CROP POST HARVEST PROGRAMME

Developing coalition approach to non timber forest produce for better livelihoods of tribal communities of Madhya Pradesh

R No 8262

PROJECT FINAL REPORT

1 January 2003 – 31 December 2004

Core Partners

(Livelihood Services, Tropical Forest Research Institute, State Institute of Rural Development)

Managing Partner

Dr. V.P. Chaturvedi
Tarun Sanskar

Project Final Report

Section A Executive Summary

A very brief summary of how the outputs of the project contributed to the purpose, the key activities and highlights of dissemination outputs. (Up to 500 words)

Jabalpur project (as it is popularly called) was aimed at "Developing coalition approach to non timber forest produce for better livelihoods of tribal communities of Madhya Pradesh". This project was implemented in the tribal dominated Kundam block of Jabalpur district (Madhya Pradesh state) of India. The project was implemented by a coalition of four partners i.e. State Institute of Rural Development, Tropical Forest Research Institute, Tarun Sanskar and Livelihood Services. This was a very interesting GO-NGO collaboration project, as the first two partners were from the Govt. sector and the later two from the NGO sector. It was a two year project and out of which the first year was managed by SIRD (GO) and the second year was managed by Tarun Sanskar (NGO).

The project undertook five activities quite successfully i.e. (1) Select and include partners including SHGs on an ongoing basis as needs arise, (2) Identify problems and opportunities with respect to NTFP and available resources with the tribal communities, (3) Adapt, field test and finalize technology and marketing prototypes to address the identified problems and opportunities, (4) Train appropriate community leaders, technology providers and market actors to continue the activities beyond the project period and (5) Share with Research and Development community; documented project lessons on institutional, technology and market development processes.

The above activities were aimed at achieving four outputs, which were also achieved quite satisfactorily. Output #1 was "Diagnosis of existing technical and marketing systems for NTFPs important to poor tribal communities in MP undertaken", Output #2 was "Marketing strategies, including technologies where required are designed and validated", Output #3 was "Strategies to promote community participation in NTFP interventions are tested and promoted" and Output #4 was "Strategy for identifying, establishing and managing a coalition of partners, including the poor, to plan, and design an NTFP intervention are developed and promoted".

The purpose of the project was "Partnership approaches adopted by research scientists, NGOs and development agencies to develop technologies and marketing strategies that support the livelihoods of tribal communities" with an inbuilt assumption that "CPHP South Asia successfully promotes institutional lessons on post-harvest innovation synthesised from regional portfolio."

The evidence shows that, CPHP South Asia is successfully promoting the institutional lessons learnt from CPHP research projects, including this Jabalpur project and the Jabalpur project has played a key role during the CPHP South Asia meetings to convey its research finding.

Lac activity had a direct impact on the ILAC project and CPHP South Asia. The Jabalpur project showed the size and complexity of Lac sub-sector. It exposed the ILAC and

CPHP personals to Lac sub-sector players in Ranchi and Kolkata. ILAC took it up as a non-CPHP case study to be analyzed and shared.

ILAC has shared its lessons learnt with a host of other players in the post harvest research sector during the capacity building workshop, where lessons of the Lac sub-sector has been shared widely.

The end users of the research output are the tribal communities. It was a project which had a focussed approach and the tribal communities were integral part of the project. The project was a field based project and was implemented within the tribal communities. The project worked with 4 self Help groups. These 4 groups have a direct membership of 63 tribal families. As a result of the project, these families have directly adopted Mahua procurement-storage-sale and Lac pruning-inoculation-harvest activities. However these 4 SHGs are part of 196 SHGs, who are also indirectly adopting the research outputs by selling their Mahua to the 4 SHGs. The Mahua activity was limited to 4 SHGs, but the lac program is expanded to all the 196 SHGs. The evidence comes from the procurement of Mahua during the on-season and sale of Mahua during the off-season, which is being carried out by the SHGs.

Section B Background

B.1 Administrative data

NRIL Contract Number: ZB0333	**Managing Partner(s)/Institution(s):** Tarun Sanskar
DFID Contract Number: R8262	**Partner institution(s)** 1. Livelihood Services, Gurgaon, India 2. Tropical Forest Research Institute (TFRI), Jabalpur, India 3. Mahatma Gandhi State Institute of Rural Development (MGSIRD), Jabalpur, India
Project Title: Developing coalition approach to non timber forest produce for better livelihoods of tribal communities of Madhya Pradesh	**Target Institution(s)** Research / Development agencies working for the upliftment of tribal / indigenous communities
Research Programme: Crop Post-Harvest	**Start Date:** 1st January 2003 **End Date:** 31st December 2004
Thematic area: Horticulture / diversification / Value addition	**Budget (i.e. Total Cost):** £74,990

Section C Identification and design stage

Poverty focus

How did the project aim to contribute to poverty reduction? Was it enabling, inclusive or focussed (see definitions below[1])? What aspects of poverty were targeted, and for which groups?

The project aimed at improving the income of poor by ensuring higher price for their most important livelihood crop. It was a focussed approach to contribute to poverty reduction. The project specifically targeted the income aspect of poverty and for tribal or indigenous communities.

Please describe the importance of the livelihood constraint(s) that the project sought to address and specify how and why this was identified.

Poor tribal farmers do not realize the maximum possible price for their produce. Though market offers a higher price, unfortunately poor tribal farmers sell their produce during a time and at a market which offer them the lowest possible price. The livelihood constraints faced by them were: (1) Tribal farmers sell their Mahua during May-June due to cash crunch during that period and (2) Tribal farmers do not have technology for storing dried Mahua thru the rainy season.

How and to what extent did the project understand and work with different groups of end users? Describe the design for adoption of project outputs by the user partners?

Research agencies and Development agencies working for the upliftment of tribal communities are the end users of the project outputs. The project has understood the needs of this group extremely well. In order to achieve this, the project was quite deliberate in selection of its partners. It decided that the partners must come from the end user agencies.

To choose a research partner, the Project had a choice to choose from Agriculture University (Agriculture Research Institute) and TFRI (Forest Research Institute). The project chose Forest Research Institute, as they would be one of the main users of the research outputs.

Similarly, to choose a community organization partner, the Project had a choice to choose from XIDAS (An Academic Institution) and Tarun Sanskar (A grassroots NGO). The project chose Tarun Sanskar, as it works with the tribal communities and would have interest to continue the activities beyond the project period.

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[1] **Enabling**: addresses an issue that under-pins pro-poor economic growth or other policies for poverty reduction which leads to social, environmental and economic benefits for poor people
Inclusive: addresses an issue that affects both rich and poor, but from which the poor will benefit equally
Focussed: addresses an issue that directly affects the rights, interests and needs of poor people primarily

Institutional design

Describe the process of forming the coalition partnership from the design stage and its evolution during the project?

The coalition process was initiated by Dr. A.K. Singh, who was the Director of MP State Institute of Rural Development (SIRD). SIRD is an agency involved in providing leadership training in the field of rural development. Dr. Singh took the lead in submitting the research proposal to NR International. He then took the lead in dialoguing with relevant institutes / individuals he thought would make sense for the coalition. When the first group of individuals met, they identified four critical areas for the success of the projects which are: Training, Research, Marketing and Community Organization. During the first concept phase there were seven organizations in the coalition i.e.:

Training

- SIRD

Research

- TFRI
- State Forest Department
- Agriculture University

Marketing

- Livelihood Solutions

Community Organization

- XIDAS
- Tarun Sanskar

However when the budget was reduced from what was originally planned, it was decided to select one person/institute from each group, which remained as:

- Training and Managing Partner: SIRD (Represented by Dr. A.K.Singh)
- Research: TFRI (Represented by Mr. Akhilesh Argal)
- Marketing: Livelihood Solutions (Represented by Mr. Guru Naik)
- Community Organization: Tarun Sanskar (Represented by Dr. V.P.Chaturvedi)

During the process of implementation of the project each of the organizations / individuals went thru some changes.

(1) Mr. Akhilesh Argal was transferred out of TFRI to State Forest Research Institute (SFRI). TFRI decided to nominate Mr. Anurag Mishra in place of Mr. Argal to the coalition.

(2) Dr. V.P. Chaturvedi retired from the position of Executive Director of Tarun Sanskar. However Tarun Sanskar decided to keep Dr. Chaturvedi involved in the project.

(3) Mr. Guru Naik formed a separate consulting firm called Livelihood Services. The coalition decided to work with Mr. Guru Naik and brought in Livelihood Services as the coalition member.

(4) Dr. A.K.Singh was transferred out of SIRD. The coalition decided to work with Dr. A.K.Singh in his personal capacity and nominated Tarun Sanskar to be the Managing Partner.

Is there an explicit institutional hypothesis? If yes, is it trying to attack a failure or inadequacy in a mechanism?

Yes, there is an explicit institutional hypothesis. The hypothesis was trying to attack the inadequacy of the conventional agricultural research system in India.

What other institutional factors were seen as being important?

Selection of organizations having diverse core competencies and which is going to gel very well with each other is critical to the success of a coalition.

Section D Implementation process

How was participation maintained among the different stakeholders (the Managing Partner(s) and the Core other Partners and, where relevant, user communities) in the research process?

At the community level the project worked with the Self Help Groups (SHGs). The project area selected was the existing project area of Tarun Sanskar (NGO). Tarun Sanskar was already promoting SHGs in its project area for encouraging women undertake small savings and credit activity. The project selected four SHGs and the project's research activity was carried out in their villages.

At the community level, three community workers of Tarun Sanskar were deputed to the research project full time to undertake the activity with the community. The community workers were based in the project area itself and they conducted village meetings, undertook surveys, implemented the research activities etc. in the community.

One person from each coalition partner (Dr. A.K. Singh from SIRD for Leadership training, Akhilesh Argal from TFRI for Technology, Guru Naik from Livelihood Solutions for Marketing and Dr. V.P. Chaturvedi from Tarun Sanskar for Community Organization) was responsible to provide support in their specialized area to the field team. These specialists normally made joint visits to the field to provide guidance to the field team. Joint visits were regularly made at least once in a month which was the main mechanism for participation. Formal meetings these members were also regularly held at SIRD. Additionally the members had very close interaction on frequent e-mails and mobile phones.

What were the major changes that took place during the implementation period. For each one, explain why they came about and how well did the project manage them?

As already explained above, there were changes in all the partner organizations. At Tarun Sanskar, Dr. V.P. Chaturvedi was retired. At Livelihood Solutions, Guru Naik formed another organization Livelihood Services. At SIRD, Dr. A.K. Singh was transferred. At TFRI, Mr. Akhilesh Argal was transferred. Even though the coalition was of organizations, but the real coalition was of individuals, who had developed a very good working relationship. The project did not want to disturb this working relationship. It decided to continue working with the individual as much as possible. This worked in three of the four cases. Even though Dr. V.P. Chaturvedi was retired Tarun Sanskar agreed to keep him in the project till the project is over. When Guru Naik formed Livelihood Services, the project worked with the new organization Livelihood Services. With the transfer of Dr. A.K. Singh from SIRD, the project decided to work with Dr. Singh at his personal capacity. As Dr. Singh was the Managing Partner and the coalition members felt that the project may not get the same response from the new Director. Hence the project decided to change the Managing Partnership to Tarun Sanskar. However in case of TFRI, with the transfer of Mr. Akhilesh Argal, such adjustment was not possible. Hence the project requested Mr. Argal to find a suitable replacement from TFRI, induct him to the project work and have a transition time. Mr. Argal got Mr. Anurag Mishra to the project.

What were the strengths and weaknesses of your monitoring system? How did you use the Information provided by your monitoring system?

Entire project was about an agriculture extension work in the field and the all the coalition members directly work in the field. Hence no separate monitoring system was installed. In fact two of the partners (SIRD and TFRI) were from the Govt. system, who came from a highly beaurocratic system and they knew the deficiency of this system. Hence there was a deliberate attempt to bring in any beaurocracy in to this project. And the project was built on a system of working relationship among all individuals.

What organisations were involved at the end of the project? Were there changes to the coalition (joining/leaving) during the project? If yes, why?

The organizations who were at the end of the project are:

- Tarun Sanskar – Managing Partner
- Livelihood Services
- Tropical Forest Research Institute
- Dr. A.K. Singh

As already explained above, there were changes in all the organizations. But the project worked to maintain the individuals working in the project despite their changes in the organizations.

Include a complete list of organisations involved, directly or indirectly, in the project and describe their relationships and contributions.

Organizations who were indirectly involved in the project are:

- Agriculture College: Provided the technology of polythene lining in mud bins
- Indian Lac Research Institute: Provided technology of lac production
- Shellac Promotion and Export Council (SPEC): Provided information about lac marketing
- Tajna Shellac Factory: Provided information about lac markets and technology of lac processing
- PRADAN (NGO): Provided information about growing of lac by the community
- MP Vigyan Sabha: Trained SHG members in Mahua processing

How will (have) project outputs affect(ed) the institutional setting?

The project very interestingly had coalition members from two diverse backgrounds i.e. NGO background and Govt. background. Tarun Sanskar and Livelihood Solutions/Services had an NGO sector. SIRD and TFRI had a Govt. sector. In general in India, these two backgrounds do not work together. There have been many attempts for these backgrounds to work together; but they simply do not understand each other's points of view and keep criticising each other. However this project quite interestingly worked extremely well. Coalition members from the Govt. background worked with NGO norms and coalition members from NGO background worked with Govt. norms. At least within these organizations there has been an extremely good appreciation of each others' strengths and contributions. Strategy for identifying, establishing and managing a coalition of partners, including the poor, to plan, and design an NTFP intervention are developed and promoted (Project output no.4: the institutional output) has made sure that the appreciation of the each sector within the other sectors will continue for ever. And a GO-NGO relationship will get strengthened.

How will the technical outputs of the project (if successful and if adopted) change the organisations and the relationships between them and in what way? Refer to the project's technical hypothesis.

