

Research Papers



Socio-Economic Benefits Derived by Poor Rural Producers from Bamboo Value Chain Up-gradation: A study of Tripura, Northeast India

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Abstract

The value chain up-gradation as an approach is very much relevant for poverty reduction, women empowerment and environmental preservation in traditional as well as no-traditional sector. It helps to develop and upgrade the various nodes in the value chain and its direct impact could be observed in socio-economic development of rural poor and small producer groups. The policy makers, rural development professionals and related stakeholders could also find a better way of planning to give space to integrate the poor producers with market.

The private investors, entrepreneurs could also get a business enabling environment to scale-up the sector to get an opportunity to link with domestic and international market. The present paper is the result of research study on value chain up-gradation in bamboo sector development in Tripura, Northeast India and its implication on socio-economic development.

INTRODUCTION

Bamboo- a word that conjures up different images in the mind; images of construction material, furniture, handicrafts, basket ware, mating, paper, food, fodder and fuel wood. No wonder then, that this resource has been variously called “the poor man's timber”, “the cardle-to-coffin timber”, “green gold” and “steel of the nature” In Asia, the history of bamboo is so inextricably interwoven with human history that one could describe a bamboo civilization in the continent. Globally, 2.5 billion people- almost half the world population- are estimated to use bamboo in one form or other (Rao, Ramanuja and Sastry B.Cherala, 1996). It is an important commodity in the cash economy. Rural poverty is much less a problem of total food availability than of who produces the food and who has the income to buy it (Chambers and Ghildyal 1995).

Bamboo is a tree like, woody grass with some 1250 species in 75 genera with sizes ranging from miniature to giant culms over 60 meter and is the world's strongest growing woody plant capable of providing ecological economic and livelihood security to the people. India has the largest Bamboo forest in the world. Next to China, India has the richest Bamboo genetic resources in 136 species, including 11 exotic species out of which 58 species belonging to 10 genera are found in the North Eastern Region (Planning Commission Government of India April 2003, <http://planningcommission.nic.in>).

Tripura is one of the eight states of Northeast India, which is not only the smallest state of the region but

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also the third smallest state in the country with a geographical area of 10,491.49 sq km and total population (provisional) of about 31.91 lakhs as per 2001 Census. The bamboo resource is spread over about 2397 km² in the state of Tripura forming about 23% area of the state.

It plays an important role in generation of employment and development of rural economy of Tripura. It is estimated that around 6.1 million man days is generated per annum by way of management, harvesting and utilization of bamboo. Around 1.49 lakhs rural poor artisans are engaged in the state in value addition of bamboo, producing annual sale of Rs.35.34 crores (TFD, 2001). However, only about 2% of the total extracted bamboo is used for value addition and so the sector has tremendous potential for growth (Sharma, 2008).

The value chain refers to full range of activities that are required to bring a product or service from conception, through the different phases of production, to delivery to final consumption and disposal after use (Kaplinsky 1999 and Morris 2001). In Global Value Chain analysis the concept of upgrading is used to identify the possibilities for producers to 'move up the value chain', either by shifting to more rewarding functional positions, or by making products with more value-added invested in them, and/or providing better returns. Upgrading is about acquiring capabilities and accessing new market segments through participation in particular chains. Humphrey and Schmitz (2002) have developed the following typology:

- process upgrading: achieving more efficient production by reorganization;
- product upgrading: moving into products with increased unit value;
- functional upgrading strategies for small producers

The process upgrading, product upgrading and functional upgrading are the main areas in the entire value chain up gradation approach. It helps the poor producers to participate in value chain development for socio-economic development through enhancement of skill, product development, added value in product and chain, technology development, business enabling environment through better policy and linkages with markets. The present paper focused on the socio-economic benefits derived from bamboo value chain up-gradation for poor rural producers in Tripura Northeast India with the following objectives:

- To analyze the socio-economic benefits in value chain up-gradation in bamboo sector.
- To enable rural small/poor producers increase production volumes in bamboo based activities and realize greater value and market share.
- To organize the sustainable production of raw materials inputs in the required quantities.
- To enable higher quality and standards of production (of inputs and final products) and meet market demands.
- To create a more favorable policy environment for the bamboo small entrepreneurs in Tripura.

