

### Additional Agenda Item No. 2

**Sub: Diversion of 1835.14 ha of forest land for Parban Major Irrigation Project in favour of Water Resources Department, Rajasthan in Baran and Jhalawar Forest Divisions of Baran and Jhalawar districts of Rajasthan.**

The above proposal for diversion of 1835.14 ha of forest land for Parban Major Irrigation Project in favour of Water Resources Department, Rajasthan in Baran and Jhalawar Forest Divisions of Baran and Jhalawar districts of Rajasthan was discussed by the FAC in its meeting dated 18<sup>th</sup> September 2012.

The Committee noted that this is a large irrigation project which involves displacement of several villages. Representations both in favour as well as against the proposal has been received by the Ministry. The catchment area treatment plan also appeared to be lopsided towards engineering structures with very little focus on vegetative/afforestation measures. The Committee also noted that the project is just about 150 meter away from Shergarh Wildlife Sanctuary. In view of the above, the Committee decided that a sub-Committee of FAC including Prof. N.P. Todaria shall undertake a site visit.

A sub Committee consisting of Prof Todaria Member FAC and Sh Harish Chaudhary, Sr AIGF undertook site inspection. The proposal is placed before FAC along with the Report.

#### *FACT SHEET*

1.	Name of the Proposal	Diversion of 1835.14 ha of forest land for Parban Major Irrigation Project in favour of Water Resources Department, Rajasthan in Baran and Jhalawar Forest Divisions of Baran and Jhalawar districts of Rajasthan.
2.	Location	
	i) State	Rajasthan
	ii) District	Baran and Jhalawar
3.	Particulars of Forests	
	e) Name of Forest Division	Baran and Jhalawar Forest Division
	f) Forest area involved	Baran Division : 538.313 ha Jhalawar Division : 1297.67 ha
	g) Legal Status/Sy. No	Protected forest
	h) Map	Enclosed on page-16/c
4.	Topography of the area	
5.	(vi) Vegetation	Local names of trees have been given at p-22-23/c.
	(vii) No. of trees which will be affected	A total of 1,99,736 trees are falling in submergence and canal. Out of which about 80,000 are above 60 cm girth (18")-p-22/c.
	(viii) Density	Baran Division - 0.1 to 0.8 Jhalawar Division – 0.3 to 0.6
6.	Whether area is significant	The area does not form part of protected area.

	from wildlife point of view	However, Shergarh wildlife Sanctuary has been stated to be about 150m downstream of the dam site.														
7.	Compensatory Afforestation (CA)	<p>It has been stated in the Part II pertaining to DFO Baran that PC Baran has set aside 618.53 ha non-forest land (including 60.67 ha in Jhalawar Distt). On the other hand, DFO Jhalawar has stated that 1238 ha non-forest land is allotted in Jhalawar Distt and 60.67 ha in Baran Distt.</p> <p>Maps have not been submitted. It has been stated that land will be shown on map after finalization of its allotment and handing over to forest department.</p> <p>Site suitability certificate has been given by the two DFOs (p-17-18/c).</p>														
8.	Catchment Area Treatment	<p>Catchment area treatment plan has been prepared involving Rs.429 crores. Breakup of the CAT plan is as below:</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Amount(crore)</th> </tr> </thead> <tbody> <tr> <td>Contour bunding</td> <td>387</td> </tr> <tr> <td>Anicut</td> <td>10</td> </tr> <tr> <td>Earthen check dam</td> <td>12</td> </tr> <tr> <td>Pasture development</td> <td>1</td> </tr> <tr> <td>Grass sowing</td> <td>11</td> </tr> <tr> <td>Plantation</td> <td>7</td> </tr> </tbody> </table>	Item	Amount(crore)	Contour bunding	387	Anicut	10	Earthen check dam	12	Pasture development	1	Grass sowing	11	Plantation	7
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9.	<p><u>Details of Irrigation / Hydel Project:</u></p> <ol style="list-style-type: none"> <li>Total catchment area</li> <li>Total command area</li> <li>Full Reservoir Level</li> <li>High Flood Level</li> <li>Minimum drawl level</li> <li>Break-up of area falling in catchment area (forest land, cultivated land, pasture land etc.)</li> <li>Area of submergence at high Flood Level</li> <li>Area of Submergence at FRL</li> <li>Area of submergence at 2 M below FRL</li> <li>Area of submergence at 4 M below FRL.</li> <li>Area of submergence at minimum drawl level + Dam</li> </ol>	<p>2672 sq. km</p> <p>1314 sq.km</p> <p>9809.95 ha</p>														

Seat			
10.	Rehabilitation of Oustees	A total of 2142 families will be displaced including 461 families belonging to SC/ST families.	
11.	Cost Benefit Ratio	Enclosed on <b>Page No – 63-77/c.</b> Cost Benefit Ratio is 1:1.61	
12.	Recommendation i. DFO ii. CF iii. Nodal Officer iv. State Government	Recommended with conditions p-9& 11/c. Recommended with conditions Page-12 & 13/c Recommended with conditions Page-14/c Recommended with conditions Page-15/c	
13.	District Profile	Baran (Sq.km)	Jhalawar (Sq.km)
	(i) Total Geographical area	6396	6291
	(ii) Total forest area of District/ Divisional forest area	2313	1318
	(iii) Total area diverted since 1980	10.39	10.35
	(iv) Total CA stipulated since 1980	1.74 on forest land 8.66 non-forest land	31.11 on forest land 5.37 non-forest land
	(v) Total CA done since 1980	0.59 on forest land 2.76 non-forest land	1.21 on forest land 1.03 non-forest land

### **SITE INSPECTION REPORT**

Site inspection report of diversion of 1835.983 ha of forest land for Parwan Major Irrigation Cum Drinking water Supply Project in favour of Water Resource Department, Govt. of Rajasthan in Baran and Jhalawar districts of Rajasthan.

