

कार्यपालक अभियंता का कार्यालय

औरंगा निर्माण प्रमंडल, पांकी

पत्रांक 291 /

दिनांक 12/08/2016

13/08/16

सेवा में,

वन प्रमंडल पदाधिकारी,
मेदिनीनगर।

विषय :- मेदिनीनगर वन प्रमंडल अंतर्गत अमानत बराज से केनाल निर्माण हेतु 127.85 हे० वन भूमि अपयोजन के संबंध में।

प्रसंग :- सरकार के उप सचिव, वन पर्यावरण विभाग, झारखंड सरकार के पत्रांक 3468 दिनांक 19.07.2016 एवं उप वन संरक्षक, भारत सरकार पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय क्षेत्रीय कार्यालय, रांची के पत्रांक 583 दिनांक - 30.06.2016

महाशय,

उपरोक्त विषयक प्रासंगिक पत्र के संदर्भ में अमानत बराज योजना के वन भूमि अपयोजन प्रस्ताव में की गई पृच्छाओं से संबंधित प्रतिवेदन तैयार कर तीन प्रतियों में अग्रेतर कार्रवाई हेतु समर्पित किया जा रहा है।

अनुरोध है कि अपने स्तर से प्रस्ताव के पार्ट-2 का हार्ड कॉपी तैयार कर संलग्न प्रतिवेदन के साथ संबंधित कार्यालय को भेजने की कृपा की जाय।

अनु०-प्रतिवेदन तीन प्रति में एवं
प्रासंगिक पत्र की छायाप्रति।

विश्वासभाजन

[Signature] 12/8/16

कार्यपालक अभियंता,
औरंगा निर्माण प्रमंडल, पांकी

पत्रांक 291 /

दिनांक 12/08/2016

प्रतिलिपि :- श्री सुनील कुमार, सरकार के उप सचिव, वन पर्यावरण विभाग, झारखंड सरकार को ज्ञापांक वन भूमि / 07/2016/3468 दिनांक 19.07.2016 के क्रम में सूचनार्थ समर्पित।

[Signature] 12/8/16

कार्यपालक अभियंता,
औरंगा निर्माण प्रमंडल, पांकी

पत्रांक 291 /

दिनांक 12/08/2016

प्रतिलिपि :- अधीक्षण अभियंता, औरंगा निर्माण अंचल, मेदिनीनगर / मुख्य अभियंता, योजना, आयोजन एवं मोनेटरिंग, जल संसाधन विभाग, रांची / मुख्य अभियंता, जल संसाधन विभाग, मेदिनीनगर को सूचनार्थ एवं आवश्यक कार्रवाई हेतु समर्पित।

[Signature] 12/8/16

कार्यपालक अभियंता,
औरंगा निर्माण प्रमंडल, पांकी

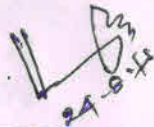
AMANAT BARRAGE SCHEME

Compliance to the comments raised on Diversion of 127.85 Ha Forest Land proposal no- FP/JH/IRRIG/15780/2015.


1. Catchment Area treatment Plan-
Not required (Certificate attached) Annexure (A)
2. Cost Benifit Analysis in Ministry's Format- Annexure (B)
3. (i) Part 1 in Prescribed Format- Annexure (C)
(ii) Part 2 in Prescribed Format- Annexure (D)
4. Copy of Environmental Clearance-
Amanat Barrage Scheme is component of Auranga Reservoir Scheme,
Copy of Environmental Clearance of Auranga Reservoir Scheme is
enclosed- Annexure (E)
5. Summary of girth wise and species wise tree details Annexure (F)
6. Details of Forest area calculation proposed for diversion Annexure (G)

To whomever it may concern

This is to certify that the proposed forest land to be diverted is required for construction of Auranga Right Main Canal only. No reservoir is to be constructed in the forest land thus catchment area treatment plan is not required for this project.



