

कार्यालय प्रधान मुख्य वन संरक्षक (कक्ष-भू प्रबंध), सतपुड़ा भवन, मध्यप्रदेश, भोपाल
क्रमांक/एफ-3/86/2018/10-11/16/33 भोपाल, दिनांक 04/01/2021
प्रति,

श्री बिजेन्द्र स्वरूप,
सहायक वन महानिरीक्षक (एफ.सी.)
भारत सरकार, पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय,
इंदिरा पर्यावरण भवन, अलीगंज,
जोरबाग रोड़, नई दिल्ली-110003

विषय:- जिला देवास के अंतर्गत पटपडी तालाब परियोजना के निर्माण हेतु 72.00 हेक्टेयर वनभूमि जल संसाधन विभाग को उपयोग पर देने बाबत।

संदर्भ:-भारत सरकार, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली का पत्र क्रमांक 8-10/2020-FC दिनांक 12.09.2020

---0---

महोदय,

विषयांतर्गत प्रकरण में भारत सरकार के उक्त संदर्भित पत्र से चाही गई जानकारी निम्नानुसार प्रेषित है:-

S.N.	Conditions	Compliance
(i)	Revised Cost Benefit analysis shall be submitted as per the Ministry's guideline dated 01.08.2017	आवेदक संस्था द्वारा यह प्रस्ताव के भाग-1 में बिन्दु G पर अपलोड किया गया है।
(ii)	User agency shall recheck the actual culturable command area of the proposed irrigation project.	आवेदक संस्था द्वारा अवगत कराया गया है कि इस बांध से कुल 1848 हेक्टेयर कृषि भूमि की सिंचाई होगी। आवेदक संस्था ने यह भी जानकारी उपलब्ध कराई है कि इस बांध के निर्माण से प्रतिवर्ष रु. 856.22 लाख रुपये का अतिरिक्त कृषि उत्पादन सम्भव हो सकेगा। आवेदक संस्था ने यह भी अवगत कराया है कि IRR 5% लेने पर Cost - Benefit ratio 2.53 तथा IRR 10% लेने पर Cost - Benefit ratio 1.48 होगा। आवेदक संस्था ने प्रतिवर्ष होने वाले लाभ रु. 856.22 लाख तथा परियोजना की लागत रु. 4803.17 लाख की गणना कर IRR 14.13% अवगत कराया है। आवेदक संस्था द्वारा की गई गणना का प्रत्रक संलग्न है।

-2-

(iii)	Compensatory Afforestation sites proposed shall be revisited and the State Government shall ensure CA sites are free from all encumbrances.	क्षतिपूर्ति वनीकरण के लिये आवेदक संस्था द्वारा उपलब्ध कराई गई गैर वनभूमि का निरीक्षण वनमण्डलाधिकारी, देवास द्वारा स्वयं किया गया है। वनमण्डलाधिकारी, देवास द्वारा अवगत कराया गया है कि यह गैर वनभूमि पूर्णतः अतिक्रमण मुक्त है। वनमण्डलाधिकारी, देवास द्वारा यह भी अवगत कराया गया है कि क्षतिपूर्ति वनीकरण हेतु उपलब्ध कराई गई गैर वनभूमि ऊर्जा विकास विभाग को विण्ड एनर्जी के लिये आवंटित थी। इस भूमि पर उनके द्वारा एक भवन निर्मित किया गया था। इस भवन का उपयोग वन विभाग द्वारा आवश्यकता अनुसार किया जायेगा।
(iv)	The State Government shall convey its views on the recommendation of the concerned DFO that a Wildlife Management Plan may be made for implementation by the user agency.	वनमण्डलाधिकारी, देवास द्वारा स्थल निरीक्षण में अपनी अनुशंसा में Wildlife Management Plan तैयार करने का उल्लेख किया है। इस क्षेत्र में कोई विशिष्ट वन्यप्राणी नहीं पाया जाता है। अतः प्रस्ताव में Wildlife Management Plan तैयार करने की आवश्यकता नहीं है। सिंचाई हेतु पाईप लाईन जमीन के नीचे डाली जानी है, अतः अण्डर पास बनाने की आवश्यकता भी नहीं है।

अतः अनुरोध है, कि प्रकरण में भारत सरकार की आवश्यक अनुमति प्राप्त कर अवगत कराने का कष्ट करें।

