

Bhutan-German
Sustainable RNR*-Development Project (BG-SRDP)
**RNR = Renewable Natural Resources*

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A short appraisal of the M&E System

Report of a Short Term Consultancy to BG-SRDP

(14. - 27. December 1997)

View on Naabji Village, Limbuka Geog, Punakha Dzongkhag
Photo by Reinhard Wolf, 1997

by Dr. Rajan Kotru
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Rajan Kotru

EXECUTIVE SUMMARY

This consultancy mission was conducted between 14th and 27th December, 1997. The main purpose of the mission was to make a short appraisal of the current M&E system (concept) of BG-SRDP (Bhutan-German Sustainable RNR Development Project). In addition to the review of project related and other documents, discussion with concerned authorities (PPD/MoA, Dzongkhag RNR-staff of Punakha and Wangdue-Phodrang) including BG-SRDP was carried out. Among the primary documents used to review the M&E concept were PPM and PO, which were revised in October, 1997. The mission was started by working out a methodology that allows a sound review within the given short time available. Accordingly the working methodology was based on:

- M&E Day (with Dzongkhag RNR-staff)
- Case Studies in villages where RNR-related activities are carried out
- Feedback Day in which the prevailing planning, M&E elements were presented
- Final Meeting was with the PPD authorities to apprise them of few recommendations and findings.

The analysis of PPM and PO revealed that substantial improvement may have to be done in these documents to bring precision and simplicity in vertical and horizontal logic. Also indicators mentioned are not containing basic features consistently (Quality, Quantity, Time). Results are having several activities which can be merged and milestones or sub-activities are missing. On the other hand the PPM and PO appears to be not amalgamated with Dzongkhag level planning of various RNR-sectors. This is important as M&E plans are derivated from these documents.

In terms of building an improved M&E system, the project will have to rely on the current set-up with gradual widening of scope for improvements. What is very important is that integrated planning should be carried out consequently and the concept of self-monitoring should be introduced. It was fairly evident that M&E as such (e.g. impact monitoring) can be decentralized and resource farmers can be entrusted with some aspects of M&E. Even villagers should be asked to reflect and perceive changes whether in their attitude or in their resource management.

At the end, number of recommendations are made, which can be useful in building upon the prevailing M&E concept and consolidate the approach of participatory evaluation. The documentation of the things happening in the villages through implementation is among the prominent ones. What is also needed is a closer communication and observation, data sharing among the Dzongkhag RNR-sectors. It is highlighted that the implementing staff still needs to undergo training and skill-building exercises which should be backed up by few types of documents, which have been proposed as M&E documents. The arrangement of exposure trips and cross visits (among the RNR-staff and villagers) will have postive impact on village-based M&E. Intersectoral planning and coordination can be at the end effective in creating a foolproof M&E system, which can provide policy makers as well as decision-makers with useful tool to shape the future sustainable natural resource management in Bhutan.

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Abbreviations and Acronyms

A.I.	Artificial Insemination
BG-SRDP	Bhutan German Sustainable RNR-Development project
BMZ	German Ministry for Economic Cooperation and Development
Dzongkhag	District
GTZ	German Agency for Technical Cooperation
GTZ-TL	GTZ Team Leader
GUP	Elected Village Chief
HH	Household
IA	Implementing Agency
IM	Impact Monitoring
ITG	Implementing Target Group
ITK	Indigenous Technical Knowhow
Km	Kilometer
Langdo	Bhutanese local land unit, dry=1350m ² & wet=1012m ²
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
Ngultrum	Bhutanese currency (1:1 against Indian Rupee)
No.	Number
NPC	National Project Committee
NRSA	National Remote Sensing Agency, Hyderabad, India
NRTI	National Resources Training Institute, Lobesa
NTFP	Non-Timber Forest Products
PIM	Participatory Impact Monitoring
PO	Plan of Operations
PPD	Planning and Policy Division/MoA
PPM	Project Planning Matrix
PRA	Participatory Rural Appraisal
PTD	Participatory Technology Development
PTG	Primary Target Group
QPR	Quarterly Assessment Progress Report
RGOB	Royal Government of Bhutan
RNR	Renewable Natural Resources
RNR-RC	Renewable Natural Resources Research Centre
RO	Range Officer
RRA	Rapid Rural Appraisal
SFAP	Social Forestry Action Plan
SFES	Social Forestry Extension Service
SMS	Subject Matter Specialist
SRDP	Sustainable RNR-Development Project
TG	Target Group
ToR	Terms of References
VDC	Village Development Committee

1. OVERVIEW

In its quest for maintaining a forest cover of 60% in Bhutan, the Royal Government of Bhutan (RGOB) has set the trend for environmental preservation. Furthermore, by its thrust on integrated approach in resource development, utilization and long-term management, RGOB has realized that sustainable development cannot be achieved by single-minded approach of a particular RNR-sector in isolation. It is the underlining of the fact that on-farm management in Bhutan has an inevitable link with the forest use. This is also fully justified since RNR-sector represented the most important sector of the Bhutanese economy. In 1987, it accounted for 47% of gross domestic product (GDP) and 90% of the total employment (Pem Dorji, in: Bhutan and its natural resources, 1994). Hence its significance for the country's welfare and future can hardly be underestimated.

The policy of RGOB is reflected very much by the current Bhutan-German Sustainable Renewable Natural Resource Project (BG-SRDP), which was conceived earlier as an Integrated Forest Management Project and was meant for the Dzongkhags Gasa, Punakha and Wangdue-Phodrang (now restricted to last two Dzongkhags). The time-period between 1994 and 1997 has been considered as "Orientation Phase". The aim of the orientation phase was to prepare the conceptual framework for the implementation of activities in the field of Forest Management, social forestry and related sub-sectors of the Ministry of Agriculture (MoA). This phase was generally devoted towards creating multi-sectoral benchmark database and study various other aspects (social, economic etc.). Subsequently, the working sphere of the project was extended from mere forest management to RNR-management, which includes agriculture and animal husbandry sectors. Moreover, the "BG-SRNR Development Project" has been scaled down to project area comprising Punakha and Wangdue-Phodrang Dzongkhags.

1.1 Objectives of the Mission

The current consultancy mission is being conducted to get acquainted with the M&E practices (Monitoring and Evaluation) of various RNR-sectors at Dzongkhag level so that an appraisal could be made. This, however, also meant a review of the basic documents i.e., Project Planning Matrix (PPM) and Plan of Operations (PO), from which M&E Plans are derived. The ToRs (Annex I) are providing the elaborated account of the tasks and results to be achieved under this mission. Based on the appraisal, recommendations could be made to strengthen the current M&E concept.

2. APPRAISAL PREPARATIONS

Prior to evolving a working methodology for the mission and its effective outcome the following aspects were considered:

- ToRs (see Annex I) were scrutinized for ascertaining the tasks to be performed and adjusting the requirements of consultancy to the given time-period available.
- The meetings were arranged with the concerned governmental authorities and GTZ-TL to get their viewpoints and expectations from the mission undertaken (see Itinerary as Annex II).
- The project related documents had to be screened and reviewed for the purpose of an effective methodology (List of documents as Point 5). The detailed account of these documents is given as Annex III. Only Project PPM- and PO-related analysis - owing to strong relevancy of these documents for M&E - are summarised here (see Point 2.3 and Annex VII).

The above-mentioned aspects are elaborated individually as follows:

2.1 Terms of Reference (TOR)

Whereas the most of the tasks assigned under TORs were clear, it was felt jointly with GTZ-TL that within the very limited time-period of the mission, the fullscale counterpart-training in M&E was a bit ambitious and only few case studies can be undertaken, based upon which one could improve upon the prevailing procedures and status of M&E at the field level. It was made clear that the focus should be mainly on agriculture and animal husbandry sector, which though attempted could not be always seen in isolation from the forestry sector especially when integrated approach of various sectors is considered. This was unavoidable due to the fact that the on-farm management in Bhutan is strongly linked to the forest use. Even the Point 4.5 of ToRs would have meant an in-depth analysis of the sectoral M&E system. However, this could be touched only marginally during the mission. In fact, this aspect could be treated only during field visits and interaction with RNR-staff with whom case studies were conducted.

2.2 Discussion with representatives of the the Ministry of Agriculture (MoA)

This composed of meetings with GTZ-TL, Joint Secretary FSD and members of PPD. The discussion mainly centred around the expectations of the mission. It was obvious that RGOB authorities want to build on the current M&E system. The overhauling of such a system was ruled out and is also not advisable. It was the concern of the above authorities that not much has been done in the field of Impact Monitoring. Moreover, it was made clear by the GTZ-TL that thus far the project was purely forestry-oriented and integrated approach to be followed now would mean some elaboration, clarifications and procedural changes in M&E system. Additionally, since the Village/Gewog-based planning is gradually being applied now, elements of M&E could be even decentralized and made much simpler. However, it is obvious that the groundwork must be done at this stage. This assumption is later supported by the findings made in case studies (see Point 3.2, Annex V and VI).

2.3 Appraisal of documents

The actual list of documents studied is given in Chapter 5. Selected and relevant documents and their reviews are elaborated in Annex III.

The survey of documents as elaborated above reveals that very few documents are useful for the strengthening the concept and practicability of M&E. In this regard two questions have emerged as noteworthy:

- Is the Concept of M&E, which should be closely based on the PPM worked out in the ZOPP5 workshop, amalgamated or coordinated with the implementing plans -as well as existing RNR-sectoral M&E mechanisms (see Chapter 4)?

Since this was not the case, PPM needs a wider recognition and linkage at Dzongkhag-level. Only then the Impact Monitoring and its operationalization can be initiated.

- If PPM worked out for the project is wholesome to pave the way for systematized M&E?

Being the primary document for evolving a system of M&E - consequently Impact Monitoring - its current contents do not reflect preciseness hence improvement of PPM/PO-contents has to be undertaken first. On the other hand, it is known that the contents of PPM and PO cannot be changed frequently. However, changes and improvements proposed now can be incorporated gradually.

Both these aspects are important if the concept of impact monitoring as well as responsibilities, budgeting and timing of the same has to be ascertained. The above questions are based on the concised appraisal of PPM and its related documents below.

2.31 Comments on Project Planning Matrix (PPM)

- Vertical and horizontal logic of PPM needs adjustment
- Definitions in PPM at all levels -Goal, Purpose etc.- could be made more precise (target groups are not clearly ascertained etc.)
- Indicators are not always containing Q.Q.T. (i.e., Quality, Quantity and Time) and partly not formulated according to the subject they should throw light upon
- Assumptions need Re-evaluation
- Tolerance levels of negative effects missing (what is acceptable mortality rate in a plantation? or how many instances of rule-violations in a plantation are acceptable? The latter could be sporadic grazing or breaking of fence etc.)
- Is there anything new (approach, strategy, activity etc.) which has not been incorporated in PPM so far (e.g. may be there are certain changes at the Dzongkhag-level inter-sectoral programmes and also in budgeting during the 8th Five-year Plan etc.)?
- The milestones of the main activities and sub-activities are not given (e.g. 200 natural services through Jersey bull will be conducted in Gewog X annually).

2.32 Comments on the Plan of Operation (PO)

The following aspects need consideration:

- The sub-activities are missing
- Milestones are missing including what is the source of information (reports, surveys etc.)
- Financial part is missing
- Responsibility part is missing
- General Remarks column is missing
- Is there a mechanism to consider more Target or User Group-oriented reflections in M&E

In general, it is maintained that PPM needs transparency and simplicity to carve out an effective M&E system especially for Impact Monitoring (IM). The Annex VI (also VII) also contains some hints and suggestions to improve the current PPM and PO. But it is admitted that a separate attention will have to be given to these documents to make them also adjustable at RNR-sector level as the current document does not really show how it is being linked to Dzongkhag-level RNR annual planning. Moreover, during the mission it was noted that feverish preparations of 8th 5-Year plan were underway. How PPM and PO will be fitted into next plan's programmes, perceptions and budget at Dzongkhag level was not clear.

2.33 Comments on older PO (prior to October 1997)

Assessment of Quarterly Progress Report: First thing to know here was as to how far this type of assessment has been considered by the Dzongkhag -RNR-sectors- already and if not, is the relevancy of this document only for BG-SRDP. If this is the case then things may not go hand-in-hand as RNR-sectors may have their own mandate for M&E, whereas this document remains isolated. This would seriously endanger the possibility for measuring the impact as and when done.

Apart from the shortcomings which were displayed for PPM and PO (see also Annex VII) the main activities under a result are not mentioning sub-activities. Similarly the overall targets and milestones are missing. The following can be undertaken to improve these sheets:

- The Format (columns) of the current QPR can be improved by including items such as Overall target set, Target current quarter, Cumulative target achieved, Financial target, Target achieved, Responsibility etc.

