

**IN THE HIGH COURT OF JUDICATURE OF KERALA  
AT ERNAKULAM  
(Special Original Jurisdiction)**

	<i>W.P.(C) No.</i>	<i>of 2007</i>	
Geetha	....		Petitioner
		Vs.	
Union of India and others	....		Respondents

**SYNOPSIS**

1. The Kerala State Electricity Board (KSEB) proposes to construct the Athirappilly Hydro Electric Project with an installed capacity of 163 MW across the Chalakudy river. The project is one requiring mandatory Environmental Clearance under the Environment Impact Assessment Notifications (as amended from time to time) issued under the Environment Protection Act, 1986. The law requires an Environment Impact Assessment report to be prepared on behalf of the Project proponent, KSEB. Concerned persons are entitled to access the report at specified public offices. Thereafter, a public hearing has to be conducted and the details of such hearing has also to be taken note of by the Ministry of Environment and Forests, Govt of India while considering the question of Environmental Clearance. The environment clearances granted to the project has been quashed by this Hon'ble Court on two occasions, i.e. in 2001 and 2006.

2. The environment clearance process has been reduced to a farce. The agency, entrusted with the task of preparing the EIA report, did not conduct any study as required by law for the requisite period of one year. The base line data used for the study was sourced from here and there and adopted without verification. The impact of the project on agricultural operations, drinking water, irrigation, tourism, tribal habitat, etc., was down-sized and largely trivialized. The bio-diversity of the project area and

surrounding catchment was largely ignored. The fact that the Athirappilly water fall, the most visited natural water fall in the state, will be lost to future generations on account of the implementation of the project has been ignored. The over whelming objection to the project at the public hearing and the concerns expressed by NGOs, environment groups, agriculturists, and members of the affected public has been brushed aside.

3. Denuding of large tracts of reserve forest land, loss of riverine riparian forest, loss of elephant corridor, loss of endemic species of flora and fauna are some of the environmental concerns thrown up by the project. Displacement and loss of livelihood of the members of a primitive tribal community, the Kadars (a scheduled tribe), loss of fishing opportunities, adverse impact on the Athirappilly and Vazhachal water falls and denial of river water for drinking and farming are some of the adverse socio-economic consequences of the proposed project.

4. The implementation of the project will efface the very character of a river that flows through some of the most environmentally sensitive areas of the country with long term conservation value. The river is already overburdened and excessively exploited by man. It has ceased to be a free flowing natural river. The proposed project, like the proverbial straw on the camel's back, will sound the death knell of the river.

5. The petitioner, under threat of displacement on the implementation of the project is therefore constrained to approach this Hon'ble Court complaining of the violation of the mandatory provisions of law and seeking to protect her fundamental right to life and livelihood guaranteed by the Constitution of India and to prevent an environmental and socio-economic catastrophe.

## LIST OF DATES & EVENTS

<u>Date</u>	<u>Event</u>
27.01.1994 -	Environment Impact Assessment Notification, 1994 issued by Ministry of Environment and Forests, Govt of India.
10.04.1997 -	Amendment to EIA Notification making public hearing mandatory. Concerned persons are entitled to access an executive summary of the project.
20.01.1998 -	Ext. P2; Environmental sanction accorded by the Ministry of Environment and Forests. The clearance is the subject matter of a challenge in a series of Writ Petitions filed before this Hon'ble Court.
17.10.2001 -	Ext.P3; Judgement of this Hon'ble Court in O.P. No. 3581/2001B and connected cases.
11.2001 -	Ext.P4, Executive summary of Project including Environment Impact Assessment Report of TBGRI is published.
28.12.2001 -	Ext.P5; Notice of proposed public hearing on 6.2.2002.
06.02.2002 -	Public hearing is conducted. Hearing Panel recommends, the conduct of a comprehensive EIA by Ext.P6, public access to the same and fresh public hearing thereafter.
10.02.2005 -	Ext.P8; Environmental Clearance granted to the project.
23.03.2006 -	Ext.P9; WP (C) 9542/2005 and WP(C) 11254/2005 are disposed of. The clearance is quashed.
15.06.2006 -	Public hearing is conducted after publication of the EIA report prepared by WAPCOS.
14.08.2006 -	Ext.P12; EIA notification, 2006 is issued.
06.11.2006 -	Fresh application for clearance submitted by KSEB.
27.02.2007 -	Ext.P23; Report filed by the Tribal Rehabilitation Commissioner on the complaint of the petitioner.