The project had three technical outputs: Diagnosis of existing technical and marketing systems for NTFPs important to poor tribal communities in MP undertaken (output no.1), Marketing strategies, including technologies where required are designed and validated (output no.2) and Strategies to promote community participation in NTFP interventions are tested and promoted (output no.3). TFRI is a conventional research organization in the coalition. Their main business is to conduct research in the field of forest crops but from commercial harvesting (as a source of revenue to the Govt.) point of view. This is the first time TFRI undertook a research in a coalition mode. The technical result and the approach adopted by the in getting the outputs have been very well appreciated by the research committee within TFRI. Certain aspects of the project that have been taken note by TFRI are:

- **Incorporating market feedback into a technical research program:** This project looked at marketing issues and modified technical research in light of necessities in the market. This has given a very good acceptance in the market. An example: in order to improve the quality of Mahua, the project had set out to work on developing technology for collecting clean Mahua. The project was looking for options for using large polythene sheets under the tree and use of dust free drying technologies. But during market survey the project found that little amount of dust in the end product does not make any difference in distillation of liquor. In fact the market does not pay extra price for clean Mahua. With this feedback the project dropped the idea of doing research on process for getting clean Mahua, which would have unnecessarily added cost. The lesson is: if the output of the research is meant for market uptake, then it is important to involve market right from the beginning. We may unnecessarily do a research, which has no bearing on the market.
- **Incorporating community into research program:** It was a case quite similar to the above. The coalition members saw the benefit of involving community thru the entire process. By involving the community the project could find the traditional knowledge of grain storage bins that existed in the community. The project was otherwise planned to introduce metal bins. But the community said, the metal bins are fine as long as someone outsider is paying for it. The community will accept it. But due to its cost the community will never buy the metal bins on its own. Hence the project studied the mud bins and looked at what improvements possible. With a very little i.e. polythene lining, the mud bin was made into a perfect moisture proof bin and community took no time in adopting it.
- **Involving NGO into a research program:** NGO provided the conduit to work with the community. NGOs having worked with the community have a better understanding of what might work with the community and what might not. Hence in meetings they bring in the point of view of the community.

TFRI has begun utilizing these lessons in their conventional research. One big thing .that has already happened is that: TFRI has already started inviting Dr. V.P. Chaturvedi for its research committee meetings.

Section E Research Activities

This section should include a description of all the research activities (research studies, surveys etc.) conducted to achieve the outputs of the project analysed against the milestones set for the implementation period.

Milestone #1.1.1 First relevant NTFP identified.

Livelihood analysis of tribal communities of the project area was carried out to see the contribution of different sources for the overall livelihood or income of the families. Based on this analysis it was found that, Mahua was economically the most important existing NTF Product of the tribal community. Hence Mohua was identified as the first relevant NTFP for the project to study and improve upon.

Milestone #1.1.2 Second relevant NTFP identified.

For the second product, the idea was to look for a new product; a product that currently did not exist in the local area, yet it had a substantial potential on the tribal livelihood and which could be introduced later. The approach taken was to undertake a comparative study between similar agro ecological locations and comparing the livelihood pattern of the tribal communities.

From various explorations, it was found that Jharkhand is another large tribal tract in the eastern part of India; where as the project area Mahakaushal is a large tribal tract in the central part of India. In Central India the main source of tribal livelihood was Mahua, where as the main source of tribal livelihood in Jharkhand was lac. Lac was naturally and artificially grown Palas and Ber trees by tribal communities of Jharkhand required. These trees were available in plenty even in the project area, but for some strange reasons lac was not being grown by the people of Mahakaushal area. Lac is also a high value product, with enormous applications. In the last 2-3 years several Govt. agencies of M.P. are trying to introduce lac cultivation, but failure rate has been very high; up to 80%. Thus the project identified Lac crop introduction in the project area as the second research activity.

Milestone #1.1.3 Constraints and opportunities of the two NTFPs analyzed and intervention areas identified.

Participatory analysis of both the products was undertaken with the community and the following were the identified areas of intervention of both the products:

- **Product-1: Mahua**
  - Maintenance of quality (moisture free) during storage
  - Marketing after the winter season
  - Maintenance of quality (sand free) during collection
  - Maintenance of quality (dust free) during drying
  - Production of Mahua resins
  - Packaging of Mahua resins
  - Marketing of Mahua resins
- **Product-2: Lac**
  - Creation of brood lac farmers
  - Large scale inoculation
  - Marketing of brood lac

- Primary processing of lac
- Local marketing (possibly to Ordinance factory) of lac
- Establishing contact with shellac factories

Milestone #2.1.1 Adapt, field test and finalize marketing prototypes of Mahua.

The project looked at the following technology interventions for Mahua:

- Improvement of the traditional storage structures, to make them resistant to moisture during rainy season.
- Use of plastic sheets under the tree for sand free collection of Mahua
- Use of plastic sheets during open sun drying for dust free dried Mahua
- Production of Mahua resins
- Packaging of clean Mahua and Mahua resins
- Food quality resting of Mahua resins

The project looked at the following possible marketing interventions for Mahua, which will be used in different combinations:

- **Option-1:** Selling the existing Mahua (Mahua collected and dried under the traditional technology) during the off season in the local market.
- **Option-2:** Selling the existing Mahua (Mahua collected and dried under the traditional technology) during the off season in the outside market, if the quantity collected is more.
- **Option-3:** Pilot marketing of Mahua resins in the local market as local candies.
- **Option-4:** Pilot marketing of Mahua resins in the outside market as mouth fresheners.
- **Option-5:** Local marketing of clean (dust free) Mahua in the local market as food item.

Based on the successful experience of Mahua marketing at a pilot scale in the first year, the Mahua marketing model was finalized as:

- Arrange working capital for the group.
- Mahua is collected during the month of April-May. Then when ever the villagers need money they sell Mahua in the local market. However as the villagers face a cash shortage during summer and rainy season due to less of Agriculture activities; they normally sell Mahua during this time. This is time when Mahua prices are the lowest.
- The group purchases Mahua from the members and other villagers at the prevailing market price and stores it.
- After the rainy and winter season the prices of Mahua increases. The group watches the price and sells when the price of Mahua is highest.
- As the group has a large quantity of Mahua, the group also goes to other markets and sells if the prices are more than the local market.
- The group later calculates the profit and pays back ~50% of the profit as bonus to the members/villagers on a pro-rata basis. ~50% of the profit is retained to increase the working capital base.

The group was provided with working capital. The group members went around and informed the villagers in near by villages about their activity in Mahua procurement. Based on the finalized Mahua marketing model the groups undertook the following:

- The groups established the system of Mahua purchasing system from the members and non members
- The groups members went around and informed the villagers in near by villages about their activity in Mahua procurement
- The group members explained the advantage of providing Mahua to the groups rather than giving to the regular traders
- Mahua flowering happened for about 15 days during June'04 this year
- The groups collected Mahua

Milestone #2.1.2 Adapt, field test and finalize marketing prototypes of Lac.

The project looked at the following technology interventions for Lac:

- Timely (February) pruning of host plants in large scale
- Sufficient collection brood lac
- Proper data collection of lac inoculation
- Timely (July) inoculation of all inoculated plants
- Training of farmers as Lac trainers
- Primary processing of lac

The project looked at the following possible marketing interventions for lac, which will also be used in different combinations:

- **Option-1**: Selling of brood lac to different district governments trying to promote lac cultivation in their area.
- **Option-2**: Tie up with shellac factories in M.P., Chhatisgarh and Jharkhand.
- **Option-3**: Exploring market for lac sticks as wood polish in the local area

The pruning of palas trees was done in February and inoculation was done during July. Based on this successful experience, the Lac inoculation model was finalized as:

- Undertake the inoculation of palas trees in February. This time gives four clear months for the branch to grow to nearly 1-meter long tender branch during inoculation.
- Mark and number the trees, which have been pruned. This helps in proper monitoring of trees.
- Identify the place / farmer from whom the brood lac will be procured. Well in advance (i.e. by May) complete the negotiation for purchase / procurement of brood lac
- Understand the developments in the brood lac for emergence of lac insects; the tip of the lac turns red just before emergence, which is the best time for collection of brood lac sticks
- The brood lac must be transported to the places of inoculation within one-two days and inoculation must be done within four-five days of cutting of brood lac. The inoculation must be done before the emergence of lac insects.
- The brood lac sticks should be cut into approximately 6-8" size. Five-Six sticks must be bundled together and wrapped with nylon net.
- The bundled should be tied to the new branches of palas tree
- Approximately one bundle of brood lac should be used for 3-4new branches. Lac insects will emerge from the brood lac and will settle on the new branches.
- In approximately 4 months time i.e. by October lac formation will take place, when the lac should be harvested, which is called stick lac

Milestone #2.2.3 Literature review and institutional search completed w.r.t. possible technology interventions of the two NTFPs.

Secondary data analysis of market for lac was done in the following places

- Indian Lac Research Institute (ILRI)
- Institute of Forest Productivity (IFP)
- PRADAN
- Tajna Shellac factory
- DPIP Sidhi
- Lac cultivation in Sehdol and Seoni district

Discussions were held for Mahua marketing with the following agencies:

- DPIP about mahua achar marketing
- CARD about marketing of processed NTFP
- PRADAN about marketing of mahua resins
- Local traders of Mahua in Kundam block and Katni

Milestone #3.1.1 SHGs are provided trained on the possible technology and marketing interventions.

196 Self Help Groups (SHGs) were studied and finally women SHGs of the following four villages of Kundam block were selected to assist for further research work:

- Majhgaon
- Bhajia
- Mahender
- Bishanpura

Capacity building of the SHGs is an ongoing activity. Regular SHG meetings have been conducted during this period to plan for Mahua collection & storage and Lac inoculation.

Additionally the group leaders were sent to Madhya Pradesh Vigyan Sabha to attend a special training course on processing of a wide range of Non timber forest produce (NTFP) available in their area.

Capacity building of the SHGs is an ongoing activity. Regular SHG meetings have been conducted during this period to plan for Mahua collection & storage and Lac inoculation.

The following two field workers of Tarun Sanskar have been assigned responsibility of regular capacity building of the SHGs. As we were dealing with women SHGs, we took a conscious decision to have women staff to manage them too.

- Ms. Guhiya Paraste (for village 1&2)
- Ms. Sanjana Pande (for village 3&4)

A field team has been formed, comprising of two field workers who are stationed in the project village cluster itself. A new person Ms. Kamal Shrivastav, has joined the field team at the supervisory level. The specific activities done by the team are:

- Regular weekly meetings took place with the members.
- Discussion took place with the members on broad developmental issues including health and rural retailing; other than specific project activities.

- Special focus has also been given to have dialogue with male members to explain about the project activities.
- Training was imparted to members on proper pruning of Palas trees.
- The villagers were assisted to undertake lac inoculation successfully.

Milestone #4.1.1 Prepare draft institutional history.

- A draft institutional was prepared, which was used for ILAC team visit during the quarter. More information was collected on different critical decisions taken during the project implementation.
- Dr. Rajeswari Raina from ILAC team visited Jabalpur during the month of July. She met the SHG members and project staff and understood the institutional processes and learning.
- The draft original institutional history document, which was prepared during the Hyderabad meeting, was updated with the latest information of Mahua collection & storage and lac inoculation.
- Final institutional history was prepared during March'05.

Milestone #4.2.1 Synthesize project lessons and prepare briefing note on managing partnership-based R&D interventions in the context of NTFP.

Prepared

Milestone #4.3.1 Present the institutional history of Jabalpur project in ILAC workshop

The institutional history of the Jabalpur project was presented in two writeshops organized by ILAC and CPHP regional office.

Section F Project effectiveness

This section of the evaluation report uses the rating criteria for the purpose and your outputs previously used in your annual reports.

	Rating
Project Goal *National and international crop-post harvest innovation systems respond more effectively to the needs of the poor*	X
Project Purpose *Partnership approaches adopted by research scientists, NGOs and development agencies to develop technologies and marketing strategies that support the livelihoods of tribal communities*	X
Project Outputs	
1. Diagnosis of existing technical and marketing systems for NTFPs important to poor tribal communities in MP undertaken.	1
2. Marketing strategies, including technologies where required are designed and validated.	1
3. Strategies to promote community participation in NTFP interventions are tested and promoted.	2
4. Strategy for identifying, establishing and managing a coalition of partners, including the poor, to plan, and design an NTFP intervention are developed and promoted.	2

1= completely achieved
2= largely achieved
3= partially achieved
4= achieved only to a very limited extent
X= too early to judge the extent of achievement (avoid using this rating for purpose and outputs)

Outputs (5 pages)

What were the research outputs achieved by the project as defined by the value of their respective OVIs? Were all the anticipated outputs achieved and if not what were the reasons? Your assessment of outputs should be presented as tables or graphs rather than lengthy writing, and provided in as quantitative a form as far as is possible.

Output #1: Diagnosis of existing technical and marketing systems for NTFPs important to poor tribal communities in MP undertaken.

OVI	Achievement	Reasons for deviation, if any
1.1 By December 2003 significant constraints and opportunities prioritised for market interventions and value addition for at least 2	✓ 2 NTFPs relevant to the livelihoods of tribal communities were identified, which were: *1. Mahua: An existing NTFP of the area*	No deviation

NTFPs relevant to the livelihoods of tribal communities.	*2. Lac: A new NTFP for the area* ✓ Technical Constraints and opportunities of Mahua were identified for intervention ✓ Technical Constraints and opportunities of lac were identified for intervention ✓ Marketing Constraints and opportunities of Mahua were identified for intervention ✓ Marketing Constraints and opportunities of Lac were identified for intervention	

Output #2: Marketing strategies, including technologies where required are designed and validated.

OVI	**Achievement**	**Reasons for deviation, if any**
2.1 By December 2004 at least one prototype output marketing mechanisms adaptively tested with local market actors and tribal communities in MP.	✓ Prototype marketing mechanism of Mahua was designed ✓ Mahua marketing was pilot tested during 2003-04 ✓ Mahua marketing was undertaken at a slightly larger scale during 2004-05	No deviation
2.2 By December 2004 at least one technology for value addition / quality management identified and prototype supply systems pilot tested with tribal communities and local market actors.	✓ Polythene lining in the existing mud storage bins was developed for improvement of quality while stored thru the rainy season ✓ Individual home based mud storage bins with polythene lining were constructed ✓ Local masons were trained on the technology for constructing such storage bins ✓ Pruning technology of palas trees were acquired ✓ Pruning of palas trees in the project area were undertaken twice during	No deviation

	the last two years ✓ Technology of inoculation of brood lac was acquired ✓ Pruned palas trees were inoculated with brood lac ✓ Successful lac formation took place twice during the last two years	

Output #3: Strategies to promote community participation in NTFP interventions are tested and promoted.

OVI	**Achievement**	**Reasons for deviation, if any**
3.1 By December 2004 at least 4 self help groups have used and evaluated approaches that foster group action.	✓ The following Self Help Groups (SHGs) joined the coalition almost as partner of the research project • Majhgaon • Bhajia • Mahender • Bishanpura ✓ Constant handholding and training were provided to these four SHGs to function as a cohesive group. ✓ These groups undertook procurement of Mahua from its members and sold to in the market during the off season ✓ Bank linkage of the four SHGs was established ✓ Working capital was provided to the four SHGs, which was kept in the bank in the name of the SHGs and the SHG members managed the entire operation	No deviation
3.2 By December 2004 at least one briefing note prepared on the promotion of community participation through self help groups in NTFP interventions.	Prepared in March 2005	The project activities continued till the end of the agriculture season and hence this output got delayed till March'05

Output #4: Strategy for identifying, establishing and managing a coalition of partners, including the poor, to plan, and design an NTFP intervention are developed and promoted.

