

CHAPTER 15

Monitoring and Evaluation

1. Monitoring

- 1.1 Regular monitoring and evaluation of work will be carried out to ensure qualitative and quantitative improvement of all development works and nurseries.
- 1.2 Monitoring of nurseries will be done keeping in view the quality of plants raised for distribution and planting with special reference to indigenous species and species of ecological, economic, environmental and religious importance.

2. Evaluation

2.1 Evaluation of development works will be carried out at following levels.

- 2.1.1. Range level
- 2.1.2. Divisional level
- 2.1.3. Evaluation by Monitoring and Evaluation Units
- 2.1.4. External Evaluation

2.1.1. Evaluation at Range level

- 2.1.1.1 Forest Range officer will constitute evaluation party at range level.
- 2.1.1.2 These parties will carryout evaluation of works quarterly in the months of April, July, October and January.
- 2.1.1.3 In this evaluation all the works in the plantations will be checked, measured and survival percentage will be found out. The evaluation of plantation will be done site wise and sub-division/block wise.

- 2.1.1.4 In these evaluation reports photographs of plantation board, plantation gate, cattle guard hut, inspection path, treated natural plants & planted species, labour amenities, t&p's etc. must be included.

2.1.2 Evaluation At Division level

- 2.1.2.1 On receiving evaluation report from Range Officers, Deputy Conservator of Forests will form an evaluation team under the control of Assistant Conservator of Forests who shall verify the evaluation carried by the range officers.
- 2.1.2.2 Evaluation report for each range will be prepared separately.
- 2.1.2.3 Evaluation report of advance action works will be submitted by June and of plantation work will be submitted by December.
- 2.1.2.4 In these evaluation reports photographs of plantation, board, plantation gate, cattle guard hut, inspection path, treated natural plants & planted species, labour amenities, t&p's etc. must be included.
- 2.1.2.5 These evaluation reports must be submitted to Re. CCF & Ad.PCCF (M&E) for perusal & further necessary actions.

2.1.3 Evaluation by Monitoring and Evaluation Cells

- 2.1.3.1 Deputy Conservator of Forest Planning and Monitoring will carry out evaluation of plantations as per instructions issued by APCCF (M&E) from time to time. The division for evaluation will be selected on random basis each year by CCF (M&E) under the supervision of Addl Principal Chief Conservator of Forests (Monitoring and Evaluation). A list of the entire plantation works of current year and previous years will be obtained from the Divisions. 20% plantation works for each year will be selected for evaluation on random basis. 100% evaluation will be carried out for 10% of selected plantations. Ten percent evaluation will be done in the remaining selected plantations. The selected plantation will be evaluated with respect to all the works recorded in the measurement book. The number of plantations and nurseries to be evaluated

- 100% or 10% can be increased by CCF (M&E) & Ad. PCCF (M&E)
- 2.1.3.2 The concerning DCF will provide all assistance to the inspecting party in making necessary arrangements for their stay and conducting evaluation. This includes vehicles, survey and evaluation equipment and materials like GPS, laptop, camera, torch measuring tapes, ropes, lime powder, calculator, necessary official documents etc.
- 2.1.3.3 The concerning DCF will ensure availability of all the following records which are mandatory to be maintained.
- 2.1.3.3.1 Survey maps, soil maps and treatment maps.
- 2.1.3.3.2 Technical note and treatment plan.
- 2.1.3.3.3 Technical estimates as per the requirements of the particular sites including revised estimates if prepared as per the requirements of the particular sites.
- 2.1.3.3.4 Plantation journal and plantation card.
- 2.1.3.3.5 Micro plan
- 2.1.3.3.6 Measurement book
- 2.1.3.3.7 Record of disposal of minor forest produce from plantation area.
- 2.1.3.4 On reaching the site, the plantation will be inspected first and a “panchnama” will be prepared in the presence of local staff. Counting parties will be constituted. The counting parties will count all the growing seedlings of naturally growing important indigenous species, planted species, dead plants, vacant pits, staggered contour trenches by marking them with white powder. Contour dykes, check dams and other soil moisture conservation structures will be measured and their number will be marked. Technical suitability and impact assessment of on the soil and moisture conservation structures on the growth on the naturally growing important indigenous species and planted species will be assessed by the team.
- 2.1.3.5 The entire plantation area shall be demarcated into blocks as per natural features of the site. The boundary of the block shall be marked with lime. After dividing the

plantation area into blocks, the evaluation party shall carry out counting and measurements block wise and also prepare the calculation sheet block wise.