Divisional Forest Officer
Medininagar Forest Division, Medininagar


Executive Engineer
Auranga construction Div. Panki
Camp - Medininagar

Exec. Engineer
Auranga
Division and
Camp-Medininagar

PARAMETERS FOR EVALUATION OF LOSS OF FOREST

Sl. No	Parameters	Medium & major irrigation, hydro electric, large mining & other misc. Projects.	Losses of forest in monetary terms
1	Loss of value of timber, fuel wood and minor forest produce on an annual basis, including loss of man-hours per annum of people who derived livelihood and wages from the harvest of these commodities.	There is no population in the proposed portion of canal and nearby village who are deriving their livelihood wages from the forest.	Nil
2	Loss of animal husbandry productivity, including loss of fodder	As the forest is the nature of open forest. There are no animal husbandry taking place in the purposed area. There is no loss of animal husbandry productivity and fodder.	Nil
3	Cost of human resettlement	There are no settlement in the proposed portion of the canal.	Nil
4	Loss of public facilities and administrative infrastructure (Rods, building, schools, dispensaries, electric lines, etc.)	There is no building, school, dispensaries, electric lines in the proposed portion of canal.	Nil
5	Environmental losses: (soil erosion, effect on hydrological cycle, wildlife habitat, microclimate upsetting of ecological balance	Density of vegetation = 0.3 Cost of 0.3 density forest for 127.85 ha. @Rs. 38.022 lakhs = Rs.4861.1127 lakhs	Rs.4861.11 lakhs

6	Suffering to oustees	There is no settlement in the proposed portion, so there is no suffering oustees.	Nil
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Total loss of forest in monetary terms :- Rs. 4861.11 lacs

Cost of project :- Rs. 34110.91 lacs

Land development @ Rs. 7012/Hac.

(On 20% of C.C.A = $7012 \times 0.20 \times 26990 =$ Rs. 378.50 lacs

Total cost of project Rs. 39350.92 lacs



Divisional Forest Officer
Medinagar Forest Division, Medinagar

Handwritten signature and date
12/5/16
Executive Engineer
Aurangabad
Division, Parli
Camp-Medinagar

3

**PARAMETERS FOR EVALUATION OF BENEFIT,
NOTWITHSTANDING LOSS OF FORESTS**

Sl. No	Nature of proposal		
	Parameters	Medium & major irrigation, hydro electric, large mining & other misc. Projects.	Benefit in monetary terms
1	Increase in productivity attributable to the specific project	Net post project benefit as per annex.- ii – Rs. 5168.59 lacs Net pre project benefit as per annex.-i (-)Rs. 174.708 lacs Total benefit in one year Rs. 4993.882 lacs Project is Designed for Fifty Years Benefit taken for twenty years only = 20×4993.882 = Rs.99877.64 lacs	Rs.99877.64 lacs
2	Benefits to economy	—	Nil
3	No. Of population benefited	Around one lacs residing in the ares and nearby village get benefitted by the canal.	Nil
4	Employment potential	Direct employment of local labours from this project @15% of the project cost i.e 34110.91×0.15	Rs.5116.64 lacs
5	Cost of acquisition of facility on non-forest land wherever feasible	NA	Nil
6	Loss of (a) agriculture & (b) animal husbandry production due to diversion of forest land	There is no animal husbandry activity.	Nil
7	Cost of rehabilitating the displaced persons as different from	There is no displacement in the proposed area.	Nil

4

	compensatory amounts given for displacement.		
8	Cost of supply of free fuel-wood to workers residing in or near forest area during the period of construction.	Workers are fully paid in cash there will be no facility of free supply of fuel wood to the workers during the construction period.	Nil

Total direct and indirect benefit from the project is = 99877.64 lacs + 5116.64 lacs
= 104994.28 lacs

Hence benefit cost ratio = Total benefit from the project/ Total cost of the project
= $\frac{104994.28 \text{ lacs}}{39350.92 \text{ lacs}}$ = 2.66

B.C Ratio = 2.66

As the B.C. Ratio is more than 1.00 the project is justified.



