Options for livelihood enhancement by combining small-scale forest based enterprises with microfinance practices: The Indian experience

B.P. Pethiya

ABSTRACT

In the recent past, more emphasis has been given to consider forests for Carbon trading, Biodiversity conservation, Indigenous people’s Culture Protection and through ecotourism for Recreation values. In this process, the very role of forests to provide livelihoods to the people who had been drawing their livelihoods from forest since generations got the lower priority. We do agree that forests have to provide economic services but at the same time, we can not ignore the basic traditional role of meeting the economic needs of the poor people, as last priority. Therefore, we have to look for models which can optimize both the roles of forests that are environmental along with the economic role. Poverty in India is one of the major problems, as amongst other developing countries. Number of Government sponsored rural development program were initiated after the end of colonial rule in India including the famous Integrated Rural Development Programs (IRDP). It was observed that these programs were mainly focusing on providing subsidy and could not convert the “Un-economic active rural poor “in to “Economically active rural people”. The major reasons were non-availability of Economic asset, Microfinance and Institutional support.

This paper attempts to high-light that in the later years, the socio-economic role of forests had been recognized, particularly to address the subsistence economic needs of the poor, who are dependant on collecting Non-Timber Forest Products (NTFPs) by dove-tailing the scope for setting up of SSNFE with microfinance. This has been done by creating the value addition options at local level for rural poor in order to increase their share in ultimate consumer’s payments for the produce collected by them from forests. Thus forests had started serving as economic asset for poor. But, this was not possible in isolation until unless, required financial services including credit and credit plus activities are taken care of. Hence, the combine effect of Small-Scale Non–timber Forest Products based Enterprises (SSNFE) options with utilization of potential of Microfinance Practices opened new doors for rural development from forests.

Key words: Economically active, Microfinance, Self-Help Groups (SHGs), Joint Forest Management Committees (JFMCs), Non-Timber Forest products (NTFP), Moneylender

Abbreviations & Acronyms and Notes
IRDP Integrated Rural Development Programme
JFMC Joint Forest Management Committees
NTFP(s) Non-Timber Forest Products
Rs. India National Rupee (USD$ = 45 INR)
SHGs Self-Help Groups
NABARD National Bank for Agriculture and Rural Development
SSFE Small scale forest based enterprise
SSNFE Small-Scale Non–timber Forest Products based Enterprises

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1 Indian Institute of Forest Management, Nehru Nagar, Bhopal 462 016, India. Email: pethiya@iifm.ac.in, pethiya@sancharnet.in
INTRODUCTION

The poor did not have the accessibility to the formal financial systems for the want of physical security and thus used to be exploited by money lenders/large farmers by lending money with exploitative terms. The exploitation is not only limited to exorbitantly very high interest rate but also forces the poor to part the collected NTFPs at un-remunerative prices many a time without any value addition immediately after harvest (to the local traders/money lenders). The concept of microfinance which is based on social security rather then physical security for providing access to credit and using the community concept with proper group dynamics, has given successful models. The poor can repay the loan in small installments, suitable to their cash in flow. The Joint Forest Management Committees (JFMCs) have been converted into small groups with a maximum size of twenty members known as Self-Help Groups (SHGs) and can access the micro finance without physical security through Bank linkage program of National Bank for Agriculture and Rural Development (NABARD). This bank linkage program has brought a major revolution for enhancing forest’s role in rural development through small scale NTFP based enterprises.

SMALL SCALE FOREST BASED ENTERPRISE (SSFE) IN INDIA

The Small scale forest based enterprise (SSFE) in India generally consists of value addition process to Non Timber Forest Products (NTFPs), which usually takes at Primary collector level (removal of unwanted parts like leaves, stems twigs etc., cleaning, shaping, bundling, drying, grading, storing, boiling, peeling, pulping). The increase in earnings through value addition can be done also at primary collector level by way of Pre and Post harvest care of NTFP production system. It was observed that the continuous shrinking of sources of availability of NTFP is leading an undue competition amongst forest dwellers for premature and unsustainable harvest of NTFP for immediate financial gains