Date of inspection:- 02 & 03.05.2012

Presence:

1. Shri Y.K. Singh Chauhan, IFS, CCF (Central), MoEF, RO, Lucknow
2. Shri M.L. Meena, Chief Conservator of Forests, Kota.
3. Shri Mahesh Chandra Garg, DFO, Jhalawar Forest Division, Jhalawar.
4. Shri P.D. Gupta, DFO, Baran Forest Division, Baran, Rajasthan.
5. Shri S.N. Gupta, SE. Water Resource Department, Kota, Rajasthan.
6. Shri V.K. Jain. Ex. Engineer, Water Resource Department, Jhalawar, Rajasthan.
7. Shri M.K. Gupta, Asstt. Engineer, Water Resource Deptt., Jhalawar, Rajasthan.
8. Shri Chhatrasal Singh} Representatives of Parwan Doob Kshetra Hitkari &

9. Shri Lokendra Singh, } Jangal Bachao Samiti, District Baran, Rajasthan  
 10. Shri Govind Singh, }

**1. Legal status of the forest land proposed for diversion:**

The total forest land proposed for diversion is 1835.983 ha notified protected forest land out of which 538.313 ha in Baran district and 1297.67 ha in Jhalawar district. The Parwan river a tributary of kalisindh river and proposed project is to utilize the water by constructing a storage reservoir and 38 M high concrete gravity dam with the storage capacity of 490MCM at FRL.308.80M. The gross catchment area of the project site is about 8242 Sq.Km out of which 2262 Sq. Km lies in Rajasthan and 5980 Sq. Km lies in M.P. The project will provide irrigation to CCA of 131400 ha with 76% intensity of irrigation through right & left main line canal system benefiting the Jhalawar, Kota and Baran district of Rajasthan. The provision has been made in the project for drinking water, downstream flow in the river, and supply of water for thermal power generation use as 50 MCM, 16 MCM and 79 MCM respectively.

**2. Item wise break up details of the forest land proposed for diversion:**

The total forest land proposed for diversion is 1835.983 ha in Baran and Jhalawar district of Rajasthan. The item-wise and district-wise forest land proposed for diversion is as following table.

S.No.	Particular	Jhalawar District (ha.)	Baran District (ha.)	Total (ha.)
1.	Construction of Dam	--	8.00	8.00
2.	Construction of approach road 10m wide to Dam	3.71	--	3.71
3.	Construction of Canal	37.83	9.522	47.352
4.	Construction road along canal 6m wide	4.92	--	4.92
5.	Construction of Colony	10.00	--	10.00
6.	Construction of road above tunnel	--	10.521	10.521
7.	Dumping yard	10.00	10.00	20.00
8.	Submergence of Dam	1231.21	500.27	1731.48
	<b>TOTAL</b>	<b>1297.67</b>	<b>538.313</b>	<b>1835.983</b>

**3. Whether proposal involves any construction of building (including residential) or not. If yes, details there of.**

Yes,

*The construction of colony serial No.5 requires 10 ha forest land for construction of residential building, guest house, store, club building, play ground, dispensary, workshop etc at dam site is not permissible as per guidelines of Forest (Conservation) Act Para No. 4.5.*

**4. Total cost of project at present rates**

Originally Rs. 2332.52 crore which is revised to Rs. 2360.43 crore.

## 5. Wild-Life

### **Whether forest area proposed for diversion is important from wildlife point of view or not.**

The proposed forest land involved for diversion is not part of any wildlife sanctuary or national park but the proposed dam is very nearer to Shergarh Wildlife Sanctuary and during site inspection the representative of the Parwan Doob Kshetra Hitkari and Jangal Bachao Samiti challenged that the proposed dam is within the Shergarh Wildlife Sanctuary. Therefore, it was decided during the meeting on the dam site, a detailed survey will be carried out jointly with officials of the Revenue Department, Forest Department and Water Resource Department. The detailed report submitted by the Secretary, Forest Department, Govt. of Rajasthan vide letter No. P.1(136)/forest/2008 dated 06.08.2012. According to the submitted report the proposed dam is 150 meter on up stream to the boundary of Shergarh Wildlife Sanctuary. The report narrated that the representatives of Parwan Doob Kshetra Hitkari and Jangal Bachao Samiti were also present during the survey.

## 6. Vegetation:

### **Total number of trees to be felled.**

Total 199736 trees to be felled out of which 91548 trees in Jhalawar district and 108188 trees in Baran district.

### **Effect of removal of tree on the general ecosystem in the area:**

The proposed project involves large number of trees removal for submergence area and canal construction activities. As per proposal 50% of water will be released from the dam within two months i.e. November and December which is part of 80% of the submergence area and this area having 186243 trees which is 93% of the total trees proposed to be felled should not felled because most of the trees will survive with submergence of two months and will provide Eco-system for birds in submergence area. Rest 13493 trees are proposed to be felled in construction of canal. The land requirement for canal construction is proposed 60 m wide but the canal and inspection road will required only 40 m wide strip and rest 10 m both side remain intact. Thus about 1/3 rd of trees will remain for which no felling is required.

### **Important species**

Predominant species are Prosopis Senegal, Prosopis cernaria, Prosopis Juliflora, Capisindica etc.