संलग्न:-उपरोक्तानुसार।

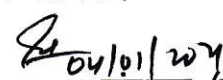

(सुनील अग्रवाल)

अपर प्रधान मुख्य वन संरक्षक (भू-प्रबंध)
मध्यप्रदेश, भोपाल

पृ. क्रमांक/एफ-3/86/2018/10-11/16/34
प्रतिलिपि:-

भोपाल, दिनांक 04/01/2021

1. मुख्य वन संरक्षक, (क्षेत्रीय) उज्जैन वृत्त उज्जैन, मध्यप्रदेश।
 2. वनमंडलाधिकारी, सामान्य वनमंडल देवास, मध्यप्रदेश।
 3. कार्यपालन यंत्री, जल संसाधन संभाग देवास, जिला देवास, मध्यप्रदेश।
- की ओर सूचनार्थ अप्रेषित।


अपर प्रधान मुख्य वन संरक्षक (भू-प्रबंध)
मध्यप्रदेश, भोपाल

कार्यालय वन मण्डल अधिकारी, वन मण्डल (क्षेत्रीय) देवास (म.प्र.)

☎ O: (07272) 253020, R (07272) 252449 Email- dfodewas@mpforest.org, dfodewas@rediffmail.com

क्रमांक / DM / 2021 / 04

देवास, दिनांक 1.1.2021

प्रति,

अपर प्रधान मुख्य वन संरक्षक
(कक्ष भू-प्रबंध)
सतपुड़ा भवन, भोपाल

विषय :- जिला देवास के अंतर्गत पटपड़ी तालाब परियोजना के निर्माण हेतु 72.00 हेक्टेयर वन भूमि जल संसाधन विभाग को उपयोग पर देने बाबद।


संदर्भ :- आपके द्वारा दिनांक 01.01.2021 को दूरभाष पर दिये गये निर्देश।

---00---

निवेदन है कि उपरोक्त विषयांकित प्रकरण में संदर्भित दूरभाष से चाही गयी अतिरिक्त जानकारियां निम्नानुसार अवलोकनार्थ सादर प्रेषित है।

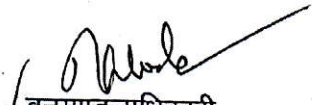
01. Compensatory Afforestation sites proposed shall be revisited and the State Government shall ensure CA sites are free from all encumbrances.

पटपड़ी तालाब परियोजना से प्रभावित वनभूमि के एवज में ग्राम जामगोद में प्राप्त 72.000 हेक्टर गैर वनभूमि पर कोई अतिक्रमण नहीं पाया गया है। उक्त भूमि पूर्णतः अतिक्रमण मुक्त है। वन विभाग को दिये जाने हेतु प्रस्तावित क्षेत्र में कलेक्टर देवास द्वारा पूर्व में उर्जा विकास विभाग निगम को विंड एनर्जी हेतु आवंटित क्षेत्र में निर्माणाधीन भवन, जो कि जीर्णशीर्ण अवस्था में है। जो वैकल्पिक वृक्षारोपण हेतु प्रस्तावित क्षेत्र के अंतर्गत है, वन विभाग द्वारा उपयोग किया जावेगा।


वनमण्डलाधिकारी
वनमण्डल(क्षेत्रीय), देवास
देवास, दिनांक 1.1.2021

क्रमांक / DM / 2020 / 05

प्रतिलिपि - मुख्य वनसंरक्षक एवं पदेन वनसंरक्षक उज्जैन वृत्त उज्जैन की ओर सूचनार्थ सादर सम्प्रेषित।


वनमण्डलाधिकारी
वनमण्डल(क्षेत्रीय), देवास

दिनांक
2/1/2021


PATPADI TANK PROJECT
Economics of Tank (Irrigation Scheme)