<u>Date</u>	<u>Event</u>
12.04.2007 }-	Five member Sub-Committee of the River Valley Committee constituted by Ministry of Environment and Forests visits site and conducts hearing. Ext.P15 report is submitted.
13.04.2007 }	
18.07.2007 -	Ext.P17; Environmental clearance is granted.
27.09.2007 -	Ext.P50; Newspaper report that the Biodiversity Board has advised the Govt. against the project.

### **RELEVANT STATUTORY PROVISIONS**

1. Biodiversity Act, 2002.
2. Constitution of India – Articles 19 (1) g, 21, 51A and 226.
3. Environment Protection Act, 1986.
4. Environment Impact Assessment Notification, 1994 (as amended in 1997 and 2002).
5. Environment Impact Assessment Notification, 2006.

COUNSEL FOR THE PETITIONER



A. **The Address of the Petitioner:-** The address of the Petitioner for service of notices, summons and other process of court is that of her Counsel, M/s. Jayakumar. K., P.B. Krishnan, M.K. Sreegesh, Geetha P. Menon and Deepa.V., Geethanjali, Warriam Road, Ernakulam, Kochi – 16.

B. **The Address of the Respondents:-** The address of the Respondents for service of notices, summons and other process of court, is as shown in the cause title above, or if they appoint any counsel, those may be served on such Counsel.

### **STATEMENT OF FACTS**

The Petitioner above named submits as follows:-

1. The Kerala State Electricity Board (hereinafter referred to as the '**KSEB**' for short), had submitted an application to the Ministry of Environment and Forests, Government of India ('**MOEF**' for short), seeking to construct the Athirappilly Hydro Electric Project across the Chalakkudy river with a total installed capacity of 163 MW by making use of the tail end water coming out of the Poringalkuthu Hydro Electric Project. The project involves the establishment of a dam toe power house and a main power house having installed capacity of 3MW and 160 MW respectively. The bulk of the waters of the river which presently reach the Athirappilly water fall, are to be diverted at the reservoir to feed the main power house after bypassing the waterfall. The proposed project, if established, will be the third largest hydropower project in the State.

2. The Chalakudy river, which flows through parts of Tamil Nadu and Kerala is 144 Km long and has its source in the Anamalai Hills in the Western Ghats. There are already six dams between the source of the river and the proposed project site. Four of these are dams used for diversion of water and two dams exclusively for power generation. Five of the six dams aforesaid come within the Parambikulam Aliyar Project (PAP). The existing installed capacity of the dams used for power generation is 102 MW. About

20 Km down stream of the proposed project site is the Chalakudy river diversion scheme, a major irrigation project. The Ayyacut of this project is more than 14000 Hectares of land in Ernakulam and Thrissur Districts. The 80 Km stretch of the Chalakudy river from its source to the Chalakudy river diversion scheme is over-burdened by excessive exploitation. The stretch is made to sustain four dams for water diversion, two hydro electric projects and one major river diversion project for irrigation purposes. The proposal of the Kerala State Electricity Board is to construct one more hydro electric project across the river within this over exploited stretch of 80 Km.

3. The original proposal for the construction of the Athirappilly dam was made by the KSEB in 1979 as a twin project, in addition to the existing dams and diversion scheme. This proposal was later given up. In 1988, a new proposal was conceived, the implementation of which would have led to the effacement of the water falls at Athirappilly and Vazhachal. This project was rejected in 1989 by the MOEF for the following among other reasons:-

- i) Loss of teak plantation and forest rich in biological diversity;
- ii) Loss of habitats of wild elephant and some endangered species;
- iii) Extinction of the aquatic life down stream of the reservoir;
- iv) The Athirappilly falls would become dry during the entire duration. The loss of such a scenic tourist spot was unacceptable.

