WORKING PLAN OF GAYA FOREST DIVISION				
(2013-14 то 2022-23)				
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SUMMARY OF PRESCRIPTIONS

1. THE TRACT DEALT WITH:

Consequent upon the taking over of all the private forests in 1948, Gaya Forest Sub-division was created in the same year under jurisdiction of the Hazaribagh Division with its headquarters at Gaya. Subsequently in the year 1949, Kawakol Beat of Monghyr Division was transferred to this sub-division. It became a separate range in 1951. A full fledged Gaya Division was created with effect from the 1st June 1952 vide Revenue Department's memo no.-CPF/52-3108R dated the 15th May 1952. In 2003 during reorganization of Forest Divisions in the State, two new forest divisions were carved out of the erstwhile Gaya Forest Division as Aurangabad Forest Division (covering Aurangabad and Arwal Districts) and Nawada Forest Division (covering Nawada District) vide Environment and Forest Department, Govt. of Bihar letter no. 3688 dated 22.10.2003, limiting the area of Gaya Forest Division to Gaya and Jehanabad Districts only. Thus, the forests dealt with in this plan lie within the civil districts of Gaya and Jehanabad only, both under Magadh Division. The total area of the forest of Gaya Forest Division is now 85321.21 ha.

Agriculture is the main source of livelihood. The tract has a continental monsoon type of climate owing to its great distance from the sea. There are three well-marked seasons in the year, namely summer, rains and winter. The heat is dry and piercing and Gaya becomes the hottest place in the State with temperature reaching above 45°C. The average annual rainfall in Gaya district is 1120 mm.

2. THE AREA:

The total geographical area of Gaya and Jehanabad districts and the total forest area of the Gaya Forest Division is as follows:

Forest Area of Gaya Forest Division

Sl. No.	Name of	Geographical	Forest Area	% of
	District	Area (ha)	(ha)	Forest Area
1	Gaya	497600	84212.54	16.92
2	Jehanabad	93200	1108.67	1.19
	Total	590800	85321.21	14.44

There are six Ranges in the Division- five in Gaya District as Gaya, Atri, Barachatti, Gurupa and Imamganj and one in Jehanabad District as- Jehanabad.

3. THE FORESTS:

The forests in Gaya Forest Division correspond to the 'Tropical Dry Deciduous Forests' as per Champion and Seth's classification of forests. Within this type, local variations are met with, due to variations in nature of soil and topography. Better stocked patches occur in cooler and protected areas on the south-east corner of the Gaya district adjoining the forests of Nawada Forest Division of Bihar and Chatra Forest Division of Jharkhand State.

4. LEGAL STATUS:

The legal status of the forests in the Division is as follows:

Legal Status of Forests

Type of	No. of forest	Area in Ha.	Remarks		
Forest	villages / Lands	Alea III IIa.	Remarks		
P.F.	510 + 3P	65090.52	Most of the village forests		
	34 + 3P	13308.41	Notified as WLS		
	Total – 547	78398.93			
	5	6396.77			
R.F.	1	497.76	Notified as WLS		
	Total – 6	6894.53			
U.F.	4	27.75			
Total	557	85321.21			

5. STATE OF BOUNDARIES:

The total demarcated length is 5511.55 kms and the total number of boundary pillars erected between 2004-05 and 2011-12 is 4334. At plantation sites adjacent to agricultural lands, trench fencing has also been done. The old boundary pillars required to be maintained regularly and at the same time new pillars need to be constructed.

6. RIGHTS AND CONCESSIONS:

The forests of Gaya Forest Division are not burdened with any right except right of way and watercourse. The privileges granted include grazing of cattle and free grant of small timber and firewood.

7. WILDLIFE:

The area comprising the Gautam Budha Wildlife Sanctuary and adjacent forests of Gaya Forest Division were once the best faunal areas in the state during private ownership. The Bhalua area was a favorite Game Reserve of the ex-landlord. Among the wild life once found in these forests were tiger, leopard, hyena, sloth bear, wolf, wild dog, wild boar, sambar, spotted deer, barking deer, nilgai, etc. All animals except tiger are still found in the sanctuary and other adjoining forest areas, though in limited numbers.