OVI	Achievement	Reasons for deviation, if any
4.1 By December 2004 an institutional history of the project documented and synthesised through process documentation.	✓ Draft institutional history was prepared by December 2004 ✓ Final institutional history was prepared in March 2005	The project activities continued till the end of the agriculture season and hence this output got delayed till March'05
4.2 By December 2004 at least one briefing note on managing partnership-based R&D interventions in the context of NTFP developed.	✓ Prepared in March 2005	The project activities continued till the end of the agriculture season and hence this output got delayed till March'05
4.3 By December 2004 Institutional findings presented at least at one workshop	✓ Institutional lessons of Jabalpur project were shared in two CPHP workshops organized by the South Asia regional office	The project activities continued till the end of the agriculture season and hence this output got delayed till March'05

For projects aimed at developing a device, material or process, and considering the status of the assumptions that link the outputs to the purpose, please specify:

The assumptions that linked the output to the purpose were:

1. Non timber forest produce remain a priority for tribal communities and development agencies

2. Political will supports the promotion of partnership based approaches to NTFP R&D

a. What further market studies need to be done?

There is no problem with marketing of mahua during the off-season. The SHGs and the NGO (Tarun Sanskar) have been marketing it. Lac production has already started. Currently lac production is being used as brood lac to expand lac production further. Major market players of lac have already been identified in Jharkhand context. But with lac production going up in Madhya Pradesh, a detailed market study of lac needs to be done later.

b. How the outputs have been made available to intended users?

TFRI is a large research organization in the forestry sector. The coalition involved only one division of TFRI i.e. both Mr. Akhilesh Argal & Mr. Anurag Mishra belong to the Agro-forestry division. The first effort has been to let the other divisions of TFR know the

outputs of this research. For this Mr. Anurag Mishra has been conveying the project activities, its progress and the output to the research committee meeting of TFRI.

TFRI is a part of ICFRE (Indian Council of Forestry Research and Education) and ICFRE has several research agencies under it like TFRI. TFRI participates in research meetings of ICFRE. The research findings are also being shared with ICFRE.

Mr. V.P.Chaturvedi being a very senior person in the NGO sector is also member of several NGO networks. He has been sharing the project activities, its progress and the output in various NGO forums he represents.

Mr. Guru Naik is the Program Director of CCF India, which is a donor agency supporting nearly 80 grassroots' NGOs in India. He also has been sharing the project lessons and outputs in his NGO circles.

c. What further stages will be needed to develop, test and establish manufacture of a product by the relevant partners?

The further stages for carrying on the project activities will include the following:

1. Streamlining pruning and inoculation: Timely pruning is critical to success in inoculation. Pruning needs to be done in February for inoculation to be done in May. Till now the project made sure that the pruning takes place in time and in sufficient scale. The communities need to be taught to continue this practice.

2. Streamlining procurement of brood lac: Lac propagates thru an insect and the insect carrying lac sticks are called brood lac. Brood lac is harvested when the lac insects mature and emerge. Once the insects begin emerging, within 3 days they need to be inoculated or placed in new trees/branches. This tight time calls for a very strong logistics management. Till now the project made sure that the pruning takes place in time and in sufficient scale. The communities need to be taught to continue this practice.

3. Harvesting for sale: Lac is a relatively new activity in M.P. Hence there was not sufficient brood lac available for cultivation of lac. Hence all the lac produced in the project was used as brood lac, which is being used to propagate lac further. With this cycle saturating, lac needs to be harvested for stick lac (not brood lac) and need to be sold in the market as stick lac. The communities need to be taught this shift in harvesting practice.

4. Establishing the marketing system: The project has already identified the market players of lac. But with the production increasing, the actual market linkage and systems need to be established on a continuous basis.

d. How and by whom, will the further stages be carried out and paid for?

1. One of the reasons of involving a partner like Tarun Sanskar was to address this issue of sustainability. Tarun Sanskar is a large NGO, which existed with the target community before the project and will continue after the project is over. The project has given new products to Tarun Sanskar, which it will carry on with its regular funding sources.

2. The project has built in Working capital to be provided to the SHG, which has been provided to them in their own bank account. The working capital is managed by the SHG as a revolving fund to purchase the products (make immediate payment), store it and sale it during the off season. This working capital will remain with the SHGs to carry on after the project period. Tarun Sanskar staff will work with the SHGs to make sure that the working capital is not depleted.

e. Have they developed plans to undertake this work? If yes, what are they? If not, why?

All the above plans have been discussed with the project partners. Tarun Sanskar has agreed to carry on. With the relationship built with TFRI and Guru Naik, they will assist Tarun Sanskar even after the project period to carry these steps forward.

Purpose (2 pages)

Based on the values of your purpose level OVIs, to what extent was the purpose achieved? In other words, to what degree have partners/other users adopted the research outputs or have the results of the research been validated as potentially effective at farmer/processor/trader level?

OVI #1: By 2005 the design of at least one new project proposals by project partners reflects partnership approaches to R&D.

During the project period itself TFRI has submitted a project proposal, where Tarun Sanskar has been included as a Community Organization expert.

OVI #2: By 2008 20 % more tribal communities in MP participate in the design and implementation of interventions on value addition of non-timber forest products

It is too early to say about this output at a state wide scale. However at a project wide scale, it is beginning to happen with respect to Mahua.

OVI #3: By 2008 livelihoods of tribal communities enhanced by 20% through value addition interventions.

It is too early to say about this output at a state wide scale. However at a project wide scale, it is beginning to happen with respect to Mahua.

Goal (1 page)

What is the expected contribution of outputs to Project Goal?

The contribution of the project outputs to the Project Goal is defined by its purpose statement, which is:

“Partnership approaches adopted by research scientists, NGOs and development agencies to develop technologies and marketing strategies that support the livelihoods of tribal communities”

However the assumption of this output was that:

“CPHP South Asia successfully promotes institutional lessons on post-harvest innovation synthesised from regional portfolio.”

The evidence shows that, CPHP South Asia is successfully promoting the institutional lessons learnt from CPHP research projects, including this Jabalpur project. The Jabalpur project has played a key role during the CPHP South Asia meetings to convey its research finding. Hence it is evident that the project output has contributed to achievement of the project goal.

Section G – Uptake and Impact

Organisational Uptake (max 100 words)

What do you know about the uptake of research outputs by other intermediary institutions or projects (local, national, regional or international)? What uptake by which institutions/projects where? Give details and information sources (Who?What?Howmany?Where?)

Lac activity had a direct impact on the ILAC project and CPHP South Asia. The Jabalpur project showed the size and complexity of Lac sub-sector. It exposed the ILAC and CPHP personals to Lac sub-sector players in Ranchi and Kolkata. ILAC took it up as a non-CPHP case study to be analyzed and shared.

ILAC has shared its lessons learnt with a host of other players in the post harvest research sector during the capacity building workshop, where lessons of the Lac sub-sector has been shared widely.

End user uptake (max 100 words)

What do you know about the uptake of research outputs by end-users? Which end-users, how many and where? Give details and information sources

The end users of the research output are the tribal communities. It was a project which had a focussed approach and the tribal communities were integral part of the project. The project was a field based project and was implemented within the tribal communities. The project worked with 4 self Help groups. These 4 groups have a direct membership of 63 tribal families. As a result of the project, these families have directly adopted Mahua procurement-storage-sale and Lac pruning-inoculation-harvest activities. However these 4 SHGs are part of 196 SHGs, who are also indirectly adopting the research outputs by selling their Mahua to the 4 SHGs. The Mahua activity was limited to 4 SHGs, but the lac program is expanded to all the 196 SHGs. The evidence comes from the procurement of Mahua during the on-season and sale of Mahua during the off-season, which is being carried out by the SHGs.

Knowledge (max 100 words)

What do you know about the impact of the project on the stock of knowledge? What is the new knowledge? How significant is it? What is the evidence for this judgement?

The project has made a good impact on the stock of knowledge. The new knowledge is the following:

- ✓ For moisture proof storage of Mahua Polythene lined mud storage bins are as good as metal bins. However Polythene lined mud storage bins are much cheaper than the metal bins and hence much more acceptable to poor tribal communities than metal bins.

- ✓ There are a wide range of markets available for any produce; a simplistic classification can be (a) local markets, (b) domestic mass markets and (c) export

markets. Poor farmers find local markets are easy to manage, but local markets always offers low price and can absorb low volume. On the other hand export markets offer the best price, but poor farmers find extremely difficult to meet their quality standards. For the purposes of poor farmers, it is found best to target domestic mass markets; it is better than the local markets in terms of price realized and it is better than the export markets in terms of meeting quality standards.

This knowledge is quite significant for running a development project with poor. Source of this knowledge is the realization of the project.

Institutional (max 100 words)

What do you know about the impact on institutional capacity? What impact on which institutions and where? What change did it make to the organisations (more on intermediate organisations). Give details and information sources.

The project has made a good impact on the institutional capacity to handle development projects. The new knowledge in this front is the following:

- ✓ Acceptance levels are always higher with poor risk averse farmers when they are advised to improve on an existing crop than to introduce a new crop. Hence the focus of research should be much higher to see all possible ways of improving existing crops.

- ✓ Poor farmers sell their produce during the harvest season though the price is the lowest in the market. Farmers do this due to their poor economic condition and lack of cash to meet their emergency needs particularly during the agriculture harvest seasons. It is not enough to advice farmers to sell their produce during the off season to earn. Farmers need to be supported with working capital, for them to be able to store the produce till the off season.

- ✓ Lac is propagated by a tiny insect. The new born insects have some food in their body and can survive for 3 days without food. Hence inoculation of lac must be done within 3 days of harvesting brood lac. Due to this, the planning of lac inoculation including brood lac transport and distribution must be done with very high degree of details. Hence lac inoculation must always be done on a war footing to complete the entire operation in 3 days. Many agencies have failed to achieve high degree of success in inoculation mainly due to failure in this aspect.

This knowledge is quite significant for running a development project with poor. Source of this knowledge is the realization of the project.

Policy (max 100 words)

What do you know about any impact on policy, law or regulations? What impact and where? Give details and information sources

Nil

Poverty and livelihoods (max 100 words)

What do you know about any impact on poverty or poor people and livelihoods? What impact on how many people where? Give details and information sources.

The project has a very high impact on the livelihoods of poor tribal farmers of Majhgaon, Bhajia, Mahender and Bishanpura villages of Kundam block of Jabalpur. These poor farmers used to sell their Mahua during May-June months when the price of Mahua was lowest in the market. The project provided working capital to the Self Help Groups of these four villages, which is kept in their bank account and managed by the people themselves. The project also constructed polythene lined mud storage bins in the individual farmers' houses. Now whenever the farmers need cash, they sell their Mahua to their own groups, where it is stored in these improved bins. The groups sell the Mahua during March-April of the subsequent year realizing a higher price (3 times higher). The groups distribute the profit to the farmers after deducting some service charges, as agreed among the members.

Environment (max 100 words)

What do you know about any impact on the environment? What impact and where? Give details and information sources.

The project has a very good impact on the environment. Palas is known as the Flame of the forest. Palas tree is normally considered to be a useless tree and a tree which creates lot of nuisance in the fields as it tends to grow anywhere in the forest area. People normally cut this tree for fuel wood, amounting to massive deforestation. But with this tree being proved to be the best tree for lac cultivation, the farmers see the value of this tree. Now they are quite tempted to save palas tree for lac cultivation. This has stopped deforestation of palas tree and saving the forest.

Signature Date 31st March 2005

Core Partners (Dr. A.K. Singh), (Guru Naik), (Anurag Mishra)

Managing Partner (Dr. V.P. Chaturvedi)

ANNEXES

Annex-1: Stakeholder analysis

Annex-2: Gender analysis

Annex-3: Livelihood analysis

Annex-4: Environmental screening summary note

Annex-5: Stakeholder monitoring table

Annex-6: Project photographs

Annex-7: Original logframe

Annex-8: Revised logframe

Annex-9: Brief report of the M&E skill development workshop

Annex-10: Institutional history

Annex-1: Stakeholder analysis

Stage-1: Stakeholder interests and influence

Table 1a: Coalition members – interests and impact

Proposed coalition members	Key interests in the project	Potential impact of the project
MGSIRD	Will enhance training portfolio	Increase in goodwill
XIDAS Jabalpur	Learning about rural management	Increase in goodwill
Tarun Sanskar	Explore approaches which are more meticulous for the rural poor	Increase in goodwill
Villages/SHG	Financial benefits, exposed to deal with market forces and capable to manage available resources.	Better livelihoods

Table 1b: External stakeholders – influence and impact

External stakeholders	How can they influence the project?	Potential impact
Agr Engineering College	Opportunity to test and use and popularize their researched techniques	Increase in goodwill

Stage-2: Roles and relationships

Table 2a: Proposed roles of coalition members in the project

Stage of research process	Proposed coalition member	Proposed role(s) in project	Justification of role
Identification stage (CN stage)	MGSIRD	Coordination, Preparation of concept note	Have the facility, turn table between NGO/GO/CBO
	XIDAS	Sharing of information, reconnaissance Karoundi area	Experience and rapport with people in Karoundi area
	Tarun Sanskar	Sharing of information, reconnaissance Karoundi area	Experience and rapport with people in Kundam block
Design and development (PMF stage)	MGSIRD	Coordination, Preparation of PMF	Have the facility, turn table between NGO/GO/CBO
	XIDAS	Provide and share field information, market research, Preparation of PMF	Availability of professionals Availability of professionals and exposure to grassroots
	Tarun Sanskar	Provide and share field information, market research, preparation of PMF	Technical know-how
	Agl Engg. College	Information on existing technology in concerned theme	Grassroots' wisdom
	SHG representative	Sharing of community aspirations and concerns	
Implementation and monitoring	XIDAS	Community organization and field testing of the technologies in Karoundi area	Presence of field personnel
	Tarun Sanskar	Community organization and field testing of the technologies in Kundam area	Presence of field personnel
	Agl Engg. College	Scouting and adopt appropriate / required technology	Have expertise available with them
	SHG representative	Assure cooperation and support for adopting to new ways	Have trust of people
	MGSIRD	Coordination & reporting	Turn table role

Table 2b: External stakeholders and relationships with coalition

Stage of research process	**Degree of participation**		
	Inform	**Consult**	**Collaborate**
Identification (CN stage)			
Design and development (PMF stage)	Forest department	Excise	
Implementation and monitoring	Trader	CIAE, RRL, TFRI & SFRI	Zilla Panchayat, Trader & Excise
Evaluation			External agency / Person