### **Number of tree to be felled of girth below 60cm**

152646 trees.

### **Number of trees to be felled of girth above 60cm**

47090 trees.

## 7. Background note on proposal:

The Parwan Irrigation cum Drinking Water Supply Project is proposed on River Parwan, a tributary of river Chambal in Jhalawar district. The dam is located near village Akawad in Tehsil Khanpur, district Jhalawar. It originates near Kala papal in the Dewas district and rises from Vindhayan ranges at an elevation of 610 meter from Bariri hills and covers a distance of 351 Km before joining the river Chambal near village Bagli of Pipalda tehsil in Kota district. The river Parwan flows through a length of 180 Km in M.P. and remaining 171 Km in Rajasthan State.

The proposed project will ensure the utilization of water of Parwan river for irrigation areas downstream on the right and left side of the river. The gross catchment area upto the project site is 8242 Sq.Km area lies in M.P. State. An area of 9810 ha will be submerged due to the construction of this dam at FRL 308.80 m. The submergence will cover 47 villages of Khanpur, Aklera Tehsils of Jhalawar district and Chippabarod tehsil of Baran district. 17 villages will be fully submerged and 30 villages will be partially submerged due to the construction of the dam. Tehsil-wise villages coming under the submergence are as under:-

S.No.	Tehsil/District	Fully submerged	Partially submerged
1.	Khanpur / Jhalawar	10	10
2.	Aklera / Jhalawar	-	11
3.	Chipabarod / Baran	7	9
	<b>Total</b>	<b>17</b>	<b>30</b>

#### **8. Compensatory afforestation:**

As the proposed forest land is notified protected forest and user agency is Water Resource Department, Govt. of Rajasthan and as per guidelines 3.2 equivalent non forest land for compensatory afforestation is required. The Collector, Jhalawar vide letter dated Revenue/2010/C 38 dated 23.04.2010 has allotted 1238 ha non-forest land and District Collector, Baran vide his letter No.F-4(19)/Revenue/11/92 dated 04.01.2012 allotted 618.53 ha non-forest land in Baran district. Thus, total 1856.53 ha non forest land/revenue land has been transferred in favour of State Forest Department, Govt. of Rajasthan. However, the proposed diversion of forest land is 1835.983 ha which is more than equivalent of forest land.

##### **(i) Whether land for compensatory afforestation is suitable for plantation and management point of view or not.**

The Divisional Forest Officer, Baran vide letter dated 12.12.2011 has given suitability certificate for 598.98 ha and Divisional Forest Officer, Jhalawar vide letter dated 12.01.2012 has given suitability certificate for 1238 ha. However, undersigned has inspected some non forest land provided for compensatory afforestation is suitable for plantation but it required protection and soil & water conservation measures during plantation.

##### **(ii) Whether land for compensatory afforestation is free from encroachment /other incumbencies.**

The DFOs have stated that they have not taken possession of the non-forest land transferred to the Forest Department but at the time of possession/Kabja they will ensure that the compensatory land should be free from encroachment and the duty of Water Resource Department that the area should be well demarcated by PCC boundary pillars of 4 feet height.

##### **(iii) Whether land for compensatory afforestation is important from religious/archaeological point of view.**

Most of the land is pasture land and Gar-Mumkin Pahar and the DFOs stated that they are not important on religious/archaeological point of view.

**(iv) Land identified for raising compensatory afforestation is how many patches whether patches are compact or not.**

The total non-forest land is given in 32 villages and the DFOs has not visited all the sites and they are not in position to narrate that the patches area consolidated or in small patches, therefore, Superintending Engineer, Water Resource Department has requested to demarcate the non-forest land provided for compensatory afforestation on village map. These documents submitted by the Superintending Engineer on 18.05.2012 shows that the compensatory afforestation patches are generally more than 10 ha which are better managed for plantation purpose.

**(v) Map with detail.**

Map with details are submitted to the Regional Office for the land provided for the compensatory afforestation.

**(vi) Total financial outlay.**

No site specific schemes have been submitted by the Forest Department and they are advised to prepare site specific scheme along the actual trench/Barbed wire fencing required for protection and water and soil conservation measures.

**9. Whether proposals violation or forest (Conservation) Act, 1980 or not. If yes a detailed report on violation including action taken against the concerned officials.**

No violation.

**10. Whether proposal involves rehabilitation of displaced persons, If yes whether rehabilitation plan has been prepared by the state Government or not.**

Yes, in Jhalawar district 10 villages are fully submerged and 21 villages are partially submerged. Similarly, in Baran district 7 villages are fully submerged and 9 villages are partially submerged. As per RR Plan about 1401 families with population of 8650 persons will be displaced fully while 741 families with 4172 persons will be displaced partially. The ST population comprises 340 families with population of 1524 persons fully displaced and 121 families population 882 persons are partially displaced which about 18.29% of total population.

The RR plan is approved by Ministry Tribal Affairs, Govt. of India vide letter No.22040/37/2007-NGO dated 29.05.2007 with certain conditions which is annexed as Annexure-III of the proposal.

**11. Reclamation Plan.**

Not required

**12. Details on catchment and command area under the project.**

The catchment area treatment plan has been prepared and approved by the EAC Committee of MoEF covering about 600 Sq.Km soil with the cost of estimate of Rs. 500 crore.

The command area is 131400 ha with 313 villages of Jhalawar and Baran districts.

**13. Cost Benefit Ratio**

The cost benefit ratio is 1.61:1, the details are annexed as Annexure-II of the proposal.