4. In 1990-91, the KSEB came up with yet another revised proposal proposing to maintain the Athirappilly water fall during the day time. According to this revised proposal the Vazhachal Waterfall alone would become non existent. On account of the stiff opposition, the KSEB did not pursue this revised proposal. In 1994-95, yet another revised proposal was made by the KSEB by which both the Athirappilly and Vazhachal water falls would be maintained during day time. In order to establish that the proposed project was ecologically sound, the KSEB commissioned the Tropical

Botanical Garden and Research Institute, Thiruvananthapuram (*TBGRI* for short) to conduct a study for the purposes of satisfying the requirements of the Environment Protection Act, 1986 and the Environment Impact Assessment Notification, 1994 (*EIA notification, 1994* for short) issued thereunder.

5. In terms of Notification No.S.O.60 (E) dated 27.01.1994 issued by the MOEF, environment clearance has to be obtained for putting up, expanding or modernizing any of the projects specified in Schedule I of the Notification. Entry 2 in Schedule II takes in “River Valley Projects including Hydel power, major irrigation and their contribution including flood control”. The proposed project is one requiring mandatory environmental clearance. The application for environmental clearance has to be accompanied by, among other documents, an Environmental Impact Assessment Report (*EIA Report* for short). A proper EIA report is effective for protecting, preventing, compensating, mitigating, or off-setting, adverse environmental and social impact of large project. The impact assessment would identify the future consequences of a current or proposed action. An effective EIA report would facilitate informed decision making by providing clear and dispassionate analysis of the facts and consequence of the proposed project. It can assess alternatives and suggest the most environment friendly option. A proper EIA report is therefore a must as an indispensable tool for the decision making authority while considering the question of grant of environmental clearance.

6. TBGRI, the agency entrusted with the task of preparing the EIA conducted a study during the monsoon months and submitted a report in 1996. The report of the TBGRI could be classified as a Rapid Environment Impact Assessment (*‘Rapid EIA’*) as understood in the EIA Notification, 1994. The report was based essentially on data collected during the monsoon and consequently it did not, in law, satisfy even the requirements of a Rapid EIA. The EIA report of the TBGRI was not published or made available to the public or concerned persons for scrutiny or information. However, the application submitted to the MOEF was pursued in the nature of a review of



the earlier decision of the Ministry declining to grant clearance. In support of the application, the Rapid EIA report of the TBGRI also appears to have been pressed into service.

7. On 10.04.1997, an amendment was introduced to the EIA Notification, 1994, by Notification No.318(E) of the Ministry of Environment and Forests, Govt of India. By the amendment, a public hearing became mandatory. Schedule IV introduced to the EIA Notification provided the procedure for conduct of the public hearing. It became mandatory to cause publication of the notice of hearing. All bonafide residents, environmental groups and others likely to be affected by the project were entitled to participate at the public hearing. The composition of the hearing panel was specified. It was also provided that an executive summary of the project shall be accessible to the concerned persons at specified public places. The amendment to the EIA notification required the conduct of the public hearing and the details of such hearing also to be submitted along with the application for environmental clearance. A true copy of the EIA notification, 1994, (S.O.60 (E) dated 27.01.1994) as amended upto 1997, is produced herewith and marked as **Exhibit P1**.

8. In spite of the amendment, the KSEB pursued its application before the MOEF without publishing the executive summary of the project and/or the EIA report of TBGRI and also without conducting any public hearing. The MOEF purported to grant conditional sanction for the project. A true copy of the communication 11016/36/B3-1A dated 20.01.1998 is produced herewith and marked as **Exhibit P2**. The sanction was challenged before this Hon'ble Court on various grounds including ecological degradation, financial viability, non-availability of water etc., etc., It was also argued that the sanction was bad for non-compliance with the requirement of public hearing under the EIA Notification, 1994 as amended. This Hon'ble Court held that public hearing is mandatory. This Hon'ble Court set aside the sanction and directed a public hearing to be conducted. It

was also directed that the proceedings of the public hearing should be communicated to the MOEF and the issues raised therein should also be taken note of while taking a final decision in the matter. A true copy of the judgement of this Hon'ble Court dated 17.10.2001 in O.P. No.3581/2001B and connected cases is produced herewith and marked as **Exhibit P3**.