Divisional Forest Officer
Medanagar Forest Division, Medanagar

Handwritten signature and date 12/8/16

Executive engineer
Auranga construction div.panki
Camp - medininagar

**STATEMENT FOR ESTIMATE OF AGRICULTURAL PRODUCE POST IRRIGATION CONDITION FOR AMANAT BARRAGE & AURANGA
RIGHT MAIN CANAL SYSTEM FROM PANKI BARRAGE TO R.D. 295.00, CCA 26690 Hect.**

Name of crop as per cropping pattern of post irrigation	Cropped area in ha.	Receipts (Value of farm)					Expenses (Rs.)						Total expenses of outlat in Rs. Lacs
		Yield per ha in Quintal	Total yield in lac MT	Rate in Rs/MT	Total value in Rs. Lacs	Fooder during receipt 3% of col-6	Total receipt in Rs. Lacs	Seed per ha.	Mannure per ha.	Pesticides /ha.	Human labour /ha.	Animal labour /ha.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Peddy 100% of CCA	26990	50	1.35	6000	8097	242.91	8339.91	400	1350	200	2500	2050	6500
													15
													1754.35

Receipts - Gross value of farm work (total of Col. 8) = Rs. 8339.91

Expenses - (a) Agriculture total value of inputs (Total of col. 15) = Rs. 1754.35

(b) Fooder expenses @ 10% of gross value (col. 6) = Rs. 809.70

(C) Depreciation on implements @2.7% of col. 6 = Rs. 202.42

(d) Share & cost rent @3% of col. 6 = Rs. 242.91

(e) Land revenue @2% of col. 6 = Rs. 161.94

Rs. 3,171.32

Net post project benefit R-E = Rs. 5168.59 Lacs

[Signature]

Divisional Forest Officer
Madanagar Forest Division, Madanagar

[Signature]
Executive Engineer
Aurangha Construction
Division Panki
Camp Madanagar

**E ESTIMATE OF AGRICULTURAL PRODUCE PRE- IRRIGATION CONDITION FOR AMANAT BARRAGE & AURANGA
RIGHT MAIN CANAL SYSTEM FROM PANKI BARRAGE TO R.D. 295.00 CCA 26990 Hect.**

Crop in ha.	Receipts (Value of farm)						Expenses (Rs.)						Total expenses in inputst in Rs. Lacs
	Yield in Quintal	Total yield in MT	Rate of yield /MT	Value of yield Rs. Lacs	Fooder receipt4.5% of col-6	Total receipt in Rs. Lacs	Seeds	Mannure	Pestic ides	Human labour	Animal labour / ha.	Total /ha.	
2	3	4	5	6	7	8	9	10	11	12	13	14	15
% of 11357.3	10	11358.8	6000	681.528	30.67	712.198	400	1000	50	1200	600	3250	369.16

Gross value of farm receipts (total of Col. 8)

= Rs 712.198 Lacs

Expenses on Agriculture

(a) Total value of inputs (Total of col. 15)

= Rs 369.16 Lacs

(b) Fooder expence @ 10% of gross value (col. 6

= Rs 102.23 Lacs

(c) Depreciation on implements @2.7% of col. 6

= Rs 18.40 Lacs

(d) Share & cash rent @5% of col. 6

= Rs 34.07 Lacs

(e) Land revenue @2% of col. 6

= Rs 13.63 Lacs

Rs 537.49 Lacs

Net pre- project benefit = R-E = Rs 174.708 Lacs

Signature
12/2/16

Executive Engineer
Auranga Construction
Division - Panki
Camp - MEDINAGAR

Signature

Divisional Forest Officer
Medinagar Forest Division, Medinagar



GOVERNMENT OF JHARKHAND

Proposal for transfer of forest land
For
Amanat Barrage Scheme

In Palamau District (Jharkhand)

Proposal No:- FP/JH/IRRIG/15780/2015

FORM 'A'
PART - I



Executive Engineer
Auranga Construction Division Panki,

APPENDIX

(See Rule - 6)

FORM - 'A'

Form for seeking prior approval under section - 2 of the proposals by the
State Government and other authorities.

PART - I

(To be filled up by user agency)