**14. Recommendations of the Principal Chief Conservator of Forest/State Government.**

The proposal is recommended by the Nodal Officer on behalf of the PCCF and by the State Govt.

**15. Utility of the project.****(I) IRRIGATION-**

The project will provide annual irrigation benefits to an area of 131400 ha (CCA) covering 313 villages of Khanpur tehsils of Jhalawar district and Atru, Chhipagarod, Baran, Anta tehsils of Baran district and Sangod tehsil of Kota district. Tehsil-wise villages to be benefited is as under:-

Sl.No.	District	Tehsil	Number of villages benefited
1.	Jhalawar	Khanpur	81
2.	Baran	Atru	82
		Chhipaborad	3
		Anta	37
		Mangrol	12
		Baran	60
3.	Kota	Sangod	38
<b>TOTAL:-</b>			<b>313</b>

The irrigation benefits will go mostly to the people who are economically backward because of scarcity of water and lack of irrigation facilities in the area. The inhabitants are hardworking and poor class people. It is expected that they will adopt intensive cultivation after introduction of canal irrigation. The soil of command is suitable for all kinds of crops and the people of area are enthusiastic for receiving canal irrigation. Thus, the introduction of canal irrigation leading to extensive cultivation is bound to prosper the cultivators and contribute towards production of additional food grains.

**(II) DRINKING WATER & INDUSTRIAL REQUIREMENT-**

The project will cater to drinking water demand of present and prospect to problematic villages of Jhalawar, Baran & Kota districts the Public Health Engineering Department has given a projected demand of 50 M Cum of water upto the year 2061. Tentatively about 820 villages are likely to be benefited as detailed below:

District	Tehsil	Approximate number of villages to be benefited
Jhalawar	Khanpur	170
	Aklera	100
	Manoharthana	100
Baran	Atru	125
	Baran	125
	Anta	100
Kota	Sangod	100
<b>TOTAL:-</b>		<b>820</b>

In addition, about 79 M.cum water is proposed to be utilized for 1200 MW Thermal Power Plants of Kawai, 2520 MW Thermal Power Plant of Chhabra in Baran district.

**16. Number of scheduled caste/Scheduled tribes to be benefited by the project.**

About 25% population of SC/ST in the area which are benefited by the implementation of the project. Similarly the same ratio is displaced in implementation of the project.

**17. Whether land being diverted has any socio-cultural/religious value.**

Not specific but some temples will be submerged having religious value.

**Whether any sacred grove or very old growth trees/forests exist in the area proposed for diversion.**

Yes, the villagers have some fruit gardens and old Peepal, Bargad trees are standing in various villages.

**18. Situation W.R.T and P.A**

The proposed diversion of forest land is adjacent to Shergarh Wildlife Sanctuary. The proposed dam is about 150 meter up stream to the boundary of Shergarh Wildlife Sanctuary. The National Board of Wildlife in 22<sup>nd</sup> meeting held on 25.04.2011 accorded permission to the Parwan Irrigation Cum Drinking Water Project with the following conditions:

- (i) 25 cusecs water round the year will be released free of cost through the dam downstream by an auto built system, free from man management.
- (ii) The dam construction work will be done during the day time only.
- (iii) One forest chowki will be constructed by project authority at the dam site in consultation with DFO, Baran, which will be used by forest staff for protection purpose.
- (iv) No night camping shall be allowed at the site.
- (v) The agency would also provide one extra pipeline for providing water for the wildlife in the area in consultation with CCF (Wildlife), Kota.
- (vi) All material for construction will be brought from outside the forest/sanctuary area.
- (vii) User agency will deposit 5% of the project cost for the maintenance and protection of project authority.

The MoEF letter No. 6-43/2007-WL-I(XIII) dated 10.05.2011 is attached as Annexure-XIV of the proposal.

During site inspection it is seen that about 70% work of forest Chowki has been completed for which money was provided by user agency to the Forest Department.

**19. Any other information relating to the project:**

- (i) During site inspection Parwan Doob Kshetra Hitkari & Jangle Bachao Samiti delegation has claimed that the proposed constructing dam is within boundary of Shergarh Wildlife Sanctuary. The officials of the Forest Department, Revenue Department and Water Resource Department have been requested for joint survey of the area and give actual position whether the proposed dam is within Shergarh Wildlife Sanctuary. The Secretary (Forests), Government of Rajasthan submitted report vide letter No. P.1(136)Forest/2008 dated 06.08.2012 in which joint survey team found that the proposed dam is 100 meter up stream from the boundary of Shergarh Wildlife Sanctuary. The user agency has submitted the proposal to Ministry of Environment & Forests, Govt. of India and the National Board of Wildlife in 22<sup>nd</sup> meeting held 25.04.2011 granted permission for the proposed dam on the Parwan River for major irrigation and drinking water supply project just out side Shergarh Wildlife Sanctuary with 6 conditions vide letter No.6-43/2007-WL-I(XIII) dated 10.05.2011 attached in the proposal.