9. In the light of the judgement of this Hon'ble Court the KSEB proceeded to publish an executive summary of the project in November, 2001. The Executive Summary was described as a basic account of the project including EIA report. A true copy of the Executive summary published by the KSEB is produced herewith and marked as **Exhibit P4**. The Kerala State Pollution Control Board ('**PCB**' for short) constituted a hearing panel as required by the EIA notification and issued notice for public hearing. A true copy of the notice PCB/TSR/CE/59/2001 dated 28.12.2001 is produced herewith and marked as **Exhibit P5**. Ext. P5 stated that the Executive Summary is available at various specified offices for inspection by concerned persons. The hearing was notified to be held on 06.02.2002.

10. The public hearing was attended by nearly 200 concerned persons. Except for the officials of the KSEB the project was opposed by the Kodungallur Municipality, Chalakudy Block Panchayath, five Gram Panchayaths, Scientists, farmers, tribals, research students, and environmental groups. Several vital issues were raised at the public hearing. The petitioner appeared at the hearing and opposed the project contending inter-alia that there would be displacement of the Kadar community. The Petitioner also pointed out that the rapid EIA had wrongly prescribed that the Kadar settlement as 4 Km away from the dam site whereas the actual distance was less than 400 mtrs. This was deliberately done to give the impression that there would be minimal impact on the tribals. The hearing panel unanimously found that the Rapid EIA report of TBGRI is incomplete and recommended the conduct of a comprehensive and participatory EIA, its publication and a further public hearing before a decision is taken on the application for

environmental clearance. A true copy of the proceedings of the Environmental Public Hearing held on 6.2.2002 is produced herewith and marked as **Exhibit P6**. In the light of the directions contained in the judgement of this Hon'ble Court, Ext.P5 had to be forwarded to the MOEF and a fresh decision had to be taken on the environmental clearance for the project. But, the KSEB ignored that direction. The KSEB did not pursue its application for environmental clearance on the basis of the TBGRI EIA report and the public hearing held on 6.2.2002.

11. A further amendment to the EIA Notification was effected by S.O. 632 (E) dated 13.6.2002 issued by the MOEF. Schedule IV of the EIA notification dealing with the procedure for public hearing was amended to read as follows:-

“(i) An Executive Summary containing the salient features of the project both in English as well as in the local language along with the Environmental Impact Assessment (EIA). However, for pipeline project, Environment Impact Assessment Report will not be required. But Environmental Management Plan including risk mitigation measures is required.

(ii) In paragraph (4) for the words “Executive Summary and Environmental Impact Assessment Report” shall be substituted”.

The effect of the amendment was that the public hearing could be conducted only after the publication of the EIA report and with the public having access to the EIA report before the public hearing. A true copy of the EIA Notification, 1994 as amended upto 13.06.2002 is produced herewith and marked as **Exhibit P7**. The amendment mirrored the international trend of making the EIA processes more interactive, for the public to be informed and then to participate meaningfully in the decision making process. The amendment filled the lacunae in the pre-existing EIA notification which made public participation at the mandatory hearing a mere formality.

12. The KSEB realised the inadequacies of the rapid EIA conducted by TBGRI. Another agency, WAPCOS, was commissioned to conduct a comprehensive EIA study and to submit a report. The report of WAPCOS was prepared and submitted to the KSEB in August 2003. The EIA report of WAPCOS was not published as required by EIA notification, 1994 as amended in 2002. No public hearing was also conducted on the WAPCOS EIA report as required by the EIA Notification, 1994 as amended in 2002.

13. The MOEF ignored the fact that the report of WAPCOS had not been published and that a public hearing had not been conducted thereon. The project was granted environment clearance once again. A true copy of the order Ref. No. J-12011/6/97-1A-1(Vol.II) dated 12.02.2005 is produced herewith and marked as **Exhibit P8**. The petitioner challenged Ext.P8 by filing WP(C) No.9542 of 2005. Writ Petitions were also filed on behalf of the Athirappilly Grama Panchayath and other affected persons. This Hon'ble court was pleased to hold that the project proponents were bound to publish the WAPCOS and conduct a public hearing thereon. This Hon'ble Court held that compliance with the amended EIA notification is mandatory. The clearance was quashed and the matter was remitted for conduct of public hearing after publication of the WAPCOS report. A true copy of the judgement dated 23.03.2006 in WP(C) No. 9542/2005 and connected cases is produced herewith and marked as **Exhibit P9**.