It was observed in India that the forest dwellers generally finance their needs by way of advance trading of NTFP with traders. The local moneylenders are also an easy option for the forest dwellers especially at the places where either, the volume of NTFP is low or the absence of NTFP traders. Thus meeting requirements of utmost basic needs of the forest dwellers at the time when they were in real financial crisis is exploited by the traders who offer to take NTFPs against their advances, at much lower value than the market value. It was also observed that the trader have accessibility to the market, information and infrastructure which otherwise is not availability to the forest dwellers. Due to the advances taken from the traders they are bound to sell their collections immediately with little value addition or without value addition. Otherwise the same collections would have fetched more price. Hence, there is great potential for micro finance sector to play a pivotal role to safe guard the interest of the forest dwellers and promote the livelihood enhancement by combining Small-Scale Non–timber Forest Products based Enterprises (SSNFE) with micro finance. This will relive them from the clutches of money lender/NTFP trader one side and will provide setting up options for SSNFE and infrastructure at local level on the other hand.

The following facts regarding contribution of NTFP to India reveal their importance (Shiva,1998).

1. Nearly five hundred million people living in and around forests in India depend on NTFP for their sustenance and supplemental income (Tewari, 1994).
2. Studies in Orissa, Madhya Pradesh, Himachal Pradesh and Bihar indicate that over 80% of forest dwellers depend entirely on NTFP, 17% landless depend on daily wage labour mainly on collection of NTFP and 39% people are involved in NTFP collection as a subsidiary occupation (Negi, 1993).
3. It has been estimated that many village communities derive as much as 17-35% of their annual household income from sale of the NTFP (Tewari, 1994).
4. NTFP provide 50% of the income to about 30% rural people. (Gupta & Guleria, 1982).
5. After processing of NTFP, value added products are obtained which increase the employment opportunities and income to the
people eg., fore-based small scale enterprises, many of the based on NTFP, provide upto 50% 50% of income for 20 to 30 times of the rural labour force in India (Campbell, 1993).

6. An estimate made in West Bengal indicated that an average return of Rs. 2720 ha/year is obtained from NTFP which is 25% more than the polewood harvest which fetches Rs. 16,000 per hectare after 10 years (Malhotra et al.,).

7. Over 50% of the revenues earned by the forest Department comes from NTFP. Growth of revenues from NTFP have generally been 40% higher than timber e.g., compound growth rates in revenues from NTFP and timber during 1968-69 to 1976-77 period were respectively 15.1% and 10.8%, the former being 40% higher than the latter one (Gupta Guleria, 1982).

8. It has been found that the share of export earnings from NTFP has been ranging from 56.5% to 75% out of the total exports of forest produce including both the timber and NTFP during 1959-91 (Gupta & Guleria, 1982).

However, it was observed that the poor NTFP collectors are exploited mainly on two fronts such as (1) distress sale and (2) lack of value addition skill, awareness and/or appropriate technology for value addition and also financial support to acquire the technology. In addition to destructive harvesting practices, is also resulting in damaging the natural forests that eventually degrading the environment. For maximizing the volume of harvested NTFP, eventually resorting to removal/damaging of the basic production system to have the one time maximum harvest and loosing/destructing the production system forever. Hence, one of the basic problems of forest dwellers is sustainable livelihood options which can be addressed by providing micro finance. Women's employment in forest based enterprises is estimated to be approximately 571.533 million days annually of which 90 percent is in small scale enterprises using NTFP (Khare, 1987).

NTFPs have features which are attractive from the gathering and processing point of view, they may not necessarily be strengths in marketing the products, but rather the contrary. For instance, the following have been listed as advantages of NTFPs gathering and processing activities:

- Small in size and often household-based
- Often involve diversity of a product
- Frequently seasonal in nature
- Labour intensive and use simple technologies
- Provide direct benefits to the local economy
- Accessible to low income and socially disadvantaged groups and are most often managed by women (Sekhar et al., 1993).

