is 2.2% and the canopy is 1.3%. The forest restoration and building up a green laboratory is very important for the enhancement of the canopy according to floor management the forest rebuilt can ensure future propagation.

The Table 3 depicts the degree of dependence on the forest of the chosen forest-dwelling tribes who are residing in the village of Jual Bhanga. Regular dependence on the Lodha is higher than the Santal. Occasional and non-dependence show a high ratio in the case of Santal. Hence, forest dependence is still in vogue among the tribes for enameling forests as a source of all kinds of potentialities.

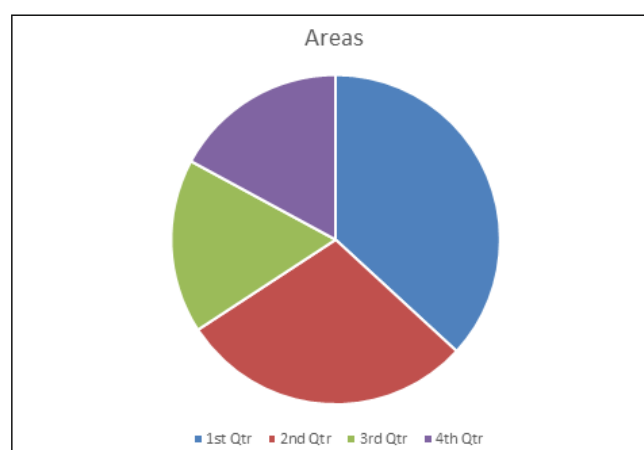
Table 3: Degree of Dependence on the Forest for Collections of Non-Timber of Minor Forest Produces.

SN	Name of the Selected Tribes	Total No of Population	Regular Dependence		Occasional Dependence		Non-Dependence	
			Total	%	Total	%	Total	%
01	Lodha	156	40	26%	35	23%	81	51%
02	Santal	58	08	14%	15	26%	35	60%
03	Total	214	48	22%	50	23%	116	54%

The degree of dependence on the forest in the above pie diagram shows the exact phenomena. 22% of the first qtr counts the regular dependence, 2nd qtr depicts 23% of the occasional dependence, and no dependence is exhibiting 54% (Fig. 2). Hence dependence continues at 45% and no dependence is 54% for the forest resides. Enabling restoration is needed.

**Fig. 2: Degree of dependence on the forest for collections of Non-Timber minor forest produces.**

The actual forest cover area is 2.8%, the floor area is 2.2% and the canopy is 1.3%. The forest restoration and building up a green laboratory is very important for the enhancement of the canopy according to floor management the forest rebuilt can ensure future propagation (Fig. 3).

**Fig 3. The actual forest covered areas of Lodha & Santal.**

Strategies and Results for Livelihoods

The goal of livelihood strategies is to attain livelihood results. A variety of factors, including intensification versus diversification, migration and remittances, grants and pensions, non-natural resource-based and off-farm activities, short-term versus long-term outcomes, and intensification versus diversification, may be taken into consideration while making decisions on livelihood choices. (Programs and projects that benefit some can also disadvantage others, which is one of the numerous issues with development.). More income, more well-being, decreased vulnerability, better food security, more sustainable use of the natural resource base, and restored human dignity are all possible livelihood outcomes, albeit there may be conflict between them.

The present investigation on Indian Boscage and its legal entity peers into the subdue factor needed for delineation of the Environmental Protection. Forest Floor Management through three-tier canopy development is a challenging counteract, which has been peered through community concerns of the village Jua Bhangra. The new method adds herbs at the lower rung of the canopy.

The herbs, shrubs, and trees are the three tiers Forest Canopy that protects the environment, ensures forest floor management, and enhances livelihood sustenance with the ushering of a new era, though the COVID-19 pandemic situation has enhanced and reduces carbon emission to some extent still for protection of rapid climate change and to propagate environmental challenge and its justness.

Technological upgradation is required up to the mark. Policy guidelines should be mass-oriented in accordance with Bio-diversity protection and Forest conservation through natural habitat.

Thereby, The Bonn Challenge is a global effort to bring about 150 million hectares of the world's deforested and degraded land into restoration by 2020, and 350 million hectares by 2030. Hence, the present study has been a proven fact which was emphasized in the village Jua Bhangra of Jhargram Forest Beat, Jhargram Forest Range, and Jhargram Forest Division of the Jhargram District of West Bengal, on the process of

forest restoration, forest floor management, plantation of new trees and protection thereof to elucidate India as a tree plantation laboratory at this 21st century.

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