

CHAPTER- VIII
RESULTS OF PREVIOUS MANAGEMENT
PAST SYSTEM OF MANAGEMENT

ADMINISTRATION

Prior to the year 1943 the forests of Hazaribagh district under the control of Bihar Forest Department were looked after by the Private Estates Forest Officer attached to the direction Division. The Hazaribagh Division was created in the year 1943 vide notification **no. 4754-VIF-40-43R dated the 14th October 1942**. This Division looked after the forests of Hazaribagh and Ranchi Districts till Ranchi Division was created with effect from April, 1946 vide notification **no.9761-VIF-106 dated the 19th December, 1945**.

Consequent upon the enforcement of Bihar private protected Forests Act, 1947 control of all the Zamindari Forest in Hazaribagh, Gaya, and Patna districts came under Hazaribagh Division. The workload of the Division suddenly increased many times the normal workload of a Division.

The division was gradually split into several smaller divisions. Finally the Hazaribagh East Division and the Hazaribagh West Division were created in March 1961 vide notification **no. C/F-I(A)013/61-608R dated the 10th April 1961**.

In recent years the territorial jurisdiction of Hazaribagh East Division has been further modified with the creation of the Bokaro Forest Division vide letter no. Planning Budget 170/4376. Govt. of Bihar Forest and Environment Department Patna, 15 dated 31.12.1997. Where by the prisons five ranges of Hazaribagh East Division one Petarbar Range and the Beats of Gomia Range has been transferred to the newly created Bokaro Division.

PAST SYSTEM OF MANAGEMENT

The Hazaribagh East Division consists of three categories of forest with different histories of management.:

1. The Ex-Ramgarh Reserves which were under scientific management since long.

2. Forests belonging to Zamindar which were offered for management to Bihar Forest Department under section 38 of the Indian Forest Act, 1927.
3. Private forest of Zamindars including Ramgarh Estate and other smaller Zamindars.

The forests of categories 1 and 2 were under scientific management since long. Forest of category 3 never had any systematic and scientific management.

For the former Ramgarh Reserves the first Working Scheme was drawn by Mr. W.C.C., Breasky, E.A.C.F. The scheme was in operation from 1928-29 to 1934-35. This prescribed coppice system with a rotation of 40 years. Improvement felling was also carried out to free sal from other miscellaneous species.

MR. GIBSON'S PLAN

Mr. Breasky's Scheme was revised by Mr. Gibson which came into operation from 1935-36. The working plan prepared by him prescribed the following working circle.

1. Coppice working circle
2. selection working circle
3. Bamboo working circle
4. Khair working circle

In the coppice working circle certain felling series had a rotation of 40 years while the other had rotation of 20 years. The inaccessible areas of certain Blocks in full and certain Blocks in parts were managed under selection system. In the selection working circle the exploitable diameter for Sal, asan, karam, salai was 4' that for Paisar was 3/2' for semal 6' and for other 3'. For khair the exploitable girth was 18' and the felling cycle was 5 years. The bamboo forest was worked on a 3 year cutting cycle.

The erstwhile private forests of category (iii) were never managed scientifically prior to 1947-48. They suffered a lot due to unregulated felling and over exploitation.

After assumption of control of the forests in 1947-48 a skeleton working scheme was introduced. In this scheme coppice felling series were constituted by grouping forests of adjacent villages. Right holders were allowed to take their requirement on the basis of settlement records and surplus produce used to be sold by auction. The Government subsequently ordered that in the right burdened forests the coupes should be laid out separately in each village. Felling of Latha, Khambha & Macha were allowed even outside the coupe if they were not available in the current annual coupe.

SRI PRASAD'S WORKING PLAN FOR EX. R.F. OF RAMGARH RAJ (1952-53 to 1962-63)

Shri B. N. Prasad, I.F.S. retired by Dy. Chief Conservator of Forest, Bihar revised the Gibson Plan for Ex-Reserves of Ramgarh Estate was in operation from 1953-54 to 1962-63. The following working circles were constituted.

- (i) Coppice working circle.
- (ii) Bamboo (Overlapping) working circle.
- (iii) Khair (overlapping) working circle.

3-A COPPICE WORKING CIRCLE

The original constitution of felling series as done in Mr. Gibson's Plan was maintained. The forests which were under selection working circle in Mr. Gibson's Plan were also brought under coppice working circle. It is not clearly known if the selection forests were constitute into new coppice felling series. The felling series contenting selection areas contained all age graduation whereas the areas which were already under coppice working circle in Gibson's Plan had been worked and coppiced upto coppice coupe no. 14.

3-B ROTATION

The rotation of 40 years as in Mr. Gibsons' Plan was followed.

3-C SEQUENCE OF FELLING

The same sequence of felling as prescribed in Mr. Gibson's Plan was allowed to continue. The C.C.No. 15 and onward till C.C.No. 28 were felled during Mr. Prasad's Plan. The C.C.No. 28 was felled in the year 1963-64.

3-D CLEANING AND THINNING

Cleaning in the 3rd year of felling and thinning at the age of 14 and 27 years prescribed. Mr. Mishra's Plan is silent on the point whether any thinning or cleaning was carried out during Mr. Prasad's Plan.