- The overall targets for the respective results are partly missing (e.g. Result 2/2.1 or 7/7.1) and these milestones are lacking in Q.Q.T. (Quality, Quantity, Time)
- Vertical sequence -logic- of activities can be improved (e.g. 6.2 should precede 6.1 etc.)
- The main activities under individual results are too many and can be easily clubbed -due to repetition (e.g. activities 3.1 and 3.2 can be combined and made precise)- otherwise milestone-setting will be cumbersome. However, the milestones against each activity are missing.
- Thus 3.4 can become milestone for 3.3 (e.g. two RNR-centres will be constructed by 1999 or Five RNR centres will be rehabilitated by 1998 etc.)
- Will not the mention of M&E as activity suffice only once as an activity (it has been mentioned several times)?
- Thus 5.2, with few years of implementation is difficult to achieve. Moreover, in 5.1 and 5.2, who is the target group and what is population and therefore both can be combined. It may read as: joint identification and elaboration of SFAP by participation of TGs, SFES and Dzongkhag administration.

It is maintained that the concise formation of PPM and PO is must for initiating the M&E system (IM etc.) and this document has to improve if M&E system is to be elaborated and applied effectively.

3. WORKING METHODOLOGY

After having met with PPD authorities in Thimphu and discussions with GTZ-TL and a thorough review of the documents provided by BG-SRDP, it was deemed useful to kick off the mission with a presentation on the field of M&E, where Dzongkhag-level (Punakha and Wangdue-Phodrang) RNR-staff will be as participants. In short, the working periods of the mission were divided into the following focus-segments:

- M&E Day
- Case Studies
- Feedback Day
- Final Meeting.

3.1 M&E Day

On 18.12.97, a day-long presentation on M&E was made. The selected parts of this presentation are given as Annex IV.

After a brief introduction of the participants it was evident that only a few of them had the background of M&E and very few among them have had practically applied certain tools of M&E. The presentation tried to give some practical examples from the fieldwork. It was obvious that the terms such as PPM, PO, M&E Plan, indicators and assumptions were not fully known. Moreover, the planning workshop and its outcome in terms of PPM and PO (etc.) were not considered by RNR sectors -Dzongkhag level- so far. Therefore, the stress was on providing a consolidated picture on the basic functions and procedural set-up of M&E system. It was also elaborated how there is a strong linkage between PPM/PO and the resultant M&E system. Some examples were quoted out of practical experiences made in Impact Monitoring in other projects. It was highlighted that precise and timely information to the decision-makers is essential for the effective implementation and curative measures, if necessary. It was maintained that M&E can be divided largely into:

- Activity Monitoring (Physical achievements)
- Financial Monitoring (Financial achievements)
- Impact Monitoring (can be further differentiated under ecological impact monitoring, Farm budgeting consisting of socio-economic aspects etc.).

Moreover, it was stressed that M&E has a fact finding mandate and not a fault finding purpose. It ought to be inexpensive, effective, on-site, timely and simple taking target groups into confidence and using their services and skills to initiate an interactive M&E system. Hence the merits of Participatory Impact Monitoring (PIM) were presented in detail and it was maintained that the scope of this type of monitoring by involving villagers should be explored and duly applied.

3.2 Case Studies

On the basis of presentation and discussion made during the proceedings of 18.12.1997, it was decided that the case studies based on individual villages -where RNR-sectors of both the Dzongkhags are actively implementing certain activities- are suitable to reflect on the current M&E. On the one hand, this gave ample opportunity to meet the villagers -primary target groups- and the field-level implementation staff -implementing agency- and assess their skills in the field of M&E. On the other hand, however, by visiting few field offices/service centres (Animal Husbandry, Agriculture) and forestry nurseries, some M&E relevant documents could be studied and reflections on the M&E system made. All the four case studies¹ and their individual findings are given in detail as Annex V. Nevertheless, it is mentioned here that all the four villages were unique individually as far as resource management, RNR-activities and planning procedures are considered. Thus the following was obvious for the respective villages:

- Nabji: remote and poor community. Upland farming (maize) dominating. Disorganized in community based approach, no cohesion in RNR-sectoral approach
- Damchi: Easily accessible and full of progressive farmer's initiatives and innovations in the field of On-farm management. Follow-up extension required.
- Hebesa: Coming alive with RNR-activities and attempting to work with RNR-sectors. Demand-oriented.
- Nubding: So far exemplary for community-based resource management and attempts for a joint approach of marketing (potato).

The major findings are given below:

- Teamwork qualities and capacity of extension agents at village level has considerable scope of improvement (e.g. it is not clear in the team who is to do what and who is to ask what etc?)
- Participatory Technique -skill building- among the field staff must be further consolidated (e.g. How to generate and handle a discussion, problems etc. and how to avoid "one man shows" both among TGs and Project participants (as planners or group). In addition, it requires preparation and art to involve people more in thematic discussions and problem/situation oriented attitude.
- The planning does not mean the promising of as many activities as possible but a phased approach by setting priorities with the villagers so that they are also kept in charged frame for action. Their contribution and responsibility in action plans must find a reflection.
- Extension agents (agriculture, forestry, animal husbandry etc.) are putting focus only on quantitative jugglery of target achievement. Besides there is hardly any interaction of these agents at the field level. Also while implementing the planning approach lacks integratedness. First a thing should be tried at smaller scale and then go for greater extension.
- The shift of M&E at village level is possible and with the help of action-oriented progressive farmers it can be managed but is not being done at present (their observations and experiences are indispensable for impact measurement). Even if practiced, the extensionists are acting hardly as strong backstoppers.

¹ Two villages for each Dzongkhag i.e., Hebesa and Nubding in Wangdue-Phodrang and Nabji and Damchi in Punakha

- Impact monitoring should be based currently on subject matter information –RNR-sectoral-requirements and cooperation among various groups/sectors. They are not reflecting, perceiving changes and exchanging views.
- Observation and communication among the sectoral staff remains mostly as a verbal message and documentation of the same is not a practice. This is especially the case when people's reflections and perceptions are to be considered. Moreover, most of the data important for M&E is hardly being shared among the sectors about what has each sector done in a particular village (e.g an animal husbandry extensionist has a single-minded approach of his own activities, how far this may lead to further forest degradation or affect other sectors is not his mandate or concern and vice versa).
- The follow-up of activities is still done with a lukewarm approach, hence if terracing is accepted as an activity, the sectoral staff must know all about this activity (equipment needed, timing, ecological feasibility etc.)
- The problems in the villages are multifold (wild animals such as wild boar, deer species etc., chilly wilt, no A.I., marketing, low mushroom production etc.). These need attention of the applied research.
- Potential of community-based RNR development is still under-utilized but this could be helpful for IM aspects starting from social forestry plantation a good chance of phased planning and implementation a need-based participative planning.
- The flaws in planning can have a bearing also on M&E system and the current planning approach has -having had a consolidated view of planning techniques and approach adopted in a village-certain flaws in it:
 - Baseline data is not being collected comprehensively
 - Participatory approach of planning is not visible
 - Intersectoral planning (RNR) needs reflection once the data is collected/prior to implementation
 - Timing and responsibility of interventions is missing

3.3 Feedback Day

Feedback day was planned for Dzongkhag level RNR-staff as well as for the officials of PPD Thimphu. The effort here was made to strike a link between M&E system, case studies findings and numerous field reflections with the staff and few M&E relevant documents studied in the field. At the advent of this day a visual illustration of the conceived link between the primary target group (people/village community) and implementing agency (Dzongkhag RNR-sectors as mediator) was elaborated (Annex VI). BG-SRDP was shown as facilitator assisting directly the implementing agency. The highlights as concised account have been put as Annex VI. What follows below is only the summarized reflections of the day by the participants.

a) Planning

Few participants were clear that the village-based planning is so far not ideal and needs lot of improvement. Many information-requirements such as how many villagers participated, who leads the group from the RNR-Planning Team, who assesses if the potential for a particular activity -prioritized by the villagers- exists etc. Similarly, lot of information/data and valuable experience may be their but due to the lack of effective and clear documentation there is hardly any use of such verbal and unrecorded information. Although the argument of manpower-problem was given but it was made obvious that for the systematic documentation of whatever is seen, happening and effected in the field needs a few minutes of daily reflection and documentation.

The village-based planning was also discussed and it was clarified that for the sustainable development for the whole community and in all sectors (integrated) this form of planning has the basic advantage of people's needs and perceptions being incorporated in the overall planning. They are also setting priorities and even share responsibilities. Even if the priority areas are earmarked in PPM, these can be used to test the validity of a target-oriented activity and methodics with which a

particular activity should be carried out. It was highlighted that village-based planning also means to fix the responsibility of people (in prioritization, time of the activity, incharge of the tasks etc.). It was widely agreed that village based plans so far have inherent danger of becoming “shopping lists” and RNR-sectoral “gift package” and this has to be cured.

M&E Plans can be derived from the PPM/PO/Annual Plans and could be used to shape the M&E as per the three main fields given as activity, financial and impact monitoring.

b) Coordination at Dzongkhag level

Despite the planning at village or Gewog level, more often than not foresters -FSD- are not participating and probably the planning data compiled by the RNR-Planning Team is not even reaching the FSD. Similarly, the coordination at Dzongkhag level according to the discussion is not integrated and geared up for an effective M&E. The integrated approach does not only allow harmonization of multi-sectoral development but also helps in avoiding disparity in development. Cross-sectoral interaction and reflection of data which is coming from the field must take place so that integrated approach is strengthened.

c) Implementation

There is as such no concept so far to reflect and document the problems being faced by the particular staff in a given activity and no offer of solutions either from him or from the people. So far attempts of including the resource farmers or user groups into a network, whether at village or Gewog level have not been utilized for M&E. The implementation is in isolation e.g. forest guard as such is hardly involved in the planning or implementation process worked out by RNR-sectors. There is no self-monitoring concept among the extensionists and implementors.

3.4 Final Meeting

This part of the mission was spent in Thimphu by meeting Joint Secretary (FSD) and PPD Head. In addition, the details of the report-composition were worked out with GTZ-TL. The meeting with Dasho Sangay Thinley, Joint Secretary (FSD), centred around the concern that the RNR-sectoral coordination at Dzongkhag level is essential for strengthening the integrated approach. Moreover, it was clarified that village/community-based planning does not really mean that RNR-sectors surrender their planning and implementing tasks to people. It should be more understood as people facilitating the realistic planning and implementation at Dzongkhag-level. The role of BG-SRDP in closely working with Dzongkhag RNR- was duly recognised. The need of elaborated impact monitoring was mentioned.

The afternoon, meeting was held with Dr. Pema Gyamtsho (Head, PPD). It was maintained that the village-based planning must not end up in “Shopping Lists” and this is the danger if such a planning is not basing its concept on situation-analysis (problems, needs, potential etc.) and that too with whole village rather than with few progressive farmers. During the discussion, cattle population was conceived as one of the parameters which could be used for integrated approach -keeping in view that if only this sector is dominating without stress on stall-feeding then problems of forest grazing can only become worse- where all RNR sectors including FSD reflects on the planning.

The significance of impact monitoring for the planners and decision-makers was considered and it was endorsed that this type of monitoring needs focus.

3.5 Streamlining of existing M&E system

The meetings with RGOB officials, GTZ-TL, RNR-sectoral staff, visits to sectoral sub-centres (two) and Forest nursery (two) both advantages and disadvantages were reviewed openly. However, a

detailed appraisal of various monitoring proformas used by different RNR sectors for different aspects was not possible as time was limiting factor. It was the general opinion that there is substantial scope for improving the M&E system.