14. In the light of the judgement of this Hon'ble Court, the WAPCOS report was published. A copy thereof was served on the petitioner. A true copy of the report of WAPCOS is produced herewith and marked as **Exhibit P10**. Objections were filed by various NGOs, Grama Panchayath, individuals, etc. The petitioner has detailed the lacunae in the WAPCOS report in paras 22 to 59. The public hearing was held on 15.06.2006 at the Gopalakrishnan Auditorium, Chalakkudy. There was no unanimity among the members of the hearing panel. The proceedings of the Environment public hearing were forwarded to the MOEF in July 2006. A

true copy of the proceedings of the Environment Public Hearing is produced herewith and marked as **Exhibit P11**. The petitioner has detailed the lacunae in the public hearing procedure in paras 60 and 61 of the Writ Petition.

15. In the light of the judgement of this Hon'ble Court, the MOEF was duty bound to complete the entire exercise in terms of the EIA notification, 1994 as amended within a period of two months of receipt of a copy of the judgement. The KSEB was obliged to submit a fresh application incorporating Ext.P11. The expert committee for river valley and hydroelectric projects at its meeting held on 23.08.2006, appears to have required the KSEB to address the concerns raised at the public hearing.

16. In the meantime, the MOEF notified a fresh EIA notification to replace the EIA notification 1994. A true copy of the EIA notification, 2006, S.O. 1533 dated 14.08.2006 is produced herewith and marked as **Exhibit P12**. Clause 12 of the Notification enables the Central Government to relax the provisions of the notification in respect of pending applications. There was no pending application in the present case. This Hon'ble Court had directed the KSEB to submit a fresh application accompanied by details of the public hearing after publication of the WAPCOS report. Since no fresh application was filed before 14.08.2006, clause 12 of the EIA Notification, 2006 did not come into play. The KSEB became obliged to submit an application complying with the requirements of the E.I.A. Notification 2006.

17. The KSEB submitted a fresh proposal along with the details of public hearing only on 06.11.2006. The application was one filed after the EIA notification, 2006 had been issued to replace the EIA notification 1994. The provisions of the EIA notification 1994 do not apply to the application submitted for Environment clearance by the KSEB. It is submitted that the application form, scoping and appraisal mechanism and the content of the EIA reports contemplated by the two Notifications are materially different. The application of the KSEB can only be treated as one submitted under the

EIA notification, 2006. However, the KSEB had actually put in an application, seeking to satisfy the EIA notification, 1994. In other words, the application dated 06.11.2006 was not a valid application for Environmental Clearance.

18. The Expert committee constituted under the EIA Notification, 1994 appears to have taken a decision to treat the Athirappilly Hydro Electric project as an old proposal. The KSEB was directed to produce a study report of the down stream impacts of the project. The Committee recommended environment clearance subject to the production of the study aforesaid. A true copy of the summary record of the discussion of the 49<sup>th</sup> meeting of the Expert Committee for River Valley and Hydro Electric Projects held on 15.11.2006 is produced and marked as *Exhibit P13*.

19. It is submitted that the application dated 06.11.2006 was not before the expert Committee meeting held on 15.11.2006. The said application was not considered. The expert committee constituted under the EIA notification, 1994 has no jurisdiction to treat the matter as an old proposal to be dealt with under the EIA Notification, 1994. The power to apply the provisions of the old notification after the issuance of the new notification is available only to the Central Govt. and not to the expert committee constituted under the old notification. In any event, the power can be exercised only in respect of applications pending on 14.08.2006. The application in the present case is dated 06.11.2006 and therefore the matter could be dealt with under the EIA notification, 2006.

20. The expert Committee under the EIA notification, 1994 appears to have considered representations against the project forwarded by the Office of the Prime Minister and taken a decision to supersede the earlier decision recommending Environment clearance. A sub group of the committee was deputed to make a site visit. A true copy of the summary record of discussion of the 52<sup>nd</sup> meeting of the Expert Committee for River

Valley and Hydro-electric Projects held on 21<sup>st</sup> and 22<sup>nd</sup> February, 2007 is produced herewith and marked as **Exhibit P14**. The sub-committee of the expert committee conducted site visit on 12.04.2007 and interacted with the public on 13.04.2007 at Thrissur. The sub committee recommended environment clearance subject to conditions. A true copy of the site visit report of the sub committee is produced and marked as **Exhibit P15**.