### PROSPECTS

As observed from the field that the gap between supply and demand for micro finance has led the forest dwellers to go for distress sale (e.g. at very minimal price generally for mahua flower (*Madhuca Indica*), between Rupees 4–6 per Kilogram (1 US dollar equals to 45 Indian Rupees) to the middlemen or petty traders of NTFP collected by them, to meet their immediate subsistence needs.

The provision of micro finance may lead to the accruing following benefits to the forest dwellers:

- Freeing from the exploitation of money lenders and NTFP traders
- Generation of self employment opportunities in form of value additions to NTFP
- Checking the destructive harvesting of NTFP
- Conserving the forest and environment
- Facilitation of adoption appropriate technology for value addition.

The SSNFE also have other advantages. It allows the forest dwellers to have an opportunity to generate cash income while remaining at their native places and enjoying their traditional customs. The SSNFE has some dis-advantages too like related to the shortage of technical and practical information about NTFPs. At entire value addition chain process i.e. from management and cultivation to marketing, harvesting, and processing, the SSNFE entrepreneur may be facing uncertainties. Marketing information is also scarce for most NTFPs. Information such as price, the volume required by the market and quality standards for the product is difficult to access by the villagers near by. If at all information is available, it may be difficult to apply to a new set of circumstances. Even after NTFPs are successfully harvested, they may not be
marketable. In summary, many SSNFE though have lot of prospects but at the same time risks involved are to be analyzed to minimize them to the extent possible.

THE GROUP APPROACH

The major objective of the NGOs working in the study area is to facilitate the forest dwellers in availing the value added advantage in NTFPs through processing and marketing interventions. However managing individual forest dwellers in large numbers can create practical difficulties, hence theses NGOs are promoting the concept of forming Self Help Groups (commonly called as SHG’s or Samities) which is a collection of members (normally between 5 to 20). They are also encouraging the forest dwellers to source-out their micro finance requirements from their own SHGs. The group is vested with autonomous powers and can take its own decisions. Every group, by principle, has a bank account of their own which is operated by the group leader. Normally every group has about minimum 1 or maximum of 2 group leaders, based on the size of the group.

In SHGs, every member of the group is required to have regular savings on weekly or fortnightly or monthly bases. In Patalkot area, it was observed that the members of SHGs have daily savings, as they save the fixed amount from their daily earnings. The frequency of savings and group meetings may vary but are mandatory. Once these savings are regular, then depending upon the need of the members and quantum of savings, group gets into credit activity. In this fashion, the forest dwellers by forming SHGs, manages their own revolving fund to meet their micro finance requirements. However, catalytic support and guidance by NGO’s and forest department officials is required for effective functioning. Thus, the NGO remains with the group from formation stage till it reaches the take-off level, which in case of forest dwellers may be bit long. During the field survey, it was observed that NGO’s and SHG’s functioning have been able to cater primary micro finance needs of forest dwellers on a cost-effective basis.

The SHGs usually creates a common fund by contributing small amount of savings on a regular basis. They evolve flexible systems of operations, often with the help of NGO’s and manage common pooled resources in a legal manner. SHGs in their periodic (weekly/bimonthly) meetings consider loans requested. Loaning is mainly on the basis of mutual need and trust with minimum documentation and without any tangible security. As observed, usually the loan amounts are small, frequent and for very short duration’s, and are mainly for unconventional purposes. The rate of Interest varies from group to group, depending on the purpose of loan as well. The rates of interest are often higher than that of banks but lower than that of moneylenders. At periodical meetings besides collection of money, emerging socio-economic issues are discussed. Micro-Finance can be a powerful instrument initiating a cyclical process of growth and development. This could also help in strengthening poor families’ resistance to external shocks and reducing dependence on moneylenders.

The involvement of the community participation through group approach has been a very successful model in India for achieving the objectives mentioned. The Joint Forest Management Committees (JFMCs) have been converted into small groups with a maximum size of twenty members known as Self-Help Groups (SHGs). These SHGs have been provided access to the microfinance without physical security through Bank linkage program. The SHG-bank linkage program is a major revolution for poverty alleviation and proved to be very effective including. The people living below poverty line usually need small financial assistance initially for subsistence, health etc and as credit requirement
gets graduated, they need more microfinance for NTFP value additions options.