4. MAJOR RECOMMENDATIONS

The major recommendations are given below. In addition, various suggestions and other specific recommendations have been made in Annex IV-VII.

a) PPM + Plan of Operations + RNR sectoral planning need amalgamation

The developmental hypothesis set in PPM and wide array of results and activities phased in PO are not necessarily reflected at Dzongkhag level planning and vice versa. Hence it is must for M&E systems that this missing link is created so that elaboration of M&E plans etc. can be made.

b) Close coordination between BG-SRDP, Dzongkhag RNR-sectors, Research centres, a must for effective planning

The planning exercises done at village level are still haphazard and intersectoral linkages and team-approach for the overall integrated planning needs consolidation. It is a must that the tendency of applied research is maintained and findings are provided to the planners at the right time so that implementation can be effective on ongoing basis.

c) Within all coordinating agencies -at all levels- self monitoring concept must be strengthened
Within all the RNR sectors at personnel level especially at the field level concept of self-monitoring -continuous reflection of works done in the field- can be introduced so that information other than physical and financial targets can be provided to the planners. Such an information can be absorbed into the existing M&E system.

d) Observation and communication among RNR-sectoral staff should act as a tool for collection and documentation of information

For any integrated approach there has to be an ongoing cross-sectoral sharing of knowledge and experience so that there is a cohesiveness in implementation. Thus for the concept of pasture development the joint working group of forestry, animal husbandry and agriculture is essential. Documentation of such an information allows formulation of collective strategy.

e) Teamwork capacity-building needed for field/extension staff participating in village-based planning

Working as or in a team, needs a preparation and joint planning whether at village-level or even at Dzongkhag-level. However, the skills in this regard can be developed through trainings and frequent field visits. The concept of who leads the team, who manages the discussion, when interventions are needed in a discussion and how to get the effective information from the people, these aspects will have to be treated in teamwork capacity-building.

f) Village based planning must take place through an inter-sectoral team, documentation of which is a must

For any intersectoral approach it is a must that the individual sectors know what other RNR-sectors have done or a planning to do in a particular village. It is to be noted that such a team should be complete and should compose of all RNR-specialists as well as FSD field personnel. This team should be capable of dealing with the subjects of Situation/Problem analysis and must have experience about how to direct people from demand-oriented approach to the need, potential and future-oriented approach. Documentation of such an information is must. For the purpose of

M&E skill-development both for the staff and consequently for community/community members (PIM) study tours or exposure trips to other interesting projects can be explored.

g) Village based planning must fix responsibility/contribution /time availability of people

The village-based planning must not end up with the situation that we get the information and we as RNR specialists become sole custodian of the plan. The idea should be to involve people in prioritization of the works or activities to be done, phased approach in implementation and fixing the responsibility of the selected villagers also so that they own the plan.

h) Participatory Planning Technique requires further upgradation among field/ext. staff

Training technique upgradation and effort should be to prepare in-house trainers so that the transfer of staff or introduction of new staff is accommodated without problems.

i) RNR-sectoral intervention based on Village planning should be priority-based and phased

To avoid disparity in development, to address the utility of parameters set for priority areas and to make villagers move towards self-reliant attitude it is necessary to avoid having an influx of various RNR activities. Hence phased and prioritized planning and implementation is needed. However, a happy marriage between Dzongkhag-level planning and village/Gewog-based data have to be made.

j) Pool of resource farmers -both demonstrations and practicing progressive farmers are potential means for IM at activity level

The information flow pertaining to impact is still not effective. Therefore, since the frequency of RNR-sectoral interventions will increase, more and more farmers or villagers will be benefiting. These benefits and other impacts should be monitored. The resource farmers are the best bet for getting such data and information. Backstopping of such resource farmers (j) through ext./field staff is a must. However, this information should be documented so that processing and analysis is possible.

k) Monthly reports of the above staff must document observations/information given by such farmers

The staff should be capable of doing self-monitoring especially in their attitudinal, behavioural aspects. The same can be applied to people with whom they work. Self Monitoring should allow them to

- be self-aware and self-critical
- admit errors
- hand over the stick
- sit, listen, lean
- improvise, invent and adapt, use their judgement always.

l) Village-based M&E documentation must be strengthened

E.g. by using village-wise work completion/input sheets, bull centre journals (repeats, survival, success rate etc.). This will allow to avoid development/input bias as villages with intensive input (or vice versa) can be easily identified. On the other hand also, for any inter-sectoral approach it is a must that the individual sectors know what other RNR-sector is doing or has done in a particular village/Gewog.

m) Proforma (Monitoring)-Formats can be introduced for the staff

E.g. Physical progress reports, where improvement can be introduced in terms of complete information-collection (name of ext. as activity, name of village, unit, achieved targets, cumulative total, status of work, beneficiaries, monthly issues, major problems encountered (Nursery Register, Plantation journal etc.). For suggested proformas see Annex VI.

Moreover, these proformas should contain reflections on change such as:

What has changed? What has caused the change? How has it changed? How has this change affected you? Do you feel responsible for the change? What other change has come as a result etc.? Meant for Dzongkhags RNR-sectors and RGOB these can be based on annual and monthly reports.

n) Research (applied) must be done in Household-budgeting as per farmer types (small, marginal, rich etc.) concerning:

- stall feeding concept cost benefit analysis etc.: If practiced, what are the advantages and disadvantages both in tangible and intangible terms?
- forest grazing cost benefit: If practiced, what are the advantages and disadvantages both in tangible and intangible Terms?

o) General

- changes in existing M&E proformas, where necessary should be minimum and should be aimed at improving the qualitative information
- M&E should focus on impact
- simple proformas devised should be in the longer run computerised
- standardisation of proformas can be done

5. LIST OF DOCUMENTS

- 1) Basic Monitoring and Evaluation System. NRSA, Hyderabad, India. 1997.
- 2) BG-SRDP Working Paper No. 14. 1997. Plan of Operations, Phase II. Compiled by Abilal Baskota, Rolf Krezdorn and Reinhard Wolf. Lobesa.
- 3) Bodhicharoen, C., Kalyanunta, T., Paksin, S., Schoepf, F. 1996. Internal Paper 200. Impact Monitoring and the Institutionalisation of Monitoring and Evaluation Activities. Thai-German Highland Development Programme. Chiang Mai.
- 4) Community based natural resource management research for improving the performance of production system in Lingmuteychu Watershed, Bajo. 1997.
- 5) Dick, John H, and Yonten, Deki P. 1996. Third Forestry Development Project. Field Document No. 13. A Preliminary Sectoral Environmental Assessment and A Framework for Environmental Monitoring. Project Facilitation Office, Khangma, Trashigang, Eastern Bhutan.
- 6) Kievelitz, U. 1995. Insights, Conclusions and Recommendations for the Bhutan-German Integrated Forest Management Project in the context of the Mission on RRA, PRA and Land Use Planning. Bhutan-German Integrated Forest Management Project. Thimphu.
- 7) Kievelitz, U. 1995. Working Paper No. 2: Training Modules for the RRA/PRA-Training. Bhutan-German Integrated Forest Management Project. Thimphu.

- 8) Kievelitz, U. 1995. Working Paper No. 3. Analysis of the Environmental and Social Situation in Nahi Gewog, Wangdi-Phodrang District. Results of RRA. Bhutan-German Integrated Forest Management Project, Thimphu.
- 9) Maier, E. Working Paper No. 9. Situation Analysis of the Social-/Community Forestry Sector in the Dzongkhags of Punakha and Wandue-Phodrang. Results and Recommendations. Bhutan-German Integrated Forest Management Project. Thimphu.
- 10) Namgyal Phuntsho. 1996. FRC\BG-IFMP Occasional Paper No. 1. Beyond Timber-What value of the Forest? A Rapid Rural Appraisal Study of Non-Timber Forest Products in the Nahi Gewog, Wangdue-Phodrang Dzongkhag, Western Bhutan. Forest Research Centre in Collaboration with Bhutan-German Integrated Forest Management Project. Thimphu.
- 11) Namgyal Phuntsho. 1996. RNRRC Yusipang/BG-IFMP Occasional Paper No. 2. Local Participation in Forest management Planning. The RRA Exercise in the Kothaka FMU Wangdue-Phodrang Dzongkhag, Western Bhutan. RNR-RC, Yusipang.
- 12) Narayan Deepa, 1993. Participatory Evaluation. World Bank Technical Paper Number 207. Washington D.C. USA.
- 13) Project Management and Monitoring and Evaluation, 1997. Training course developed on behalf of GTZ (by Dr. Walter Salzer).
- 14) Richter, M. 1997. Working Paper No. 13. The motorable Road of Hope. Resource Management by Rural Households in Nahi Gewog/Wangdue-Phodrang Dzongkhag. Bhutan-German Sustainable RNR-Development Project. Thimphu.
- 15) RGOB, 1995. Guidelines for the Monitoring of Project Implementation. Third Forestry Development Project (Cr. 2533-BHU). MoA, Thimphu, Bhutan. Draft FSD, PPD/MoA.
- 16) Zangley Dukpa et. al. 1994. Bhutan and its natural resources. Vikas Publishing House, Delhi.

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Annex I

Terms of Reference for Short Term Consultancy on Monitoring and Evaluation (M&E)

1. Objective

The consultant shall, based on the proposed M&E system, train counterpart staff (especially RNR staff of The Dzongkhag administration) in systematically observe the implementation of project activities and its impact on the basis of the project's plans and to document the relevant information and data systematically

2. Relevance to the plan of operations

Since the project is subject to many influences which can hardly be foreseen and since an original plan can never be seen as being absolutely correct, project management and all parties involved require a continuous flow of information in order to steer the project effectively. Therefore, the establishment and implementation of M&E system is an integral task and are planned in all relevant sectors of the project.

3. Description of the problem to be solved

Most of the monitoring activities related to project activities, including documentation and reporting, has to be done by the planning officers and RNR sector heads of the Dzongkhag administrations, in cooperation with target groups. A set of M&E forms and tables have been proposed to fulfill this supply of information.

Many of the RNR staff of the Dzongkhag administrations have not yet practiced M&E in a systematic way. Therefore, a short term consultancy is proposed to train counterpart staff (especially RNR staff on Dzongkhag level), to enable them to carry out M&E in order to effectively steer project activities.

4. Description of tasks

The short term consultant will have the task to

1. Prepare professionally and technically for the assigned tasks.
2. Acquaint with the existing M&E practices in Bhutan, especially within the Ministry of Agriculture and within the RNR sector.
3. Contact other institutions, relevant to the consultancy mission.
4. Familiarize with the project planning matrix and with the proposed M&E structure of the project.
5. Recommend, if necessary, modifications of the proposed M&E structure of the project.
6. Train counterpart staff in systematically carrying out M&E in cooperation with the target group. The practical training should be done in small groups in both Dzongkhags.
7. Conduct a one day workshop for all trained staff towards the end of the consultancy mission.
8. Prepare a summary report in English, describing the main findings and recommendations.
9. Carry out debriefing at the Ministry of Agriculture in Thimphu and present the most important results to the concerned Bhutanese institutions.

5. Preliminary time schedule

- Preparation in India 2 days
- Arrival in Bhutan 14.12.1997
- Execution for the mission in Bhutan 12 days, 15.12.-16.12.1997
- Departure from Bhutan 27.12.1997

ANNEX II: Itinerary

<i>Date</i>	<i>Place</i>	<i>Officials met/Work done</i>
13.12.1997	Flights from Jammu and Delhi	Departure from Palampur for Jammu and then on to Calcutta
14.12.1997	Calcutta	Due to cancellation of the flight stayed in Calcutta
15.12.1997	Thimphu	Reached Thimphu by noon and met GTZ-Team Leader, Mr. Wolf. In the afternoon meetings were attended with Joint Secretary/FSD, Dasho Sangay Thinley and Mr. Sangay and Mr. Gurung (PPD). Issues discussed were the ways and means to strengthen the M&E system and its scope. Received various project related documents from BG-SRDP
16.12.1997	Thimphu/ Lobesa	Documents surveyed until noon and left for Lobesa reaching there in the afternoon. First preliminary discussion (ToRs etc.) with Mr. Wolf, Mr. Akey Dorji (RO) and Mr. Tashi Tshering (RO) on the mission-programme and readjustment of Itinerary
17.12.1997	Lobesa	Preparation of Presentation on M&E. Further discussions with Mr. Wolf, Mr. Akey Dorji and Mr. Tashi Tshering
18.12.1997	Lobesa	Workshop Presentation of M&E at NRTI made for the RNR-officials of Dzongkhags, Punakha and Wangdue-Phodrang including BG-SRDP staff
19.12.1997	Nabji Chuchasa	Case Study-I and field visit with RNR staff of two above-mentioned Dzongkhags and BG-SRDP officials. Also visit to Animal Husbandry Sub-centre
20.12.1997	Lobesa	Preparation of first case study-draft and discussion with Mr. Wolf and Mr. Akey Dorji on the first case study findings
21.12.1997	Lobesa/Thimphu	Work on case study, PPM and compilation of presentation made on 18.12.1997. For half day in Thimphu
22.12.1997	Damchi (Omtheke)	Case Study-II field visit with Punakha Dzongkhag-RNR staff. Visit to District Agriculture Office and forest nursery in Punakha
23.12.1997	Hebesa	Case Study-III field visit with Wangdue-Phodrang, Dzongkhag-RNR staff and BG-SRDP officials and discussion on PPM with Mr. Wolf and Mr. Akey Dorji
24.12.1997	Nubding	Case Study-IV field visit with Wangdue-Phodrang Dzongkhag-RNR staff and BG-SRDP officials
25.12.1997	Lobesa	Feedback Day at NRTI with Dzongkhag RNR staff of Punakha and Wangdue-Phodrang (including Planning Officers and Mr. Gurung from PPD/Thimphu)
26.12.1997	Thimphu	Meeting with Joint secretary-PPD, Mr. Sangay Thinley, Dr. Pema Gyamtsho (Head, Policy and Planning Division)
27.07.1997	Paro/Calcutta/ Delhi	Departure to Delhi via Paro/Calcutta Overnight Stay in Delhi
28.07.1997	Jammu/ Palampur	Flight got cancelled and reached Palampur on 30.12.1997

Annex III: Appraisal of Documents (detailed)

1. Baskota, A., Krezdorn R. and Wolf, R. (1997): Plan of Operations (revised version October, 1997)

Given the fact that any M&E-Plan is based on soundly conceptualized PPM and PO, for any effective and functional M&E system it is inevitable that the above two documents are precisely worked out to initiate the M&E system. The detailed comments and suggestions on the PPM and PO of BG-SRDP are depicted in Annex VII. Although revised very recently (October 1997) it was found that there is a necessity and also scope of improvement in these documents to make them precise, understandable and adjustable with the intersectoral interventions implemented by RNR-sectors.