Annex-2: Gender analysis

1. How does the research problem/opportunity that you have identified affect men and women differently? • This will help women more as majority of them are involved in collection of NTFP • Will provide excess in decision-making at the household level
2. How will your expected results impact differently on women and men? • This will help women more as majority of them are involved in collection of NTFP • Will provide excess in decision-making at the household level
3. What barriers exist to men's and women's involvement in project design, implementation and management decisions? No significant barriers all the stakeholders have women staff that shall involve in all the stages of the project

Annex-3: Livelihood analysis

1. Which interest group(s) is your work intended to benefit and where are they? Tribal community living below the poverty line in the rural areas, whose livelihood primarily depends on the collection and sale of minor forest produce.
2. In what way can they be defined as poor? State your source(s) • 12.13 lakh tribal families are below poverty line in Madhya Pradesh • Source: Government of Madhya Pradesh website
3. What livelihood problem of opportunity are they experiencing and how many people are affected? State your evidence. • Livelihood problems: Primitive agriculture, stress sale, low price, lack of storage facilities/techniques and inaccessibility to appropriate technology • Livelihood opportunities: availability of plenty of non timber forest produce • Source: The cornucopia of NTFP in MP & Chhatisgarh – survey conducted by XIDAS

4. What contribution will your work make to this, over the timeframe of the project?
 	
• The project will select one major NTFP and conduct research to find the following:
  • Capital requirement at group level
  • Low cost storage techniques
  • Appropriate packaging
  • Market linkages

5. What external factors need to be in place for impacts to be sustained and extended after the project has ended? The model developed by the project is adopted by Rural Development Department of the state government, NGOs working in the field of SHG and NTFP
6. What other initiatives (research or development) would your project complement / and value to? • Tribal development programme of the state Government and NGO programs
7. On what basis was the work that you propose identified? Experience of the stake holders working in the field for tribal development
8. Who stands to lose from your work, if it is adopted/ implemented on a large scale? Small traders at the village level

Annex-4: ENVIRONMENTAL SCREENING SUMMARY NOTE (ESSN)

1. Project Title: *Developing coalition approach to non timber forest produce for better livelihoods of tribal communities of Madhya Pradesh*

2. Project Cost: *£ 74990*
3. Duration: *2 year 3 months*
4. Country: *India*

5. What are the potential significant environmental impacts (both positive and negative) of the proposed research activities?:

There are no significant environmental impacts (both positive or negative) of the proposed research activities.

6. What are the potentially significant environmental impacts (both positive and negative) of widespread dissemination and application of research findings?:

Through this research, capacity building among the tribals and coalition organizations will be developed in such a manner that will help tribals to make use of non-timber forest produce resources in a more sustainable manner. This will help to maintain the resources in al long run. It is a long-term positive impact of the proposed research.

7. What follow-up action is required to minimise potentially significant negative Impacts?: *Not applicable*

- Who will be responsible for ensuring this action is taken?: *Not applicable*
- What form of monitoring/objective verification?: *Not applicable*

8. How can positive impacts be enhanced/ extended cost-effectively?

Forest department and CBOs will encourage and may become partners in the initiatives that would emerge through this research to deal with non-timber forest produce issues. Training and capacity building as part of the research output will help Panchayat Raj institution members, CBOs and NGOs.

- Who will be responsible for ensuring this action is taken?: *State Institute of Rural Development*

- What form of monitoring/ objective verification? *Information on the extent of project's positive impacts have been applied by the Panchayat Raj Institutions and NGOs could be made available at two levels:*
  (1) Information collated at SIRD from Panchayat Raj Institutions and
  (2) Information collated at M.P. Federation of Volutanty Agencies

This Note completed by (managing partner(s): Name: Dr. A.K.Singh
Institution: State Institute of Rural Development
Date: 15th November 2002

Endorsed/ modified by Programme Manager: …….

Date: ……

Annex-5: Stakeholder monitoring table

Group / stakeholder	**General role**	**Specific monitoring responsibility**
Steering Committee : - Dr A.K. Singh, SIRD - Mr. Guru Naik, Livelihood Solutions - Mr. Akhilesh Argal, TFRI - Dr. V.P. Chaturvedi, Tarun Sanskar	General progress. Monitoring contribution to project purpose.	Resolving differences
Dr A.K. Singh, SIRD	Managing Partner.	Liaison with NRI UK Liaison with state Govt. Lead on institutional baseline
Coalition Member - Dr. V.P. Chaturvedi, Tarun Sanskar	Project Implementation and monitoring	Community organization
Coalition Member - Mr. Akhilesh Argal, TFRI	Project Implementation and monitoring	Technology development
Coalition Member - Mr. Guru Naik, Livelihood Solutions	Project Implementation and monitoring	Market development Quarterly meetings to review progress and prepare reports
Farmer Group of Kundam	Primary target group. Participation in project field trials	Annual group monitoring of field trials.

Annex-6: Project photographs

Training of SHG members in lac inoculation

Training on placement of brood lac during inoculation

Procurement of brood lac by SHG members

Brood lac inoculation by SHG members

Annex-7: Original logframe

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Risks
Goal			
National and international crop-post harvest innovation systems respond more effectively to the needs of the poor.	*By the end of the project, new pro-poor institutional process lessons of the Jabalpur project contribute to the knowledge pool of DFID South Asia Crop Post Harvest program*	*Program reports*	*National and international affairs interfere with the execution of the research project.*
Purpose			
To learn from action research, the development processes required for increasing the economic benefit of poor tribal community through improved quality and better market linkages of non-timber forest produce by a coalition of diverse institutions.	*By the project end, Post harvest research scientists, NGOs and development agencies will have a greater knowledge of the process adopted to identification and development of technologies and marketing strategies for value addition of non-timber forest produces to improve economic condition of tribal communities.*	*Case study reports arising out of the project*	*Non timber forest produce does not remain a priority for tribal communities and development institutions*
Outputs			
1. Effective coalition: *A coalition of Rural development, Tribal development, Technology development and Market development institutions formed, strengthened and established to undertake the action research effectively.*	*1.1 By January 2003, the overall work plan of the research incorporating separate and joint roles and responsibilities of partner institutions and mechanisms of information sharing and coordination finalized.* *1.2 Starting from March 2003, quarterly review and planning meetings among all partners are held, experiences shared and differences resolved, if any.*	*1.1 Project MoUs* *1.2 Minutes of meetings* *1.3 Quarterly progress reports*	
2. Community organization: *Tribal community groups are established, trained and mobilized to actively participate in the research process, such that the action research identifies and addresses their problems and solutions meet their needs and capabilities effectively.*	*2.1 By February 2003, four Tribal community groups (SHGs) identified having poverty focus, gender focus, NTFP involvement and financial discipline.* *2.2 Starting from March 2003, selected SHGs are involved in all aspects of the research including problem identification, technology / market development, field-testing and providing feedback for improvement.*	*2.1 SHG selection report* *2.2 Quarterly progress reports*	
3. Problem identification: *Technical constraints in maintenance / improvement of quality and marketing constraints in realizing higher market price of*	*3.1 By March 2003, two denationalised non-timber forest produce having high economic impact on the tribal communities selected thru a*	*3.1 NTFP selection report* *3.2 Technical constraint report* *3.3 Marketing constraint report*	

the non-timber forest produce by the tribal communities identified.	*thorough livelihood analysis.* *3.2 By May 2003, technical constraints faced by tribal community in maintaining good quality of selected non-timber forest produce identified.* *3.3 By May 2003, marketing constraints faced by the tribal community in fetching maximum market price of the selected non-timber forest produces understood.*	*3.4 Quarterly progress reports*	
4. Technology development *Simple and affordable technologies to address the identified technical constraint developed, field tested and improved with the tribal communities such that the technologies meet their felt needs and are acceptable to them.*	*4.1 By July 2003, relevant literatures are reviewed and technical institutions contacted to learn more about the identified technical constraints and their probable solutions.* *4.2 By October 2003, prototype technologies to overcome the technology constraints developed, field tested with the self-help groups and feedback of the users collected.* *4.3 By February 2004, technologies are further improved based on user feedback and designs are finalized and ten equipments installed with the self-help groups.*	*4.1 Literature survey report (Technology)* *4.2 Technology development report* *4.3 Quarterly progress reports*	*1. Other technical institutes may not cooperate in providing required technical information*
5. Technology availability *Manufacturing capabilities for producing the new technologies in the local area developed, such that the technologies are available in the market commercially sustainable basis and yet affordable to the users.*	*5.1 By October 2003, five existing local micro enterprises are identified, who have the capability to manufacture and sell the technology equipments.* *5.2 By October 2004, at least two micro enterprises are trained to produce the technologies and provided exposure to the tribal community groups as a market for the technologies.*	*5.1 Quarterly progress reports*	
6. Market linkages: *Better and non-exploitative market linkages and marketing systems established to access higher value markets of non-timber forest produce.*	*6.1 By September 2003, relevant literatures are reviewed and relevant NGOs (involved in non-timber forest produce issues) contacted to learn more from their experiences.* *6.2 By May 2004, market prices, marketing costs and trading systems of selected non-timber forest produces in different markets across different seasons understood and alternate marketing arrangements worked out.*	*6.1 Literature survey report (marketing)* *6.2 Market survey report* *6.3 Quarterly progress reports*	*1. Wholesalers and marketers may feel threatened in providing right market information.*

7. Process documentation: *Institutional process, technology and market lessons are analysed and documented and Public / research / NGO sectors are made aware of these lessons.*	*6.3 By October 2004, SHGs are provided exposure and training for the alternate marketing systems and guided for test marketing under the new system.* *7.1 Starting from January 2003, on completion of every activity, activity lessons are analysed and documented.* *7.2 By December 2004, project lessons are shared with local NGOs, SHGs, Govt. agencies and Research agencies.*	*7.1 Activity reports* *7.2 Output reports* *7.3 Quarterly progress reports*	

Activities	**Inputs**		
1.1 Hold planning meeting at the starting of the project and finalize work plan, responsibilities and coordination mechanism. *1.2 Hold bi-monthly project coordination meetings to review, share experiences, resolve differences and discuss future activities.* *2.1 Study existing Self Help Groups and identify four for further research based on their a) tribal focus, b) poverty focus, c) gender focus, d) NTFP focus and e) financial discipline.* *2.2 Conduct regular capacity building and hand holding of the selected Self Help Groups so that they can be actively involved in the research process.* *3.1 Carry out participatory appraisal with the tribal community to identify one or two denationalised non-timber forest produces having substantial economic importance on tribal community.* *3.2 Carry out participatory appraisal with the self-help groups to identify key technological constraints faced by them in maintaining good quality of the selected non-timber forest produces, thus resulting in realization of low market price.* *3.3 Carry out participatory appraisal with the self-help groups to identify key marketing constraints of selected non-timber forest produces faced by them in accessing high value markets.* *4.1 Conduct secondary data analysis and institutional survey to assess the existing similar technologies and identify potential technologies to adapt.*			*1. Staff do not remain with the project or suitable replacement staff is not appointed* *2. Partners are not able and willing to participate in the project activities on an ongoing basis* *3. Major disagreement among the partners occur, completely disrupting the project activities*

4.2 Develop low cost prototype technologies that are affordable and replicable, field-test them with the selected self help groups and gather feedback from the users. *4.3 Further improve the prototype based on feedback (continue the process till finally approved by the users) and install with the self-help groups.*			
5.1 Survey the local fabrication industry (or appropriate for the type of technology identified) and short list five based on their interest and capability. *5.2 Train at least two fabricators to produce the technologies and provide them exposure to the tribal communities.*			
6.1 Conduct secondary data analysis and institutional survey to gain knowledge about marketing innovations done by other development agencies. *6.2 Conduct market survey along the market chain of the selected non-timber forest produce across the seasons to understand and work out different marketing options.* *6.3 Conduct exposure and training of the self-help group members to the new marketing options and guide them for test marketing.*			
7.1 Collect, analyze and document process undergone by the coalition upon completion of each activity and compile them for each output. *7.2 Share project lessons with other NGOs working for tribal upliftment with NTFP, Govt. departments working on tribal development and post harvest scientists eastern of Madhya Pradesh.*			

Annex-8: Revised logframe

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
Goal			
Crop-post harvest innovation systems respond more effectively to the needs of the poor.			
Purpose			
Partnership approaches adopted by research scientists, NGOs and development agencies to develop technologies and marketing strategies that support the livelihoods of tribal communities.	1. By 2005 the design of at least one new project proposals by project partners reflects partnership approaches to R&D. 2. By 2008 20 % more tribal communities in MP participate in the design and implementation of interventions on value addition of non-timber forest products 3. By 2008 livelihoods of tribal communities enhanced by 20% through value addition interventions.	Research proposal External reviews. Annual reports of implementing agencies. Monitoring and evaluation reports of implementing agencies. State level poverty statistics and consumption and income surveys	CPHP South Asia successfully promotes institutional lessons on post-harvest innovation synthesised from regional portfolio.
Outputs			
1. Diagnosis of existing technical and marketing systems for NTFPs important to poor tribal communities in MP undertaken.	1.1 By December 2003 significant constraints and opportunities prioritised for market interventions and value addition for at least 2 NTFPs relevant to the livelihoods of tribal communities.	1.1 Market system study report. 1.2 Minutes from meetings to discuss priorities. 1.3 CPHP annual poverty relevance review 1.4 Project monitoring reports	1. Non timber forest produce remain a priority for tribal communities and development agencies 2. Political will supports the promotion of partnership based approaches to NTFP R&D
2. Marketing strategies, including technologies where required are designed and validated.	2.1 By December 2004 at least one prototype output marketing mechanisms adaptively tested with local market actors and tribal communities in MP. 2.2 By December 2004 at least one technology for value addition / quality management identified and prototype supply systems pilot tested with tribal communities and local market actors.	2.1 Project quarterly and annual reports 2.2 Project monitoring reports 2.3 Field reports of partners on adaptive testing of prototypes.	
3. Strategies to promote community participation in NTFP interventions are tested and promoted.	3.1 By December 2004 at least 5 self help groups have used and evaluated approaches that foster group action. 3.2 By December 2004 at least one briefing note prepared on	3.1 Self help group self-evaluation. 3.2 Minuets of evaluation meetings 3.3 Briefing notes	

	the promotion of community participation through self help groups in NTFP interventions.		
4. Strategy for identifying, establishing and managing a coalition of partners, including the poor, to plan, and design an NTFP intervention are developed and promoted.	4.1 By December 2004 an institutional history of the project documented and synthesised through process documentation. 4.2 By December 2004 at least one briefing note on managing partnership-based R&D interventions in the context of NTFP developed. 4.3 By December 2004 Institutional findings presented at least at one workshop	4.1 Minuets from regular self-reflection and monitoring meeting of project partners 4.2 Process recording documents and final synthesis report. 4.3 Briefing note 4.4 Workshop proceeding	

Activities	Inputs		
1. Select and include partners including SHGs on an ongoing basis as needs arise. 2. Identify problems and opportunities with respect to NTFP and available resources with the tribal communities 3. Adapt, field test and finalize technology and marketing prototypes to address the identified problems and opportunities. 4. Train appropriate community leaders, technology providers and market actors to continue the activities beyond the project period. 5. Share with Research and Development community; documented project lessons on institutional, technology and market development processes.	Staff costs……£40,850 Overheads……£5,030 Capital equipment…….£4,000 Travel & subsistence..£18,010 Miscellaneous……£7,100 Total……£74,990		1. Other technical organizations will cooperate. 2. Stakeholders will manage preconceived threats to market agents about release of data. 3. Key staffs involved with the project will remain till the end of the project or their suitable replacements will be appointed. 4. Partners will be able and willing to participate in the project activities on an ongoing basis.

