

PART – I
CHAPTER – V
PAST SYSTEM OF MANAGEMENT

HISTORY OF RESERVATION

1.5.1 The forests of Chaibasa South Forst Division were partly notified as early as 1892. During Mr. Gravens Settlement in 1897 protected forests Block No. 1 to 58 were surveyed and demarcated Blocks were actually declared P.F.s in four lots, first being in 1905 and last in 1920. In the beginning these forests were under singhbhum forest division, Chaibasa Forest Division was created in 1905-1906.

1.5.2 Subsequently blocks no. 57 to 184 were added in this Division. But on creation of the Kolhan Forest Division in 1924 Block no. 1 to 18 were taken out and included in the Kolhan Forest Division.

PAST MANAGEMENT

1.5.3 The protected forest were managed without any proper scheme or working plan till 1915. The first experimental scheme came in 1917-18 for four blocks viz. nos. 74 to 77. They constituted only one felling series and system adopted was coppice with standard on 30 years rotation.

Another scheme was drawn in 1919-20 for most of the remaining blocks. These scheme proved satisfactory for regeneration but not encouraging the standards. The selection of standards and their number were not done properly.

1.5.4 The Forest blocks out side the scheme did not improve much. During the period of first scheme the area was opened by construction of the Railway line and new roads.

The sowing and planting under this scheme did not prove successful.

WORKING PLAN OF MR. F. A. ALL HART. 1930-37

1.5.5 Mr. Hart's regular working plan came into force in the year 1930-31 embraced all the P.F's of this division. The plan prescribed three working circles based on the quality of the crop and local condition.

(i) COPPICE WORKING CIRCLES

1.5.6 Covered 70% (1,05,886 acre) of the total area of the division and comprised forests below quality class III and where the demand of the Raiyat was high. The Silvicultural system was simple coppice, standards were to be kept only on silvicultural ground with a rotation of 40 years. This replaced the coppice with standards system of the past working scheme. The entire working circle was divided into 38 felling series.

No subsidiary silvicultural operation was prescribed after the main felling but a 10th year thinning was prescribed.

(ii) SELECTION CUM IMPROVEMENT WORKING CIRCLE

1.5.7 Covered 2.5% (3817 acre) area of the Division, and prescribed for the area where the quality of the crop was better and demand of the Raiyat was negligible. This was operation in P.F.'s blocks no. 29, 30, 37, 39. A felling cycle of 20 years was adopted. The yield was prescribed by area and all the trees over a minimum exploitable diameter were to be marked for felling, except a few reserved trees to be retained as seed bearers.

(iii) UNGREGULATED WORKING CIRCLE

1.5.8 Covered the remainder area of the Forests, These Forests were either too open or too poor or inaccessible. In this working circle the conservator of Forests was given the option to allot any portion of the area of this working circle in any of the above two working circles.

The Plan remained in Operation till 1936-37 and brought all round improvement in the working of the forests and proved successful for the coppice system except that the number of standard were in adequate for future reserve. The selection working circle tapped only a small portion of the blocks allotted to this working circle.

Mr. W.D.M. Warren Plan 1937-38 to 1977-78

1.5.9 The Hart's Plan was replaced by Mr. Warren's Plan. This plan prescribed only one working circle namely coppice working circle for the entire division except the BICHAGUTU reserve forest maintained as LAC ORCHARD. The area allotted to this W.C. was 1,31,999 acres.

SUMMARY OF PRESCRIPTIONS

1.5.10 The coppice working circle was constituted into 62 felling series with a rotation of 40 years, to provide poles of 6" to 10" diameter. In addition it was prescription to retain 2 to 3 fruit trees per acre.

1.5.11 A selection felling for all trees 14" above in dia was prescribed and in advance of the main coppice felling for P.F.'s block No. 29, 30 and 37. There the crop as a whole was very much over matured and unevenaged. After then whole forest in the above block had been gone over during the first fourteen years (Coupe no. 1 to 14) by clear felling and the rest under selection felling (Coupe no. 14 to 40) a second selection felling cycle was prescribed with reduced selection diameter of 12" and coupe no. 28 to 1 were to be worked under this cycle during the next 14 year.

CONSTITUTION OF FELLING SERIES & SUPPLY OF PRODUCE TO RIGHT HOLDERS

1.5.12 The 62 F.S.'s under coppice working circle was constituted, so that right holders might not have to travel more than 6 miles to get their requirements.

SILVICULTURAL OPERATION AND THINNINGS

1.5.13 No cleaning was prescribed after the main fellings. Two thinning were prescribed, one of the age of 14 years and others at 28 years.

SOWING AND PLANTING

1.5.14 It was prescribed that the time of laying out of annual coupes any blank of more than 2 acres to Stock-Mapped and notified to the D.F.O., for Plantation purposes.

COUNTOUR TERANCHES

1.5.15 Contour Tranching for plantation in drier area was recommended.

GRAZING

1.5.16 Annual coupes were to be closed for 8 years after the main felling to permit the regeneration.

FIRE PROTECTION

1.5.17 No fire scheme was provided but efforts were to be made to protect the coppiced coupes worked during the first 8 years after copping.

