

CHAPTER – V
Past systems of Management

1.5.1 When the forest was under private ownership neither any scientific management nor any technical supervision of forests were undertaken. This resulted in maltreatment and the forests suffered from over exploitation especially during the Second World War.

1.5.2 The forests to come first under the management of the Forest Department were of the Banaili Estate in the Banka sub-division, which were notified as Reserve Forests under section 38 of the Indian Forest Act in January 1946. This was followed by the enactment of the Bihar Private Forest Act (1948) which put all the private forests under the control and management of the Forest Department. The Banka forests were divided into 7 felling series and coppice fellings were started in 1946-47 on 40 year rotation. In the rest of the forests, working commenced in 1950-51 under fixed value ticket system, by issuing tickets to venders. These systems were soon given up. Regular working under coppice system was started in 1951-52 fixing the area of coupes on rough estimates.

1.5.3 Initially the coupe working in the Civil sub-division of Banka, were managed under the Baunsi Forest sub-division of the Monghyr Forest Division and those of Deoghar Forest Division of the Santhal Parganas Division. The Deoghar Forest Division was created on the 1st of June, 1952 comprising the above forests. But that time, the demarcation of the forests was complete, but there was no written scheme or plan. Originally 151 felling series were started under various rotations: 20 years and 40 years rotations being more common.

1.5.4 In 1954-55 village wise working of the forest was enforced by the Government for the convenience of the right holders. This increased the number of coupes too much beyond the capacity of the forest staff to supervise as a result of which the forests suffered a set back in regeneration and development.

1.5.5 Bamboo Working

Four felling series were formed on a 4 year cycle. Bamboos were over exploited and the annual lease system and hiring of contract labourers. Moreover, illicit fellings at the

hands of the head-loaders could not be stopped. All this combined resulted in complete deterioration of the crop rendering it unexploitable.

1.5.6 Khair working

In 1950-51, Sri Kerketta, A.C.F. had drawn up a tentative scheme for working of Khair in the Katoria Range. By enumeration, he found 2150 Khair trees of 2' and over in girth. Applying a felling cycle of 20 years he prescribed yield of 107 trees each year. The scheme did not work as it failed to attract the purchaser.

1.5.7 P. Mishra's Plan

This is the first working plan for the management of the forests of this Division. It was enforced in the year 1955-56. It prescribed working under three working circles.

1.5.7.1 Coppice Working Circle

The forest area under this working circle is divided into 1282 blocks. Coppice with standards silvicultural system was adopted with rotation of 30 years. Yield had been fixed by area. The number of standards per acre was fixed by area. The number of standards per acre was fixed at 5 to 10 with 1' to 2' in girth. In open and eroded areas 25 standards per acre were fixed. It was prescribed to retain all fruit bearing trees.

1.5.7.2 Afforestation Working Circle

The blank areas available in demarcate forest lands, undemarcated notified lands and Govt. waste lands. The objectives of management are to afforest the blanks as soon as possible and to check erosion. The second objective was to raise a mixture of firewoods and timber species for meeting the local demand. The silvicultural system adopted in the "Artificial Regeneration" of blanks.

1.5.7.3 Bamboo Overlapping Working Circle

This Working Circle overlapped those parts of the working circle, that had exploitable bamboo. The cutting cycle for this was fixed at 4 years. Supply of bamboos to the turis at concession rates has been suggested by incorporating suitable clauses in the agreement.

1.5.8 Results of P.Mishra's Working Plan

The prescriptions suggested in this working plan were not practiced. Due to the poor management illicit fellings and hackings gained the upperhand. In fact most of the forests were not allowed to put on even one season of growth. The prescribed sequence of fellings had not been followed and attempts were made to exploit the better portions of the growing stock.

The block wise grouping of forests for constituting the felling series in P. Mishra's Plan was not sound. It was later realized that the village forests should not have been put under two or more felling series.

1.5.9 The afforested areas have fared as had as the forest areas. Most of the plantations were either illicitly hacked or grazed.

1.5.10 The bamboo felling series also fared badly. The clumps deteriorated beyond redemption and became unexplainable.

1.5.11 D.P. Sinha's Plan

Out of 178 felling series during the previous plan only 16 felling series were suggested for exploitation and the rest were kept in Rehabilitation cum Plantation series. In D.P. Sinha's Plan two Working Circles were prescribed.

- i) The coppice working circle.
- ii) The rehabilitation and plantation working circle.

1.5.11.1 Coppice Working Circle

This covered the areas occurring on plains and lower slopes of hills which still support pole crop and where coppice regeneration had fair chance to survive and grow, simple coppice system with rotation of 10 to 15 years had been prescribed. With a view to the objective of meeting the local demands the felling series had been constituted by grouping a number of villages, within each panchayat, especially in right burdened forests.

1.5.11.2 Rehabilitation and plantation working circle

It covered all degraded areas, blank areas and old plantation areas. The objects of management were to improve the ground cover as a safeguard against soil erosion and run off. Other objectives were to raise plantations of short duration, to supply fuel wood and small timbers.

1.5.12 Results of D. P. Sinha's Plan

1. The areas in which coupe working was done rendered itself to be a degraded forest now only being left with poles and stumps. The coupe working was very irregular and not according to the plan. When there is heavy illicit felling revenue based coupe working should not have been proposed evaluating the need of the right holders only that much of felling should have been proposed.

2. The regulations prescribed for plantation coupes could not be practiced. Sisal plantations have not been done except Acacia very less amount of other species were taken up. In plantation areas protection from grazing and fire was nil as a result less amount of plantation could survive.

3. The entire forest has now turned into totally degraded areas. In addition to this except plantation in patches no soil conservation work was proposed in the plan. Continuous sheet erosion and gully erosion have turned some of the areas totally unfit for plantations.

4. The boundary pillars are not maintained properly. Some of the areas have been encroached and there is danger of more encroachment if boundary pillars are not maintained properly.

CHAPTER – VI
Statistics of Growth and Yield

1.6.1 There are no sample or research plots in these forests. No statistics of growth or yield either of sal or of any other species are available. No such data were collected even during the last working plan. Enumeration of the growing stock has not been done. Heavy pressure of demand, leading to unrestricted hacking is not allowing. The coppice sheets to grow up and has reduced the crop into rooted wastes. There is no such forest left in which yield can be prescribed even for meeting the local demand.

However an approximate statistics of growing stock is mentioned below:

The total sal area under this division is 8162 acre. On an average there are 80-90 sal saplings per acre. The approximate total number of trees is $8162 \times 85 = 693770$. Average diameter at breast height = 2.5", Average height = 15'

$$r = \frac{2.5}{2} = 1.25'' = 0.1 \text{ ft.}$$

Approximate volume = $\pi r^2 \times h \times N = 3 \times .1^2 \times 15 \times 693770 = 312196.50 \text{ cft.}$

So the present stock of the sal saplings is 312196.50 cft. The average dbh of a 10 years. It is only due to the illegal felling of the trees that do not allow the saplings to accrue continuous increment. If the forest is protected and regular increment is added to the crop in coming 10 years it should attend an average diameter of 8". After 10 years the crop value will be $3 \times .3^2 \times 20 \times 693770 = 3746358 \text{ cft.}$ That is twelve times what the present growing stock is.

The prescriptions are based on the population pressure and the economic conditions of the local people.