Annex-9: Brief Report of the M& E skill development workshop at Jabalpur 28th & 29th March 2003

CPHP South Asia has recently commissioned a research project "**Developing coalition approach to non timber forest produce for better livelihoods of tribal communities of Madhya Pradesh"** recently . MGSIRD the managing partner will work with three coalition partners i. e. ***Livelihood Solutions, Tarun Sanskar,*** and ***Tropical Forest Research Institute (TFRI),***

The objective of this workshop was

- To initiate the skill development process among the partners
- To develop a suitable M& E system from the initial phases of the project.

Workshop has been attended by four representatives of Tarun Sanskar two representatives of TFRI, a participant from Livelihood Solutions and MGSIRD was represented by four participants. The process of developing M& E framework has been evolved through the interactive sessions managed by CPHP South Asia regional coordinator Dr. Andy Hall & Dr. Archana Godbole. No external facilitator was involved in the deliberations. This in it self was a learning. Interactive discussions and field visit on the second day helped to take partners through to understand the monitoring & evaluation needs of the project and helped them to understand the need of process monitoring beyond conventional indicator based M& E systems as per the requirements of donors.

During the 1st session each partner organisation has provided details of their organisations work, expertises available and their role in the project. Since this group has already gone through phase of selecting SHGs for project work the deliberations to reach the understanding of process monitoring were more specific to the project.

This group felt the need of monitoring and evaluation for following

- To know the shared responsibilities
- Project process as a learning opportunity
- Use of available collective skills for successful implementation
- Means to reach the right message to poor people as well as wider policy audience
- Opportunity of Learning to work together
- Proper utilization of funds available

They look at monitoring and evaluation in their organisations as

- a tool to make necessary changes in the implementation and activities with enhanced understanding.
- Learning as important way of developing new approaches
- Process monitoring as opportunity to answer how questions
- What changes to be monitored in the complimentary fashion
- To evolve work plan for effective action research.
- Evaluation is phased activity to be carried out by external agency midterm or post project.

In the second session a detailed discussion on various research questions helped to define the process monitoring domains and their effective use during the story telling method. These

questions were based on how and further sub questions explaining the process; for reaching up to the micro level of intervention. This exercise has been carried out by using cards. Individuals wrote various questions on cards and later these questions/cards were sorted into domains. Various questions /categories are given in annex I .

Four domains useful for process monitoring were identified /evolved through this question session

Domain I : How is process becoming more pro poor ?

Domain II : How new capacities developed while working in coalition type of ways ?

Domain III : How are we learning to learn?

Domain IV: How we are making others aware (Including policy audience) ?

On second day a story telling method has been practised as an effective to tool for process monitoring. Guru Naik, Tarun Sanskar village workers and coordinator narrated the story and series of events went into selection of SHGs in the project area. Guru and Administrative office of Tarun Sanskar has earlier data on SHGS from Kundam district. They had developed a set of criteria to judge the effectiveness of SHGs to be involved for project purposes. Computer aided sorting helped to shortlist about 17 SHGs. Further sorting helped to define 7 SHGs. With this analysis when they approached the Tarun Sanskar Village level staff there was a completely different set of criteria and list of SHGs selected by them. Many deliberations meetings and actual visit to villages finally helped to reach the understanding and matching the final selection of SHGs by both the groups.

This story was long and elaborated; however it helped to define the process monitoring questions like

- How to judge /validate earlier findings/information /knowledge?
- How negotiations and consultative process is important in decision making?
- How knowledge and experience of field workers is used in decision making?
- How are the contributions of the partners tested?
- How new abilities of partners came in light?
- How it has helped to check capacities and attitudes of partners/ individuals involved?

This whole exercise was focused around the collective decision making process among partners and individuals within the partner organisations. As the project activities proceed further such periodic story telling sessions will focus on other process related issues and monitoring of the same.

Some observations:

In case of Jabalpur group all the discussion and process was based on the intense process of decision making happened in their project, therefore it was more specific for them to define the process monitoring domains. In case of IDEI group it was more abstract understanding as no specific process taken place in the project was discussed. It was realised that at times the facilitated process may create confusion. Similarly if we want coalitions and process monitoring to be continued after the project by partners; then it may not be feasible for them to hire a facilitator due to cost constraints. The understanding has to evolve by them based on their experiences and ways and means they prefer to adopt for monitoring and documentation of processes.

How is the process becoming more pro poor?

- Have we consulted poor people before designing an intervention?
- How poor people will make choices out of intervention suggested?
- How local people's capacities will be used to make the intervention more beneficial?
- How local people accept it?
- How were poor were consulted for product selection?
- How the process can help to enhance livelihoods of the poor?
- How we learnt about the problems of the poor?
- What methods used for knowing problems of the poor?
- How did we consult poor to design effective intervention?
- How process improving economic conditions of poor?
- How process is going to improve living standards?
- How the poor respond to the process?
- How the process is pro poor?
- How process will increase confidence of the poor?
- What would be parameters to judge/test process?
- How situation analysis /status study helped to design the intervention?
- How we will apply the process to empower the poor?
- How to analyse problems of poor from their perspective?
- How to involve local community in process monitoring and evaluation?
- How the process can become more favourable to poor tribals?

How new Capacities developed while working in coalition type of ways?

- How coalition helps in enhancing capacities?
- How the coalition partners coordinate with each other?
- How partners are involved in critical decision-making?
- How individual partner perceive the situation?
- How the process be workable o coalition party?
- How is process changing to include other's experiences?
- How the new capacities would be used in new coalitions?
- How transparency is achieved in decision making process?

- Does coalition realise the scope for more to begun?
- How coalition look at ways of doing?
- How we accept it?
- How the need be asked by the process?
- Could we achieved substantial to be known to?
- How to make process simple understandable and useful?
- How coalitions types of arrangements will help tribals?

How we are learning to learn?

- How learning helps in changing the awareness?
- How the process changes for learning?
- How can we learn through our failures?
- How process can assist to (learn about) people's wisdom and efforts?
- How we gear up to learn?
- How the partners are using project learning to modify the way new approaches are adopted?

How we are making others aware? (Incl.Policy)

- How can others be made aware about process?
- How is the process going to increase awareness?
- How we are extending learning to others?
- How the process will be replicable in other circumstances?
- How to create audience interested in learning?
- How we are going to disseminate the knowledge?
- What are the tools to disseminate the knowledge/ information?
- How the tools will be made apt to the comprehension level of the audience?
- How to implement the proposed programme through the community?
- Who's involved in dissemination and how?
- How to make awareness generation process acceptable?
- How awareness can be created among tribals?
- How specific activities based on skills and knowledge of various partners would be made more effective for awareness generation?

Annex-10: Institutional History

(By ILAC and Jabalpur team)

1. Introduction:

This study analyses and explains the new/modified ways of working that have taken place in a project coalition on non-timber forest produce (NTFP) innovations for better tribal livelihoods. The purpose of this study is to see 'how' these new ways of working emerged, and to document and analyze the learning that has come with or caused these new ways of working. The work of the coalition includes planning, implementing, monitoring and evaluating this NTFP innovations project.

Two distinguishing features of this project are (i) its focus on NTFP with a gathering/collecting mode of access to the 'forest' produce/commodity as opposed to the cultivating/harvesting mode that is seen in other 'agri-horticultural' post-harvest projects, and (ii) its coalition approach to understanding and addressing the livelihoods problems in the NTFP sub-sector, where the tribals have no control over the yield or quality of produce till it is collected and processed (again unlike agri-horticultural projects where post-harvest processing and marketing often dictate how the crop is cultivated/harvested etc.) The latter, the access to collecting and commercially selling the NTFP, is in itself is a matter of great political manipulations rendered more complex by several versions of environmentalism.[2]

This study is organized into the following sections:

In section 2 we explore why learning is important for innovation and development activities. The focus here is to understand how 'technology' or the tangible components of any innovation cluster gets all the attention and the credit, while the 'institutions' or the intangible processes or ways of working are often ignored or if acknowledged, never documented or analyzed. There seems to be a void when it comes to understanding how innovation systems learn to do the things it does. The objectives of this study to document and analyze the institutional learning that has taken place within a project coalition are developed in this context of knowledge gaps. Section 3 takes us to the project and the case of its evolution.

Section 4 presents the answers to the questions posed in section 2, and draws out the institutional learning that has taken place in this project. It uses the changes in the project logframe as recorded evidence of learning that has taken place in the project. The project revised its logframe and technical outputs after almost a year of work.

[2] Note the recent legal battles in India over eco-development and the ban or sanctions against commercial exploitation of NTFP. The varieties of environmentalism and their livelihood concerns/lack of it are captured in Guha and Alier (1999), Rangarajan, Prasad (2003) and the *Down to Earth* (2004) issue on eco-development.

Comparing this with the initial logframe reveals the evolution that has taken place in the project, and the lessons that have enabled this evolution.

2. Institutional learning within an innovation systems framework:

This study is prompted by two findings from recent empirical research on agricultural (mainly post-harvest) innovations (see Hall et al, 2004). The first is that innovations take place and evolve in contexts where an 'innovation system' is operating. This innovation system consists of a network of mutually dependent partners with complementary skills and needs/stakes in the innovation or related issues. And all the partners or actors in the system make/bring some innovations into the system and its functions. The second is that most of these successful innovations reveal a combination of technological innovations and institutional innovations – the latter essentially meaning new or modified ways of thinking or working as in new or modified organizations, relationships or linkages (that were earlier absent or not well appreciated or known), rules of conduct, work cultures, monitoring and evaluation practices. If our purpose is to understand how a particular project or intervention (better livelihoods/ poverty reduction, etc.) works, it is important to know both the technological innovations and the institutional innovations. And it is crucial to see what lessons have been learnt from the project/intervention, w.r.t. both the technological as well as institutional innovations.

An analysis of institutional learning and change goes beyond the conventional accounts of innovation that focus exclusively on the technological innovations. The main reason, as we said before is that any innovation involves both technological and institutional innovations, and therefore there is a need to know both (Lundvall, 1992; Hall and Yoganand, 2004, Uphoff et al, 1998; Biggs and Matsaert, 1999). Any economic activity that is built on the introduction of advanced technologies can be successful and sustainable only if accompanied by institutional change – organizational change and competence building among the employees and people involved (Lundvall, 2004). Let us, in the context of this case study of livelihood options in tribal villages, recall that 'advanced' is a relative term that is very context specific, and may include any 'new' technology or modifications thereof introduced in a context that has not seen/used it before. A second reason is that technological changes themselves are socially constructed –generated from and shaped by context specific historical, social and cultural factors/processes (Beijer). In the highly location specific and poverty relevant knowledge that is used in rural/agricultural development, it is important to know how the technological knowledge is socially constructed. We now know that even the (allegedly) pure sciences like physics and mathematics respond to and are shaped by historical, social and cultural forces, in their choice of research problem, organization of knowledge generation and linkages with partners, etc. (Raina and Habib, 2004). The third reason, going beyond the hedonistic interest in the shaping of knowledge and the practice of science and innovation, is the burning reality of poverty and the complex question of how successful innovations can be replicated or utilized in different contexts and regions. The current practice of 'technology transfer' involves identification of the technological change in the successful development contexts and transferring that technology to other contexts. This technological determinism and the development approach that focuses only on technological innovations has been widely criticized (Levy, Stewart, 1977; Roling and Wagemakers, 1998, Engel, 1995) . But little has been said or done about in transferring or adapting the institutional innovations to different problem contexts. For one many of these institutional innovations are not tangible and easy to identify.

Second, they are complex and messy and are therefore not easy to transfer as is the case with a technological innovation. Third and most important, is that institutional knowledge often does not reside with the ones who are involved in this technology transfer mission – it resides in the community or society or coalition of partners (all of them contributing to these new ways of doing/ organizing business) and often as tacit or intangible knowledge. It cannot be "transferred" – unless the powers that be decide to transfer entire innovating systems out of context. A less destructive way of bringing the fruits of knowledge – both technological and institutional – to other communities or regions/contexts, is to learn about and from these innovation systems – the communities and coalitions of partners involved, and see if we can learn about both technological and institutional changes made ***during and as a result of*** their working together.

2.a. Objectives, hypothesis and methods:

The objective of this study is to assess the extent of institutional learning that has been brought about by this project coalition working on NTFP innovations for better rural livelihoods.

The central hypothesis is that the acknowledgement, acceptance/ownership, uptake and sustainability of these institutional lessons are indicators of the sustainability of the innovation system. The presence or absence of institutional learning can be used as a litmus test to assess the viability and sustainability of an entire innovation system.

The specific questions posed in this study are:

Can the institutional innovations (outputs or processes) be identified against each technical innovation that is accomplished by the project coalition?

How did these institutional innovations facilitate or enable the technological innovations? What are the other causal relationships? Or, how did the project coalition arrive at each of these institutional innovations?

Has the project coalition noticed these institutional innovations/changes? If yes, what have they done to sustain these institutional changes? In other words, can the institutional lessons be documented, as lessons learnt by each one of the partners in the coalition, about changes in or in the behavior of (a) their partners, (b) themselves, and (c) their relationships with others – partners/non-partners- and their processes (of decision-making, implementing, etc..)

How were the lessons learnt? Can some specific pressures or processes be identified that helped the institutional lesson? (as evident in changed behavior, arrangements, relationships, rules or norms)

Does the project coalition own or accept these institutional changes? Or are they seen as temporary institutional arrangements to serve a specific (NTFP) project? In other words, what is it (some indicators or thumb rules) that will tell us whether these institutional changes and lessons are sustainable?

Does institutional learning take place even if actors resort to old institutional arrangements after a particular coalition project is completed?

What are the indicators that tell us whether institutional changes effected by this coalition will become 'habits' or rules/norms/conventions within/among these actors, or remain one-off events?

How can innovation policy sustain these institutional change processes? (As a prelude to that question, what are the aspects/elements of existing innovation policy (or R&D policy as the case is) that are challenged by these institutional changes?)