THE NEED FOR INSTITUTIONAL SUPPORT

The existing NTFP trade channel from collectors to the consumer involves the middleman as a major link. The SHGs on their own can not reach to the consumers until and unless, they form a cluster and federation of their own or the big NGO makes the marketing interventions to replace the service of the existing middlemen. The appropriate NTFP value addition technology development becomes indispensable for setting up profitable SSNFE. Thus the role of micro finance is not only essential but also very crucial to achieve viability; by enabling those to adopt appropriate technology.

Figure 1 depicting the integrated network of NTFP, can work as a good system to reap the value addition benefit to the primary collector. Mere value addition in isolation can not solve the purpose, because before value addition commences there some prerequisites like availability of certain viable quantum of specific specie. If, once this criteria fulfils then comes to the kind value addition that can be done for that particular species, and then accessibility of both exotic and/or endemic technology that suits to the purpose. Once the appropriate technology is available then the financial (micro credit) assistance to use such technology becomes the major input for carrying-out value addition. Micro finance not only act as facilitator to use required technology, but also proves to be value added by way of arresting distress sale which makes the villager to resort on trader to sell their NTFP at throw away price. Once the finished product is ready then the most crucial part of the network is availability of market for that value added product. If market is also there, then infrastructure like roads and transportation is also vital, otherwise the chain between the producer and end-users may not be able to fasten that will defeat the every objective of the network i.e. enhancing the livelihood of the primary collector throughout
value addition. Further there should a sort of institutional mechanism that will support and co-ordinate the whole NTFP value addition network thereby enable them villager to reap the value addition and micro credit fruits.

**SETTING UP SMALL-SCALE NON–TIMBER FOREST PRODUCTS BASED ENTERPRISES (SSNFE)**

The SSNFE are less polluting in nature, i.e. it is less destructive to environment as compared to similar enterprises that involve emissions of pollutants. Moreover such enterprises are neutral to scales, where number of persons involved can vary from an individual to a group activity of sufficiently large size. These enterprises do not require huge infrastructure, sophisticated technology and large capital outlay.

To make the SSNFE a sustainable successful venture, it should be based on market driven for the proposed output (product), maintaining high quality of the product and continuance purveyance of output into the market. Processing of NTFP for local markets i.e. with low value addition can be carried out in SSNFE s, which can be small, dispersed/scattered, using primitive technology, with low infrastructure and requiring persons without training and that too on part time basis. In such situation cooperative institution could also be a viable proposition which has another advantage of using better technology and having better access to market. More-over cooperative can link production to a reliable/captive source of raw material supply from the members.

Before setting up SSNFE, one has to give due consideration for basic consumption pattern, i.e. how it is consumed (raw/semi-processed/processed) and how much (quantity/period) it is consumed? The consumption pattern varies at various socio-economic levels viz.

![Figure 2: NTFP Consumption Pattern](image)

Source: Primary Data

Figure 2: NTFP Consumption Pattern
the poor prefers to consume in raw form and the rich consumer wants it in processed form who is prepared to pay bit more for it. The following figure depicts various consumption patterns of NTFP.

These forms of consumption are directly related to the purchasing power of an individual. As the one who are primary collector are bound to look for the short term and immediate gains, as observed in case of Mahua. It was observed that during the Mahua Season, the primary collectors collects Mahua flower and sell the same at very minimal price generally between Rs. 4–6 kg to the middlemen or petty traders. The forest dwellers do not have the hoarding capacity for mahua flowers since they do not have sufficient alternatives for meeting their subsistence during the rainy season, hence, resorting to distress sale. After the rainy season, they purchase back the same at higher price Rs. 10 – 12 kg for their own consumption. It was observed that the forest dwellers are resorting to maximize their immediate gain through maximizing the quantity of NTFP collected (they go and collect the available NTFP’s on first come first basis) even beyond sustainable harvest limit. The forest dwellers are neither generally concerned with the future returns nor sustainable harvesting. Hence, setting up SSNFE can contribute substantial to enhance the well-beings of forest dwellers on one side and will arrest the unsustainable NTFP harvest.