- (ii) The user agency has not been submitted the Gram Sabha resolutions which were submitted later by the user agency (Photocopy attached as **Annexure-A**) in which Gram Sabha has passed the resolution with the recommendation in favour of construction of proposed dam. At the same time, the Parwan Doob Kshetra Hitkari & Jangle Bachao Samiti has submitted the Gram Sabha resolution in which Gram Sabha has opposed the construction of proposed dam (Photocopy attached as **Annexure-B**). Thus, the same Gram Sabha has passed two types of resolution but the user agency has submitted Gram Sabha resolutions which are recommended by the Gram Sewak/Paden Sachiv of Gram Panchayat which can give the legal or administrative recognition.
- (iii) During site inspection and later Parwan Doob Kshetra Hitkari & Jangle Bachao Samiti has submitted the representation opposing the construction of proposed dam (Photocopy attached as **Annexure-C**). On the same time the representation submitted by the concerned Legislative Assembly Constituencies and representatives of District Heads submitted joint representation in favour of construction of proposed dam (Photocopy attached as **Annexure-D**).
- (iv) During site inspection the public of various villages requested that about 17 villages area completely submerged and 30 villages are partially submerged so the most of the people becomes landless but as per Resettlement and Rehabilitation Plan only Scheduled Tribes have given the land for construction of houses and agricultural purpose but for other caste no package of land has been awarded. However, in Jhalawar district plenty of Govt. land is available like the site inspection by undersigned of Magsi village where found huge chunk of Government land and DFO, Jhalawar informed that about 4000 hectare Govt. land is available so it is recommended that the State Govt. provide land for other than scheduled tribes people who are proposed to be displaced in submergence of the proposed dam.
- (v) The trees in 80% submergence area in which water is receded within two months. Thus, the trees in such area recommended should not felled. Similarly, in canal construction about 10 meter area left both side of the canal on both sides trees standing on that land should not felled.

**20. Recommendation of the Additional Principal Chief Conservator of Forests (Central), Regional Office (Central Region), Lucknow.**

The proposal of the State Government for diversion of 1835.14 ha of protected forest proposed for diversion for the project, was inspected by the Chief Conservator of Forests of Regional Office (Central). The site inspection report submitted by the CCF have details of the proposal. The actual area involved for construction of Parwan Major Irrigation cum Drinking Water Supply project in favour of Water Resource Department in district Baran and Jhalawar is 12247.79ha out of which the actual forest area is 1835.983 ha. The major part of the area required is for submergence of dam which is 9810 ha of the 1731.48 ha is in forest land as per the details given in para 2 of the report. In the proposal area of 10 ha of forest land in district Jhalawar is proposed for construction of residential colony of Water Resource Department which should be avoided in the forest area. The residential buildings can be taken up in non forest land which is otherwise available in district Jhalawar and Baran. Therefore the affected area for the project in forest land should be 1825.983 ha.

This is a major project for supply of water for irrigation and drinking purpose and would cover the large area of Jhalawar, Baran and Kota. Tentatively 820 villages would be benefited by the project. Besides the project would also help in establishing of thermal power plant at Kawai and Chhaha in district Baran.

As large area is involved mainly in submergence of dam, many families would be displaced as per the details given in the site inspection report. In all about 47 villages would be involved in submergence area of the proposed dam. There are two groups in the area having opposite view in construction of the proposed major irrigation project. There is Parwan Doob Kshatrakari and Jangal Bachao Samiti which vehemently opposed the project but there are large number of population which is represented by the elected representative are in favour of the project. The representation given by the two opponent group should also enclosed with the report herewith.

- The proposal involves submergence of large area in which population of 47 villages will be affected. The rehabilitation and resettlement plan prepared by the State Government has provision for settlement of Schedule Tribe only who constitute about 25% of the total population. Therefore there is some resentment by the other community of the areas who are also affected because of the project. The State Government should consider for rehabilitation and resettlement of all category of people of 47 villages involved in the submergence in the project.
- The proposal does not involve any wildlife sanctuary or national park. As per the survey carried out by the district administration with the staff of Revenue Department, Forest Department and project authority, which gives its report that the proposed dam is 100 meter upstream from the boundary of Shergarh wildlife sanctuary. The National Board of Wildlife has accorded permission for the proposed project subject to certain conditions as given in the Ministry's letter No. 6-43/2007-WL-I(xiii) dated 10.05.2011.
- The project involves 199736 trees in the forest area proposed for diversion, which are mainly comprises of *Prosopis senegal*, *Prosopis cenerauia*, *Prosopis juliflora* etc. These trees are in short statured shrubby in nature. As per the site inspection and information furnished in the proposal submergence part is 80% of the area 186243 trees are involved in submergence. These trees will remain submerged for a short period of 2 to 3 months and during this period most of the trees can survive. Therefore the felling of such large number of trees may not be required and which can be retained to provide proper habitat mainly for birds for their shelter. The remaining 13493 trees are falling in the area marked for construction of canal for which 60 meter wide area is proposed. The actual area required for canal and inspection road would be 40 meters therefore 20 meters (10 meter on either side) could remain intact and 1/3 trees could be avoided for felling. Therefore the enumeration of trees proposed for felling should be carried out again as number of trees can be reduced substantially.
- The residential colony proposed in 10 ha forest area should be takenup in non forest land which is available in plenty in district Jhalawar and Baran. Therefore area in forest should be reduced to 182.893 ha.
- The compensatory afforestation proposed is in 32 patches and as per the information given, each patch is about 10 ha of the area, it would be easy to manage for plantation

and protection. However the complete scheme for CA has not been submitted with the proposal and the area for CA has also not been properly demarcated. The financial outlay for CA has also not been worked out.

- The environmental clearance has already been accorded by the MOEF, New Delhi vide its letter F. NO. 3-12011/27/2007-IA.I dated 25.1.2011.