Sources of information and Methodology:

Sources of information used for this study are primarily discussions and notes (working notes and concept papers/reading material) and observations during field visits, meetings, and workshops/writeshops. Documents used from the Jabalpur project include: (a) the initial project document (2002), (b) the annual report (2003-2004), (c) the revised project document (2004), and (d) the worksheets used to select SHG partners in the project. Documents from CPHP include the recent books (Hall et al, 2003; 2004), policy briefs (Sulaiman and Hall, 2002, 2004), concept notes (Hall and Prasad, 2004; ILAC-TIDE, 2004). This study of institutional outputs in the Jabalpur coalition by the ILAC coalition is a mix of *emic* and *etic* perspectives. ILAC being a part of the CPHP portfolio of projects, and having a common partner in both ILAC and the Jabalpur coalition does enable an internal/*emic* perspective and analysis. Whereas, the specific social sciences skills and the interviews with the participants in this coalition do give us an outsider or *etic* perspective, we must recall that even these interviews or group discussions recollecting experiences/processes of decision-making were facilitated by the *emical* considerations and understandings between different CPHP projects.

A crucial question in this study is about the methods and tools that are used to prove that learning has or has not taken place within this coalition. This methodological question itself evolved from the PMF stage of these CPHP projects (Oct 2002) through the workshops conducted at individual project locations (August- Sept 2003) and the write-shop on institutional outputs held at ICRISAT (March 2004).

At the PMF stage, the portfolio of CPHP projects who met in ICRISAT to work on their project details, thought through crucial technical and institutional outputs. While each one had their own specific technical outputs, the institutional outputs came up as more generic and germane – shaping the way the project was formulated and designed to work. The institutional outputs or processes that each project proposed to deliver were documentation and analysis of (a) the structure of the projects – especially the partner selection processes and the ways of establishing crucial linkages among partners/non-partner organizations involved in the project, (b) the governance or management of the project – especially the transparency and shared ownership of activities, the leadership process (ability to represent the others in the team), the credibility (legitimacy conferred by the partners and other members in the project cluster), and ability to recognize opportunities/avert threats.

At the workshops conducted at each project site, the CPHP team helped the projects develop their own process documentation processes and responsibilities. This was an important facilitation exercise, and helped the individual projects think about how technical outputs were helped or mediated by the processes or ways of working in the project. For some it was the first time they had considered importance of documenting these processes because what they had done intuitively, and re-worked /adapted to other projects/contexts could now be documented and analysed properly (personal communication – Orissa team). But there still was a lot of confusion about how the analyses of processes/ processual changes could be done.

This study of institutional learning and change uses the case study method to analyse and explain process innovations in one action research project. We specifically use the process tracing in case study method, where we will follow the leads given to us to understand how certain decisions and processes have evolved and changed during the project duration (Bennett and George, 1997).

The next section here gives a brief account of the project, its objectives and context.

3. Evolution of the Jabalpur NTFP coalition

Here we map the coalition and its evolution. Some specific points about selection/choice of partners in the coalition and reasons thereof are highlighted. The section identifies and analyses the institutional outputs that accompany each technological output of the project (See Table 1). In our attempt to answer the above questions- objectives- (sticking to the same order as much as possible) we explore the processes/institutional changes that led to each of these institutional outputs. This following section also explores whether the project coalition has learnt the institutional lessons from this project, and how far these lessons are evident in their institutional and organizational arrangements, as part of the coalition and in their larger individual/organizational contexts.

3.a. Introduction to the project:

(a) the project:

This project titled "Developing a coalition approach to non-timber forest produce for better livelihoods of tribal communities of Madhya Pradesh," started working in April 2003. It ends in December 2004. It is located in one of the poorest districts of the State, i.e., Jabalpur, and focuses on Kundam block in the district, a predominantly tribal area.

(b) its context:

Technologically and institutionally, this project is located in a context where there are poor tribal populations eking out a living from the collection and marketing of NTFP. While the processing options do exist, they are used rarely for want of both technological and institutional support/facilities. Previous attempts at bringing processing technologies to these tribal communities have often left them with an overload of technological options with little or no change in the institutional arrangements that can get them access to these technologies (and their locally suitable adaptations), finance and other infrastructural facilities necessary to make the technologies work , the scale (volume) of produce needed for operating, the mutual trust and norms required for collectively acquiring or sharing any of these technologies or market processes (like bargaining with the local collection agent/ middleman for a better price, storage facilities to wait for the lean season sales to begin), etc. (Bhattacharya and Joshi, 2002; Bhattacharya and Hayat, 2003; Bhattacharya, Joshi and Hayat, 2003). The context is one where there is an obvious lack of technological and institutional arrangements that go hand-in-hand, one enabling the other, and ensuring sustainable tribal livelihoods.

(c) its purpose:

This project proposes to understand the local systems of produce collection, processing and marketing, so as to bring both the technological and institutional arrangements that will ensure better livelihood options for these tribal villages. The project purpose (as stated in the project document) is "to learn from action research, the development processes required for increasing the economic benefit of poor tribal community through improved quality and better market linkages of NTFP by a coalition of diverse institutions." In this case analysis of institutional learning and change, we will replace the term institutions here with 'actors and organizations.' This is to maintain our distinction of "ways of working" (institutions) from the "actors who are engaged in the work" (organizations).

(d) its partners:

This project coalition consists of five key partners, the tribal households represented by the women's SHGs in the tribal villages, the Mahatma Gandhi State Institute of Rural Development (MGSIRD hereafter), the NGO Tarun Sanskar, the Tropical Forest Research Institute (TFRI hereafter), and Livelihood Solutions Pvt. Ltd. While the four key partners were part of the coalition right from the project formulation stage, the tribal SHGs come into the project scenario at a later stage when Tarun Sanskar (TS hereafter) and Livelihood Solutions (LS hereafter) selected them through a screening process, following a study of existing SHGs in the block. Thus selected by these two partners for their (a) tribal focus, (b) poverty focus, (c) gender focus, and (d) financial discipline, the tribal women's SHGs were the hand picked partner in this coalition. It is important to mention this here, compared to the voluntary and carefully considered self-assessment that each of the partners carried out before they became partners in this coalition. What is noteworthy in the case analysis that follows, is how this partner, the women's SHGs, transformed the entire coalition, demanding new and more inputs and rethinking from these four initial partners in the coalition.

As they exist and function, the four core members of this coalition have the following mandates:

MGSIRD – is an autonomous institute to analyze, design and cater to all emerging training needs of Rural Development department as well as the elected representatives of panchayat raj. Its mandate is to train, conduct evaluations and monitoring of on going projects and schemes, do research in concerned areas and feed analytical reports beck to the Department. The Institute sees itself as "an academic arm of the department, fulfilling role of a think tank."

The stated mission is "developing the knowledge, skills and attitudes of officials, functionaries and representatives involved in rural development so as to introduce them to the newest concepts, techniques and information to enable them to act as catalysts for qualitative development. Identifying possibilities and exploring potentials for integrated development through research and study of ongoing rural development programmes and schemes to ensure the harnessing of resources towards the achievement of development's goal."

TFRI –is an institute manned by officers of the Indian Forest Service (IFS). It is under the Indian Council of Forestry Research and Education, and was founded as an institute

only in 1988 though the field station in Jabalpur did exist as a unit under the Forest Research Institute in Dehradun. It has the mandate to conduct research on forestry in the States of M.P., Maharashtra, Chattisgarh, Jharkhand, and Orissa, covering much of the hills of Gondwana and the Vindhaya and Satpura ranges. The mandate by definition, is scientific and technological – and the research activities are grouped according to the major technological/ scientific concerns addressed. [3]

Tarun Sanskar – is an NGO committed to tribal development in Jabalpur and Mandla districts of M.P., working in the area for over two decades It holds a development vision, where the 'rejuvenation of a village community is based on the principles of self-sufficiency, equity and distributive justice and well principled governance.' TS has vast field experience and good social networks in the tribal areas, due largely to its programmes. These include community organization (including establishment of SHGs), sustainable livelihoods (including NTFPs), gender empowerment, integrated environment management, youth voluntary projects, community health and education, rural markets and retailing, biofertilizers, and trainings offered for several rural/tribal development functionaries of the panchayats and other NGOs.

Livelihood Solutions – is a relatively new, private development consultancy firm, with expertise in the promotion and marketing of rural products. Its mission is to identify and market 'powerful' products that can sustain rural livelihoods and ecosystems and cater to market demands. Personnel in LS are equipped with long years of experience in diverse rural/tribal regions and livelihood problems.

This partner has gone through major organizational changes, with changes in organizational structure and internal operations. Since July 2004, it is called Livelihood Services, and has become an individual consultancy firm.

3.b. An overview of the project and evolution of its institutional outputs:

The project evolved from a visit made by the Coordinator and Systems Manager of CPHP South Asia to Jabalpur in 2002. The visit was promoted by suggestions from Guru

[3] The research activities of the Institute have been grouped under twelve divisions.

1. Silviculture Division
2. Agroforestry Division
3. Genetics and Plant Propagation Division
4. Forest Resources and Economics Division
5. Forest Pathology Division
6. Forest Entomology Division
7. Biodiversity and Sustainable Management Division
8. Forest Ecology and Rehabilitation Division
9. Non-wood Forest Produce Division
10. Chemistry of Forest Produce Division
11. Forest Botany Division
12. Computer Application and Instrumentation Division

Naik (Livelihood Solutions), whose previous experience with the tomato box innovation system had been documented and analyzed by the CPHP research team. The specific suggestion made was that the NTFP based tribal livelihoods presented a case of post harvest disorganization in the forestry sector. The visit and meetings with MGSIRD, TS, and LS revealed that the NTFP based livelihoods were marked by poor and dated technologies, seasonal distress sale of collected produce, poor infrastructure (storage, transport, etc.), exploitation and vicious circles of poverty for the tribal people, some good organizations like the XIDAS that were trying to help these tribal people and their access to and control over NTFP based incomes, and some excellent professional expertise vested with selected forestry and agricultural research organizations. The CPHP team identified the need for and scope to build a coalition among these individual actors, and the immense potential of such and coalition to contribute to CPHPs own agenda of strengthening the poverty focus and delivery mechanisms of post harvest projects.

The next meeting, a month after the CPHP SA visit, among the potential partners was held in MGSIRD where XIDAS, TS and LS decided that they could develop a project proposal together. TFRI, SFRI, and JNKVV were potential partners along with the CBOs, which had not yet been identified. Following submission of a project concept note – the tentative project team went to the PMF workshop (October 2002) with a rough draft of the project proposal, and developed its project memorandum. It committed to seven major technical outputs as the deliverables in this action research project (this included the institutional output – of documenting and analyzing its own processes or ways of working.) The project team finally chose its coalition members and when the project was sanctioned started work in January 2003.

The immediate discussions were around selecting the appropriate CBOs to partner with the team and to identify the best NTFP for intervention by this coalition. It was the decision to focus on SHGs (given the local ownership, gender implications, and control over livelihoods) as the right kind of community partner that helped the choice of coalition partners (between XIDAS and TS). The SHGs were selected from among a list of SHGs that had been developed with involvement of the TS field staff. The shortlisting done by LS (spread sheet) went from over 200 SHGs to 120, to 35, with whom both TS and LS had detailed discussions. Then there was a shortlist of 19 SHGs, and after a meeting among the coalition members and further analysis by LS, the number came down to 8; finally a group of 4 SHGs (in were selected as partners in the coalition.

In the meanwhile the project coalition was searching for and interacting with several potential options for the right NTFP intervention to be made. Mahua was a natural first choice – it could interact effectively with several points in the livelihoods system of the tribal households. The coalition discussed and erserached options such as extraction of organic colour from Palash flowers, Teju flower colour, Baibarin laxatives, etc. and also lac. All these were rejected in favour of lac, despite a significant case of failure of lac in the area.

Mahua and lac – specific post-harvest interventions.

The case of lac as a post-harvest intervention is different from that of mahua, where access to or control over the produce begins only at the point of collection of the flowers. Lac, is handled by the project through the entire process of identifying trees to inoculating-cultivating-harvesting-processing and marketing. Thus the lac operations involve a wider range of technical and socio-economic skills.

In mahua the technical interventions as envisaged by the coalition had to begin with clean collection practices, dust free drying, safe and moisture free storage, resources to tide over lean season without resorting to distress sale of mahua. The last – the market practices to enable a better and more sustainable income from mahua is the most visible innovation in the case of mahua. The SHGs rejected all the suggestions for clean collection of mahua because the price difference between clean mahua (collected on muslin spread under the tree, and dried dust free) and mahua with a bit of dust and dirt was hardly worth the mention. The SHGs argue that unless further technological improvements or value addition is done, there is no point in clean collection of mahua. Second, dust free drying is again important if mahua kishmish making or other value added products – like the high technology drying (the reference here is to the powerful product – the osmotic dehydration of mahua flowers), are possible. But for that, the SHGs claim they need better infrastructure, more resources, and better trade contacts. After assessing different ways of traditional storage, the coalition recommended that storage in these traditional structures in individual households could be reinforced by lining the storage compartment with polythene lining and packing up the top (as is traditionally done) with the mud packs. In April this year, no polythene sheets could be supplied to the SHGs – so that moisture free lining was not done for the crop collected and dried this year. The community storage infrastructure identified as an important intervention that the project could make has been grounded for want of certain intra-coalition conviction (that the community storage facility/warehouse is the best option), decision timing (by the time the ground work was done for these structures, the villagers had other things like mahua collection/ wheat harvest to attend to), and resource mobilization (TFRI which is responsible for the technical investments did not release the funds in time due to internal rules or norms). The SHGs also sent their women (all – about 40 of them) to training at the MGSIRD and a few active members for training at the Chindwara training centre. The provision of working capital and the market management interventions using this capital have gone on, the SHGs gaining strength from these interventions, overcoming their dependence of the local trader, and being able to dictate the price (despite a false fall in prices created by the local traders to discourage the SHGs from their scale advantages and institutionally supported (banks and NGOs like TS) market practices. (The corresponding institutional outputs are discussed later and presented in Table 1)

The earlier failure (of an attempt by DRDA in Jabalpur to introduce lac) taught these actors (TFRI, TS, and LS) important lessons about (1) the intricate linkage between lac cultivation technology and the processes that could facilitate these technologies, (2) timely harvesting and quality of brood lac – which meant that skills for harvesting and transporting the brood in time were to be ensured or a reliable supplier with these skills brought into the picture, (3) safe and timely inoculation which meant that pest retaining nets/bags had to be procured, from which only the lac insect larvae would escape leaving the pests behind in the bag – thus giving a head start for the larvae to establish themselves on the tender shoots; (4) ensure that the tender shoots are ready – or pruning of the palash trees well before the inoculation is done- helping the SHGs do the pruning and identification of the trees pruned, (5) arrange finances for the brood lac, transport costs, technical training (enabled through and conducted by the DRDA officer Mr. Moni, whose interventions had made lac a success in Shahdol, etc. An important innovation that can come in with lac is inoculation on perennial *arhar* (pigeon pea) trees to substitute for palash trees. Experiments in TFRI and other lac research institutes have revealed that these perennial arhar trees are a good host for lac insects and also offer a

good crop for the livelihoods needs of the tribal households. TFRI has arranged for procurement of these perennial arhar seeds from Aurangabad and Bilaspur – where the crop has established well.