2. Basic Monitoring and Evaluation System-1997. NRSA, Hyderabad, India.

This document is reflecting on the M&E system to be adopted by the above-mentioned institute. The contents as such only marginally deal with the main elements of M&E, steering of the project and its activities and how good the project has been conceived for the same. The report is orientated to the technical sectors relevant for the institute. Therefore, the PPM though well elaborated is not ideal in terms of suggestions which could be made on the improvement of BG-SRDP/PPM.

3. Bodhicharoen, C., Kalyanunta, T., Paksin, S., Schoepf, F. 1996. Internal Paper 200. Impact Monitoring and the Institutionalisation of Monitoring and Evaluation Activities. Thai-German Highland Development Programme, Chiang Mai.

This document is undoubtedly reflecting the vast experience made by this project including in the field of M&E. The analysis of the knowledge especially gained in Impact Monitoring is treated profoundly. The document can be very relevant for BG-SRDP in carving out an amalgamation of PPM/PO with RNR-sectoral programmes. Thus it is important for the M&E to figure out about Target groups, and activities which are designed to achieve the objectives (i.e., if they had impact on economy, ecology etc.). The document gives a succinct account of procedures by which main- and sub-activities in a plan can be monitored. Here stress is not only on quantitative but also on qualitative information. Similarly this document also reflects at instances by which certain aspects such as behavioural and attitudinal changes can be evaluated on the basis of indicators. Formats given in Annex V -presented on Feedback Day on 25.12.1997- pertaining to different monitoring fields and subsequent evaluation can be helpful to improve and simplify the M&E system in general. Therefore, the parts of this document can be used as training material for upgrading the implementing staff's skills in applying the M&E system systematically.

4. Community based natural resource management research for improving the performance of production system in Lingmuteychu Catchment, RNRRC, Bajo, 1997.

It is draft version of the resource management planning. A proposal describes selection criteria for the Limbuteychu catchment, demographic features of villages studied and was carried out by a multi-disciplinary team as RRA. The planning exercise has been done in few villages. The prioritized issues will be implemented by RNRRC-Bajo, with the participants of the farming systems. The document may have relevance for impact monitoring for the villages where planning was done and various activities accordingly were implemented.

5. Dick, John H, and Yonten, Deki P. 1996. Third Forestry Development Project. Field Document No. 13. A Preliminary Sectoral Environmental Assessment and A Framework for Environmental Monitoring. Project Facilitation Office, Khangma, Trashigang, Eastern Bhutan.

This is a consolidated baseline document on environmental assessment and environmental monitoring. Nevertheless, it deals mostly with the forest vegetation and faunal elements linked to it for the region of Trashigang, eastern Bhutan. It can serve as useful document to develop a concept of Environmental Impact Monitoring in the field of forestry. In the context of BG-SRDP Development Project, it can be said that this

study can serve as guideline in working out some bio-diversity indicators especially if the ecological impact of RNR-sectoral activities is considered.

6. Kievelitz, U. 1995. Working Paper No. 2. Training Modules for the RRA/PRA-Training. Bhutan-German Integrated Forest Management Project. Thimphu.

This paper works on the methodology to be adopted for RRA/PRA at the Village-based planning and can serve as guideline, as well as upgradation tool for the staff, who are untrained in the field of village land-use planning process. Such planning documents if well elaborated -seasonality, wealth ranking, matrix-ranking- can be helpful in IM, if same exercise is done after the intervention period has terminated. The village in which various RNR-sectoral activities are conducted can serve as a Model for IM. Especially, the areas for which the study area were taken can fit into this.

7. Kievelitz, U. 1995. Working Paper No. 3. Analysis of the Environmental and Social Situation in Nahi Gewog, Wangdi-Phodrang District. Results of RRA. Bhutan-German Integrated Forest Management Project, Thimphu.

This report is a useful document for participatory planning and describes briefly the methodology linked to RRA-approaches and a general characteristics of Nahi valley. It touches further the issues of natural resource management, other social/institutional/health and education aspects. It contains also a problem description, where the road figured as one of the demands with irrigation facilities as the major demand. The document can be valid as an approximate baseline and therefore has a potential for impact monitoring after some RNR-interventions based on planning have been done. Especially the changes that may occur due to project intervention can readily take wealth ranking into consideration.

8. Kievelitz, U. 1995. Insights, Conclusions and Recommendations for the Bhutan-German Integrated Forest Management Project in the context of the Mission on RRA, PRA and Land Use Planning. Bhutan-German Integrated Forest Management Project. Thimphu

This report is a sum-up of various RRA, PRA and Land-Use Planning exercises made in the project region in 1995. The various conclusions and recommendations made by the author showed that there are some shortcomings in the project's developmental hypothesis and implementary concepts. The stress is on integrated approach and village based planning. Whatever has been recommended and whichever recommendation was implemented by the project can be monitored and checked how far project has improved in that particular field or aspect. Hence application of this document in monitoring and evaluation of organizational, operational and integrated concept of the project over time by considering some implemented recommendations as activity or outcome.

9. Maier, E. Working Paper No. 9. Situation Analysis of the Social-/Community Forestry Sector in the Dzongkhags of Punakha and Wandue-Phodrang. Results and Recommendations.

This report is devoted to a synthesis of social/community forestry programmes of RGOB, which has been initiated in 1979. The legal, organizational, administrative and management aspects have been dealt in detail and reference is being made also to the two Dzongkhags of Punakha and Wangdue-Phodrang. A timeline of events in social/community forestry reveals a gradual progress in the programme. At the end, a set of recommendations are being made, including the growing concern of establishing a M&E system.

This report can find use in gauging the impact of plantations raised under the above programme. Moreover, the focus can be on the issues of social, ecological, economical and institutional changes. Because the ultimate aim of social forestry is also to make people responsible for the various management aspects. The impact may be also assessed in terms of production changes on the former degraded areas, which were afforested.

10. Namgyal Phuntsho. 1996. FRC\BG-IFMP Occasional Paper No. 1. Beyond Timber-What value of the Forest? A Rapid Rural Appraisal Study of Non-Timber Forest Products in the Nahi Gewog, Wangdue-Phodrang Dzongkhag, Western Bhutan.

It is a very consolidated inventory on the resource utilization in forests linked to non-timber forest products. Both faunal and floral elements are treated and their use as practiced by people are depicted. Since the report deals with the Nahi Gewog, where some other data is available in connection with road-construction, this Gewog can serve as a Model for Impact Monitoring. On the one hand there is a potential area of NTFP and on the other hand, the accessibility can bring a great change pertaining to the resource utilization. This will be due to the fact that marketing aspect will be no more hindrance and resources previously used commonly may get substituted by alternative items available in the market. Moreover, due to improved accessibility, the commercial use of forests can change. Hence this document can serve as baseline for impact monitoring purposes later when different RNR-sectoral interventions start yielding results.

11. Richter, M. 1997. Working Paper No. 13. The motorable Road of Hope. Resource Management by Rural Households in Nahi Gewog/Wangdue-Phodrang Dzongkhag. Bhutan-German Sustainable RNR-Development Project. Thimphu

This report elaborates on the background and status of the planned road in Nahi Valley. The report does not reflect on the technical aspect and cost-benefit analysis of the proposed road. However, it provides a general background on Nahi valley -demographic data, production features, household budget aspects (income/expenditures), division of labour and accessibility of people to markets. It touches the dynamic changes occurring in the country towards RNR-management, organizational, institutional and especially makes a set of recommendations in various production systems, irrigation, health sector etc. The report as such is not of great significance for M&E aspect. Nevertheless, it may find utility as baseline for impact monitoring as and when the advantages or disadvantages of the new road are evident after construction. If this is the case then indicators of change should be developed now.

12. Royal Government of Bhutan. Third Development Project, 1995 (Cr. 2533-BHU)

Draft FSD, PPD. Guidelines for the Monitoring of Project Implementation, MoA

Dzongkhag Administration, Mongar, Lhuntshi, Trashigang, Pemagatshel, Trashigang, Samdrup jongkhar

The report is depicting a design summary progress reporting to track the implementation of the project in way that recognises and facilitates- direct linkage of the Forestry-III Project to National Plan implementation. It is tailored for the Govt. at policy level. The module given feeds directly into the sector programme monitoring module of the RNR-monitoring system. It provides government with updated summary statement of project progress as a basis for reviews, assessment/re-planning of the project and contribute towards the overall RNR-policy and programme development. It is a consolidated account of expenditure statements and physical monitoring and that too of forestry sector. However, if the linkage is to be created with the existing PPM of BG-SRDP, then aspects of Quarterly Progress Reports, Performance Indicators etc. -focusing on financial and physical progress- will demand adaptability to other project documents. It is an open question which document should be adapted. However, the project performance indicators given here do not clearly represent the main features of indicator such as quality, quantity and time. As its significance is for the policy makers, it is not ideal for field level monitoring especially due to the reason that Gewog/village-based planning is gradually seen as medium for the sustainable development. M&E accordingly can be refined and adapted to the new horizons of developmental activities.

Annex IV: M&E Presentation

1. Definition of M&E

Monitoring: It means to systematically observe the implementation of a project, its effects and frame conditions on the basis of project plans and to document relevant information and data.

It is all about observing continuously one's own activity, daily work or monthly plan. The stress here is mostly on quantitative data, feedback by various staff members and also by the people with whom one is working. It is must that only relevant information or data is collected. The data and information can be put in tour diary or as daily notes.

Evaluation: It is the project/departmental-internal assessment of monitored information and data related to the standards and objectives set for a project. It is reflecting on the activities and jobs which are being done on the basis of data/information analysis.

The data or information compiled through monitoring becomes a graveyard information unless reflections are made on them. Hence data/information must be processed, analysed i.e., evaluated, so that we can assess if our actions, activities are in line with the objectives.

It needs:

- the on-going, structured comparison of the planned and actual status of project: and
- the on-going assessment of deviations from planned targets based on which decisions on how to steer the project or how to improve project implementation can be made?

Both actions must -most often- simultaneously be carried out.

In case of any major plan deviations and before plans are periodically updated, project plans need to be critically assessed as to whether they still adequately respond to the implementation experience of the project, the frame conditions and the felt needs of the target population.

2. Organization of the flow of information and evaluation of M&E Findings

All Indicators stated in:

- ⇒ Project Planning Matrix
- ⇒ List of Important Assumptions
- ⇒ List of Unexpected Effects
- ⇒ Plan of Operation/Workplans

are compiled in a List of Indicators/M&E Report containing columns for:

- ⇒Responsibility (for reporting about the indicators)
- ⇒Reporting Date (month)
- ⇒Planned/Actual Status Report
- ⇒Reasons for deviations from the planned status
- ⇒Evaluation Remarks according to steering categories
- ⇒Steering measures to be taken
- ⇒Responsible body for steering measures to be taken
- ⇒Date of Completion for steering measures to be taken

Reporting about indicators and the evaluation of plan deviations should be made at regular team meeting (weekly, bi-monthly and quarterly etc.). For the assessment and evaluation of plan deviations, all available formal and informal information is used.

3. M&E Function

Based on project plans, objectives (short term), purpose etc. RNR sectors have to work together if that has to have an impact positive (or negative) on sustainable development.

The role is in continuous provision of information.

- ⇒ for decision-makers on all levels of a project (including the target group for certain aspects)
- ⇒ based on project plans, monthly achievements
- ⇒ to compare and assess the planned/actual status of project implementation considering
 - * Outputs and their effects/impacts (positiv/negativ)
 - * activities
 - * inputs (personnel, finances, facilities)
 - * important conditions (cooperation of other parties, frame conditions)

- ⇒ in order to be able to execute important management functions, especially:
 - project steering
 - no intervention
 - corrective action
 - plan adjustment, replanning
 - discontinuation of project
 - reporting
 - the project's progress to project authorities, the public and other interested parties

- ⇒ to create a basis for external evaluations

4. M&E Plan -Operationalization of Indicators

To assess whether an indicator can be actually verified at reasonable costs and is useful, the following aspects must be checked:

Baseline value	Is it necessary to relate a planned indicator value to abaseline value? (future production in terms of % of future income)
Specific data/Information	Which specific data/Information items are to be provided in order to verify the indicator?
Data/Information collection	How shall each required data/information be collected? What are the methods applied?
Timing/frequency	When/How often shall the required data/Information be collected?
Responsible body	Who shall be responsible for collecting, processing, analysing, documenting and forwarding the information?
Costs	How much time, materials and other means are roughly required for data/information collection and processing?
User/use of Information	Who can use the information provided for which kind of management task?