The proposed Parwan major irrigation cum drinking water supply project is important developmental activity for the development of Jhalawar, Baran and Kota districts of Rajasthan as it will provide irrigation facilities and drinking water supply to the large population, is recommended for approval of diversion of 1825.983 ha of PF for the project subject to the following conditions:

1. CA in equivalent non forest land would be carried out at the cost of the project authority.
2. NPV as applicable shall be paid by the Project Authority.
3. Catchment area treatment plan has approved by EAC committee of MOEF cover about 600 Sq meter shall be carried out in phase manner as per the approved rate by the Forest Department at the cost of the project.
4. As the area is close to the wildlife sanctuary the condition proposed by the National Wildlife Board conveyed vide MOEF letter No. 6-43/2007-WL-I(xiii) dated 10.05.2011 shall be implemented by the project authorities.
5. The rehabilitation and resettlement plan for all the families affected by the submergence in district Jhalawar and Baran shall be carried out by the State Government.
6. Forest area shall be demarcated by the boundary pillars by the user agency.

**Report of the sub Committee consisting of Prof Todaria, Member FAC and Sh Harish Chaudhary, Sr AIGF**

**A. Background**

1. The State Government of Rajasthan vide their letter dated 7<sup>th</sup> February 2012 submitted a proposal to obtain prior approval of Central Government under the Forest (Conservation) Act, 1980 for diversion of 1835.14 hectares of forest land in favour of the Water Resources Department in the State Government of Rajasthan for construction of Parwan Major Irrigation Project in Baran and Jhalawar districts, Rajasthan.
2. The project involves construction of a 38 meters high concrete gravity dam on Parwan river, a tributary of Kalisindh river, near Akawad village in Khanpur Tehsil of Jhalawar district to create a 490 million cubic meters (MCM) storage capacity reservoir at 308.80 meters full reservoir level (FRL).
3. The gross catchment area of the project is about 8,242 km<sup>2</sup>, out of which 2,262 km<sup>2</sup> lies in Rajasthan and the remaining 5,980 km<sup>2</sup> is located in the Madhya

Pradesh. The right and left main line canal system of the project have been designed to provide irrigation to 1,31,400 hectares command area in 313 villages located in Khanpur tehsil of Jhalawar district, Atru, Chhipagarod, Baran and Anta tehsils of Baran district and Sangod tehsil of Kota district.

4. Apart from irrigation, the project is proposed to provide 50 MCM water to the drinking water projects benefiting about 820 villages located in Khanpur, Aklera and Manoharthana tehsils of Jhalawar district, Atru, Baran and Anta tehsils of Baran district and Sangod tehsil of Kota district. In addition, about 79 MCM water is proposed to be utilized for 1200 MW and 2520 MW Thermal Power Plants located at Kawai and Chhabra respectively, in Baran district.
5. Construction of the project involves 12,247.79 hectares of land, including 1,835.983 hectares of forest land. The major part of the land required for the project is located in its submergence zone covering 9,810 hectares in 47 villages located in Khanpur, Aklera Tehsils of Jhalawar district and Chippabarod tehsil of Baran district. Out of these, 17 villages will be fully submerged and 30 villages will be partially submerged. Of the total 1835.983 hectares of forest land required for the project, 1,731.48 hectares is located in its submergence zone. A substantial part of the forest land proposed to be utilised for the project is presently under encroachment. Such forest land being utilised for cultivation is presently devoid of trees and other vegetation of natural origin.
6. The forest land proposed for diversion contains total 1,99,736 trees, out of which 91,548 trees are available in the forest land proposed to be diverted in Jhalawar district and the remaining 1,08,188 trees are available in the forest land proposed to be diverted in Baran district.
7. As per the Rehabilitation and Resettlement (R & R) Plan project involves full displacement of 1,401 families having population of 8,650 persons and partial displacement of 741 families having population of 4,172 persons. These include 340 scheduled tribe (ST) families with population of 1,524 persons which will be fully displaced and 121 ST families having population of 882 persons which will be partially displaced. The Ministry of Tribal Affairs vide their letter dated 29.05.2007 has approved the R & R plan with certain conditions.
8. As the project involves diversion of more than 100 hectares of forest land, the representatives of Regional Office (Central Zone), Lucknow of the Ministry of

Environment and Forests (MoEF) inspected the forest land proposed to be diverted. During the site inspection representatives of the *Parwan Doob Kshetra Hitkari & Jangle Bachao Samiti* claimed that the proposed dam site is located within the Shergarh Wildlife Sanctuary. The representative of the MoEF therefore desired that joint survey be undertaken by the officials of the Forest, Revenue and Water Resource Departments in the State Government of Rajasthan to ascertain whether proposed dam site is located within the Shergarh Wildlife Sanctuary or not.

9. The Secretary (Forests), Government of Rajasthan vide his letter dated 06.08.2012 submitted a report wherein it is indicated that the joint survey team found that the proposed dam is located 150 meter upstream from boundary of the Shergarh Wildlife Sanctuary. It has also been indicated in the joint survey report that representatives of the *Parwan Doob Kshetra Hitkari and Jangal Bachao Samiti* were present during the survey.
10. Earlier, keeping in view that the project may affect water flow in the Shergarh Wildlife Sanctuary, the user agency submitted a proposal to the MoEF for consideration of the National Board for Wildlife (NBWL). The NBWL in its 22<sup>nd</sup> meeting held on 25.04.2011 recommended grant of approval for construction of the Parwan Dam subject to fulfilment of six conditions. The MoEF vide letter dated 10.05.2011 communicated said recommendations of the NBWL to the State Government of Rajasthan and the user agency.
11. Environment clearance to the project has already been accorded vide MoEF letter dated 15<sup>th</sup> May 2011.
12. The proposal along with the site inspection report (SIR) received from the Regional Office (Central Zone), Lucknow was placed before the Forest Advisory Committee (FAC) in its meeting held on 18<sup>th</sup> September 2012 for its examination and appropriate recommendations.
13. The FAC after examination of the proposal and the site inspection report noted that this is a large irrigation project which involves displacement of several villages. Representations, both in favour as well as against the project, have been received by the MoEF. The catchment area treatment plan also appeared to be lopsided towards engineering structures with very little focus on

vegetative/afforestation measures. The FAC also noted that the project is located just about 150 meter away from Shergarh Wildlife Sanctuary. In view of the above, the FAC recommended that that a sub-Committee of FAC, including Prof. N.P. Todaria shall undertake a site visit and submit a report for its further consideration.