- 2.1.3.6 All the works in the plantation will be checked, measured and average species height and survival percentage will be found out. The evaluation of plantation will be done site wise and block wise.
- 2.1.3.7 Arrangements made for development & protection of important natural indigenous species and the proportion of important indigenous planted will also be evaluated.
- 2.1.3.8 After completion of work, the area will again be inspected to ensure that no work is left uncounted, unmeasured and unnoted. The number of forms used for evaluation will also be entered in panchnama and signature of local staff will be taken.
- 2.1.3.9 The evaluation reports will be examined at the headquarter and will be sent to concerning DCF / CF / Re.CCF, with the request to take remedial action in order to qualitatively and quantitatively improve the site within the prescribed time period. In case of serious lapses, action will be proposed against the concerning officers & staff. During evaluation work, no development work will be allowed to be undertaken on the plantation sites.
- 2.1.3.10 Concerning DCF will designate at least one Range Forest Officer to accompany the evaluation team. Besides site in charge, additional persons will also be directed to accompany each counting party and after each day's work, all of them will put their signatures on evaluation and counting sheets.
- 2.1.3.11 Concerning DCF / ACF will inspect the evaluation work at least once, to ensure that evaluation work is being conducted properly.

2.1.4 The evaluation party will also intensively assess the following

- 2.1.4.1 Record of V.F.P.M.C., its meetings, bank account, development works if any carried out by VFPMC. Progress of self-help groups and any other entry point activities undertaken by the VFPMC.
- 2.1.4.2 Status of encroachment.

- 2.1.4.3 Sign board and gate of plantation.
 - 2.1.4.4 Inspection path and cattle guard hut.
 - 2.1.4.5 Location map with GPS co-ordinates of boundaries and important landmarks.
 - 2.1.4.6 Soil texture, structure and topographical features.
 - 2.1.4.7 Natural vegetation and no. of plants of important indigenous species.
 - 2.1.4.8 Old works in the plantation area.
 - 2.1.4.9 Results of sowings of tree and grass species.
 - 2.1.4.10 Details of pruning, weeding & hoeing, both in natural as well as planted saplings.
 - 2.1.4.11 Cut-back, singling, pruning and tending operations in species like Dhok and others.
 - 2.1.4.12 Labour amenities and availability of tools and plants.
- 2.2** The plantation work will also be intensively assessed for selection of site, effectiveness of fencing, selection of species, and technical standard of work, layout and location of contour - trenches, V-ditches, contour dykes and their interval, check dams, their interval and all other technical treatments to the area. The reasons of any damage in plantations and the reason for development of natural grasses and vegetation in the area will also be recorded.
- 2.3** While counting the seedlings, “thaonlas” will be counted species wise. Pits without 'thaonlas” will be counted as blank pits without planting. “Thaonlas” around natural plants and plants of seed origin will be counted and recorded separately.
- 2.4** The measurement and impact assessment of various activities will be taken as under.
1. Contour trenches, V-ditches: - Length in running meters, its size and impact of location on natural as well as planted species.
 2. Contour- Dykes:- Location, length in running meters. Transverse measurement at either end and at 25 m interval
 3. Check Dams:- Length at top and bottom, width and height at three places (both ends + center)
 4. Fencing of each type:- In running meters. Transverse Measurements at 100 m interval and its effectiveness.

- 2.5 The counting of work items will be carried out block wise.
- 2.6 The in charge of evaluation team will randomly select a sub division/block and verify works by measurements and counting.
- 2.7 Photocopy of counting sheets and measurement record will be made available to DCF / ACF of the concerning Range Officers.
- 2.8 In these evaluation reports photographs of plantation, board, plantation gate, cattle guard hut, inspection path, treated natural plants & planted species, labour amenities, T&P's etc. must be included.
- 2.9 After receipt of evaluation report, if any disciplinary action is initiated then recounting will not be done. Evaluation report will be considered as a part of preliminary enquiry report.
- 2.10 Prompt action will be taken on evaluation report by the concerning DCF / ReCCF. In the case of serious irregularities and lapses, PCCF will appoint preliminary enquiry officer who will conduct enquiry within 3 weeks time.

3. External Evaluation

- 3.1 External evaluation of development works can be done by other state govt. department such as Evaluation Department or by some private agencies.
- 3.2 Evaluation by private agencies will be done only after short listing of agencies which are suitable and capable of carrying out evaluation studies. The forest department and the agencies will agree upon a memorandum of understanding. Evaluation studies will be carried out on specified time and at specified sum, which will be paid at specified period slated to completion of work.
- 3.3 The evaluation by private & external agencies would be carried out as intensively & as accurately as done by M&E units of the department.
- 3.4 The report of external evaluation will be examined at the level of APCCF (M&E)/ ReCCF concerned and suitable remedial action will be taken.