8. PAST MANAGEMENT:

Before taken over under the Bihar Private Forest Act, 1947 by the Forest Department, the forests of Gaya Forest Division belonged to various Zamindars. The main estates and the forests belonging to them were as follows:-

Name of Estate	Forests owned by Estates
Amawa	Forests of Gurpa Range
Tekari	Forests of Brachatti Range
Maksudpur	Forests of Ektara, Pathra Parsauni

The past approved Working Plans, Schemes & Revised Working Plans for the management of erstwhile Gaya Forest Division are-

Sl.No.	Writers of the previous Working Plans	Working Plan Period	
I	Sri B.N Prasad	1957-58 to 1966-67 extended	
	SII D.IN Flasad	up to 1974-75	
II	Revised W.P. By Sri P. Mishra for	1959-60 to 1968-69 extended	
111	Koderma & Rajauli Range	up to 1974-75	
III	Sri Om Kumar (Khair Working Scheme)	In the year 1970-71	
	for Barachatty and Gurpa Range		
IV	Sri B.C Jha (Revised W.P)	1980-81 to 1999-2000	

Since 2000-2001 the Working Plan for these forests could not be prepared and the present Working Plan will be the first plan after the reorganization of Gaya forest Division in 2003.

9. AREA OF THE PLAN:

The forest area of this Division is **85321.21** ha limited to the southern aspect of Gaya District. However, the area of the Plan shall be the entire geographical area of Gaya and Jehanabad districts, covering the forest area as well as the area outside the forests, which forms the bulk of the area and is most suited for increasing tree cover.

10. OBJECTIVES OF MANAGEMENT:

The following main objectives have been fixed for this Working Plan-

A. Long Term Objectives:

- (i) To maintain environmental stability through preservation of the remaining natural forests and restoration of ecological balance
- (ii) To improve the productivity of Forests to meet the essential local needs, especially fuel wood, fodder and small timber for the rural people.
- (iii) Increasing substantially the forest/tree cover through afforestation and social forestry programmes, especially on all degraded and unproductive lands, river and canal sides, and other fallow lands.
- (iv) To ensure scientific management of the Forests.
- (v) To protect the Forests through the co-operation of local communities on the principles of Joint Forest Management.

B.Short term Objectives:

- (i) Improvement of the existing growing stock and its density by reclamation of degraded forests through plantations aided by artificial regeneration.
- (ii) Improvement of soil quality through soil conservation measures.
- (iii) To give special attention to water conservation measures inside the forest area so as to improved moisture regime and water availability.
- (iv) Plantation of suitable species which can meet the local requirements. Bamboo will be given importance for sustainable yield.
- (v) To increase diffusion areas for wild life.
- (vi) Involvement of the local people in the management process through Joint Forest Management.
- (vii) Strengthening of infrastructure of the Division for protection and achieving the above goals.

11. PROPOSED WORKING CIRCLES:

The following Working Circles have been proposed in this Plan-

- i. Protection-cum-Improvement Working Circle.
- ii. Soil & Water Conservation (Overlapping) Working Circle.
- iii. Rehabilitation Working Circle.
- iv. Plantation Working Circle.
- v. Wildlife Management (Overlapping) Working Circle.
- vi. Joint Forest Management (Overlapping) Working Circle.
- vii. NTFP, Medicinal Plants & Fodder Management (Overlapping) Working Circle.

Management prescriptions for following operations have also been given in the Plan

- a. Management of Tree Cover Outside Forests (TOF).
- b. Miscellaneous Regulations.
- c. Monitoring & Evaluation

11.1. Protection-cum- Improvement Working Circle

The Protection-cum Improvement Working Circle includes those forest areas which have some rooted stocks and can establish if protected and some silvicultural operations done. This is limited to the hill tops and nala banks in the remote areas. The total area allocated to this WC is 7944.07 ha which accounts for 10% of the total forest area. The main objective of this circle is to protect the existing natural resources. The hills and hillocks which have suffered the most in loss of soil and vegetation are also included in this working circle.

This working circle also covers the areas under inferior miscellaneous growth of poor density. These areas do have potential to convert itself into good forest in comparatively lesser time and with lesser efforts.

11.2. Soil & Water Conservation (Overlapping) Working Circle

Gaya Forest Division falls under the rain shadow zone, there being 1120 mm of normal rains only through out the year. Due to illicit felling and indiscriminate removal of vegetation, the hills and hillocks have suffered heavy erosion. Thus, apart from silvicultural operations, it is necessary to make an appropriate plan of action for improvement of soil and water (moisture) content in the forest area. Hence the entire forest area of **85321.21** ha of Gaya Forest Division has been kept under this working circle with a target of 10000 ha to be covered in the first five years of the Plan period. Earthen check dams, boulder check dams, contour trenches and water harvesting dams are also proposed to be constructed.

11.3. Rehabilitation Working Circle

An area of 39617.46 HA (46% of the total forest area) included under Rehabilitation Working Circle is under stocked forests having root stock, but in the bushy stage i.e. rooted wastes or in perpetual sapling stage since long and are not able to grow up and establish into pole crop by itself due to adverse biotic factors and interferences like grazing, fire and unregulated felling. An area of 22500 HA have been proposed to be planted in the first five years of the Plan period. Depending on the success of the schemes and the mid term appraisal, provisions for the next five years will be made.