METHODOLOGY

Under the study fifteen bamboo economic development clusters within Tripura state has taken for the whole study. Basically, it is an empirical study including socio-economic dimension of the poor rural small producers involved with the cluster in the state. Moreover, the study has also covered the bamboo small and budding entrepreneurs outside the cluster in the state.

Sample: As part of the study, a total 1500 small producers belongs to self help groups (SHGs) which include 125 budding bamboo entrepreneurs outside the cluster were interviewed from the study area in the state. Out of that 375 respondents were selected as sample on random sampling procedure.

Material: A structured interview schedule was used which consisted of opened and closed end questions. The interview schedule was previously pre-tested and finally printed for field use.

Procedure: The study followed by observation for gathering the data, rapport building and the interview schedule was used for collecting data. In addition PRA/RRA tools have also used for assessing the value chain up-gradation in bamboo sector under the study.

RESULTS AND DISCUSSION

The present study is exploratory cum descriptive in nature. It shown the nature and circumstances of the poor small producers/SHGs in cluster based budding bamboo enterprises in Tripura through value chain up-gradation. It obviously includes in the study i.e. process up-gradation,

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enhancement of income, added value, technology up-gradation, policy up-gradation, religion and educational status.

A majority of the respondents among the small (35.73%) were schedule caste, 25.33% were schedule tribes, 16.80% were general and 15.33% OBCs and 6.94% were minority (Table no.1). It has been shown that vast majority of the small producers belongs to schedule caste and followed by tribal community of Tripura. The rural poor have a direct relation with bamboo and their socio-economic development. As a result, majority of the rural poor belongs to socio-economically backward community has been largest participation in value chains up-gradation.

Table-1: Category wise distribution of small producer in value chains

I.No.	Category	No.	Percentage
1.	Schedule Castes	134	35.73
2.	Schedule Tribes	95	25.33
3.	Other Backward Castes	57	15.20
4.	Minority	26	6.94
5.	General	63	16.80
	N= 375	375	100

Table No.2 shown the small producers participation in various nodes in value chains up-gradation. It shown that 35.46% participation actively involved in value chains process up-gradation camp for development of their self knowledge on value chain, 25.86% were in entrepreneurship skill development training which helped them to produce market driven quality products, 24.26% were visited similar project outside the state to enhance the knowledge on added value and scanning the business enabling environment to negotiate for policy support for bamboo sector development. Only 1.33% were participated in business plans development to provide business development services in the sector.

Table-2: Participation of small producer in capacity enhancement

Sl.No.	Category	No.	Percentage
1.	Awareness and motivation camp on process up-gradation	133	35.46
2.	Exposure visit	91	24.26
3.	Design/added value	15	4.00
4.	Market Linkages	10	2.66
5.	Technology up-gradation	8	2.13
6.	Entrepreneurship skill development training (EDP)	97	25.86
7.	Business plan & financing	5	1.33
8.	Policy up-gradation for cluster development	16	4.26
	N=375	375	100

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Table no.3 shown that 35.20% were participated in bamboo incense sticks product, 29.93% in bamboo crafts and 2.13% were in bamboo housing components. It reflected that the small producers shown keen interest in bamboo incense sticks production in larger extent due to regular market and growth in the sector and less interest in bamboo housing components because of market demand irregular and somewhere else.

Tables No. 4, 5 and 6 shown the age group of the male and female producers, economic status, rural and urban status in the value chain up-gradation. It shown that 34.84% of female belongs to 15-25 years of age group in the value chain up-gradation, followed by 29.88% in the age group of 35-45 year. It assumes among adolescent has the tendency to learn the bamboo crafts based economic activity to contribute their family substantially after the marriage. On the other hand male counterpart was 36.84% in the age group of 35-45 years majority and assumed that they involved in trading based activity. It shown that the small producers belong to 76.26% were below poverty line and 23.73% were above poverty line in bamboo value chain up-gradation.