I-PROJECT DETAILS :-

(i)	Short narrative of the proposal and Project/scheme for which the forest land is required	:-	<p>The project comprises of the following --</p> <p>(1) Amanat Barrage at Panki (2) Right Main Canal- 90.00 Km. (3) Distribution system - 57.95 Km</p> <p>Amanat Barrage Scheme is component of Auranga Reservoir Scheme. Amanat Barrage on river Amanat is located at Panki in Palamau district. The canal system from the Barrage will provide irrigation to about 26,990 Ha. of Land in Palamau district of Jharkhand.</p> <p>The area is chronically drought prone and falls within the range of retreating southwest monsoon. Hence the rainfall is very scanty and capricious in distribution. The average annual rainfall of the area is 1244.44 mm of which major portion (86.5%) is received during the months of June to September.</p> <p>Proposed Forest land falls in the alignment of Right Main Canal and its distribution system.</p> <p>No Forest land is involved in the construction of Amanat Barrage & Distribution System.</p>
(ii)	Map showing the required forest land, boundary of adjoining forest on a 1:50,000 scale map.	:-	Toposheet showing alignment of the project is being enclosed. Annexure I
(iii)	Cost of Project	:-	Rs 34110.91 Lacs
(iv)	Justification for location the forest area.	:-	The canal is essentially a contour canal region hence to reduce the cost of the project & to cover the maximum culturable command the alignment of canal has been kept to follow the contour. Several alternatives had been examined & it was found that the present alignment is most suitable & economical.

(v)	Cost benefit analysis (to be enclosed) B.C Ratio	:-	A copy is being enclosed marked as ANNEXURE :- 2																									
(vi)	Employment likely to be generated	:-	Though there will be no permanent employment but more than 9184726 man days of labour will get employment during construction work in the project. The area is drought prone and hence this will improve the financial position of farmers and labourers as well as it will add in stabilization of national economy.																									
2	Purpose – wise break – up of the total land required	:-	<table><tr><th colspan="4">Component wise breakup</th></tr><tr><th>S.no</th><th>Component</th><th>Forest Land (Ha.)</th><th>Non-Forest Land(Ha.)</th></tr><tr><td>1.</td><td>Barrage and Camp</td><td>0</td><td>103.504</td></tr><tr><td>2.</td><td>Right Man Canal</td><td>127.85</td><td>284.805</td></tr><tr><td>3.</td><td>Distributory</td><td>0</td><td>51.633</td></tr><tr><td colspan="2">Total</td><td>127.85</td><td>439.242</td></tr></table>		Component wise breakup				S.no	Component	Forest Land (Ha.)	Non-Forest Land(Ha.)	1.	Barrage and Camp	0	103.504	2.	Right Man Canal	127.85	284.805	3.	Distributory	0	51.633	Total		127.85	439.242
Component wise breakup																												
S.no	Component	Forest Land (Ha.)	Non-Forest Land(Ha.)																									
1.	Barrage and Camp	0	103.504																									
2.	Right Man Canal	127.85	284.805																									
3.	Distributory	0	51.633																									
Total		127.85	439.242																									
3	Details of displacement of people due to the project,if any	:-	Nil																									
(i)	Number of families	:-	Nil																									
(ii)	Number of Scheduled castes/Scheduled Tribe Families.	:-	Nil																									
(iii)	Rehabilitation Plan to be enclosed)	:-	Not required																									
4	Whether clearance under environment (Protection) Act. 1986 required? Yes/No.		Yes Clearance certificate attached ANNEXURE - 3																									
5	Undertaking to bear the cost of raising and maintenance of compensatory afforestation and or penal compensatory afforestation as well as cost for protection and regeneration of safety Zone, etc. as per the scheme prepared by the State government (undertaking to be enclosed)	:-	Undertaking is being attached- ANNEXURE 4																									
6	Details of certificates/Documents enclosed as required	:-	(i) Schedule of forest & non forest land ANNEXURE 5 (ii) Schedule of non forest land to be																									

under the instruction. All the required Certificate/Document are in enclosed.

transferred to forest dept. For compensatory afforestation.

ANNEXURE :- 6

- (iii) Enumeration list of trees to be felled in the alignment.

ANNEXURE :- 7

- (iv) Index Map of Project ANNEXURE :- 8

- (v) Topo sheet showing Segment of Forest land to be diverted, ANNEXURE :- 9

- (vi) Geo-reference map of Forest land to be diverted ANNEXURE :- 10

- (vii) Topo sheet showing Compensatory land, ANNEXURE :- 11

- (viii) Geo-reference map of Compensatory land ANNEXURE :- 12

- (ix) Inspection Report of the Conservator of Forest Territorial Circle, Medininagar, ANNEXURE :- 13