**LINKAGE OF SSNFE, SELF HELP GROUPS AND MICROFINANCE**

Microfinance includes the entire range of financial services involving very small sums by which poor people can amass usefully large sums of cash. The opportunities to save, take loan, remit money and insurance, etc, fall within its purview. In India, about one-third of rural people are not covered by banks. Because in traditional banking sense (cost of lending and collateral), the poor persons are considered individually as unbankable. In India, commercial banks are encouraged by the National Agriculture Bank for Rural Development (NABARD), a public sector development bank of Government of India to finance the Self Help Groups without collateral. To facilitate the poor, NABARD has also simplified the guidelines for commercial banks lending to the SHGs and giving a boost to the poor to form the soliditary groups and avail the microfinance under banking programme for SSNFE.

The NTFP collectors can form SHGs for such purpose. The SHGs are groups of people, mostly women groups, who have felt the urge to come together to tackle socio-economic problems through group action. In India, more than 95% SHGs are of women member SHGs, which are linked to the commercial banks for obtaining microfinance without physical collateral. The “Bank-SHG” route leads to empowerment of the poor people and, therefore, after sometime, the SHGs need no external support to continue with its activities. This change in mindset has already caused and will lead the movement to gain the desired momentum in SHG-Bank linkage programme in future. So shifting from physical collateral based lending to social collateral or collateral substitutes based lending. The medium of SHGs is powerful social collateral having a very high degree of impact efficiency without much of costs to the financial intermediaries. Donor agencies also facilitate the community structures to establish common funds before they withdraw so that people get to come together periodically which would sustain accruing the benefits of the project even after the end of project period. The membership of SHGs ranges between 10-20. The NGOs are to play a catalyst role..

At primary level, simple technology like making plates and bowls can be taken up. At intermediate level, further processing like making cigar wrappers and herbal medicines can be taken up. In complex processing, big plants for medicinal purpose can be thought off.

There are three basic models for SHG bank linkages:
In the above model, the bank helps to organize the poor to form SHGs and nurture them. The savings of the members are mobilized through the groups to the bank. The bank provides credit to the SHG (not to the individual members) based on the savings with the bank and the maximum credit can go up to ten times of the savings of the SHGs. However, it was noticed that the employees of the bank need special training to indulge in nurturing the Self Help Group in addition to their routine job. There is also a need to change the mind set of the bank personnel to shift from physical collateral based lending to social collateral based lending, which is not so easy.

In this model, the banks do not provide the direct finance to the SHGs but they provide the whole sale financing to the NGOs or the federation of SHGs who in turn extend the credit to the SHGs. However, it was noticed that the employees of the bank need special training to indulge in nurturing the Self Help Group in addition to their routine job. There is also a need to change the mind set of the bank personnel to shift from physical collateral based lending to social collateral based lending, which is not so easy.

At present, this is most popular model in which the SHGs are helped by the Non Government Organisations (NGOs)/Voluntary Agencies (Vas) and Government Organisations (GOs) for forming, nurturing and monitoring their activities. On the recommendations of the NGOs/Vas/GOs, bank provides direct finance to the SHGs based on their saving amount. The bank officials rely on the recommendations of these organizations for taking a decision whether to link the SHGs with the bank by providing credit or not. The NGOs working in the area are better equipped with the personal details of the members of the SHGs and are in a better position to understand the credit absorption capacity of the SHG members.

ROLE OF ASSURED MARKETS FOR ADOPTING THE NTFP VALUE ADDITION TECHNOLOGY

In all the study area it was observed that most of the forest dwellers are concerned with the assured market for the value added NTFP products. The role NGOs in the study area was appreciated but the outreach is still limited. Hence, some of the forest dwellers still have to depend on middle man and thus realizing un-remunerative prices for the their NTFP products. In addition the general market uncertainties as applicable to other products are also having bearing on the returns to the forest dwellers. The degree of uncertainty is higher for NTFP based products like triphala, pachak aonla etc. Due to this uncertainty, the concerned SHG’s as well as NGO’s either may loose heavily or even if they earn, the earnings will not be substantial. The existing channel from collectors to the consumer involves the middle man as a major link. The SHGs on their own can not reach to the consumers until and unless, they form a cluster and federation of their own or the big NGO makes the marketing interventions to replace the service of the existing middlemen.