Table-3: Participation of small producer in product up-gradation in value chain

Sl.No.	Category	No.	Percentage
1.	Bamboo Incense sticks	132	35.20
2.	Bamboo Charcoal	33	8.80
3.	Bamboo Furniture	10	2.66
4.	Bamboo Housing Components	8	2.13
5.	Bamboo Nursery	16	4.26
6.	Bamboo Harvesting	27	7.20
7.	Bamboo Primary Processing	9	2.40
8.	Bamboo Crafts	112	29.86
9.	Bamboo Deport	11	2.93
10.	Bamboo Industrial Products	17	4.53
	N= 375	375	100

Table-4: Age-wise distribution of the Small Producer in value chains

Sl.No.	Age Group	Male	Percentage	Female	Percentage
1.	15-25	15	13.15	91	34.84
2.	25-35	35	30.70	65	24.90
3.	35-45	42	36.84	78	29.88
4.	45-55	14	12.28	17	6.51
5.	55-65	8	7.01	10	3.83
	N=375	114	100	261	100

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Table-5: Community wise distribution of the Small Producers

Sl.No.	Category	No.	Percentage
1.	Above Poverty Line (APL)	89	23.73
2.	Below Poverty Line (BPL)	286	76.26
	N=375	375	100

Table-6: Rural and Urban Households of Small Producers in value chains

Sl.No.	Population	No. of HHs	Percentage
1.	Rural Households	287	76.54
2.	Urban Households	88	23.46
	N=375	375	100

Tables No.7 and 8 have shown the distribution of educational status of the small producers in value chain up-gradation and financial facilities for development of the business. It shown that 34.09% were illiterate among the women, followed by 30.70% of male participants in value chain up-gradation in bamboo sector, 0.76% were Industrial training or other related training among women, 25.67% women and 38.59% male participants education level upto class 8th level. Only 1.76% male participant's graduate degree in value chain up-gradation and very negligible 0.76 were female.

Table-7: Educational status of the small producer in value chains up-gradation

Sl.No.	Education	Male	Percentage	Female	Percentage
1.	Illiterate	35	30.70	89	34.09
2.	Upto class 8 th	44	38.59	77	29.50
3.	Upto class 10 th	19	16.66	67	25.67
4.	Upto class 10+2	11	9.46	23	8.81
5.	Graduate	2	1.75	2	0.76
6.	Post Graduate	0	0.00	1	0.38
7.	ITI/BCDI/NID courses	3	2.63	2	0.76
	N=375	114	100	261	100

Table No. 8 shown that 23.46% financing provided by the Tripura Rural Bank and followed by middleman and traders 22.40% and 18.13% local money lenders in bamboo sector. The role of commercials and nationalized banks were very negligible.

Table-8: Status of financing facilities for small producers in value chain up-gradation

Sl.No.	Institutions	No.	Percentage
1.	National Banks	19	5.06
2.	Cooperative Banks	28	7.46
3.	Commercial Banks	17	4.53
4.	Rural Bank Tripura	88	23.46
5.	Private Banks	11	2.93
6.	Micro Finance Institutions	47	12.53
7.	Local Money Lenders	68	18.13
8.	Middlemen and Traders	84	22.40
9.	Non-Banking Financial Institutions	13	3.46
	N=375	375	100

Table No. 9 shown the comparison of income among the small producers through value chain up-gradation in bamboo sector. It shown that before value chain up-gradation 36.53% households incomes were Rs.500-750 per month and after value chain up-gradation 24.26% house hold income increased Rs.1250-1500 per months. It described that the majority of the producers enhanced trip income through value chain up-gradation for small producers majority belongs to rural areas. Further, it proved that the value chain up-gradation given an opportunity to the rural small producers to improve their socio-economic life and a sustainable income.