The coalition, in October 2003 did the first pruning and inoculation of lac in these villages – it had to arrange for the supply of brood lac from the Shahdol group (through Mr. Moni) who had conducted a technical training here in Kundam block, with the involvement of TFRI. Since then a small harvest and another round of pruning and inoculation has occurred in April-June 2004. The field visit in July revealed clear establishment of lac colonies on all the palash trees inoculated. The role of TFRI in this successful introduction of lac here goes beyond their technical expertise. TFRI researchers and staff went through a long period of hand holding and regular interactions enabling pruning, harvest, brood lac inoculation, etc.

Institutional changes associated with the mahua and lac interventions:

Visible institutional changes took place initially at the PMF and coalition formation phase. The next set of institutional changes came about with the identification activities –mahua and lac, and inclusion of the SHGs in the coalition.

Though work allocation among the coalition members was discussed earlier, the arrival of the SHGs added a new dimension. The tribal women's SHGs did not know any of these coalition members. It was clear that each one had to introduce themselves and their roles in the project to these SHGs, if the SHGs were to be equal non-hierarchical partners in the coalition. Interviews in July 2004 revealed how the project coalition faced this task of introducing their skills/specializations to the SHGs in the light of the needs and livelihood problems discussed by the SHGs. Each one had to re-configure and re-orient their specializations to express how they could interact with the SHGs in specific post-harvest NTFP interventions, improving the livelihood options for the villages. The MGSIRD for instance, had to present itself as a mentor, a figure that was culturally acceptable, facilitating the working of the coalition members, besides conducting its own training programmes for these SHG women. For the organization, training illiterate tribal women unfamiliar with urban facilities and practices demanded some significant changes in teaching methods – there were role plays It made a radical change in its own operations, from training officers/development workers to training illiterate tribal women – for whom even travel from their villages to MGSIRD was their first trip to Jabalpur. The cultural distance traversed by both the SHG members and MGSIRD staff, was far greater than the 40-60 kilometers of road.

TFRI had to step down (a term that is increasingly questioned by the coalition) from its research arena to explain how it had the skills to help the SHG members prune palash trees, inoculate lac, and even number the trees – an input for record keeping and ownership that the SHG needed (which would not have in the conventional scheme of events been part of the TFRI mandate). TFRI deployed a forest officer (a lady) and her team to work with the SHG women on lac cultivation!

Another change in the project coalition was related to deeper issues of responsibilities and decisions made. (See Box) When the SHGs were given their working capital, Rs.75,000/- TS had the SHGs enter into a bond with them – as a condition to withdraw money from their accounts. This was a rule that LS had some differences with- its demand was that TS operate on trust between itself and the SHGs, instead of through a contract or bond. But the bank demanded it as a measure of good practice, and also accountability (to have a responsible NGO vouch that the withdrawal was put to good

use) that TS was bound to facilitate. Thus every demand the SHG has for working capital allocation had to be given to TS as a proposal. This is then discussed among both the SHG members and TS, and when both sign the demand papers, the papers are given to the bank officer. This amount is then released by the bank. Each SHG has been given a credit worthiness of only Rs. 5,000/- though the amount has been given to them as working capital. So the SHGs do have a valid complaint about the timely release of funds – in this case 'our own funds' they remind us. In Mehdan for instance the SHG could withdraw ony Rs. 15,000, though they needed more working capital to procure mahua from other households and villages (because of all these procedural delays). This working capital will be returned to the account by December-Jan 2005, when the mahua stocked in April-May will be sold off completely, and profit allocated among SHG members (after deducting the amounts borrowed from SHG funds by the members during the lean season).

The SHGs having been through the empowerment training in MGSIRD are now very articulate and have come up with a detailed plan for local trade in post-harvest produce, that they can operate on their own, without dependence on any shopkeepers, middlemen, or petty traders in the area. These women have now mastered issues of scale and are articulate about the need for better management skills and better community facilities (the community storage structure to begin with) to exploit scope in post-harvest operations through value-addition, timely sale, identifying the right buyers, etc. They have good records of meetings held, debates about issues, especially any conflict or difference of opinion expressed and discussed. Their demands for better management practices have led TS and LS to reconsider their strategies about capacity building at the local SHG level – to include more exposure visits to other successful SHGs handling NTFP marketing, enable effective linkages or some sort of federating, bringing and sustaining expertise like TFRI for continuous hand holding till the SHGs master the techniques and institutional requirements (for lac and also for other NTFP), to introduce some more interactive learning sessions and discussions in the next training at MGSIRD, train some of these SHG office bearers in public speech and articulation of long term sustainability questions.

Differences in work culture were apparent – especially among partners like TS and TFRI (where administrative permission was required for any major allocation within the project) when the decision was to be made about constructing community storage structures. These storage structures were a demand made by the SHGs, and other non-members in the village, where lack of proper storage infrastructure was a major livelihood constraint. They wanted these community storage facilities to be used for Mahua, and for several other NTFP items that the tribal SHGs could collect, process, store and market to the right customers and at the right time/season to fetch a good price. These structures, they argued could also provide space necessary for SHG activities, including *mahua kishmish* making or other processing activities for which they had been trained by the MP Vigyan Sabha in Chindwara (sponsored and facilitated by the project coalition – TS and LS in particular).

Box:
Allocations and accountabilities:

The initial allocation of work and financial responsibilities were as follows:
MGSIRD – as managing partner would retain the project management funds and disburse the funds earmarked for community work to TS, for technical support to TFRI and for market/product development to LS. But after the field work started in the tribal villages, with the participation of the women's SHGs, there was a change in roles and accountabilities.
The TS field staff who had earlier (before the project) worked on other livelihood concerns, health projects etc, with these villages now had to define their role as building the community participation in the project- which included articulation of NTFP related problems, ensuring that the SHGs function well, are managed well, and continue to trust and collaborate with this project coalition. . All technical problems were to be addressed by TFRI (designated to provide the technology components of the project). But these neat compartments of 'community based/social work' to be done by TS and 'technological work' to be done by TFRI broke down when it was clear that technological solutions, such as a bin-lining, construction of community storage bins, etc would not be possible without TFRI working with the community and without TS and LS getting involved in enabling the storage structures – the land, facilities, inter-household cooperation, legal issues, etc. Once lac was identified as the ideal NTFP that could be promoted in these villages, TFRI's scientists (forest officers from the IFS) set out on intensive field visits, helping and training the SHG members with numbering of trees (which according to TFRI was not their job in the erstwhile compartmentalized role of technology supply), pruning operations, and inoculation. Later TFRI expertise was also employed in identifying best pest management practices, sources of the pest free inoculation nets (including where to procure it from),
LS which had been assigned the product development and marketing role, soon found itself discussing and participating in several other components of this innovation chain, some which had little to do with marketing. Once the SHGs were given their initial support of working capital (Rs. 75,000/- per SHG) – routed through TS, LS and TS helped develop proper recording of minutes at meetings (because decisions to buy Mahua from neighboring villages, decisions to store it, allocate each member's share of sale proceeds etc. depended on transparent recording of decisions made at each meeting of the SHG), and with the field staff led the discussions and prepared the legal ground (in one case getting land allocated by the Sarpanch), contracted masons, found necessary labour, etc. for construction of community storage structures. But TFRI needed internal administrative clearance for expenses above a certain limit, and that delayed the final decision about construction of community storage structures.
The debates and consequent decisions within the coalition reveal how financial allocation among partners, without considering the internal rules/norms of allocation within each organization, was an important issue that affected the decisions and actions by the coalition.

Equal non-hierarchical participation of these SHGs made the coalition confront some of their internal equations; which they had assumed were perfectly compartmentalized into competence based functions/responsibilities. The coalition learnt that the technological decisions and the institutional decisions went hand in hand. These systems relationships translated from field realities changed the way the coalition perceived and allocated responsibilities.(See Box)

Here it is worth noting that while TS, MGSIRD and TFRI, along with the SHGs agreed that community storage might be a good idea, LS was always emphasizing that improving individual household storage structures would be a good idea for reasons for intra-community accountability and safe handling of the produce by each individual—what if there was a decision-making problem and the produce cannot be sold at the right price/right time? Individual household storage minimized risk and community level uncertainties - an issue that was important given that women would collect process and store the NTFP commodities and the men might want access to it along with socially distressing habits like increasing alcoholism etc.

What is evident here is the importance of choice of partners - none of the partners had any complaints about changes in roles and responsibilities. This was the case even in the face of critical delays in funding the community storage structures by TFRI, because of internal norms/rules of functioning prevalent within the organization. The delay was critical because *mahua* collection period is about 20-25 days in March –April. And the construction of storage structures cannot be done when people are busy collecting the flowers. The timing of construction activities must coincide with the lean cropping season – say late winter, when there is some water available too for construction- and before mahua collection and the crop(wheat) harvest that follows soon after.

4. Institutional lessons learnt –

The major institutional lesson learnt within this coalition is that its own ways of working is an important output in itself. This lesson was facilitated by the CPHP write-shop in March 2004, and is evident in the revision of the project memorandum by the coalition. This was done when it submitted its annual report for April 2003-March 2004. The coalition realized that in committing its technical outputs, the main issue was that the project unnecessarily compartmentalized activities, responsibilities and deliverable outputs. If these compartments did not exist in the way they worked, then why should these compartments exist on paper? So the new revised PM contains a different set of technical outputs or deliverables. We use this annual report 2004, the revised logframe in the project document and the post-PMF stage project document as points marking the evolution of the project. Lessons learnt, as we have argued in section 2 above are evident in changes – these documents give us evidence of changes, and interviews reveal how the project coalition learnt lessons and changed its technical outputs, ways of achieving these outputs, rules or allocations of work, etc. Drawing from the previous section we explore the decisions and discussions that led to the revision of the logframe. These are summarized in Table 2 below. What this Table 2 does not reveal however, are the key insights that led to revision of these outputs/logframe. Some of these gleaned from the interviews and field visits are:

Post-harvest technology is perhaps a misnomer- it takes away the attention from other factors that are crucial to post-harvest processes for NTFP based livelihoods. Though technology development, access, etc. are given importance, real livelihood problems are not resolved by technology alone

1. Forestry science and technology therefore is only one among a number of tasks or inputs needed to address real NTFP based livelihoods
2. The production and use of knowledge of social and economic significance demands a better understanding of several complex processes and local contexts – a willingness to learn from different sources and angles.
3. This can be accomplished only if there are many players from the public, private, civil society, research, marketing and other sectors who are willing to get together and address the livelihoods problem. In this case there are instances when high tech solutions or high value products that may have had a good commercial market were not taken up because the pro-poor focus demanded that the tribal households should have control over and a fair share of the value added product price. These angles would have been ignored if only one actor (S&T organization or commercial agency) had taken up the NTFP technology intervention.
4. Science and technology, community organizations, NGOs, market agents, and others must all work together and partake of each others compartments of work – in fact, as the work evolves, there will be no compartments of work left that is exclusive to each actor.
5. This is the partnership development process where knowledge and experiences about production contexts, market conditions, technologies, current and probable constraints/ conflicts/opportunities, etc are shared and evolved together. There is sharing of pains and gains. (There are lessons here for evaluation of S&T – how can incentive systems be designed?)
6. Therefore it is important to understand how these processes (of sharing knowledge and experiences, of changing work allocation, funding arrangements, making new or modified decisions etc.) are enabled. Because if these processes are enabled then half the problem is solved.

The project seems to have implicitly learnt these lessons.

Final institutional outputs -- Some of the main lessons are listed below in Table 3, highlighting the key institutional lesson that has been learnt within the coalition. But the lack of process documentation and internal checks that can reveal whether there are lessons learnt is also evident from the fact that the coalition seems to have moved from one phase to another, from one problem to the next with the same trail and error method that each of them (especially LS and TS) used to do in earlier projects. LS and TS are conscious of the role of institutional lessons and the scope for applying these lessons in future projects. MGSIRD being a training organization with fixed training mandates and curricula and TFRI being the research institute with no demand for recording processes and changes therein, have not considered why process documentation and institutional lessons learnt are crucial to them too. It is also clear that had the coalition made an attempt to achieve the technical outputs – say, test or validate some of its process insights (say in community organization or coalition building) then the achievement of the technical outputs would have enabled the coalition to see its own institutional lessons.

References:

Bennett, Andrew and George, Alexander L. (1997) (mimeo) "Process tracing in case study research," Paper presented at the MacArthur Foundation Workshop on Case Study Methods, Belfer Center for Science and International Affairs (BCSIA), Harvard University, October, 17-19, 1997.

Bhattacharya, Prodyut, Bharati Joshi and Seyed Faiz Hayat (2003) "Research Note: An Improved Method of Tapping Gum from Kullu Sterculia urens, Forests, Trees and Livelihoods, Vol. 13( ):187-196.

Bhattacharya, Prodyut, and Bharati Joshi (2002) "Bridging the Knowledge Divide: Academic Institutes's Role in Promoting Community Forestry in India Through Multi-Stakeholder Collaboration," in Barros, Santiago (ed)., Proceedings of the IUFRO Forestry Extension Conference – Collaboration and Partnership in Forestry, Valdivia –Chile, November 11-17 2002: IUFRO and INFOR: Chile.pp.130-148.

Bhattacharya, Prodyut Seyed Faiz Hayat (2003) "Issues in Sustainable Management of NTFPs for Livelihood Generation of Tribals: A Case from Sheopur District of Madhya Pradesh, India," in Proceedings of National Workshop on Non-Wood Forest Products: New Mechanisms and Strategies, Organized by MoEF, Govt. of India and M.P. State Forest Produce Cooperative Fedearation Ltd. Bhopal. 29-30th May 2003, Vigyan Bhavan, New Delhi, pp. 37-47.

Horton et al (2003) Evaluating Capacity Development – Experiences from Research and Development Organizations around the World ISNAR, IDRC, CTA. ISNAR: the Hague, Netherlands.

Lundvall, Bengt-Ake (2004??) "Why the New Economy is a Learning Economy" Druid Working Paper No. 04-01, Danish Research Unit for Industrial Dynamics. Aalborg University. Druid: Aalborg.

Norgaard, Richard B. (2004) "Learning and knowing collectively," Ecological Economics, Vol. 49(2): 231-241.