CREATING A THREE TIER INSTITUTIONAL MECHANISM

There is a need of institutional mechanism to support and co-ordinate the whole NTFP value
addition network thereby enable them to reap the value addition and micro credit fruits.

Three tier institution and possible SSNFE are given below:

The above model clearly reveals that as we move up in the hierarchy of three/four tier institutional mechanism, investment in the SSNFE are also likely to increase. We can have three tiers or four tier institutional mechanism for setting up of SSNFE starting from manually operated at first level to the capital intensive SSNFE at the fourth level. This is going to be a popular institutional mechanism which will provide the opportunity to expand the market for the rural finance, based on the potential for setting up of SSNFE.

DETERMINING AND MEETING PRE-REQUISITES FOR SSNFE

There are certain prerequisites for making the SSNFE as a successful venture. Merely going for NTFP value addition in isolation cannot serve the purpose. The availability and accessibility to appropriate technology and the accessibility to microfinance for adopting the appropriate technology, though very important factor but other pre-requisites also has to be considered. In fact, microfinance simply does not act as a facilitator through acquire the appropriate technology but the initial microfinance for consumption norms also meets the requirement of poor for their consumption needs and thus arrest the distress sale which generally the poor are forced in the event of non availability of microfinance. Thus the enhancement of the hoarding/storage capacity of the poor to hold the NTFP till the market picks up, provides a value addition due to price rise for their collected NTFP.

The availability of minimum viable quantum of NTFP and minimum infrastructure like motorable roads and transportation should also be made available by the development government agencies/departments to utilize the potential of microfinance for NTFP value addition to the fullest potential. The challenging task before us is to make assessment of capacity building needs of all the stake holders, particularly the members of SHGs and to identify such institutions who can impart the required training. The expense in capacity building should be treated as an investment. The pre-mature formation of federations in three tier institutional structure also to be checked, otherwise the venture may not be able to deliver the goods as expected from it.

The accessibility to capital without physical collateral and adoption of developed technology of SSNFE will lead to augment their livelihood options. More over, the dove-tailing of microfinance will also arrest the undue competition amongst poor forest dwellers leading to premature and unsustainable harvest of NTFPs from Dipterocarps due to shrinking availability for immediate financial gains.

SSNFE IS PRONE TO HORIZONTAL AND VERTICAL INTEGRATION

The vertical integration starts from procurement of NTFPs to the finally a value added final product for ultimate consumer. The horizontal integration will include development, awareness and accessibility to the appropriate technology along with the availability of finance without hassle and physical collateral. Requirement of physical collateral, procedural complications and indifferent attitude of formal banking system lead to the non-accessibly to finance for the majority of Indian rural population through formal banking system.

Pethiya and Teki (2003) observed that the market situation is vulnerable for the rural enterprise due to lack of institutional linkage and support. Therefore, apart from making accessibility to the required microfinance for MEs, the catalyst
role has to be played by some voluntary agencies/NGO to provide the required market linkages for success.

FINANCIAL ANALYSIS OF SSNFE BASED ON SCIENTIFIC HONEY EXTRACTION FROM ROCK BEE*

The Financial Analysis has been carried out for the one unit of scientific honey extraction from Rock Bee. The availability of honeycombs ready for harvesting in a year will approximately for 60 days in two spells. The first spell will be from 25th September to 25 October (30 days) and second spell will be from 15th May to 15th June (30 days). Depending upon the availability of honeycombs, the quantity of raw honey extracted will be varying. However, based on field information, approximately 700 Kg. of raw honey per annum (60 days period) by one group of honey hunter (of five male members from 100 hives) can be considered on an average basis, if honey is extracted by the scientific methods. In normal circumstances with traditional methods, the quantity of honey extracted would have been only 400 Kg. Thus, an incremental benefit due to scientific extraction will be 300 Kg per group per annum.