Tehsil :- Udaynagar


District : Dewas

S. No.	Name of Crop	Area under cultivation ha.	Cost of cultivation/ ha. (Rs.)	Total cost of cultivation (Rs. Lakh)	Yield per ha. (Qtl.)	Rate per Qtl. (Rs.)	Total yeild (Qtl.)	Total value of product in Rs. Lakh
1	2	3	4	5	6	7	8	9
Pre Development								
1	KHARIF							
	Soyabean	-	-	-	-	-	-	-
	Total	-		-				-
2	RABI							
	Wheat ordinary	600	6000	36.00	20.00	2000	12000	240.00
	Gram ordinary	200	4000	8.00	8.00	4500	1600	72.00
	Total	800		44.00				312.00
Post Developmet								
1	KHARIF							
	Soyabean	-	-	-	-	-	-	-
	Total	-		-				-
2	RABI							
	Wheat ordinary	840	8000	67.20	30.00	2000	25200	504.00
	Wheat Hybrid	550	10000	55.00	40.00	2000	22000	440.00
	Gram Hy.	458	5000	22.90	16.00	4500	7328	329.76
	Total	1848		145.10				1273.76
	Loss due to submergence	-12.337	4000	-0.49	8.00	4500	-98.70	-4.44
	Total	1848						1269.32

Net Profit		Total value of product	Total cost of cultivation	Profit
(a)	After Irrigation	1269.32	145.10	1124.22
(b)	Before Irrigation	312.00	44.00	268.00
	Net Profit			856.22


Sub Engineer
Paras canal Sub Division Bagli


(Mayank Parmar)
Sub Divisional Officer
Paras canal Sub Division Bagli


(A. K. Sharma)
Executive Engineer
Water Resources Division
Dewas

Chapter

Benefit cost ratio and Financial statement

1 General

Patpadi Tank Project is a minor irrigation scheme proposed in tribal area of Dewas district in Udaynagar tehsil. It envisages an annual irrigation of 1848.00 ha.

2 B. C. Ratio of the project

In order to examine the economic viability of the scheme the benefit cost ratio have been worked out based on the formate No. 144 issued by the Water Resources Department of MP. The expected value of produce without and with introduction of irrigation are worked out. The gross value of the benefits of the project for the pre-project and post-project conditions are computed adopting the yields and prices of commodities collected from Agriculture and marketing departments. The net benefit from irrigation works out to Rs. 856.22 Lakh from designed area of 1818 ha. Net value of benefit is computed after allowing the loss in the area coming under submergence. The annual cost is computed allowing for 5% and 10% of interest on total estimated cost of the project. The working details of B. C. ratios are given below.

2.1 Estimated cost of the project

	Rs. In Lakh	
(a) Estimated cost of the project	4775.45	
(b) Cost of land development @ Rs. 15000/ha.	27.72	
Total	4803.17	
	856.22	

2.2 Annual benefits

2.3 Annual cost

	@ 5%	@ 10%
(a) Interest on total cost of the project	240.16	480.32
(b) Depreciation charges @ 2%	96.06	96.06
(b) Operation and maintenance charges @ 120/ha.	2.22	2.22
Total	338.44	578.60
	2.53	1.48

2.4 Benefit cost ratio

The benefit cost ratio of the project had been computed based on the annual cost of the project and annual benefit from the project works out to 2.53 @ 5% and 1.48 @ 10% of interest on the total cost of the project which shows that the scheme is economically viable.

3 Internal rate of return (IRR)

The Internal rate of return for the project has been computed and works out to 14.13%. The details are furnished as per below table.

Table

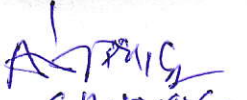
1	Life of the project after completion	100 years
2	Construction period	2 years
3	Cost of the project	4803.17 Lakh
4	Annual benefits	856.22 Lakh
5	Maintenance cost	2.22 lakh
6	Rate of discounting	15 %