Table-9: Household monthly income comparison of the small producers in value chains

Sl.No.	Income	Before value chains	Percentage	After value chains	Percentage
1.	500-750	137	36.53	16	4.26
2.	750-1000	86	22.93	19	5.06
3.	1000-1250	46	12.26	55	14.66
4.	1250-1500	32	8.53	91	24.26
5.	1500-1750	26	6.93	68	18.13
6.	1750-2000	11	2.93	43	11.46
7.	2000-2250	7	1.86	29	7.73
8.	2250-2500	12	3.20	23	6.13
9.	2500-2750	8	2.13	17	4.53
10.	2750-3000	10	2.66	14	3.73
	N=375	375	100	375	100

Table No. 10 shown a comparison of expenditure among the small producers. It shown, before value chain up-gradation 50.40% household's expenditure made for food procurement, 19.46% for SHG savings, 4% for children education and 2.66% for self-enhancement. After value chain up-

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gradation 42.40% on food procurement, 23.46% for SHG savings, 14.66% for children education and 7.73% for self enhancement. Further, it assumed that the propensity to invest through SHG increased and partly food expenditure invested on children education and their self enhancement. It is the positive indicator for socio-economic development.

Table-10: Degree of expenditure comparison of the small producers in value chains

Sl.No.	Expenditure	Before value chains	Percentage	After value chains	Percentage
1.	Food procurement	189	50.40	159	42.40
2.	SHG savings	73	19.46	88	23.46
3.	Household needs	65	17.33	27	7.20
4.	Children education	15	4.00	55	14.66
5.	Medical treatment	23	6.13	17	4.53
6.	Self enhancement	10	2.66	29	7.73
	N=375	375	100	375	100

Table No.11 shown a comparison of market linkage practices in value chain up-gradation in bamboo sector. It shown, before value chain up-gradation 35.20% household depended on middleman, 17.60% linked with Government sales out-let, 15.20% direct market linkages with national buyers and 2.93% export. After value chain up-gradation 22.13% made on direct market linkages, 20.80% self enterprise and 7.46% export market. It assumed that the value chain up-gradation in bamboo sector in Tripura given an opportunity to the small producers to participate national market.

Table-11: Marketing practices for the small producers in value chain up-gradation

Sl.No.	Marketing Linkage Practices	Before value chains	Percentage	After value chains	Percentage
1.	Cluster Development	29	7.73	67	17.86
2.	Middleman	132	35.2	53	14.13
3.	Self Enterprise	53	14.13	78	20.80
4.	Direct to Buyers/Market	57	15.20	83	22.13
5.	Government Sales Outlet	66	17.60	43	11.46
6.	Export	11	2.93	28	7.46
7.	Any others	27	7.20	23	6.13
	N=375	375	100	375	100

Under the research study two focus group discussions (FGD) were conducted in the majority concentrated areas of the bamboo small producers i.e. Nalchar, Sonamura sub-division and Ambassa, Dhalai sub-division. In each group 20-25 members invited in different age groups including budding entrepreneurs and cluster level small producers. Moreover, the group members belong to different

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category based on social and economic strata. It was participatory methods and applied PAR tools i.e. chapatti games, social mapping and get well soon. The participants concluded that the value chain up-gradation given an opportunity to participate directly in national market, enhance knowledge on quality control for developing value added products and work in cluster development mode. Due to lack of working capital through commercial and nationalized banks, the small producers could not able to link export market linkages.

CONCLUSION

Bamboo is a poor man's timber. It has ample potential for livelihood and socio-economic development. The value chains up-gradation is a new strategy in the bamboo sector has given an opportunity to the small producers in Tripura to enhance their income and sustainable livelihoods and participate directly in domestic market. Definitely, the small producers are facing problems in working capital and a suitable enabling environment. A suitable policy prescription through value chain up-gradation will change the current scenario and scale-up and develop an enabling environment for private public partnership (PPP) in bamboo sector. Last but not the least, the current value chain up-gradation in bamboo sector will replicate in other sector for wide scale poverty reduction, gender development and environment protection.

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