The cost of machinery/equipment including (strings proof dresses, buckets, knives, jackets, torches, rope stairs, clips nets, water sprayers and other equipment etc.) is assumed to be Rs. 75,000, which will be sufficient for 5 such hunting groups. The collected honey can be sold at the rate of Rs. 50.00 per Kg. It is assumed that 60% of this amount will account for equivalent labour charges and other overheads. Thus net incremental benefit by adopting this scientific technique of honey harvest will be Rs. 20.00 per Kg.

INCREMENTAL COST BENEFIT ANALYSIS FOR HONEY COLLECTION GROUP

Approx. incremental yield of honey by Scientific Honey collection method from 5 groups = (700-400=300) *5 groups = 1500 Kg.

Incremental Revenue realized by the sale of unprocessed honey (1500 x 20/kg) = Rs. 30,000/-

Incremental earnings per annum of each groups, after considering equivalent labour charges and overheads, due to shifting to scientific collection = (30000/5)= Rs. 6,000/-

Incremental earnings per annum of each member,
after considering equivalent labour charges and overheads, due to shifting to scientific collection = Rs. 1,200/-. 

| Net Present Value @ 10% | Rs. 1,09,336.00 |
| Net Present Value @ 15% | Rs. 75,563.00 |
| Internal rate of return | 38.4% |
| Payback period | 3 years |
| Economic life of the project is consider as 10 years. |

From the above analysis it can inferred that with the investment of Rs. 75,000, for adopting scientific honey harvesting technology (tools and implements) for total five groups having 5 members in each group. The net present value of investment @ 10% is Rs. 1,09,336 and @ 15% Rs. 75,563 and Internal rate of return (IRR) was reckoned to be 38.4%. Besides having very reasonable NPV, the incremental benefit due to adoption of scientific harvest method can enhance the livelihood of the forest dwellers very substantially. The investment Rs. 75,000 is generating employment to 25 (5X5) people for about 60 days for each member. Thus the project is generating employment of total (60X5X5)1500 man days per annum which resulted in the incremental benefit of Rs. 60,000 per annum (p.a). This venture would be indeed very effective investment that can generate sizable employment to the forest dwellers. The required financial assistance to adopt scientific honey harvesting technology will further will have positive impact on environment because, it will check destructive ways of honey harvesting.

In the recent past, more emphasis has been given to consider forests for Carbon trading, Biodiversity conservation, Indigenous people’s Culture Protection and through ecotourism for Recreation values. In this process, the very role of forests to provide livelihoods to the people who had been drawing their livelihoods from forest since generations got the lower priority. We do agree that forests have to provide economic services but at the same time, we can not ignore the basic traditional role of meeting the economic needs of the poor people, as last priority. Therefore, we have to look for models which can optimize both the roles of forests that are environmental along with the economic role.

CONCLUSION

Poverty in India is one of the major problems, as amongst other developing countries. Number of Government sponsored rural development program were initiated after the end of colonial rule in India including the famous Integrated Rural Development Programs (IRDP). It was observed that these programs were mainly focusing on providing subsidy and could not convert the “Un-economic active rural poor “in to “Economically active rural people”. The major reasons were availability of Economic asset, Microfinance and Institutional support. In the later years, the socio-economic role of forests had been recognized, particularly to address the subsistence economic needs of the poor, who are dependant on collecting NTFPs. This has been done by creating the value addition options at local level for rural poor in order to increase their share in ultimate consumer’s payments for the produce collected by them from forests. Thus forests had started serving as economic asset for poor. But, this was not possible in isolation until unless, required financial services through Micro-finance programme of India by innovative approach of setting up of SSNFE by SHGs and catering to the need of micro finance and credit plus activities. Hence, the combine effect of SSNFE options with utilization of potential of Microfinance Practices opened new doors for rural development from forests.

Note: This paper is based on the research project ‘Assessing the Impact of Microfinance as a tool for adoption of appropriate Technology and conserving the Environment (with specific reference to NWFP)” sponsored by the Indian Institute of Forest Management, Bhopal, INDIA, under taken by the author of the paper with Dr Teki S. as Co-investigator in 2003.

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