Year(s)	Cost	Benefit	Net benefit	Discounting factor		Present worth of the net benefits	
	Rs. In Lakh		Rs. In Lakh	14%	15%	14%	15%
1	2401.58	0	-2401.58	1.00	1.00	-2401.58	-2401.580
2	2401.59	0	-2401.59	0.8600	0.8500	-2065.00	-2041.352
3	2.22	856.22	854.00	0.7396	0.7225	632.00	617.015
4	2.22	856.22	854.00	0.6361	0.6141	543.00	524.441
5	2.22	856.22	854.00	0.5470	0.5220	467.00	445.788
6	2.22	856.22	854.00	0.4704	0.4437	402.00	378.920
7	2.22	856.22	854.00	0.4045	0.3771	345.00	322.043
8	2.22	856.22	854.00	0.3479	0.3205	297.00	273.707
9	2.22	856.22	854.00	0.2992	0.2724	256.00	232.630
10	2.22	856.22	854.00	0.2573	0.2315	220.00	197.701
11	2.22	856.22	854.00	0.2213	0.1968	189.00	168.067
12	2.22	856.22	854.00	0.1903	0.1673	163.00	142.874
13	2.22	856.22	854.00	0.1637	0.1422	140.00	121.439
14	2.22	856.22	854.00	0.1408	0.1209	120.00	103.249
15	2.22	856.22	854.00	0.1211	0.1028	103.00	87.791
16	2.22	856.22	854.00	0.1041	0.0874	89.00	74.640
17	2.22	856.22	854.00	0.0895	0.0743	76.00	63.452
18	2.22	856.22	854.00	0.0770	0.0632	66.00	53.973
19	2.22	856.22	854.00	0.0662	0.0537	57.00	45.860
20	2.22	856.22	854.00	0.0569	0.0456	49.00	38.942
21	2.22	856.22	854.00	0.0489	0.0388	42.00	33.135
22	2.22	856.22	854.00	0.0421	0.0330	36.00	28.182
23	2.22	856.22	854.00	0.0362	0.0281	31.00	23.997
24	2.22	856.22	854.00	0.0311	0.0239	27.00	20.411
25	2.22	856.22	854.00	0.0267	0.0203	23.00	17.336
26	2.22	856.22	854.00	0.0230	0.0173	20.00	14.774
27	2.22	856.22	854.00	0.0198	0.0147	17.00	12.554
28	2.22	856.22	854.00	0.0170	0.0125	15.00	10.675
29	2.22	856.22	854.00	0.0146	0.0106	12.00	9.052
30	2.22	856.22	854.00	0.0126	0.0090	11.00	7.686
31	2.22	856.22	854.00	0.0108	0.0077	9.00	6.576
32	2.22	856.22	854.00	0.0093	0.0065	8.00	5.551
33	2.22	856.22	854.00	0.0080	0.0055	7.00	4.697
34	2.22	856.22	854.00	0.0069	0.0047	6.00	4.014
35	2.22	856.22	854.00	0.0059	0.0040	5.00	3.416
36	2.22	856.22	854.00	0.0051	0.0034	4.00	2.904
37	2.22	856.22	854.00	0.0044	0.0029	4.00	2.477
38	2.22	856.22	854.00	0.0038	0.0025	3.00	2.135
39	2.22	856.22	854.00	0.0033	0.0021	3.00	1.793
40	2.22	856.22	854.00	0.0028	0.0018	2.00	1.537
41	2.22	856.22	854.00	0.0024	0.0015	2.00	1.281
42	2.22	856.22	854.00	0.0021	0.0013	2.00	1.110
43	2.22	856.22	854.00	0.0018	0.0011	2.00	0.939
44	2.22	856.22	854.00	0.0015	0.0009	1.00	0.769
45	2.22	856.22	854.00	0.0013	0.0008	1.00	0.683


96	2.22	856.22	854.00	0.0003	0.0003	0.00	0.256
97	2.22	856.22	854.00	0.0003	0.0003	0.00	0.256
98	2.22	856.22	854.00	0.0003	0.0003	0.00	0.256
99	2.22	856.22	854.00	0.0003	0.0003	0.00	0.256
100	2.22	856.22	854.00	0.0003	0.0003	0.00	0.256
101	2.22	856.22	854.00	0.0003	0.0003	0.00	0.256
102	2.22	856.22	854.00	0.0003	0.0003	0.00	0.256
						Total	45.42
							-317.269

$$\text{Internal rate of return (IRR)} = 14 + \frac{1}{362.689} \times 45.42$$

$$\text{Internal rate of return (IRR)} = 14.13 \%$$


 (A. K. Sharma)
 Sub Engineer
 Paras canal Sub Division
 Bagli


 (Mayank Parmar)
 Sub Divisional Officer
 Paras canal Sub Division
 Bagli


 (A. K. Sharma)
 Executive Engineer
 Water Resources Division
 Dewas

Cost Benefit Analysis for
PATPADI TANK PROJECT (MINOR)

DEWAS

On the basis of Guidelines for Forest Land Diversion 2017

Table-A Cases Under Which A Cost Benefit Analysis for Forest Diversion Area Required


S. No.	Nature of Proposal	Applicable / Not Applicable	Remarks
1	All categories of proposal involving forest land upto 20 Ha. in plains and upto 5 Ha. in hills.	Not applicable	
2	Proposal for defense installation purposes and oil prospecting (prospecting only)	Not applicable	
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	
4	All other proposal involving forest land more than 20 Ha. in plain and more than 5 Ha. in hills including roads, transmission lines, minor, medium and major irrigation project, hydro projects, mining activity, railway lines, location specific installations like micro-wave station, auto repeater centers, TV towers etc.	Applicable	B.C. Ratio has been calculated as per forest guidelines.