REVIEW OF RESULTS OF MR. WARREN'S PLAN

1.5.18 Warren's Plan allowed coppice felling in all F.S.'s irrespective of the topography, nature and density of the cropaced retention of 3 to 4 standards per acre. Felling carried out on ridges all hill tops where the growth was already poor resulted in further reduction of drop and creation of new blanks. Coppice fellings near human habitation resulted in the creation of rooted wastes.

No cultural operation after main felling were prescribed resulted in the creation of blanks.

1.5.19 The thinning programme as suggested by warren did not get a chance to operate due to pancity of fund resulted in heavy congestion.

1.5.20 No treatment of the blanks could be done due to no definite plantation scheme for the blanks was prescribed.

1.5.21 His suggestion for contour trenching was also not given effect too and resulted no improvement in dry and open type of forests.

1.5.22 The coppice working circle suffered very badly due to heavy grazing annual fires, illicit fellings and encroachment took place during 1955 and about 4000 acres of good forests suffered on this account.

1.5.23 These are large areas carrying salai crop which could have been worked under a separate scheme but the same was allowed to be felled in coppice coupes.

1.5.24 In absence of proper stock map no treatment was given on about 16.593 acres of unproductive area resulted in the fast deterioration of the forests.

1.5.25 Due to increase in population and demand of villagers the area fixed for privileged rayats coupes did not serve the purpose and this increase in illicit fellings.

1.5.26 But inspite of these the plan played its role towards scientific management of forests and the prescriptions of the plan can not be blamed for the adverse biotic factors working against the scientific management of these forests.

FIRE PROTECTION

1.5.27 The forests suffered very badly from fire and no care was taken to protect even the young coppiced areas.

SPECIAL WORKS OF IMPROVEMENT

1.5.28 The roads, buildings and wells were constructed during the plan period.

SOWING AND PLANTING

1.5.29 Prior to creation of Singhbhum afforestation Division I 1955 some sporadic attempts were made to plant up the blanks and other suitable areas with teaks semal and other Spp. during the period of working plan.

SRI S.N. BANERJEE'S PLAN FOR THE PERIOD 1973-74 TO 1982-83

1.5.30 Sri. S.N. Banerjee I.F.S., revised Mr. Warren's plan which came in operation during the year 1973-74. On the basis of composition, density, Situation and Silvicultural needs of the forests and also the local requirement the following working circles were constituted.

- (a) Coppice Working Circle
- (b) Rehabilitation cum plantation working circle
- (c) Salai Overlapping Working Circle
- (d) Protection Working Circle

COPPICE WORKING CIRCLE

1.5.31 This Working Circle embraces the major portion of the Forests of Western, Southern East Part of the Central and North Eastern Regions of the division. The total area of this Working Circle was 10046.00 acres/40487.215 hectare and 49 felling series constituted. The system adopted was SIMPLE COPPICE with provision to retain a few selected stems as standards on 40 years rotation. This was adopted for the areas where the quality and stocking of the crop in good and less demand of privileged raiyat. The rotation reduced to 30 years where the quality and density of crop in poor and heavy demand of Raiyats. The yield was fixed by area.

Hostile population and may other complication however did not permit the working of forests, according to the prescriptions of the Mr. Banerjee's Plan. The result has been in general maltreatment of forests.

REHABILITATION CUM PLANTATIONWORKING CIRCLE

1.5.32 This working circle embraces all such areas which needs rehabilitation and plantation. This includes sal rooted wastes, mixed rooted wastes, blank and semi blanks areas. The total area under this working circle was 17,705.00 acres/7,165.04 hectare. The main objects of management was to rehabilitate the degraded forests in cutting back the pollarded and malformed stems to land up the blanks and some blanks by suitable spp. to minimize soil erosion to ensure soil and moisture conservation and also to increase the revenue on a

sustained basis, to meet the requirements of privileged Raiyats. For this purpose the annual areas for Rehabilitation has been fenced properly either by barbed wire or by trench fencing. After cutting back operation the blanks has been planted up with suitable spp. according to the texture of the soil. To meet the increasing demand of forests produce by industries and trades to provide increased quality of grass for to order, to improve the quality of plantation by scientific management and stocking in plantation by suitable measures.

In the Shri S. N. Banerjee's Plan period quite a handsome areas were planted and the result is not so satisfactory.

SALAI OVERLAPPING WORKING CIRCLE

1.5.33 This working circle constitutes the predominantly Salai bearing areas, which were ascertained through stock mapping and enumeration. The total area allotted to this working circle, was 14,854 Ac/6011.201 hectare which overlaps the coppice working circle as well as rehabilitation cum plantation working circle.

This working circle has been divided into two felling series i.e., DEOSUKUA & BHAGABILLA. The minimum exploitable diameter was fixed 16" over bark at breast height.

The Silvicultural system was selection cum improvement fellings. On 20 years felling cycle and yield regulated by Smith's Safe guarding formula in the terms of trees.