- (x) Joint Inspection done by Executive Engineer Auranga Construction Division Panki & D.F.O Medininagar Forest Division, Medininagar. On dt. 18- Feb- 2015. Annexure- 14

- (xi) Copy of Documentary evidence in Support of FRA ACT 2006. Annexure- 15

- (xii) Cadastral sheets of the revenue villages showing alignment of canal and forest boundaries are being enclosed. ANNEXURE :-16

Date :

12.8.2016

Place:

Medininagar

(SATISH CHANDRA VERMA)

Executive Engineer
Auranga Construction Division,
Panki, Camp- medininagar, Palamu

Executive Engineer
Auranga Construction
Panki
Medininagar

Divisional Forest Officer
Medininagar Forest Division, Medininagar

LAND SCHEDULE.

Village wise Breakup

Sl.No.	Village	Forest Land in Hec.	Non Forest Land in Hec.
1	Karma		3.553
2	Gargaon		5.722
3	Ambawar		6.884
4	Harna		9.745
5	Chandrapura		14.314
6	Kalwhua		34.019
7	Nuru		12.950
8	Lukwa		16.317
9	Haldi		24.682
10	Haldi Minahi		16.949
11	Gongo		8.142
12	Kapurfhuta		3.092
13	Khera		11.376
14	Binayka		1.161
15	Udaypura		16.932
16	Gulalpur		5.471
17	Selari		5.953
18	Bagla		5.269
19	Chhatarpur		14.253
20	Tandwa		2.193
21	Pashar		3.335
22	Kasmar		3.634
23	Baliyari		2.881
24	Sonpura		1.473
25	Dhobdiha		2.501
26	Nawa		4.803
27	Kichdiya		5.399
28	Dundu		6.309
29	Sildiliya khurd	6.51	0.000
30	Sildiliya kala	2.39	3.693
31	Gorwatand	10.8	2.424
32	Manjhawan		1.797
33	Bajalpur	8.22	3.877
34	Panchrukhiya	7.85	0.000
35	Lalgara	3.53	9.118
36	Dhuma	15.38	0.000
37	Sewti	5.91	11.441

38	Saraidih	6.87	4.342
39	Gogda		2.200
40	Tirondha		2.553
41	Chilhoi	3.85	3.267
42	Bhalugari	7.61	0.000
43	Tariyan	8.18	4.067
44	Sonpurwa	5.69	11.509
45	Kanaudi	8.54	0.000
46	Boradah	7.2	0.000
47	Jagodih		5.066
48	Angra		10.101
49	Kararkala	0.49	10.590
50	Chetma	12.90	15.107
51	Imlikhas	5.93	14.249
52	Boradoho		12.140
53	Panchkedia		17.080
54	Sutha		2.347
55	Aaredan		5.791
56	Pandaypura		1.163
57	Huri/Berset		2.614
58	kumhawa		2.088
59	Basdewa		0.757
60	Dharo		0.979
61	Mathfhurhi		0.319
62	Barhakurwa		0.546
63	Bedani khurd		1.542
64	Mahri		2.493
65	Nawadih		1.341
66	Borkoma		1.291
67	Delha		0.125
68	Baghi		0.374
69	Nawadih		1.174
70	Bisunpur		1.930
71	Bhalogari		0.992
72	Haraiya		0.508
73	Kalapahad		0.417
74	Khamhi		1.448
75	Dandai		1.052
76	Sahdeva		0.741
77	Loinga		3.545

78	Angra		3.059
79	Rajhara		4.298
80	Dhangaon		0.392
81	Kamal kediya		1.983
	Total	127.85	439.242

Sumar
7/11/16
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Sumar
7/10/16
S.E.

Agarwal
09-1-2016
9/11/16

Sumar
17/8/16
Executive
Aurang.
Division
Camp-Medininagar

Divisional Forest Officer
Medininagar Forest Division, Medininagar

Part II

(To be filled by the concerned Deputy Conservator of Forest)

State serial No. Proposal : JH-036/2015

1. Location of the project/Scheme:

- (I) State/ Union Territory :- Jharkhand
- (II) District :- Palamu
- (III) Forest Division :- Medininagar
- (iv) Area of forest land proposed for diversion (in ha) :- 127.85
- (v) Legal status of forest:-

S.No	Division	Forest Land (ha)	Legal Status
1	Medininagar	127.85	Jungle - jhari land