In case of deficiencies, the respective indicator must be revised or rejected

5. M&E of the Project's Performance and its effects/impact

Basis: Project Planning Matrix elaborates on a logical hierarchy of objectives including:

Development status	Goal (e.g. Target group realized benefits)
Target Group Action	Purpose (Target group did something etc.)
Project performance	Results (e.g. Target group assisted in...)
Frame and other external conditions	Important assumptions (e.g. product price levels do not deteriorate...)

as well as on major activities and inputs necessary to implement the chosen project approach.

6. Participatory M&E

- increases the target group awareness and understanding of development, its own role and the role of the project
- increases the target group (s) ability to control the development process, enhances self-regulating abilities among the target group and helps the target group to become self-sustained
- improves the project's understanding of the target group perceptions and the project's interaction with the target group
- improves the quality of M&E data/information

7. Comparison of traditional and participatory M&E

Traditional M&E

Outsiders (Project personnel) administer M&E while local people are mere respondents to questions

M&E skills remain with project staff or other outsiders

Objectives, indicators and means of verification are mostly formulated by the project staff or other outsiders

M&E data/information is analyzed by project staff or other outsiders

Feedback to the target group is seldom provided; information stays with project

Judgemental; based on outsiders, values and perceptions

Participatory M&E

The target group assesses with outsiders as facilitators for a limited period of time

Self assessment skills are developed within the target groups

Objectives, indicators and means of verification are defined in close cooperation between the target group and the project

M&E data/information is analysed by the target group

Feedback to the target group is immediate and forms basis for the self-induced reflections and decision-making

Self-critical; based on widely accepted values and perceptions of target group and project

8. M&E Types

a) Activity Monitoring

- b) Financial Monitoring
- c) Impact Monitoring

a+b: Planning documents (PPM, PO, APO, Monthly Plans etc.) deals with physical and financial targets

c: Planning document → (Goal, Purpose, Results) PPM+Miscl. (Surveys, reports, feedbacks, observations etc.)

- Goal/Purpose/Results
 - Monitoring of Afforestation, Fodder production, water yield, surface runoff, photomonitoring
 - Baselines of climatic appraisals, fuelwood, fodder, lactation, Animal census, socio-economic (Household budgets)
- Overall Methodology
 - Fixed sample plots, periodic surveys, reports, VIRMPs, General observations etc.
- Reflections in
 - Monthly meetings, sectoral group discussions, extension (Training/exposure) meetings with Target Groups
- Decision-making by Project Management
- Steering of Project Performance

9. Tips for PIM

- 1) Involve local people/community/user group members from the start (in an activity) in baseline studies etc. (data collection, observation, measurements and interviews)
- 2) Create a pool of locally based natural investigators
 - trained village people (VDC, women groups, youth etc.)
 - Resource farmers (seed trials, mushroom cultivation)
 - Monitoring Assistants (Project staff)
- 3) Take few selected Monitoring aspects which are relevant (Goal/purpose)
 - Grass/fodder production
 - Water yield
 - Miscl.
- 4) Take observations of local people (Target groups) as much into consideration as one can
- 5) Reflect and act:
 - Reflections in-House (also Target groups etc.)
 - Utilize the findings etc. (Decision-making, impact Monitoring/evaluation etc.)
- 6) General Features:
 - Collaboration
 - Problem- solving orientation
 - Knowledge generation
 - Releasing creativity
 - Using multiple methods
 - Involve experts as facilitators

Annex V: Case Studies

Case Study I (19.12.1997): Nabji Village (Gewog:Limbu; Dzongkhag: Punakha)

1. Participants: Akey Dorji (RO), Forest Guard, Agriculture Supervisor (Punakha), DAHO (Wangdue-Phodrang), Animal Husbandry Sub-centre incharge in Tshochhasa village, Reinhard Wolf (TL-GTZ), Rajan Kotru

2. Objective: Exploration of elements of M&E and implementation strategy and timing of planned activities in the village

3. General Background

The village was selected for planning by outlining some selection criteria such as upland farming (maize cultivation), terracing, Watershed Management, potential for rice, all other RNR-sectors required, Shokhsing, Irrigation needs, and lower degraded catchment etc. The total number of HHs is 19. The village is a remotely (approximately 4 km on foot from Tshochhasa Village) located one. The village has a well spread area with households individually scattered rather than congregated in a group i.e., each house is at a substantial distance from the neighbouring house. This is essential to know as PRA and RRA exercises, if not done accordingly, can easily bias the needs and planning process of the village. In such villages it is mostly difficult to collect people. This is asserted that villagers here are individualistically-oriented rather than as community. Moreover, the RNR-sectoral interventions so far are hardly integrative.

What can easily be seen also is that the agriculture land-size is heterogeneous with maize fields even on steeper slopes. The rice fields are on the flatter terrain. The terracing of rice fields is well-maintained commonly, whereas maize patches are not terraced and now mostly infested with *Ageratum conyzoides* weed -winter was a fallow season on such patches. The village is directly situated under a dense ridge of forest cover (*oaks, Schima species, blue pine etc.*). Though stall-feeding is practiced, animals are mostly seen grazing in the forest as well as on the individual private land. The supply of fodder, fuelwood and timber as basic household needs are obviously met from the open use of forests surrounding the village and appear to be sufficiently available (no deficit). This is the major reason that the households are hardly surrounded by trees, shrubs i.e., the homestead/kitchen gardens are not developed etc. Also terrace-bunds are devoid of any bush-type or tree vegetation (terrace-bunds could for instance have grass tufts if not trees etc.). Though an activity in this regard could easily reduce some pressure on the adjoining forest cover.

4. Planning:

The planning process has been undertaken within the Limbuteychu Watershed planning and the following RNR-sectoral activities are proposed in the village:

- Terracing of crop fields and their maintenance
- Provision of crop seeds (e.g. maize) on demonstration or trial basis
- Provision of a Mithun Bull, which will be maintained by the villagers
- Supply of saplings of fruit (citrus, apple, plum, apricot) and other tree species (walnut etc.)

5. Process on 19.12.1997

The meeting point was at the newly appointed Village Head's place, who also remained the main speaker among the village participants. The inhabitants of this village have migrated from eastern Bhutan some 25 years back. The interest of villagers for our team was obvious as 17 villagers had turned up for the meeting, out of which 40% were women who took a long and tedious hike to reach the meeting point. The participants from the project seem to have a good rapport with the villagers. However, it was evident that the approach in dealing with the people's demands -in the past- has been typically Top-Down, subsidy or dependency-oriented rather than participatory. This is very much in line with the line-agency's target-oriented approach. In various asian countries this strategy is

known as “dropping the pellets strategy”. As long as the strengthening of the village-based groups (TGs: poor, agriculturists, horticulturist, livestock keepers etc.) is not the purpose or a result to be achieved, it is in order. However, if one wants to come away from the dependency/subsidy-oriented system and build a village-based, user-group oriented, self-management/-reliance system, then things may have to be done differently. Moreover, it was obvious that the individual sector-oriented (RNR) approach i.e., in isolation from each other, can hardly be termed as integratedness.

The villagers quoted lot of yield/impact related data in resource utilization which speaks for their continuous observation of activities and their evaluation at the village-level.

Finally -after activities were discussed- the interaction was shifted to the elements of M&E. It was found that there is a common interest in participatory M&E. Therefore the various activities undertaken by farmers can be easily utilized for this purpose. As an instance, among the farmers, who will terrace their fields, few could be picked for making comparisons for the changes in yield of their crops according to terraced and unterraced cultivable land over the course of coming years.

During the discussion with the villagers it was noticed that in the team -from RNR-sectors- some shortcomings (common to all case studies done, hence not repeated after this) were noticed in:

- Teamwork capacity of extension agents at village level
- Participatory Technique based rapport with villagers
- Generating people’s involvement in thematic discussions and problem/situation oriented aspects
- Avoiding “One man shows” both among TGs and Project participants (Planners etc.)
- Miscl. (phased planning than bundle of interventions in one go, set priorities with villagers so that they are also kept in charged frame, put their contribution and responsibility in an action plan etc.)
- Data/Information documentation.

6. Activities planned in the village

The activities planned in the village can be monitored and indicators can be also developed as has been shown below.

• Milestone for Terracing:

- a) Among the farmers having adopted terracing on unterraced land each year, 75% report increase of crop yield, or
- b) The yield increase due to terracing is being reported by 75% of the farmers by 2001 (if no other improvement was made by these farmers)
- c) X% of farmers did terracing on their own by 2001 (impact)

The mandays involved in terracing of a particular land size is not known. One could take running meters into consideration and then extrapolate. Moreover, it has to be seen how much potentially culturable area is lost to terracing.

• Seed distribution

Similarly take resource farmers who can measure changes caused due to introduction of improved seed varieties, winter vegetables etc. Indicators can be as follows:

75% of the farmers having used superior quality seed report increase in yield annually or report income increase by selling the surplus.

Such activities should normally be done on demonstration or trial basis.

• The Mithun bull

Before introducing the bull one should have known the servicing potential. Planning did not reveal aspects such as:

- a) No. of female cattle and herd structure of farmers
- b) Yield and fat content (milk) of this breed etc.

As the decision has been already taken that the bull-keeper will be an individual farmer who will be also responsible for its maintenance, the monitoring aspects can be entrusted to the bull-keeper.

Thus, it is possible to keep a bull-centre register with bull-keeper (in Dzongkha language and train him) who maintains a record such as kept with Sub-station of Animal husbandry in Chuchasa village. However, it should do a further survey as to how many calves are finally surviving and how many are repeated cases or how many cattle could not be successfully serviced. This information is essential to follow the success or impact of this activity.

The job of departmental extension staff should be to procure and cross check the data supplied by the bullkeeper. Not all animals can be cross-checked, hence a percentage can be fixed as per the workload of the extensionists etc.

• **Remarks on Animal Husbandry sector**

In the sub-centre of animal husbandry visited in Tshochhasa village, the monthly achievements and targets set for various operations (e.g. vaccinations, deworming etc.) were clearly mentioned. What has to improve is the reflections of the field staff about all the activities and people's observations. Yet again most of the activities conducted are cost-free thus in the longer run expensive.

Now that even villagers are prepared to keep the bulls for breeding purposes, such a situation should be used for M&E. What is important is that a bull-keeper should get a ready-made proformas and it should be the job of extensionist to provide him the directions about the proforma and this form should be collected monthly and if mating season is particular, only then.

But one has to also check if the bull is being maintained as per the standards or not (diseases, ration, overuse etc.). The mandate of animal husbandry sector should be clear. Besides, the parameters such as mortality rate, success rate of services are necessary to talk about impact in subsequent years.

As has been noticed in Nabji village the participatory monitoring is possible. Hence we should not be shy of using local people -for baseline or any other data- , of course after giving them a training. The fields could be animal census and lactation. This would allow to differentiate between various breeds people are keeping, their choices, performance of animals as regards fodder requirement and lactation yield. PRA data or individual studies by research centres may be used but after verifying the completeness of data in terms of methodology and quality of questions etc.

We should remember that change of breed also means changes in fodder, lactation, forest use, animal health, population dynamics.

Moreover, the animal husbandry programme (at result level to be separated from crop) may delineate the individual main activities such as (not seen from the sub-centre data):

- Improvement of Animal health care (with sub activities underneath them). Possible Milestone: Health-care treatment given to 75% of the livestock in a particular Gewog by 2001
- Upgradation of animal breeds. Possible Milestone: No. of natural /A.I. services up to 2001
- Improvement of animal management
- Improved pasture management

7. Final remarks as recommendations (are also valid for other case studies, hence not repeated)

- Extension agents (Agriculture, Forestry, Animal husbandry etc.) should meet regularly and exchange experience.
- The shift of M&E at village level is possible and should be tried in selected villages initially
- Within all the major sectors some activities can be easily got monitored by people with extensionists acting as strong backstoppers
- The training for participatory M&E can be easily done at a Gewog level in various sub-centres
- Although incentives act as catalysts for village-based M&E but should be avoided, if possible
- Impact monitoring should be based currently on subject matter information requirements and cooperation among various groups/sectors. They should reflect, perceive changes and exchange views on cross-sectoral impact
- Observation and communication among sectoral staff should act as tool for gathering and documenting information
- The staff should monitor and evaluate its own actions, preferably on monthly or quarterly based and report it to the related higher-ups as a document rather than a verbal message.
- To avoid the subsidized system RGOB should supply expensive items (e.g. Mithun Bull) on full payment to farmer and provide an intensive follow-up.