11.4. Plantation Working Circle

This working circle comprises of **23953.51 ha** (28 % of the total forest area) of barren and eroded plain areas near the foothills where there is no chance of natural regeneration in near future. Being adjacent to the villages, there is immense biotic pressure.

The area can be easily assessed, planted and in the following years sivicultural operations can be done. It also includes those areas where plantations have been done in the past. An area of 10000 ha have been proposed to be planted in the first five years of the Plan period. Depending on the success of the schemes and the mid term appraisal, provisions for the next five years will be made.

11.5. Wildlife Overlapping Working Circle

This will be an overlapping working circle extending over the entire geographical area of the Gaya Forest Division excluding the area of 13806.17 ha which has been notified as Gautam Budh Wildlife Sanctuary vide notification no. S. O. 1485 dated 14 September, 1976 under section 18 of the Wildlife (Protection) Act, 1972 and which will be dealt with the provisions made in its specific Management Plan. This working circle will deal with the conservation and protection measures of the faunal wildlife in the area outside the Sanctuary within the perspectives of Wildlife (Protection) Act, 1972 (Amendment Act 2006). The Divisional Forest Officer, Gaya Forest Division is the ex-officio Wildlife Warden and he will be responsible for the protection, conservation and development of wildlife present in and outside the forest area. The wildlife seen during enumeration work are neelgai, jackal, wolf, and hare, while others commonly seen are hyena, sloth bear, few bird species and reptiles.

11.6. Joint Forest Management (Overlapping) Working Circle

This Working Circle is constituted with a view to achieve the objectives of the sustainable management based on the principles of participatory approach. As all

prescriptions of the earlier working circles are subject to the constitution of the Forest Protection Committees and preparation of Micro-plans, this working circle becomes important for the constitution of different committees, their regulations and functioning, and overall sharing of responsibilities as well as benefits.

The total forest area of Gaya Forest Division is 85321.21 ha spread over 557 notified forest areas as 547 Protected Forests, 6 Reserved Forests and 4 Unclassified Forests having villages in the vicinity of forests. However, only 54 VFMPCs have been constituted in the Gaya Forest Division - 19 in Imamganj Range, 18 in Barachatti Range, 10 in Gurpa Range, 3 in Atri Range, 2 each in Gaya and Jahanabad Ranges.

11.6. NTFP, Medicinal Plants & Fodder Management (Overlapping) W Circle

The forests of the Division were once rich in NTFP and medicinal plants, but now has depleted due to heavy biotic pressure. However, there still occurs khair (Acacia catechu), bamboo (Dendrocalamus strictus), kendu leaves and other NTFP very much scattered here and there in the entire forest area of the Division, but not in workable quantity and quality. The bamboo, to a large extent, occurs in dry mixed forest often associated with Salai on hill tops and occasionally with Sal. Thus, the entire forest area needs special treatment for these species, as protection and enrichment plantations, to establish again so as to meet the bonafide needs of the local people.

11.7. Management of Tree Cover Outside Forests (TOF)

In Gaya Forest Division, the geographical area of the two districts Gaya and Jehanabadl is 4976 and 932 sq. km. respectively and the forest area being 842.12 and 11.09 sq. km. respectively. Thus, out of the total area of 5908 sq. km. in the two districts, where an area of 853.21 sq. km. is covered with forest, an area of 5054.79 sq. km. lies outside the forested area. This area has to be used for increasing the tree cover, which will not only be helpful to meet the daily requirements of the local people, but also release pressure from the forests and help to improve the environment of the area and conserve biodiversity.

Thus, afforestation works will be done in the entire area of the district, extending plantation of trees on farm lands, road, canal, river and rail sides and on other fallow lands with the objective to increase the tree cover up to 15% in the next five years.

12. PLAN EXPENDITURE & REVENUE:

The present condition of the forests of the Division is highly depleted and not in position to give any revenue in true sense. However, some sale price may be collected from the illegally felled trees/poles, those along the roads and also as

compensation receipts. The total expenditure other than establishment, etc. will be Rs. 14707 lakhs only during the Plan period on different proposed plan activities including protection works and infrastructure development.. This is roughly Rs. 2489/- per ha for all the works in area for entire Gaya Forest Division (590800 ha of geographical area of Gaya and Jehanabad) during the next ten years, or say 249/- per ha per year.

13. SOURCE OF FUNDING:

The source of fund for the activities prescribed in the Working Plan will be from-

- i. Forest Development Agency Funds from GOI.
- ii. Plan Funds from GOI & GOB.
- iii. Non-Plan Funds from GOB.
- iv. CAMPA FUND
- v. Employment Guarantee Schemes, as MGANREGA.
- vi. Van Ewam Vanyaprani Sanrakshan Kosh.
- vii. Bamboo Mission.
- vii. 13/14th Finance Commission, etc.