#### **B. Details of the Site Visit**

1. In Pursuance to the recommendation made by the FAC in their meeting held on 18<sup>th</sup> September 2012, a sub-committee of the FAC consisting of Prof. N.P. Todaria, non-official member of the FAC and Shri H.C. Chaudhary, Assistant Inspector General of Forests, Forest Conservation Division in the MoEF visited the Baran and Jhalawar districts on 21-22 March, 2013.
2. The sub- committee during its stay at Baran circuit house and its journey from Baran circuit House to the project site interacted with representatives of the villages located in command area of the project and received representation seeking early clearance to the project. The representatives of the command area during their interaction with the sub-committee even offered to provide five percent of their land proposed to be irrigated by the project for rehabilitation and resettlement of the project affected families. The District Collector, Baran and the Superintendent of Police, Baran also paid courtesy visit to the sub-committee. Some Members of Legislative Assembly (MLAs) representing the constituencies falling in command area of the project also met the sub-committee and requested early clearance to the project.
3. The Chief Conservator of Forests, Kota; Chief Conservator of Forests (Wildlife), Kota; Chief Engineer, Water Resources Department, Kota; Secretary, Rajasthan-Madhya Pradesh Chambal Management Board and representatives of district administration and local police accompanied the sub- committee during its visit to the project site.
4. At the project site, the sub-committee interacted with representatives of the *Parwan Doob Kshetra Hitkari and Jangal Bachao Samiti* and other representatives of the residents of the submergence zone of the project. The committee also visited site of the proposed dam and the area located in vicinity of the boundary of the Shergarh Wildlife Sanctuary. The sub-committee also recorded the geo-

coordinates of the proposed dam axis by using hand held GPS belonging to the State Forest Department.

### **C. Observations and Recommendations**

1. The major reasons cited by the *Parwan Doob Kshetra Hitkari & Jangle Bachao Samiti* and others for rejection of approval under the Forest (Conservation) Act, 1980 for diversion of forest land required for the project are as below:
  - (i) The proposed dam site is located within the Shergarh Wildlife Sanctuary;
  - (ii) The project has little relevance for the command area as major part of it is already irrigated through tube-wells. Construction of a large dam involving submergence of a large area of fertile agriculture land is unnecessary and wasteful;
  - (iii) Main purpose for construction of the project is to provide water for thermal power projects, including a thermal power project being setup by a private entrepreneur;
  - (iv) The project will submerge approach road to religious place of heritage value, such as the Kakoni temple.
  - (v) Project will involve displacement of large population.
2. The observations and findings of the sub-committee on each of the above arguments are as below:

#### **A. Location of Dam *vis-a-vis* Boundary of the Shergarh Wildlife Sanctuary**

- (i) It is a fact that boundary of the Shergarh Wildlife Sanctuary is not physically demarcated in the ground. As per the representatives of the *Parwan Doob Kshetra Hitkari & Jangle Bachao Samiti* and other residents of the submergence zone, a footpath which meets the Parwan river at a point located on South Eastern side of the Akawad Kalan village where width of the river is fairly large is the boundary of the Shergarh Wildlife Sanctuary. Whereas, as per the State Forest Department, a seasonal stream which drains into the Parwan river at a point located on north eastern side of the Akawad Kalan village where width of the river is fairly low is the southern boundary of the Shergarh Wildlife Sanctuary.

- (ii) Representatives of the *Parwan Doob Kshetra Hitkari and Jangal Bachao Samiti* also produced a copy of the Survey of India toposheet No. 54 D/ 10 obtained by them under the Right to Information. The toposheet duly authenticated by the Divisional Forest Officer, Baran depicts boundary of the Shergarh Wildlife Sanctuary and location of the Akawad Kalan village and proposed dam site etc. A copy of the said toposheet provided to the sub-committee by the representatives of the State Forest Department is enclosed as **annexure-I**.
- (iii) As per the said toposheet, southern boundary of the Shergarh Wildlife Sanctuary meets the Parwan river at 24°37.5182' N, 76°31.286' E where width of the river is fairly low. Similarly, geo-coordinates of the dam axis shown on the said toposheet are 24°37.372' N, 76°31.294' E. The geo-coordinates of the dam axis as recorded by the sub-committee by using hand held GPS is 24°37.416' N, 76°31.158' E.
- (iv) It was also brought to knowledge of the sub-committee that the proposal seeking prior approval of the Central Government under the Forest (Conservation) Act, 1980 for diversion of forest land required for construction of a transmission line which runs parallel to the natural stream which, as per the state Forest Department constitutes southern boundary of the Shergarh Wildlife Sanctuary, has been processed considering that it falls within the Protected Forests. In case the footpath shown by the residents of the submergence zone is considered as southern boundary of the Shergarh Wildlife Sanctuary, a part of the forest land required for construction of the said transmission line for whose diversion approval under the Forest (Conservation) Act, 1980 was accorded by Regional Office (Central Zone), Lucknow of this Ministry way back in 2008, will fall within the Shergarh Wildlife Sanctuary. The above fact clearly demonstrates that in the past also the said footpath was not considered as a boundary of the Shergarh Wildlife Sanctuary.
- (v) Keeping in view the above prominent geographical features and also keeping in view that geo-coordinates of the dam axis, as measured by the sub-committee during its visit to the project site tally with the geo-coordinates of the dam axis as per its location shown in the toposheet produced by the State Forest Department and the *Parwan Doob Kshetra*

*Hitkari and Jangal Bachao Samiti*, the sub-committee is of the view that the findings of the joint inspection team that the dam site is located at about 150 meters upstream of the boundary of the Shergarh wildlife sanctuary appears to be correct.