General Note:

The equipment needed for the terracing-operations has been promised to all the households, which are opting for this activity. Such an action will again render them dependency-oriented. The effort should have been made by organizing a user group and providing same with limited number of such equipment. Such an approach could have led towards community-organization and less expenditures and people would have felt responsibility of sharing the things. We must note that the village-based planning cannot be effective, if it conducted as if we have the "Gift Package List" and they are having a "Shopping-list". Moreover, the policy of government may change in future avoiding free of cost distributions, then conflicts can arise while we do planning in the neighbouring villages.

Case Study II (21.12.1997); Village: Damchi (Gewog: Kabchi; Dzongkhag: Punakha)

1. Participants: Akey Dorji (RO), Tashi Tshering (RO), DAO Punakha and Agriculture Supervisor, Animal Husbandry extensionist, R. Wolf (TL-GTZ), Rajan Kotru

2. Objective: Exploration of elements of M&E and the current RNR Implementation Strategy

3. General Background

It is a road-side village and therefore easily accessible. The village houses are evidently carrying the census marks and House No. on their front doors. There are only few houses adjoining to each other and rest of the houses are widely scattered as was the case in other villages visited. The village cultivable area is located on elevated banks of river **Mo chu** -mother river- and has a long elongated stretch of ideal agricultural land. The substantial availability of agriculture land is reflected by the fact that the cultivable land size varies between 6 langdo and 2.5 acres. However, at least one villager termed as "progressive farmer" appeared to own larger size of the land (approximately >1.5 ha). The villagers were seen working on the fields for winter crops although some of the cultivable patches looked as if these will remain fallow during the winter. With better accessibility and better RNR-services, Jersey breed has picked up well and is people's first preference. Nevertheless, open grazing is practiced for 12 months.

The forest land is basically surrounding the village on both north-northeastern side across the river as well as on the south-southwestern side. The *oak species* are the dominant vegetation in the forests nearby. Few progressive farmers are evident as one has a look at well-managed and established

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homestead gardens. Moreover, the good economic status is obvious from the fact that power tillers and other multi-purpose agricultural equipments (machines) are not an uncommon site in the village.

Though stall-feeding is practiced and numerous cattlesheds -both closed and open ones are seen- open grazing in the forest as well as on the individual private land is still a common site. The supply of fodder, fuelwood and timber as basic household needs are obviously met from the open use of forests surrounding the village and appear to be sufficiently available (no deficit).

4. Process on 21.12.1997

There were only 9 villagers who took part in the meeting with us. The meeting took place at "progressive farmer's place". Again the team which visited the village was larger in number than the number of villagers having gathered for the meeting. The discussion took mainly place with the progressive farmer who elaborated on winter crops sown in the area. The winter crops were introduced 20 years ago and are now regularly sown. Intensive use of cultivable land winter/summer takes place. Heavy inter-sectoral input and exposure (trainings, study tours etc.) of farmers has taken place here. Hence over the course of years, it is evident that after observations and experience the farmers are on their own becoming selective (innovative) about the vegetable or crops they should sow. Thus planting of onions by a progressive farmer on larger scale is his own innovation. This crop is economically lucrative and not subjected to wild animal attack as per the farmer. On the other hand, in former times the current winter crop area used to be the grazing ground for the cattle, which is no more possible and forests have become also grazing ground during winter. The agriculture now has become highly input-oriented in terms of power tiller use, pesticides, chemical fertilizers etc. The people are more or less self-sufficient in terms of food grain supply. The villagers are fully satisfied with RNR-services, though Artificial Insemination has been stopped in the village due to mobility problems.

We inspected fields of few farmers, who are demonstrating the cultivation of various vegetables and making lot of money. These farmers are interesting from the viewpoint of impact (economic etc.).

Finally - after activities were discussed - the discussion was shifted to M&E. It was found that there is a common interest in participatory M&E. Therefore the activities pertaining to any RNR sector can be assessed according to the perception of effectiveness of the same (economically, ecologically etc.).

a) Problems: wild animals (wild boar, deer species etc.), chilly wilt, no A.I. any more, mushroom cultivation (long term?)

b) Own observations: Animal care or cattle sheds could be improved, intensive open grazing, better homesteads resource base demonstrated by progressive farmers. We should remember that the change of breed also means changes in fodder quality and quantity requirements (for getting the full potential of the breed e.g. milk yield, early calving etc.), forest use, animal health, inbreeding problems and population dynamics.

(Some cost data reflecting intensive subsidy: All inputs 20/30 Ngultrum for vaccination and deworming 40/50 Ngultrum per cattle annually, subsidy in the range of over 100 Ngultrum/cattle annually).

5. Features of Progressive farmer (focus): Cultivable size over 2 ha

On-farm strategies

- silvo-pasture management and fruit trees
- winter diversification by planting onions, wheat (onions have good market and safety from wild animals)
- summer crops

- vegetables
- mushroom cultivation
- small timber/implements
- milk yield (jersey)

(The terrace-bunds are not planted as it is believed that rats get shelter and insect diseases frequent)

6. Final remarks

- The shift of M&E at village level is possible cost-free and should be tried with progressive farmers with extensionists acting as strong backstoppers
- The training for participatory M&E can be done with a group of such progressive farmers (user groups etc.) at a Gewog level.
- Impact monitoring should be based currently on subject matter information requirements and cooperation among various groups/sectors. They should reflect, perceive changes and exchange views.
- Observation and communication among sectoral staff should act as tool for gathering and documenting information.
- Marketing attention/support (cooperatives etc.) should be given to such farmers and effort should be made that commission agents do not exploit the farmers.
- Research (applied) must be done in HH budgeting as per farmer types (small, marginal, rich etc.) touching farmer's On-farm strategy (subsidised to self-sustained). The following aspects can get our attention:

i)	stall	feeding	concept	cost/benefit	etc.
ii)	Forest grazing cost/benefit etc.				
- -Such a village can be used for cross-visits (for RNR-staff as well as villagers from other areas of the project) or the progressive farmers should be used as extension agents in other project areas (new).

Case Study III (23.12.1997); Village: Hebesa (Dzongkhag:Wangdue-Phodrang)

1. Participants: Agriculture Development Officer, Agriculture Extensionist, Animal Husbandry Officer, Animal Husbandry Extensionist, Planning Officer, DFEO (Wangdue Phodrang), Akey Dorji (RO), Tashi Tshering (RO), Reinhard Wolf (TL-GTZ), Rajan Kotru

2. Objective: Exploration of elements of M&E and Sectoral Strategy of Planned activities in the village

3. General Background

The village is located approximately 20 km from Wangdue-Phodrang in the main catchment of planned Basochu Hydro Project area. In fact, the foundation stone of the project is very much located in the village and some lower area of the village has been already earmarked for the residential construction for the project workers. It was interesting to note that people are aware of potential advantages (good accessibility, market possibilities etc.) as well as disadvantages (too many people around and threat to local forest and agriculture resources etc.). The village is widely divided into lower and upper catchment with 3 households situated in the lower part of the village and few houses are in isolation in the southern part. The most of the houses are located on southeastern slope.

4. Process on 23.12.1997

The meeting point was at the farmer's place near the Hydro-Electric Project foundation stone. The number of villagers was 8 with few women present. The talking was done mostly by the farmer only who is doing also the winter-vegetable trial with the agriculture department. The day's proceedings were started by establishing a rapport after which general information of the village was asked. Accordingly, the total number of households is given as 18, but 6 out of these are not living in the village anymore. The population is given as 200 which means that each household has more than 10 family members. The agriculture land-holding varies between 1 and 5 acres. The winter crops are wheat, mustard, barley, buckwheat and now vegetables also are grown. The summer crops are given as paddy and maize (on dry upland or Kamzhing type). The village has a densely forested upper catchment dominated by *pure broadleaved forest type*.

The villagers have faith in the technology or advice given by the departments/sectors and would even try a new thing even if it is a failure at the first instance. However, there is no evidence that sectoral personnel intend to create a feeling among the villagers that one has to gradually depart from dependency/subsidy-oriented system and build a village-based self-management/reliance system, only then things might become more TG's or Community-based development.

The flatter areas are used as rice fields the terracing of which is generally well-maintained. The food grain production is sufficient for the big landholders, where as the households with only one acre of land work for others to make their food requirements complete.

Though stall-feeding is practiced but animals are occupying space at different places individually. It was clarified that all animals irrespective of the breed, graze in forest whole year. Hence the supply of fodder required at household level is very low as only the night-requirements are to be taken care of. Similarly, dry fuelwood is abundantly available and by paying a small revenue or royalty to the forest department two big trees are given annually for fuelwood. The area surrounding homesteads is still having a potential to -due to under utilization of area- support useful vegetal elements to release the pressure on forests.

a) Some yield data

Agriculture production of the paddy and wheat was given as fluctuating as per good years (400 dre/langdo) and bad seasons (200 dre/langdo) (1 pathi = 1.2 kg paddy or 1600 pathis/acre, average for Bhutan: approx. 1 ton/acre, source: 8th Five Year Plan, Ministry of Planning).

It was mentioned that since last two decades the services especially from agricultural and animal husbandry department has improved and considerable progress has been made to increase the yield of various products. They are hopeful that population increase can be met by the simultaneous improvement of knowledge and technology in the on-farm aspect (agriculture and animal husbandry). It is believed that forest cover has increased since forest laws have been introduced and enforced by RGOB.

The introduction of Jersey breed has come in a big way and villagers feel that it can also plough and graze in forests as other breeds. This statement was contrary to the information given by all other villages visited, where people still maintained that Jersey cannot do ploughing and forest grazing. They have a clear preference for this breed. The cattle number per household is varying between 5 and 30 (average could be 17 and that would give a human/animal ratio of 1:1). The milk yield of Jersey is given as 5 bottles/day (approximately 4.25 kg, which however is low as compared to other areas in the Himalayas).

The people have no individual Shokshing but they do collect leaf litter and other forest products regularly.

b) To be noted

The participants from the RNR-sectoral staff -which accompanied us in the team are able to generate a rapport with the villagers but tend to give their own comments and answers even before the villagers have been asked or they have said anything. It is obvious that most of the participants in our team should be made capable of generating dialogue with the villagers than asking straight questions and wanting direct answers. It is usually underestimated that people have lot to say about any subject of On-farm management and their experience only comes to light if discussion is well-managed.

c) Problems

Irrigation requirements were given as the main problem and it is believed that with better irrigation facilities they can meet the food requirements of future. Moreover, rats destroying crops was also mentioned.

5. Planning

There was so far no **joint sectoral approach** here i.e., all RNR sectors are working in isolation from each other. RNR activities done in this village are few and sectoral activities of individual sectors are going as usual and thus agriculture sector has introduced:

- Mushroom cultivation activity (by many farmers)
- Provision of vegetable seeds on demonstration basis (on trial basis, winter crop)
- Animal husbandry has few years back done animal services with Jersey bull

It was found that there is a common interest in participatory M&E. Therefore the activity of vegetable promotion or mushroom cultivation can be utilized for this purpose. Among these farmers few could be chosen for monitoring. Remember, however, the findings should be also shared with the farmers also.

6. Final remarks

Generally, in any village where project personnel will enter for planning with people, villagers will directly talk about their problems and would even demand that they want this or that thing. The art of tackling such a frequent situation has to be developed among the planners and extensionists who have a close interaction with the villagers.

- The shift of M&E at village level, based on resource or demonstration farmers should be applied
- Within all the major sectors some activities can be easily got monitored by people with extensionists acting as strong backstoppers
- Observation and communication among sectoral staff should act as tool for gathering and documenting information
- The staff should monitor and evaluate its own actions, preferably on monthly or quarterly based and report it to the related higher-ups as a document rather than as a verbal message.
- Some RNR sectoral officials are aware that RNR activities should not be enforced in a subsidized way as it only increases the dependence of villagers on externally guided resource utilization and management
- Both practicing and demonstration farmers should be used for extension by arranging exposure trips etc.
- First try a thing at smaller scale and then go for greater extension.
- Finally, it is important to go to village as a complete team of specialists -while planning- and not that one or few team members come at their own time. The team, which visits the village should in

advance distribute tasks prior to start of interaction with villagers. One should also never hurry through the proceedings.