Roling,N. and Wagemakers, Annemarie E. (1998) "A new practice: facilitating sustainable agriculture," in Roling and Wagemakers (ed.s) Facilitating Sustainable Agricuture.Cambridge University Press: Cambridge. Pp.3-22.

Table 1: Institutional outputs against each technical output in the (unrevised) project logframe

Sl. No.	Technical output (as per the logframe Jan 2003–May 2003)	Institutional outputs – presented/ discussed at the CPHP workshop in ICRISAT, March 2004.
1.	Effective coalition	A coalition comprising four partners (MGSIRD, TS, TFRI, and LS) was identified and established. The main process to identify partners was to check for inbuilt competencies of the partners, to see how the ground realities of the project fitted with these capabilities, and to check whether the organization had a credible presence in the area (area includes both Jabalpur, as well as tribal welfare and NTFP). The coalition built the team by assigning each one specific roles and responsibilities. Selection of Managing Partner was based on the leadership role that MGSIRD and its Director (the individual partner representing MGSIRD) could play in the coalition, functioning as an energizer for the coalition efforts.
2	Community Organization	The coalition decided that selection of SHGs had to be done with caution – select SHGs showing a clear evidence of growing for a purpose, which is here the improvement of livelihoods through post-harvest NTFP innovations. Some criteria were used for selection of four SHGs (listed in the text) But beside the criteria that helped narrowing down, the entire coalition visited and discussed with a group of about 20 SHGs – information sought about interactions with banks, markets, local traders, enthusiasm, previous work with TS projects, availability of local support for documentation (including writing minutes of meetings), etc. helped focus on four SHGs. The coalition decided to associate with other willing partners from other SHGs, CBOs or other groups – the idea was that local social support for the activities of the coalition (including the SHG) would be built only if inclusive processes were used. A wider collective ownership is important in this context – also for other contexts.
3	Problem identification	Even before the project proposal was done, *mahua* was identified as a strong NTFP with many livelihoods impacts. But the initial attempts were focused on industrial use of mahua – the team discussed and researched options ranging from extraction of essential oils to establishing a brewery. But the pro-poor focus brought the team back to enhancing livelihood related options and giving maximum control over the produce and decision-making to the tribal households. Other NTFP post-harvest interventions discussed were colour from Palash flowers, Tegju flower colours, laxatives from Baibarin – but all of them posed problems of technology being too alienated from the tribal scenario, no change in the current exploitative local market practices, continuation of distress sale every season etc., and also questions of scale and no local value addition. Lac came as a strong product with significant market and livelihood impacts – lessons from a previous experiment that failed helped identify where and why lac had failed to take off in these forests. The two NTFP interventions the project has taken up are *mahua* and *lac*.
4	Technology Development	The specific technologies identified for mahua focused on two aspects that mark the mahua-based livelihoods – quality of produce, and seasonal distress/lack of bargaining power in the local market. The technologies were therefore chosen to enable value addition and good storage as well as marketing strategies to tide over the seasonal distress sale of mahua. Value addition started from clean collection practices – different options were tried to prevent the flowers from falling on to the forest floor- these included nets, cloth cover on the ground, etc. Storage technologies including different bins, traditional time tested storage structures, good drying practices and some grading were also tried. Plastic lining of traditional storage bins was found to be ideal to reduce moisture spoilage of the produce. Lac technologies were identified and adapted by the coalition based on the lessons from the failure of lac in the area in an earlier experiment by the DRDA. Personnel from this earlier failure were contacted and technology development (timely harvest of brood lac and timely inocculation, safe transportation and storage of the brood lac, use of pest trap nets, other pest management practices, identification of right trees, pruning and inoculation training, were all done in collaboration with the ex-DRDA personnel now working with a successful lac innovation cluster in Shahdol.

		Processes involved detailed discussions with the actors concerned – led by TFRI in the coalition.
5	Technology Availability	The coalition reports that the processes to understand the existence of and access to right NTFP technologies – especially for mahua and lac took them to several organizations – each partner explored organizations/actors around their area of expertise. These included visit to Ranchi for *lac* technologies and to Chindwara for *mahua* technologies. An important process innovation occured when the coalition decided that if these technologies were to be made accessible and utilizable by the tribal SHGs, then TFRI and TS had to work together on getting the proper village level arrangements (institutional changes) made- these include providing working capital for the SHGs, supplying and demonstrating use of plastic lining material, taking the SHG members to Chindwara – for training to make mahua value added products etc. for mahua, and numbering the palash trees, training women to inoculate lac, and prune the trees, bringing the Shahdol group under the leadership of Mr. Moni Thomas to train the village women, etc.
6	Market linkages	These innovations in market development were the crucial innovations made by the project coalition. First the decisions were made about how to reduce distress sale which was evident in the discussions with the women SHGs. The process innovations here were suggested by the SHG women – giving details of how the SHG could support lean season (after the wheat harvest is consumed/sold to meet household needs) expenditure against a stored quantity of mahua. The SHGs and TS together devised the scheme by which TS (with the advise of the local bank) provided the working capital (Rs, 75,000 for each SHG) to the SHG bank account, and worked out a detailed schedule of release of funds during the mahua collection season so that the SHGs could collect mahua. Linkages with local petty traders – who also supplied many household items to these villages - were modified with the increasing bargaining power of the SHGs. In lac market linkages at the supply side (brood lac, inoculation nets/bags, etc.) were worked out. A few visits to the shellac factories, the Ordnance factory were made and detailed discussions are on, to see whether an assured market for lac from these villages can be provided by the ordnance factory (it needs wax for seals, equipment parts that use lac, and lac polish). Establishing this linkage would ensure that the tribal villages in the area take up lac as a crucial NTFP livelihoods option.
7	Process documentation	Minimal process documentation at the coalition. Regular recording of minutes and decisions made at the SHG level and some record keeping at TS. The coalition wrote up its institutional outputs at the CPHP write-shop in March 2004.

Source: draft institutional output of Jabalpur project, March 2004, and discussions/ observations with project coalition, and CPHP South Asia office, October 2002, and March 2004.

Table 2: Changes in Project outputs – and related processes (during the period September 2003-March 2004)

Sl. No.	**Revised project outputs (March 2004)**	**Institutional lessons that mark these changes in listing of project outputs**	***Sources of learning* and points of articulation**
1.	Diagnosis of existing technical and marketing systems for NTFPs	The decision was to merge earlier distinct project outputs (numbers 3 and 4, and part of 6). The coalition members found that problem identification in an action research project that was designed to improve the livelihoods of tribal households through post-harvest NTFP interventions, could not be curtailed to identifying the right NTFP product, but had to include the right market linkages and best technological and institutional arrangements. Problems were not just at the NTFP product identification level but ran throughout the system of NTFP technologies and marketing	*Field* – interactions with tribal communities, local markets, and lessons from earlier work by or technical expertise from TFRI and TS. The CPHP team visit and workshop (Sept-Oct 2003) was the first point of articulation of this systems view of problem identification, and the heightened pro-poor focus brought about by this view. But crucial insights came after the interactions with SHGs, market agents/ contractors, research organizations, etc.

		arrangements. And the need was for problem diagnosis – across the system, rather than problem identification limited to one product, component or level.	
2.	Marketing strategies, including technologies designed and evaluated	This again is an amalgam of earlier project outputs 4,5, and 6. Here the coalition's increasing awareness of the distinct yet complementary role played by strategies (ways of doing things) and technologies is evident. The coalition also revealed that working on one technology/ a group of NTFP technologies had to go hand-in-hand with continuous internal assessments of these technologies and the marketing strategies (whether it was for procurement of *mahua* from other villages, sale of *mahua* during the lean season, finance management – negotiations with the petty trader and bank, dialogue with the Ordnance factory (an assured buyer of lac), brood lac supply, etc.) that come with these technologies. The lessons from discussing JNKVV, or Palash flower colour as the NTFP intervention, etc. were crucial to get to this understanding and revision of project output.	*Intra-Coalition interactions and field inputs*- basically, the livelihood study that was conducted/commissioned by the project (MGSIRD in March 2004) had included some of these concerns. Monthly coalition meetings repeatedly brought out these roles and linkages right from September 2003 onwards.
3.	Strategies to promote community participation in NTFP interventions are tested and promoted	This is output 2, in the earlier version. But the emphasis here has shifted from community organization to identifying and promoting ways of building community participation in NTFP led development projects. The context specificities highlighted by TS field staff were crucial leads that enabled this redefinition of project output.	*Coalition interactions in the field* – with important changes being introduced in the roles and responsibilities of the members, once the SHGs were taken up as members of the coalition. CPHP write-shop March 2004, while writing their own institutional output: when it was clear that the output had to be ways and means that others could use to promote community participation.
4.	Strategy for identifying, establishing and managing a coalition, including the poor, designed and promoted.	The coalition (especially LS and MGSIRD) debated about the project outputs and decided that the earlier output 1 and output 7 were very closely related and separate reporting for the two would be a repetition of institutional outputs. So they were merged into one overarching institutional output. The key arguments was that the earlier output 7 was clearly a sub-set or a precondition for the achievement of the output 1 – which is the establishment of an effective coalition, where effective by definition would be a learning and evolving partnership among various actors/organizations. And this learning and evolving is earlier output 7. What the project has to deliver therefore, was modified by the coalition, through processes of debate (even some irritation in delays, internal rules or norms of partner organizations) and negotiation, revealing the learning that has taken place within this coalition.	*Intra-coalition discussions*, especially since September 2003 when the pressure to write the process documentation was building up. CPHP write-shop in March 2004: where the institutional output had to be specified. But the team still has doubts about the technical vs. institutional outputs of the project, and this redefinition/articulation of this output as "identifying, designing and promoting strategies for coalition building" makes it clear that the achievement of the technical output committed is the means to realize the institutional output.

Source: personal interviews, July 2004; Annual Report of the project, April 2004. Note the italics and underlining in col.4, indicating source of this change and the point at which the articulation of this change took place in the evolution of the project.

Table 3: Institutional outputs of the NTFP coalition in Jabalpur – as of July 2004.

Sl. No.	Revised project outputs (Annual Report 2004)	Institutional outputs – process insights from achieving each technical output
1.	Diagnosis of existing technical and marketing systems for NTFPs	
2.	Marketing strategies, including technologies designed and evaluated	
3.	Strategies to promote community participation in NTFP interventions are tested and promoted	The technical output here is evidently achieved with four dynamic SHGs participating actively and introducing changes in the way the entire coalition functions. The institutional outputs are a list of steps/sequences that will promote community participation. 1.*Community organization is not a one time activity*. The processes of community organization/participation and collective efforts are constantly evolving. 2.*Local livelihoods are important stakes* that can be used to demonstrate the benefits to the community from participating in the project. These discussions and demonstrations (basically narrative skills) demands the time and attention of one or two members of the coalition. 3.*Proof or validation of local knowledge and contacts* is essential for the community to trust the coalition members and participate willingly in the project. Here the coalition partners with a significant presence in the area and in NTFP interventions was an important input. These partners knew local markets, exploitative practices, seasonal stress in tribal households, etc. – and that gained them the respect or legitimacy needed to work together with the SHGs. 4.*Make SHGs establish their credibility to participate in the project*, instead of requesting them to participate or enticing to participate with funds/facilities or other fringe benefits (such as jobs for relatives). The open analysis (by TS and LS) of existing SHGs, their credit worthiness and their practices/norms (regular meetings, effective operations, functional bank accounts, articulate office bearers, etc.) sent the message to all SHGs that they had to be good enough to participate as equals with other partners in the project. 5.*Spend time understanding their constraints and identifying options for training/capacity development.* TS had dedicated field staff with whom the four SHG partners soon established a rapport (they also knew them earlier because TS was instrumental in establishing SHGs in Kundam block), and this field staff also interacted with TS management and MGSIRD in identifying real training needs that would enable these women to collect, process and market NTFP for sustainable livelihoods. 6. Recognize the need for hand holding in any technological intervention. Once the realization was made that, the coalition decided that its
	Strategy for identifying, establishing and managing a coalition, including the poor, designed and promoted.	This coalition of partners has evolved over time – starting with two key partners LS and XIDAS who have known each other for some time. The tentative coalition of LS, XIDAS, MGSIRD, TFRI, SFRI, JNKVV, TS finally narrowed down to the five members. Each partner has asked (at least one) new question, taken on new roles and made changes in their own routine ways of doing work. Outputs are: 1. *Processes of partner selection and coalition formation* -focusing on specific capabilities, previous knowledge of partners or their current commitments, personal knowledge and familiarity with partner's work, and stakes in the NTFP-tribal development sector. 2. *Processes of Definition of roles* – through discussions and regular meetings, by articulating the strengths and weaknesses of each partner, complementarities to achieve project objectives, and observation of each partner's performance in the area of their specialization – research in TFRI, training in MGSIRD, market development in LS, community organization in LS.

		3. *Processes of Changing roles and expectations, and rules/procedures within organizations* -The coalition has effected some changes in the roles of individual partners; LS which was to do market development and livelihood support parts of the project work ended up taking on roles of facilitation of technical work (lac inoculation and pruning), helping with the financial management of SHGs (record keeping, planning trade strategies), working closely with TS in identifying and deliberating location of storage structures, legal issues related to these, and enabling a constant flow of communication among partners (for instance when one partner TFRI was unsure about the funding mechanisms that were needed to facilitate the construction of big collective storage structures- especially in good time for the *Mahua* season) Strategies for identifying partners that are evident here are: (a) bring partners with complementary skills (b) prior knowledge or working relationship among partners is useful (c) identify key individuals as core partners and they bring their organizations with them (d) identify partners (especially individuals) with a strong presence in the community Strategies for establishing the coalition evident here: (a) enable regular meetings, and open communication among all partners (b) spell out rules of operation and responsibilities of each partner – activity wise, so that the coalition is founded on a common understanding of roles and accountabilities (c) partners found not suitable, with strong overriding interests but not directly complementary inputs, or not able to cope with a coalition mode of working must be discarded (d) openly acknowledge and encourage changes in behaviour/norms observed among coalition members Strategies for managing a coalition: (a) encourage internal debate and evaluation- re-consider decisions made or activities implemented regularly, as an informal assessment/evaluation of how the project progresses with a pro-poor focus (especially after the community level partners, SHGs have been identified and included in the coalition). (b) create and encourage active interest from a wider network of actors – build social relationships in the context. This is especially true of project coalitions like this that have displaced a *kochias* (petty intermediaries), negotiated with forest departments/guards- so that local social/political support is maintained. The project does not seem to have addressed (thus far) any strategy for promoting these lessons – there is no list of organizations/actors who may take up these lessons (ways of working)or the processes that the coalition can use to promote these lessons in the NTFP-tribal livelihoods sub-sector