- (vi) The National Board for Wildlife (NBWL) after appraisal of the project has already recommended grant of approval for the project, subject to fulfilment of certain conditions. The sub-committee therefore is of the view that approval under the Forest (Conservation) Act, 1980 for the project may be accorded subject *inter-alia* to an additional condition that the user agency shall implement the conditions stipulated by the Standing Committee of the NBWL.

#### B. **Relevance of Dam for Agriculture**

- (i) It is a fact that a major part of the command area of the project is presently irrigated by using tube wells. However, the sub-committee was informed that keeping in view the fast depleting water table and increased cost of electricity, it may not be financially as well as ecologically viable in the long run to undertake tube well irrigation based agriculture in the region. It was also informed that use of fluoride rich ground water for irrigation is also posing health hazards.
- (ii) The fact that representatives of the command area during their interaction with the sub-committee at Baran Circuit House have offered to provide five percent of their land proposed to be irrigated by the project for rehabilitation and resettlement of the project affected families demonstrates that the project is highly relevant for long term sustainability of the irrigated agriculture in command area of the project. Government of Rajasthan can explore this offer of beneficiaries for the rehabilitation of displaced families. This shall be a unique and new concept wherein beneficiaries shall share the benefits with land losers.
- (iii) Project involves 12,247.79 hectares of land, including 1,835.983 hectares of forest land. The major part of the land required for the project is located in its submergence zone covering 9,810 hectares. A major part of the submergence zone of the project will however, be submerged for limited period of two to three months. The sub-committee therefore, is of the view that approval under the Forest (Conservation) Act, 1980 for the project, if accorded, shall be subject to the condition that the State Government shall explore feasibility to utilize such areas (except those located in forest land) during dry months for cultivation of

appropriate crops by the project affected families (without the use of fertilizers otherwise the water will not be potable). The forest land located between FRL and the FRL-4 meters, may be afforested by planting appropriate tree species.

**C. Diversion of water for Thermal Power and industrial Power Projects**

- (i) Though there is no mention in the EIA report and other documents, about 79 MCM water from the dam is proposed to be utilized for 1,200 MW and 2,520 MW thermal power plants being constructed at Kawai and Chhabra respectively, in Baran district. To ensure that character of the project is maintained as an irrigation project so as to ensure continued benefit to the farmers in the command area, the sub-committee is of the view that approval under the Forest (Conservation) Act, 1980 for the project may be accorded subject *inter-alia* to an additional condition that no more diversion of water from the project for industrial projects be permitted in future.
- (ii) Apart from placing total embargo on further allocation of water for industrial projects, the sub-committee is also of the view that approval under the Forest (Conservation) Act, 1980 for the project, if accorded, shall be subject to a further condition that the State Government shall explore feasibility to meet water requirement of the Kawai and Chhabra Thermal power plants from other alternate source(s). Water from the project to the said thermal power plants be provided only if it is not feasible to meet requirement of these plants from any other source, after realizing appropriately high water charges.

**D. Impact on Religious Places of Worship**

- (i) It has been accepted by the project proponent that approach road to the historic Kakoni temple will be submerged. Submergence of the approach road will hinder free movement of devotees to the said temple, which may result in public resentment.
- (ii) To ensure unhindered approach to the Kakoni temple, the sub-committee is of the view that approval under the Forest (Conservation) Act, 1980 for the project may be accorded subject *inter-alia* to an additional condition that the user agency shall provide alternate approach path to the Kakoni temple from its own cost.

**E. Displacement of the large population**

- (i) Project involves full displacement of 1,401 families having population of 8,650 persons and partial displacement of 741 families having population of 4,172

persons. These include 340 scheduled tribe (ST) families with population of 1,524 persons which will be fully displaced and 121 ST families having population of 882 persons which will be partially displaced. The Ministry of Tribal Affairs vide their letter dated 29.05.2007 has approved the R & R plan with certain conditions.

- (ii) As per the R & R Plan rehabilitation and resettlement benefits will be extended to only those families which are in legal possession of the land being acquired for the project. The families which are illegally cultivating a part of the forest and government land proposed to be acquired for the project will not be eligible for R & R benefits.
- (iii) Most of these families do not belong to the notified Scheduled Tribes and also do not have any documentary evidence to prove that they are in possession of the forest land for a continuous period of minimum 75 years. They are thus not eligible for recognition of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. The sub-committee was informed that agitation against the project is mainly spearheaded by these illegal settlers.
- (iv) As the illegal settlers are not likely to get R & R benefits, the sub-committee apprehends that they may encroach the adjoining forest areas once they are displacement from the land presently occupied by them. The sub-committee is therefore, of the view that that approval under the Forest (Conservation) Act, 1980 for the project may be accorded subject *inter-alia* to appropriate conditions to prevent encroachment of the adjoining forest land by such families.

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