Case study IV (24.12.1997); Nubding Village (Dzongkhag: Wangdue-Phodrang)

1. Participants: District Planning Officer, DAO, DFEO (all from Wangue-Phodrang), Reinhard Wolf (TL-GTZ), Akey Dorji (RO), Tashi Tshering (RO), Rajan Kotru

2. Objective: Exploration of M&E elements and technical interventions so far

3. General Background

The village is located at an altitude of 2500m a.s.l. approximately 50 km from Wangdue Phodrang on the main highway to eastern Bhutan. The village is marked by new satellite houses by the roadside, whereas the main village is located few hundred meters off the main highway eastwards. The upper southwestern area is marked by a dense forest cover which is peculiar for sporadic gaps in the canopy. These gaps are still evident as they are now marked by grass and scrub growth. As revealed by the villagers approximately 25 years back there was a phase of heavy deforestation in the surrounding areas as timber was being harvested for the construction purposes for the districts of Paro, Thimpu and Wangdue-Phodrang. This deforestation phase has changed the tree vegetation of the surroundings and species such as *Bamboo is no more growing here*. Also *hemlock, fir and spruce have become rare*. The roadside houses are conspicuous of *popular kitchen-gardening*. Despite harsh climatic conditions, the farmers are growing variety of winter vegetables.

4. Planning

The village has so far benefited from the RNR intervention though all of them are pursued independently by the individual sectors. One of the major activities has been the initiation of community based forestry on 12.5 acres of deforested land. The other major happening has been the introduction of potato farming, which has picked up in a big way. The current planning foresees further interventions in agriculture and animal husbandry. Moreover, due to positive impact of the afforestation so far, the villagers are willing to give more area for plantation. Besides the plantation has been also carried out with the local school.

5. Process on 24.12.1997

There was a delayed start to the proceedings with the villagers as the Home Minister of RGOB was visiting the local area. Nevertheless, the local Gup -at whose house we assembled- could spare some time to start the proceedings. In the beginning the number of villagers was very low but went up to 11 after some time. Towards the end of the meeting only few villagers were left. The villagers felt that the life in winter is easier and not like in summer when only cloud cover and fog is around. It was mentioned that the road came to the area 20 years back and since then the villagers are benefiting from all services of RNR-sectors due to accessibility. It was mentioned by the villagers that the size of cultivable land varies between 0.17 acre and 5 acres). Some are even landless. The discussion in the initial stages centred around crop production and mainly on potato cultivation. Out of 12 households (total), 8 grow potato. The potato crop appears to be economically viable but is fraught with marketing problems, which crop up every year. Despite the pest problems -*potato grub/cutworm*, weeds- and ups and downs of market the farmers have persisted with potato. This is largely due to their in-built strategies for marketing attempted so far. Thus one way of overcoming price slash being practiced is that they sell in piece-meals. Moreover, they sell part of the crop as seeds to the department or keep some of the best grades as seed for own requirement for the next year. The farmers also gave the details about the yields per langdo according to different seasons and the inputs -in labour and material. This data can be used for the impact monitoring purposes. In spite of the input of chemical fertilizers, farmers are still using organic manure as the major source of fertilizer.

During winter only *mustard and barley* is being sown. The landless people and the ones with insufficient food production are working for others in the village to earn their foodgrains. There is a

clear understanding that the living standard has improved since last 10 years. They are satisfied with the prevailing services extended by the RNR-sectors.

They are opting for Mithun bull breed. However, 10 years back they had a *Jersey bull* which was removed from the services three years back. There are rules for raring a bull which were reflected by the fact that there is a set tradition for repaying the bullkeeper if service is successful.

This was the only village, where villagers were firm in saying that the forest cover and the composition of species in the current degraded forest has changed.

a) Major project (RNR) intervention

Community Forestry (12.5 acres) on the former clear-felled area, not all people know about it, plantation so far in good condition (quality, survival). Natural regeneration satisfactory and site specific indigenous species coming up including *fir*. This plantation has a good potential to be taken up for impact monitoring (biodiversity, social acceptance etc.). More community forestry area is being offered. Involvement of villages in IM possible.

The local Gup has proposed for an individual dairy for which the feasibility has to be checked by RNR-sectors. The site was not visited.

b) Problems (mostly potato related): Pest diseases in Potato (grub/cut worm), weeds, attack of wild animals (wild boar, deer etc.), marketing of potato.

6. Final Remarks

The concept of community-based planning has been initiated here and can be consolidated by evolving further the management concept of the afforested areas under social forestry. People have confidence in the RNR-sectoral staff and this should be used. The request of further area to be taken under afforestation clearly speaks for the maturity of the people for the long-term thinking. This could be a potential village for **impact monitoring not only for ecological rehabilitation but also for attitudinal and institutional changes occurring at village level**. The contribution of people in afforestation has been encouraging and needs their involvement in other fields as well such as in PIM (biodiversity changes in afforested land etc.). The other aspects which could be considered are:

- Potential of community-based RNR-development should be explored and even children of the school can be involved.
- Community-based management of afforested area can be initiated.
- IM/PIM aspects should be explored and few areas tried out. People should reflect, perceive changes and exchange views on them.
- A good chance of phased, prioritized planning and implementation possible.

ANNEX VI: Feedback day (25.12.1997)

A) Few reflections on 18.12.97 (not given here, see Annex IV)

B) Short account of case studies with remarks for M&E (plus M&E, Impact)

Case study I: Village Nabji (1870m) (Dzongkhag: Punakha, Gewog: Limbu)

Some selection criteria: Watershed Management, Rice potential, All RNR elements, Shokhsing, Irrigation, and lower degraded catchment. Other background: 19 HHs, HHs scattered, upper ridge densely forested, individualistic, remote, Maize fields very slopy and untterraced, Homesteads not developed, Self sufficiency, Interventions so far hardly integrative

Planning: Terracing, Maize seed, Mithun bull, Supply of fruit saplings. The intervention: sectoral RNR is purely a dependency and subsidy oriented, long term self-sustaining ideas missing

Flaws in planning

- i) Baseline data not comprehensive
- ii) Inter-sectoral Team for planning incomplete
- iii) Participatory approach not visible
- iv) Timing, Responsibility of interventions missing

4. Some final remarks

- i) Elements of M&E (few) can be built on village-level (incentives not required)
- ii) All major intersectoral activities can be monitored by people with extensionists acting as strong backstoppers
- iii) Training of participatory M&E (Impact) at Gewog/Sub centre level
- iv) Observation and communication of sectoral staff should for gathering and documenting information (subject-matter baseline, impact etc. (e.g. irrigation channel)
- v) People are good listeners and have faith in extensionists, rapport exists. This can help in building/or leading towards long term TG action (i.e., Project purpose, PTG + I.A.)

Case Study II (22.12.1997): Village: Damchi (Dzongkhag: Punakha; Gewog: Kabchi)

Some village features: Roadside village-good accessibility, substantial agricultural land available (6 langdo-2.5 acres, but 1.5 and 2 ha), Few progressive farmers evident as they effectively manage homesteads, good economic status evident (power tillers etc.). Intensive use of cultivable land winter/summer. Heavy intersectoral input and exposure (trainings, study tours etc.), Jersey preference, open grazing 12 months still, (All inputs 20/30 Ngultrum for vaccination and deworming 40/50 Ngultrum per cattle). 20 years back winter crops started. Villagers are satisfied with with the inter-sectoral extension

Problems: wild animals (wild boar, deer species etc.), Chilly wilt, No A.I. any more, mushroom cultivation (long term problems)

Own observations: Animal care or cattlesheds could be improved, intensive open grazing, better homesteads resource base

Progressive farmer focus: Cultivable size over 2 ha, On-farm strategy practiced (silvipasture management and fruit trees, winter diversification onions, wheat, summer crops, vegetables, mushrooms, small timber/implements, milk yield (jersey)

Remarks

- Good HH-Budgeting cases (IM)
- Farmers strategy On-farm (subsidised to self-sustained)
- Potential for Extension-Agents, cross visits, SMS Information/data
- Marketing attention/support (cooperatives etc.)
- IM-village based resource farmers, a best bet.

Case study III; Village: Hebesa (20 km away), Dzongkhag: Wangdue-Phodrang

General background: HHs 18 (6 are out), Animal/Human population 1:1 (human 200), Basochu Hydro project since few years, HHs scattered, cultivable land holding 1-5acres, crop yield even today more than average in Bhutan 1.65 t/acre, winter/summer crops grown, food sufficiency only for big landholders (small famers work for others for self-sufficiency), open grazing for 12 months, RNR sectoral extension satisfactory, the coming of road (both positive and negative)

RNR highlights (activities) so far:

- Jersey Programme is a success (no inhibitions etc.)
- Agriculture input regular
- Mushroom-activity introduced but no experience so far
- Vegetable (winter) demonstration started

Problems: Irrigation (Hydro Project may affect), rodents attack the crop, less agricultural land (ceasing), Forest and other land can get affected by workers, expectations from RNR-sectors very high (irrigation channel has been promised)

Remarks: Collective mobilization of people not evident

RNR sectoral interventions have not focused on implications of Hydro project

RNR sectoral strategy/concepts not clear (Homesteads vacant)

Good site for reflections on different intersectoral activities. heterogeneity village-wise and activity should be accordingly -extension also.

Case study IV; Village Nubding (2500m a.s.l.), Dzongkhag: Wangdue-Phodrang

Village background: Now marked by satellite houses -roadside, distance 50 km., Crop production centres around potato, Kitchen garden idea better evolved than previous villages, clear strategies for marketing attempted. Out of 12, 8 HHs grow potato, Cultivable land size small between 0.17 acre and 5 acres, some are landless, In case of foodgrain insufficiency, villagers work for others- 2/3 decades back heavy deforestation, which has reduced forest cover and tree composition (bamboo, pine blue, hemlock, fir etc. growing rarely) preference for Mithun bull in this regard community based experience available,

Major RNR intervention: Community Forestry (12.5 acres) on the former clear-felled area, not all people know about it, plantation so far in good condition (quality, survival). Natural regeneration satisfactory and site specific indigenous species coming up including fir. More community forestry area offered, involvement of villages in IM possible.

Dairy proposed by an individual farmer (Gup)

Problems: Potato (cut worm, grub) weeds

Remarks:

- Potential of community-based RNR development "the best", more area offered, general concern about deforestation)
- Community-based management of RNR can be initiated
- IM aspects starting from CF-plantation possible
- A good chance of phased planning and implementation
- A good site for the need of participative planning (CF school), Approach elaboration

Elements of M&E

- Ongoing review (identify irregularities in project implementation)
- Systematic observation/documentation (to document process of change)
- Analysis and Decision-making (adjust, rectify, innovate etc.)

- Frequent and systematic periodic reflections
- No actions without reflection and these need time

Impact

- is lasting and significant effect at the level of overall Goal - identifiable after project completion and in significant time
- at Result level/ Technical -economical impact) as physical, economical, financial changes, easy to measure
- at Goal level/Purpose: Socio-cultural/Institutional impact as groups capacity, Implementing Agency's capability, autonomous, attitude, skill, behaviour, problem solving capacity, learning capacity.

Annex VII: Comments on PPM

I. General Comments

a) PPM

- Vertical and Horizontal logic of PPM may need improvement
- Definitions at all levels -Goal, Purpose etc.- not precise
- Indicators are not always containing QQT (Quality, Quantity and Time)
- Assumptions need Re-evaluation
- Tolerance levels of negative effects missing (what is acceptable mortality rate or how many instances of trespassing -fires, grazing incidents etc.- in plantation are acceptable etc.)
- Is there anything new (approach, strategy, activity etc.) which has not been incorporated in PPM/PO so far (Changes through 8th Five year Plan)? How is PPM and PO being incorporated in Dzongkhag-Level RNR-sectoral planning?
- Where is the quantification of the main result-wise activities?

b) PO

- Milestones are missing including what is the source of information (Reports, surveys etc.)
- Financial part is missing
- Responsibility part is missing
- General Remarks column is missing
- Is there a mechanism to consider more Target or User group-oriented reflections in M&E?

II. Goal

The definition of the Goal can be made more precise for the reason given below:

- Do we know what is the current productivity and that too in different sectors and different types of land-ownership (i.e., private, registered, forest) and if it is less then what is it (e.g. fodder deficit, food grains imported etc.)?
- Moreover, it is important to mention at Goal-level \Rightarrow where the productivity will be enhanced (e.g. district X and Y or in project area, if in all RNR sectors?).
- Normally, if there is a productivity increase that would mean a bonus for people (e.g. selling of excessive food grains etc.) and their economy will improve (i.e. living conditions will improve).
- It is advisable to put indicators at Goal level

Indicators G1: Do we know the initial productivity. If not, then may be trace it over different activities as to what will be the annual or periodic increase in production. Perhaps a break-up in indicator i.e., take productivity on degraded land will increase by such and such percentage, or increase on private lands will be by such and such percentage up to 2001 etc.