3-E BAMBOO WORKING CIRCLE

Four Bamboo Felling Series (Overlapping over coppice working circle) were constituted. They were Harli, Purnapani, Routa and Chute. The felling cycle was 4 years. A set of Bamboo cutting rules were prescribed.

3-F KHAIR WORKING CIRCLE

No felling series under this working circle was constituted in Hazaribagh East Division as extensive Khair bearing areas were not available.

MR. PRASAD'S PLAN FOR P.P.Fs.

The first working plan for erstwhile P.P.F. was written by Shri B.N. Prasad, IFS for the period 1957-58 to 1966-67. The following working circle were constituted.

- (i) Coppice working circle with rotation 30 years and 40 years.
- (ii) Protection working circle.
- (iii) Afforestation working circle
- (iv) Bamboo (overlapping) working circle
- (v) Khair (overlapping) working circle

In the coppicing working circle felling series were constituted by grouping forests from neighbouring villages. This plan could never be brought under proper operation. Coupes continued to be laid out in each village under short rotation of 10-20 years. Even the best of right burdened P.Fs were worked on 20 years rotation for 14-15

years. In the coupes worked by contractor, working had been generally satisfactory, but in the areas worked by right holder it was far from satisfactory.

The bamboo forests were worked scientifically and systematically as per prescriptions of the working plan.

The first comprehensive plan for the entire forests area of Hazaribagh East and West Division was prepared by Shri P. Mishra, IFS for the period 1962-63 to 1971-72. The plan could not be revised in time and the life of the plan was extended by the Chief Conservator of Forest, Bihar till 1976. Further Extension beyond 1976 was requested but the order of the Chief Conservator of Forest was still awaited till the revision of the Plan was finished.

4-A RESULTS

A closer inspection the forests and also the dwindling number of coupes of Commercial Felling Series sold and number of Community Felling Series coupes laid out and handed over to villagers from year to year will reveal that the forests have generally deteriorated during the last 15 years or so.

Similarly it has been found that due to non-availability of utilizable material in the coupes of community felling series coupes in many of the felling series are not being laid out regularly.

The deterioration of the forests of the community felling is mainly due to unregulated felling annual incidence of fire and heavy grazing are other reasons for degradation these forests. The forest of Commercial felling series has undergone significant deterioration due to these reasons. However the deterioration has no bearing on the prescriptions of the working plan. It is primarily due to administrative failure to protect the forests against unregulated felling fire and grazing.

SRI K.P. TRIPATHI'S PLAN (1979-80 TO 1998-99)

In the last working plan (1979-80 to 1998-99) Sri K.P. Tripathi prescribed the following working circle and allotted the areas given in the table.

Sl. No.	Name of Range	Total Area	Coppice Working Circle	Rehabilitation Working Circle	Plantation Exploitable Plantation	Working Fit for Plantation	Protection Working Circle	Bamboo (overlapping) working circle
1	Bagodar	36072.39	16237.81	15590.20	2014.19	1957.01	158.42	537.40
2	Daru	17186.37	12033.56	4173.75	59.64	132.70	786.72	3395.80
3	Mandu	27323.78	11993.83	11980.63	428.52	2921.40	0	3096.95
4	Gomia	31800.46	20143.62	10194.92	497.10	328.85	632.61	12120.30
5	Petabar	11796.63	4010.61	2207.85	3010.75	2488.10	79.24	88.15
	Total	124179.63	64419.43	44147.35	6010.20	7828.14	1656.99	19238.60
	Percent	100 %	51.88%	35.55%	4.83%	6.30%	1.34%	15.49%

5-A COPPICE WORKING CIRCLE

5-A (I) CONSTITUTION

Such areas of sal and mixed forest of the Division which were able to regenerate establish grow into ole crop by itself without any external help were put under this working circle with cultural system of coppice with standard.

In spite of fair illusion of rehabilitated natural forest under this working circle the total area got shrunken from 108363 Ha (87.26% of the Division during Mr. P. Mishra's Plan 1962-63 to 1971-72 64419.43 Ha (51.88% of the division in Sri K. P. Tripathi's Plan 1979-80)

- The felling series as constituted in Mr. P. Mishra's okab (1962-63 to 1971-72) were adopted by Sri K.P. Tripathi (1979-80 to 1998-99) without any change except where large portion of a felling series had been allotted to Rehabilitation working circle due to the crop being degraded.
- The felling series of this working circle were again classified into two categories community and commercial as in Mr. Mishra's Plan. The community category consisted of such felling series where the demand of right holders exceeded the quantity of forest produce available in the annual coupes. The commercial category consisted of such felling series where surplus was generally available in the annual coupes after satisfying the demand of right holders was generally

available in the annual coupes after satisfying the demand of right holders.