(vi) Density of vegetation:-

S. No	Area (in ha.)	Density	Eco-Class
1	127.85	0.3	Eco 4

- (vii) Species-wise (scientific names) and diameter class-wise enumeration of trees (to be enclosed. In case of irrigation/hydel projects enumeration at FRL, FRL-2 meter & FRL-4 Meter also to be enclosed.)- Enclosed
- (viii) Brief note on vulnerability of the forest area to erosion: -Yes, Some Portion of the Forest land of the are Valnerable.
- (IX) Approximate distance of proposed site for diversion from boundry of forest (in Km): 0.00
- (X) Whether forms part of National Park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, etc. (if so, the details of the area and comments of the Chief Wildlife Warden to be annexed). : No
- (XI) Whether any rare/endangered/unique species of flora and fauna found in the area – No.
- (XII) Whether any protected archaeological/heritage site/defence establishment or any other important monument is located in the area. No
8. Whether the requirement of forest land as proposed by the user agency in col. 2 of Part-I is unavoidable and barest minimum for the project. Yes
9. Whether any work in violation of the Act has been carried out. No
10. Details of compensatory afforestation scheme:

- (i) Details of non forest area/degraded forest area identified for compensatory afforestation, its distance from adjoining forest, number of patches, size of each patch. Enclosed
- (ii) Map showing non-forest/degraded forest area identified for compensatory afforestation and adjoining forest boundaries. Enclosed
- (iii) Detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, cost structure, etc.

S No.	Documents	Remarks
	NIL	

- (iv) Total financial outlay for compensatory afforestation scheme.
- (v) Certificates from competent authority regarding suitability of area identified for compensatory afforestation and from management point of view. (To be signed by the concerned deputy Conservator of Forests).
11. Site inspection report of the DCF (to be enclosed) especially highlighting facts asked in col. 7 (xi, xii), 8 and 9 above. Enclosed
12. Division/ district profile:
- (i) Geographical area of the district. 797580 ha
- (ii) Forest area of the district. 151783.95 ha
- (iii) Total forest area diverted since 1980 with number of cases. 53.7929 ha
- (iv) Total compensatory afforestation stipulated in the district/division since 1980 on
- (a) forest land including penal compensatory afforestation, 258.226 ha
- (b) non forest land.
- (v) Progress of compensatory afforestation as on (date)
- on
- (a) forest land 1475 ha
- (b) non forest land. 0.00
13. Specific recommendation of the DCF for acceptance or otherwise of the proposal with reasons: Palamau is drought prone area of Jharkhand state. Hence Amanat Barrage is a dream project of the Palamau. About 26990 ha land will be irrigated after completion of the project. There of proposal of diversion of Forest land may be accepted.

Signature

Name

Official Seal

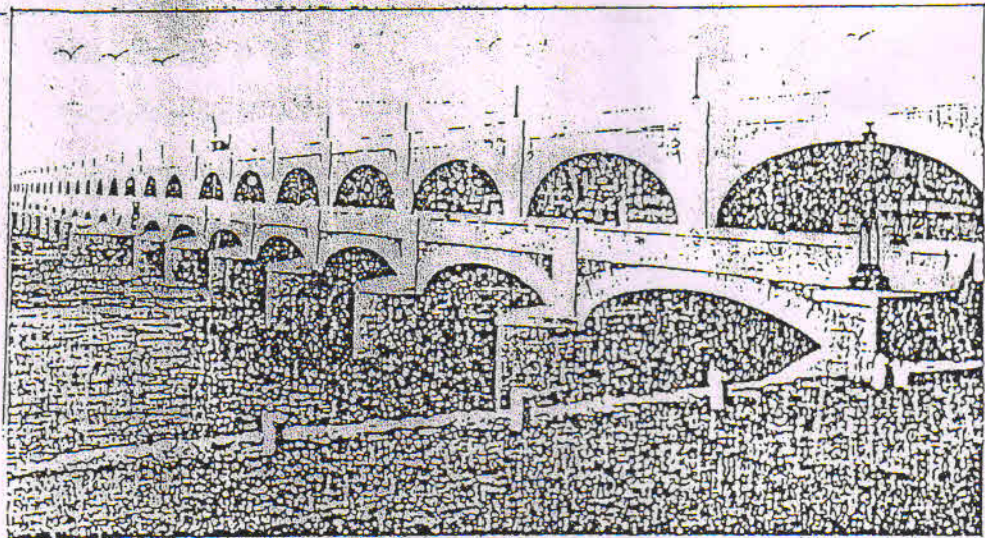
Divisional Forest Officer
Medininagar Forest Division, Medininagar