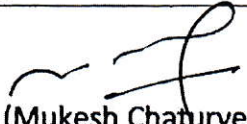
Table-B Estimation of Cost of Forest Diversion

S. No.	Parameters	Remarks
1	Ecosystem services losses due to proposed forest diversion.	Ecosystem services due to diversion of forest land suggested by the forest classification report NPV is Rs. 6.26 Lakhs/Ha. Cost of Forest Land as per NPV is $72 \times 6.26 = 450.72$ Lakhs
2	Loss of animal husbandry productivity including cost of fodder.	As per applicable guidelines @10% of NPV is $72 \times 0.626 = 45.07$ Lakhs
3	Cost of Human Resettlement	Not Required
4	Loss of public facilities and administrative infrastructure (road, building, schools, dispensaries, electric lines, railways etc.) on forest land if these facilities were diverted due to the project.	There is no loss of public facilities and administrative infrastructures on forest land due to construction of Patpadi Tank Project (Minor) . Hence no cost has been added on this account.
5	Possession value of forest land diverted.	The possession value of forest land diverted is taken 30% of the N.P.V. due to loss of forest is $72 \times 1.878 = 135.216$ Lakhs
6	Cost of suffering to oustees	Not Required
7	Habitat fragmentation cost	Forest land is being acquired for submergence of Patpadi Tank Project (Minor) . There is no amount is taken under this account.
8	Compensatory afforestation and soil and moisture conservation cost.	The cost @Rs 4.00 Lakhs per Ha. is taken for compensatory afforestation and soil moisture conservation. Hence amount will be $= 72 \times 4.00 = 288.00$ Lakhs
9	Total cost due to forest land diversion	Total cost due to forest land diversion for Patpadi Tank Project will be : $= 450.72 + 45.07 + 135.216 + 288.00 = 919.006$ Lakhs

Table-C Existing Guidelines for Estimating Benefits of Forest Diversion in CBA

S. No.	Parameters	Remarks
1	Increase in productivity attribute to the specific project.	The crop production benefit due to Patpadi Tank Project will be Rs. 860.66 Lakhs in designed life of 100 years and water level will be increase economy growth of the project. Project also reserves the water for drinking purpose for Udainagar Dist. Dewas.
2	Benefit to economy due to the specific project	Patpadi Tank Project will trigger economy development and also influence with irrigation facility to a land of 1848 Ha. in the surrounding area.
3	No. of population benefited due to specific project.	Project is located in backward area of the village. After completion of project 1480 Ha. Cultivators will be benefited and water level will be increased in surrounding area. This project will also facilitate drinking water supply to Udainagar Dist. Dewas (M.P.)
4	Economic benefit due to of direct and indirect employment due to the project.	The project will be provided direct employment for approximate 20,000 people (24 months) during construction period.
5	Economic benefits due to compensatory afforestation.	An economic benefit due to compensatory afforestation has considered as per the benefit of C.A. guidelines of ministry for N.P.V. estimation.


 (Mukesh Kumar Meena)
 Sub Divisional Officer
 Paras Canal Sub Division
 Bagli


 (Mukesh Chaturvedi)
 Executive Engineer
 Water Resources Division
 Dewas

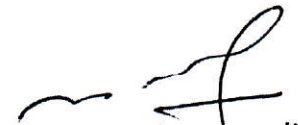
PATPADI TANK PROJECT (MINOR)

COST BENEFIT ANALYSIS

Total Cost Due to Forest Land	:	Rs. 1080.00 Lakhs	
Total Benefit Due to Project	:	Rs. 860.66 Lakhs	
Benefit Ratio of Project	:	@10% Interest on Capital	1.49
	:	@5% Interest on Capital	2.25



(Mukesh Kumar Meena)
Sub Divisional Officer
Paras Canal Sub Division
Bagli



(Mukesh Chaturvedi)
Executive Engineer
Water Resources Division
Dewas