- No appreciable change had been made in the position and area of different coupes in felling series.
- The serial number of coupes was re-numbered only upon the need of the maturity of the crop in the coupe. However serial number of coupes from C.C.no. 14 to 29 in felling series having 30 years rotation and the C.C. no. 28 to C.C.no. 3 in felling series having 40 years rotation which were felled during Mr. Mishra's Plan had been retained unchanged.
- Rotation of 30 and 40 years as prescribed for different felling series in the previous plan had been adopted.
- Everything except the standards the fruit trees and the reserved species were prescribed to be felled and coppiced along with even saplings and thinner poles upto 10cm dia of valuable species.
- The yield was generated by area. Thus equi-sized coupe ws obviously not equi-productive due to variable quality and density of the crop of felling series.
- Supply of forest product to right holder was made as compiled by Mr. Mishra's Plan with necessary change as suggested by the territorial division.
- Name of standards per to be kept was 38 for valuable non-fruit trees like sal, gija, asan, gamhar, karam, siris, dhauta and panjan and 40 fruit trees maximum in the dia range of 10-15 cm.
- Blja (per crops marsupial) below 25 cm dia was declared the reserved species not to be cut.
- Advance growth comprising all saplings and poles upto 10 cm dia were prescribed to be retained as the future crop to yield 17.5 cm dia props (age 50 years) upon felling after 30 years because 10 cm dia sal means 20 years its age in Hazaribagh platen.
- Felling series were shown mostly on 6"=1 mile scale D.V.C. Topographical maps for other 1"=1 mile top maps were in changed to 4"=1 mile.
- First cleaning was to be done in the year following the main felling and was the coppicing of all defective stems of the advance growth.
- Another cleaning cum thinning as suggested was to be done in the 5th year to preserve two shoots per stools.

- C-Grade thinning in the 14th and 27th year was left to discretion of the Divisional Forest Officer.
- Improvement measures and rehabilitation methods of degraded crop were suggested against grazing fire and like.

5-B REHABILITATION WORKING CIRCLE

- Sal forest in bushy stage or in perpetual sapling one constituted this working circle to undo obstructing factors of crop growth and thereby to establish pole crop by itself.
- Total area under this working circle was divided into a number of Rehabilitation Block of 800 to 1000 ha area.
- The rehabilitation period was 10 years.
- Each rehabilitation period was 10 years.
- Each Rehabilitation Block was to be worked out in 10 years hence the annual target in one Block was nearby one tenth of its total area i.e. 80 to 100 ha/year.
- Map of Rehabilitation Block were made in 1"=1 mile scale. Thana maps shown by continuous red line.
- The rehabilitation technique broadly consisted of fencing, cutting defective stems, planting and tending.
- Protection fire, grazing and any felling were to be strictly observed.
- No sequence of rehabilitation in a Block was prescribed. Instead of it was to the discretion of the Divisional Forest Officer.
- As most of the rehabilitation Block were area near villages and under having biotic pressure the exploitation of 10 years old rehabilitation crop of sal along with the planted species were suggested.

5-B (I) RESULTS

- In spite of the control and regulations prescribed for grazing, fire and unauthorized felling, the entire forest area continued to be severely affected. The freshly coppiced areas which needed complete rest were no exception. This resulted in blanks, partial blanks or reduction in density, especially in areas near villages and human habitations.
- This has resulted in general deterioration in the site quality and the quality of the existing crop. Ineffective check on unregulated felling

has rendered some of community felling series unable to grow beyond bushy stages.

5-C PLANTATION WORKING CIRCLE

- This working circle compressed such areas which were already planted or were to be planted
- The species like sessoo, Teak, Gamhar, Mahaneem (Ailanthus), Chakundi, Accacia, Khair, Bakain, Kajin etc. were choice trees of this working circle.
- Generally for quick growing species like Eculyptus, Chakundi, Accacia 10 years rotation was suggested and for Bamboo Plantation 4 years rotation cycle.
- Felling Series of Plantations which were pliable and to be exploitable within 10 years prepared on 1"=1 mile scale.
- One felling series for all practical purposes extended over one territorial range.
- Each felling series had been divided into 10 annual coups where plantation of one particular year was included in once coupe with necessary deviations.
- The execution of clear felling was to be done upto 31st march in exotic species plantations.
- Stress was laid upon maintenance of old plantations, harvesting of the nature ones and restock of clear felled blank sites.

RESULTS

- Uncertain funding, excessive biotic interference and like traced the failure of plantations as with other working circle. This has resulted in general deterioration in the site quality and quantity of the existing crop.

5-D BAMBOO OVERLAPPING WORKING CIRCLE

- *Dendrocalamus strictus* the only species of bamboo occurs in forest.
- The quality and density was much variable and the best ones were found on the Jhumra Pahar of Gomia Range.

- Entire bamboo forest was under long term lease to m/s Rohtas Industries Ltd.
- Felling series as leased out to the lessee and shown in the P. Mishra's Plan was adopted.
- Cutting cycle of 4 years was prescribed.
- Lay-out of Bamboo coupes and cutting rules were not changed from the previous plan.

RESULTS

- Excessive cutting of both authorized and unauthorized nature as well as rampant incidences of fire have virtually made crop of bamboo to rare species. Presently there is no bamboo coupe operating as there is hardly any appreciable quantity available.

5-E PROTECTION WORKING CIRCLE

- Forest areas on steep and rocky hill slopes with little possibility to regenerate after felling constituted the Protection Working Circle.