Date :-

Place:-



बिहार सरकार
जल संसाधन विभाग



औरंगा जलाशय योजना

VOL-II

UNIT - 1

DAM & APPURTENENT WORKS

फरवरी 1989

अधीक्षण अभियन्ता

मुख्य अभियन्ता

औरंगा निर्माण अंचल, हालटनगंज

(सिंचाई) राज्य नगर

AURANGA RESERVOIR PROJECT

V O L-2

C O N T E N T S

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X- ENVIRONMENT AND ECOLOGYR E P O R T

The provision for the sub-head X-Environment and Ecology in this revised estimate has been made on the basis of important items indicated in the broad guide lines for preparation of project estimate by Central Water Commission as also on the basis of necessary safeguards suggested by the department of Environment and Ecology, Govt. of India while issuing environmental clearance to this project in its letter UC.NO 3/1/78-MCT/ENV dated 24.1.79 (copy enclosed as annexure 2.4.10.5.2).

The items included in this estimate are compensatory afforestation, re-storation of land in construction areas, Control of aquatic weeds in submerged areas, enforcement of anti-poaching laws, measures to prevent forest fires, public health measures, treatment of catchment areas etc.

The provision in the estimate is based on sample estimate worked out on the basis of suggestion for North Koel Project.

The provision for compensatory afforestation has been made as per Forest (conservation) Act 1980 and the cost of plantation on the degraded forest has been adopted as per letter no 796 dated 21.2.81 (appended as appendix.2.4.2.4.8)

There is no provision for this work in the mentioned estimate (First revised estimate based on 1981 schedule).

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ANNEXURE

Department of Sec. & Technology
(NCPEC) NATIONAL COMMITTEE OF ENVIRONMENTAL PLANNING)

The Project has been examined to the NCPEC on the basis of details available as well as the report of the expert Team that visited the Project site, the Environmental Approval Committee has cleared this project provided that the following safeguards are effectively implemented :-

1. All Project activities like establishment of colony sites, labour camp, approach roads to the dam site borrow pits should be confined to the right bank of the Auranga river ie. in the area between Daltonganj Ranchi road and the Auranga river. The Left bank of the river adjoining the Tiger Project area should not be disturbed. Use of any of the existing roads of the sanctuary should not be permitted for construction operation, It is learnt that these safeguards. Were discussed by the expert team during the visit and are acceptable to the project authorities:-
- 2:- No human settlements should be allowed to remain on the left bank of Auranga Dam. This would ensure that the buffer zone adjoining the lake would provide free access to the water for wild life.
3. The impact of submergence caused by Auranga Dam has to be considered alongwith the submergence to be caused by Kutku dam over North Koel River for which infrastructural development has already been completed. Kutku Dam will submerge a large chunk of forest in the core as well as buffer area of Project Tiger. It is desirable, therefore, that that water impoundment of the Kutku dam and the forest on its periphery should be included in the Palamau National Park.
4. No reserve forest area should be released for rehabilitation or other purposes in view of the loss of forest due to submergence. Intensive social forestry should also be undertaken to off-set the loss of forests in submergence.

Compensatory afforestation should be undertaken by the forest department to off-set the loss of forest by submergence. At least 2000 acres of irrigated plantations should be raised in the command area and along channel banks for which adequate water should be provided by the irrigation department.