PROTECTION WORKING CIRCLE

1.5.34 This working circle embraces an area of 2665.00 acre 1078.48 hectare. It comprises parts of the forest in different felling series, which for various reasons have been excluded from normal exploitation operation, they range from steep mining faces to deforested areas in course of mining operation.

LAC ORCHARDS AND TASAR ADDAS

The main objects of this working circle was to prevent soil erosion and land slide on steep mining faces and maintain brood lac farm cum demonstration enters and Tasar Addas.

Further on the prescriptions hill faces where Iron Ore mining and asbestos mining are in progress, no fellings of trees shall be done except to the extent they may be unavailable.

RESULTS OF SRI. BANERJEE'S PLAN

1.5.35 As per plan the forests were managed under COPPICE REBAHILITATION CUM PLANTATION, SALAI OVERLAPPING AND PROTECTION etc.

1.5.36 The Commercial cum community and Commercial felling was allowed only in coppice working circle. Most of the coppice felling series areas specially near human habitation were converted into rooted wastes and blank due to high incidence of grazing back of protection and pilferage of forest produce.

1.5.37 Sal & Miscellaneous forest under commercial felling series occurring in comparatively in accessible area, and under lighter pressure are only holding the ground. The regeneration of crop did not take place and coppice shoots could not be established, in woody form. Its consequence was deterioration of forests in rooted waste & exposure of Soil erosion and also reducing its fertility.

1.5.38 Neglect of prescribed cultural operation, after main felling was also important factor for the deterioration of forests.

1.5.39 In Salai overlapping working circle, salai were prescribed to be worked under selection system. But after felling no operation has been under taken to ensure regeneration consequently occurred drastic reduction in growing stock.

1.5.40 More attention was needed towards rehabilitation of degraded forests. The afforestation in blank and semi-blank forest areas require either B/Wire or trench fencing in the vicinity of human habitation.

1.5.41 No special attention was given on the protection working circle areas as per plan's advice. Which resulted in further deterioration of forest areas.

PAST YIELD

1.5.42 The figures of total outturn of the division for the period from 1971-72 to 1984-85 have been given in Appendix No. XVII.

REVENUE & EXPENDITURE

1.5.43 The past revenue and expenditure figures of the Division for the period from 1972-73 to 1988-89 have been given in APPENDIX NO. PART – II, CHAPTER –IX.

PART – I
CHAPTER – VI

STATISTICS OF GROWTH AND YIELD

1.6.1 No Statistics is maintained for this coppice forests either in divisional office or in Forest Research Office. There is no sample or experimental plots in the Division to give any statistics for growth or yield the yield has been regularized from the all India yield table of coppice forests.

1.6.2 It transpired on tentative analysis that about 24% of the trees after coppicing failed to throw coppice shoots and assan did not coppice up to the extent of 50%. The results needs consideration which managing the forests under coppice system.

1.6.3 At the age of 30 to 40 years Sal Crop is expected to yield drop of above 5" & 7" dia respectively. Poles of these sizes have very favourable market at present. It is apparent that trees of sized, larger than these may not be allowed to grow. This will have to be kept in view while fixing the rotation.

1.6.4 Plantation of Bambioo, Eucalyptus and Acacia auriculiformis have been raised in the Division during last decade. The results have not been uniform enough to enable the selection of any particular spp. for this region. Bamboo has, however feared badly wherever it has been planted underneath matured trees of Sal. In open and plain areas, it has established well. Eucalyptus too was found putting on Satisfactory growth in areas which are free from dense vegetation and occurs in plain with deep loan soil. Acacia auriculiformis has been mostly tried ever refractory arenas. The plants do give green look but in the absence of tending operations it is doubtful if they would turn into commercially acceptable trees.

ESTIMATED OUTTURN OF DIFFERENT M.F.P.

Item	Quantity in Meter			Values in Rs.		
	1983-84	1984-85	1985-86	1983-84	1984-85	1985-86
Sal Seed	2418	21597	13778	2176200	2159700	16533600
Mahua Seed	601	2171	926	1652750	6513000	3241000
Karanj Seed	300	714	202	375000	1071000	303000
Kusum Seed	428.28	78	845	910975	117000	1478750
Harra Muts	-	173885	208398	-	86942	125038
Bakeya Muts	-	69011	74368	-	27604	341884
Amla	-	3562	500	-	2849	375
Jongji Marna	-	1468	N.A.	-	2936	NIL
Palas Seed	4731	5158	766	3784.80	4126	766

TABULAR STATEMENT OF PROCUREMENT AND RATE OF PURCHASE OF SAL SEED

PROCUREMENT		PURCHASE RATE	
Year	Tons	Year	Rs./Kg.
1977-78	14948	1977-78	0.40
1978-79	390	1978-79	0.40
1979-80	16888	1979-80	0.40
1980-81	1542	1980-81	0.45
1981-82	11521	1981-82	0.55
1982-83	2610	1982-83	0.75
1983-84	21186	1983-84	0.90
1984-85	2642	1984-85	0.90
1985-86	21567	1985-86	1.00
1986-87	12779	1986-87	1.20
1987-88	13934	1987-88	1.20
1988-89	21851	1988-89	1.20