Thrust should be on activities with maximum intensity or maximum chances of early impact. Thus in case of an afforestation, the survival rate alone will not speak for productivity increase -quality of plantation is necessary- some sampling or observations made by villagers or implementing staff should be incorporated. The few examples for indicators could be:

- a) The yield increase achieved by adopted/resource farmers of particular crop 30% by 2001.
- b) Grass fodder increase of 25% from degraded registered land by 2001.
- c) Fuelwood yield from afforestations increase by 10% up to 2001.
- d) Miscl., one should know what other major sectors are being considered and indicators at Goal level can be accordingly. Since the project has or will take up 3 sectors only, indicators can be accordingly.
- e) In a watershed approach area, perhaps indicator can be on water yield increase.

All this, however, foresees that some benchmark or baseline data is available, if not, still one can procure such data or compile it from RRA/PRA if their number and contents are sufficiently representing the project area scenario.

An effective development of M&E system inculcates the availability of all baselines (e.g. social, economic, ecological aspects etc.).

Proposed Def. for the Overall Goal: Productivity of RN Resources enhanced in project area or in two Dzongkhags (Punakha & Wangdue-Phodrang) with improvement in living conditions.

Goal

- Remember achievement of purpose is not equal to Goal achievement and vice versa.
- Productivity not self-sustaining and there are even now indications for that. Individual farmers are subsidy-dependent, further RNR areas can come under pressure etc.

III. Purpose

It is not evident in here who is the TG (Line departments are able to do it or user groups at village level etc.). Purpose must reflect on target group action.

a) Proposed Def.: Sound RNR planning and management of priority areas in districts X and Y developed and implemented by RNR-sectors.

Queries: What is sound? Who is TG? or What is TG action? and What are priority areas?

b) Def. Proposed: Need-based RNR planning and management approach developed by IAs and implemented with PTG in two Dzongkhags

Queries: What is the minimum ecological interference? Is there really deficit/gap at present?

PP1: Can one really achieve that in three years?

Does the baseline exist, which pinpoints the current deficit. How much time it will take till afforestations can really provide the yield that would clear the deficit.

May be it is easier to mention that in the selected villages/Gewogs within priority areas this or that thing will happen.

Besides what is “under minimal ecological interference”? Is there any activity which is focusing on this aspect.

Will the project documents suffice or should there be a fullfledged cell for IM within sectoral M&E, which not only reflects on physical and financial aspects but also what has been effected?

Queries: With no change in the forest use (i.e. open grazing, fuelwood, leaf litter collection etc.) an biodiversity change occur in 3 years that to even on randomly selected spots. One should say in test areas (if at all then in selected, intervened areas where we have done some activity which could lead towards the change in biodiversity).

Where is TG-action?

MoV: should be supported by surveys, observations and Monitoring reports.

Suggestion: better to mention in Test/selected areas this or that will be achieved by Participatory TGs in 20% of villages in two Dzongkhags under RNR-integrated approach

Assumptions

- No largescale movement or transfer of qualified/trained staff
- Population growth remains stable
- Line agencies coordinate or cooperate

PP2: What is understood from biodiversity and its level. Is there a current level then what is it? Why is biodiversity mentioned here?

Possibilities:

e.g. No. of species increased by y % in 20% of treated area or something with soil fertility can be brought in (this would, however, need a baseline about what is the composition and number of species under different human impact conditions).

In this regard may be natural regeneration on degraded sites and now under protection can be taken up as an indicator, fauna and other flora, also accumulation of organic matter (soil etc.), water may find use.

IV. Results

Some open questions and suggestions are made individually by denoting the particular result no. (etc.):

Result 1:

What are sectoral balanced plans?

- No. of such plans to be made and implemented?
- No. of Integrated Resource Management Plans to be done up to 2000?

Proposed Def.: Sectoral Plans are operationalized and continuously improved

Query: Result (1), What is balanced? What is plan? Whose plan Implementing Agency or Participatory TGs?

Result 2: If baseline is not complete or relevant then this result may become Result No. 1. Sufficient and relevant data should be available before we can do planning.

What has been the process of planning and where it should be directed further? (departmental or participatory etc.)

R2.2: may even be put as assumption

Result 3: No assumptions given?

Result 4: Extension strategy developed and implemented (this could be said instead)

Result 5: Break-up to be given up to 2000

- Out of potential no. of M-Plans, X% are developed and implemented by 2000
- Social forestry meets requirements of 25% of HHs in treated areas by 2000
- or Yield out of social forestry afforestations meets X% of total requirement in priority areas. (Who measures and what, when etc.?)
- Result 5/6 = 5.2 indicator: Will resource utilization start in three years?

Result 6: QQT missing

Result 7: Crop/livestock (result may be separated, too long and confusing)

- What is mandate of both the sectors? Production increase or Crop diversification or both, Low input oriented Agriculture etc.
- What do Animal Husbandry sector aim: breed improvement, milk production, better animal health care?

7.1 should mention, productivity of what? Yield of what? by how much? In how many seasons, years? Resource farmers etc. should figure here

For the logic of sequence (or vertical logic of PPM) it is proposed that results should be well-defined and precise

The main/sub activities under Result 7 must answer the following queries:

Animal husbandry: What is the potential of breeding programme, Long term implications (inbreeding, increased milk yield, fodder requirements. What about peoples choice, Stall feeding concept, Intensive Input-orientedness.

Agriculture: Is it must to force all activities in a village that too subsidised? What is the potential of production increase? What is the homestead concept? Farmers type HH-budgeting

- Both the sectors and their intensive development are strongly influenced by forest use also, i.e., input from forests (manure, grazing etc.)
- Marketing may become a problem for remote villages

A short term M&E of activities, implemented through RNR-sectors signal the need of some unavoidable improvements in PPM so the Goal/Purpose/Results are not confused: vertical/horizontal logic, definition imprecise, Indicators QQT, assumptions, clear cut main and sub-activities, how PPM incorporated in PO and RNR planning

V. Plan of Operations

In general the following aspects in PO are not reflected and these are Budget, Performance Indicators, Location etc.

General remarks on activities

See for instance Activity 4.2 and 4.4 in Result 4:

- The activities are simultaneously containing many aspects therefore too long
- In these activities we are talking about training twice and why not to merge into a single activity on training and exposure, then one can put it as Milestone: X number of Exposure trips for staff or Two trainings in the field of a and b will be conducted annually
- Z number of TGs will be trained in organizational or institutional capacity-building annually

VI. Miscellaneous.

Some general suggestions

- There should be a separate list of Indicators (taken from PPM), which allows a clear testing of PPM
- PPM should be discussed and improved since then it will be very helpful to device a procedure and approach for IM
- Check if there can be intermediate purposes (two) and indicators respectively
- Put emphasis about which activity or areas we want to focus

IMPORTANT is:

- Take more reflections from people about the works done in their project
- Better to have a separate Organigram for M&E which shows the course, type and time of information-flow (including responsibility) and also link with Dzongkhag-level RNR-sectors
- Plans (OP etc.) have information that can be used for Project Monitoring
- Low level staff must know about what we are doing with information that we collect from them. Moreover, this information or input should finally also go to the PTGs
- Never select only one objective, keep alternatives also

Following example of a break up as a good at Indicator or Milestone level

Activity	Year			
	97	98	99	2000
No. of Trainings	2	3	3	1
No. of Exposure trips	1	2	2	2

or

Year	No. of Improved Seed Distributed Villages	Cultivated Area covered (ha)
1997	10	25
1998	20	40
1999	20	50
2000	20	45

Assumptions

- All quality inputs from RNR-sectors are available in time as per the time frame in APO
- Third Parties do not destroy Community Plantations
- Villagers are prepared to provide support or cooperation
- RNR-sectors provide land and personnel as required and as per time frame in project operational plan
- Requisite resources are provided by RNR-sectors in time as per PO

VII. How to measure negative impact?

(e.g)

Sub-Activity

To implement forestry activities

Negative impact**Indicators**

Users Conflict (Inter and Intra village)	No. of trespassing incidents annually (grazing, fence damage etc.)
	No. of fines imposed on villagers annually (by VDC)
Reduction of open grazing land	No. of browsed plants annually
	No. of physically damaged plants annually (lopping or cuttings)
Physical hazard	No. of fires incidents annually
	Frequency of damage + extent of damage on crops and other plants

Sources of Information: VDC documents, Surveys, Reports

Impact Monitoring (Proposed example for Annual Reporting)

Which Main-/Sub-activity you have worked on in Annual Plan of 1997/1998 (case reflections, on-going observations etc.) e.g. for an extension agent of Animal Husbandry

Result No. 7²	Responsibility	Time schedule	Progress	Action Required
<p><u>Main Activity:</u> Crop and Livestock programmes identified and implemented</p>	<p>Dzongkhag RNR sectors Agriculture Animal Husbandry</p>	<p>From July 1997 June 1998</p>	<p><u>a)What is done by you up to now?</u> <u>b)Achievements and problems</u></p>	<p><u>What action shall be taken by whom to solve problems etc.</u></p>
<p>Sub activity 1: Genetic upgradation activities carried out (i.e., Natural services)</p> <p>Sub activity 2: Castration of old and unwanted animals carried out</p>	<p>Sub-centre Incharge Extension Agent</p> <p>Sub-centre Incharge Extension Agent</p>	<p>March-July 1997</p> <p>July 1997- March 1998</p>	<p>Sub activity 1: Natural services of Jersey breed done in 6 Gewogs and 55 animals serviced (MoV: monthly reports from sub-centre data)</p> <p>Sub activity 2: 10% of such animals in 6 Gewogs castrated (MoV: monthly reports from sub-centres data) Available at Sub-centre/Dzongkhag</p> <p>Problems: 1) In slopy areas Mithun bull preferred and Jersey fodder needs are high and inbreeding has caused milk yield reduction 2) Religious inhibitions against castration, most bulls are grazing in forests, hence castration targets were not achieved time-consuming / in- effective village visits</p>	<p>Action Required based on the problems: → Sub-centre Incharge/extensionist writes to (report) Dzongkhag level sector head that people have reservations for Jersey promotion. Sector head agrees to provide the services of Mithun Bull or orders change of Bull type</p> <p>→Extensionist + District Animal Husbandry Officer or Sector-head on the basis of report have Gewog level meetings with villagers to campaign for the benefits of castration. Castration days were fixed as per people's selection</p>

² see PPM-BG-SRDP, Contents of Result 7 are modified!

Impact Monitoring (e.g. self monitoring), proposed example for Annual Reporting

Did your action lead to attitudinal or change in behaviour of PTG which support the sustainability of your achievements? Describe/elaborate the changes and means of verification (MoV) (case reflections, on-going observations etc.)

Result No.4 (PPM-BG-SRDP):	Responsibility	Time schedule	Progress	Action Required
RNR Extension services strengthened and improved continuously	<u>RNR sector heads</u> <u>Extension staff</u> <u>PRA Consultant and RNRRC</u>	<u>From July 1997</u> <u>June 1998</u>	<u>a)What is done by you up to now?</u> <u>b)Achievements and problems</u>	<u>a)What action shall be taken by whom to solve problems etc.</u>
Main activity: <u>Effective M&E for the RNR extension established and TGs need based services ensured</u>	RNR Sector heads and Extension staff	by April 1998	Positive <u>Impact I</u> Village-based planning (1 village/ Gewog) incorporated in Annual Plan. The planning was done by an inter-sectoral Team with integrated approach <u>Impact II</u> In 6 villages (1/Gewog) respectively two farmers/village are acting as Resource farmers for the impact on yield increase in agriculture and milk production	Action: Order from Dzongkhag RNR-Sector heads to their staff for inter-sectoral planning coordination in the field and notice issued that no village based planning to be done until 75% of Households are represented in General House and at least 40% are women participants
a) Sub activity: Participatory working approach developed and implemented	RNR-Sector heads RNRRC-Bajo BG-SRNR	by June 1998	Negative <u>Impact I</u> The planning meeting in villages were attended by only 25% of the villagers (households) and only progressive farmers benefited MoV: Planning document made in village	
b) Sub activity: Linkage of Farmer's based and inter-sectoral M&E created	RNR-Sector Heads Extension Staff	July 1997- July 1998	<u>Impact II</u> Excessive funds got spent in a particular village due to lack of inter-sectoral coordination and neighbouring villages are complaining about the projects planning procedure MoV: Village notes from neighbouring villages and quarterly reflection by the extension agent	Note: Village-based, phased and prioritized planning was recommended

Monthly Account of Tasks and Issues Encountered (based on tour diaries, information from villagers)

Month: _____ **Year:** _____ **Village/Area/Gewog:** _____

Extension Agent/Forest Guard/Sub-center Incharge: _____

<i>Sl. No.</i>	<i>Activities/Tasks done</i>	<i>Status (Successes/Problems encountered)</i>	<i>Solutions/Decisions (RNR sector Meeting, Villager's input etc.)</i>
.			
.			
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.			

Submitted to: _____ Date/Signature: _____

Bhutan-German Sustainable RNR-Development Project (BG-SRDP)

MONITORING AND EVALUATION TRAINING

18 - 25 DECEMBER 1997

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