Signature
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5. A census of wild life should be under taken by state forest hole fresuanted by a large number of animals . A small contour channel about 2 m+ wide and 2 m deep, from the reservoir area. This channel would feed & series of permanent small tanks with earthen bunds within the National Park which can be created by the forest department. This would ensure perenial water supply and would contain the game with the area. It may also help the growth of evergreen species and render the forest less decidusus in summer. The submersion contours should be clearly demarcated & the vegetation on two or three & islands in the reservoir above the FRL, should at the cleared so that they may be developed as brieds sanctries.
7. The health hazards like incidence of Malaria have not been considered. Adequate provision should therefore, be made for anti-malaria measures.
8. Fuel depots should be set up by the forest department to provide fuel wood, free of cost, to the labour force, so that indisoriminate felling of trees may be prevented. Adequate provi-sion in the project estimates should be made to meet this cost.
9. A ntl-poaching measures should be strictly enforced by the project cost, for effective enforecement of these measures.
10. A monitoring Group should be by the State Govt. in consul-tation with the NCEPC so that the suggested safeguards are implemental effectively and follow up action taken as and when necessary.

It is also suggested that participation of Project tiger authorities in the Monitoring Group should be ensured.

These safeguards are in addition to these suggested by the Project Tiger Authorities.

Sd/-

(Dr. S. Maudgal) 24.1.1979
Member Secretary, Environmental
Appraisal Committee.

Department of Agriculture (Sri S.P.Srivastava, I.G.F.) Krisi
Bhawan. Dr. Rajendra Pd. Road. New Delhi.

Department of Science and Technology U.C.No. 3/1/78-HCT/ENV
Dt. 24.1.1979

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12/8/16
Executive Engineer
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V. G. ...
24.1.79
Divisional Forest Officer
Medanagar Forest Division, Medanagar

Summary of girth wise and speciwise tree details:-

S No.	Scientific Name	Local Name	(31-60) cm	(61-90) cm	(91-120) cm	(121-150) cm.	(>150) cm.	Total
1	Sal	sal	90	14	14	6		124
2	Terminalia Tomentosa	Assan	5		5	1		11
3	Bombax Ceiba	Semal			1			1
4	Holoptelia integrifolia	Chilbil			1			1
5	Acacia Catechu	Khair	586					586
6	Lagistromia Lanceolata	Ginjan			1	1		2
7	Boswellia Serrata	Salai			1	5		6
8	Teak	Sagwan	4					4
9	Gmelin Arborea	Gamhar	1					1
10	Adena Cardifolia	Karam	1					1
11	Eucalyptus	Eucalyptus	10					10
12	Misc. Species		40		26	18		
13	Others	Pols	3608					

FRL NOT APPLICABLE

Species-wise local/scientific names and girth-wise enumeration of trees at FRL

S No.	Scientific Name	Local Name	(31-60) cm	(61-90) cm	(91-120) cm	(121-150) cm.	(>150) cm.	Total
NIL								


Species-wise local/scientific names and girth-wise enumeration of trees at FRL-2 meter

S No.	Scientific Name	Local Name	(31-60) cm	(61-90) cm	(91-120) cm	(121-150) cm.	(>150) cm.	Total
NIL								

Species-wise local/scientific names and girth-wise enumeration of trees at FRL-4 meter


S No.	Scientific Name	Local Name	(31-60) cm	(61-90) cm	(91-120) cm	(121-150) cm.	(>150) cm.	Total
NIL								


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 Medininagar Forest Division, Medininagar


 Executive Engineer
 Auranga Construction
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 Ganga... Medininagar

Details of forest land calculation

Sl.	Village	width(m)	length(m)	Ha.
1	Sildiliya Khurd	91.46	712.000	6.51
2	Sildiliya Kala	91.46	261.440	2.39
3	Gorwatand	91.46	1181.400	10.8
4	Bajalpur	91.46	899.180	8.22
5	Panchrukhiya	91.46	858.704	7.85
6	Lalgar	91.46	386.143	3.53
7	Dhuma	91.46	1682.407	15.38
8	Sewati	91.46	646.490	5.91
9	Saraidih	91.46	751.503	6.87
10	Chilhoi	91.46	421.146	3.85
11	Bhalugari	91.46	832.450	7.61
12	Tariyan	91.46	894.801	8.18
13	Sonpurwa	91.46	622.423	5.69
14	Kanaudi	91.46	934.182	8.54
15	Boradah	91.46	787.603	7.2
16	Kararkala	91.46	536.010	0.49
17	Chetma	91.46	1411.121	12.9
18	Imlikhas	91.46	648.676	5.93
TOTAL				127.85



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Auranga Const. Div. Panki
Camp - medininagar
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