21. In the meantime, the expert appraisal committee under the EIA notification, 2006, was constituted. The said Committee conducted its first meeting on 18.04.2007. The Athirappilly Hydro Electric Project was taken for consideration at the 2<sup>nd</sup> meeting held on 16.05.2007. The KSEB appears to have presented its proposal dated 06.11.2006 and a fresh WAPCOS report on down stream impacts dated 04.01.2007. The Expert Appraisal Committee appears to have accepted without verification, the KSEB proposal and recommended Environmental Clearance for the Project. The Committee appears to have merely incorporated the 'clarifications' furnished by the KSEB as the answer to the issues raised. A true copy of the summary record of discussion of the second meeting of Expert Appraisal Committee for River Valley and Hydro Electric Project constituted under the provisions of EIA notification, 2006, held on 16.05.2007, is produced herewith and marked as **Exhibit P16**. On the basis of the recommendation of the Expert Appraisal Committee the MOEF granted a conditional clearance to the project under the EIA Notification, 1994 and the EIA Notification, 2006. A true copy of the Environmental Clearance No.J-12011/6/97-1A – 1 (Vol.III) dated 18.07.2007 is produced herewith and marked as **Exhibit P17**.

22. The EIA report prepared by WAPCOS is not a proper report prepared after necessary study. The circumstances under which WAPCOS was appointed itself will indicate that there was never any intention to conduct a proper study for the requisite period. The WAPCOS EIA report does not satisfy the requirements of a comprehensive EIA report under the EIA Notification, 1994 or EIA Notification, 2006. As already stated the

KSEB was pursuing its applications for clearance on the strength of a Rapid EIA report prepared by TBGRI. The clearance granted thereon was set aside by this Hon'ble Court. This Hon'ble Court directed a public hearing to be conducted, the report to be forwarded and a decision to be taken thereon by the MOEF. The hearing was conducted on 06.02.2002. The report was forwarded. But, the matter was kept pending. It is alleged that WAPCOS was commissioned to conduct a Rapid EIA from Jan 2002 to April 2002. This was not revealed at the public hearing. The work contract was awarded by letter dated EMC/AHEP/2002/821 dated 22.01.2002 issued by the KSEB. The work order itself was issued only towards the end of Jan 2002. It is inconceivable that any study was conducted during Jan 2002. The hearing report was forwarded in March, 2002.

23. The decision to extend the WAPCOS EIA study from Rapid to Comprehensive was apparently taken only in July, 2002 and conveyed to WAPCOS by the KSEB by its letter IELA/EMC/AHEP/2002/039 dated 10.07.2002. It is inconceivable that any study was conducted in May and June 2002. WAPCOS had no work order for a period beyond April, 2002 to prepare either a Rapid EIA or a Comprehensive EIA report. The request, if at all, for a comprehensive EIA study was made only on 10.07.2002. Thus, the crucial summer months of May and June, 2002, when the river flow is at its leanest, could not have been studied by WAPCOS. The work order for a comprehensive EIA study was issued by the KSEB only towards the end of November, 2002, ie. by letter No. IELA/ENG/AHEP/2002/1258 dated 25.11.2002. It was provided in the said work order that the draft Report has to be ready by the 10<sup>th</sup> of January, 2003 and the final report by 30.01.2003. There was no work order for a comprehensive EIA study till 25.11.2002. It is inconceivable that studies were conducted between May and November, 2002 without any work order. It is submitted that having regard to the work orders issued by the KSEB there could have been no study from 01.01.2002



to 22.01.2002 and from 01.05.2002 to 25.11.2002. The WAPCOS EIA report cannot at all be considered to be a comprehensive EIA report.

24. In order to conduct a comprehensive EIA of the Chalakudy River basin it is highly necessary that data is collected from the following offices:-

- (i) Irrigation department, particularly the Idamalayar Irrigation Project Office and the Chalakudy River Diversion Scheme. These offices alone can furnish data relevant for assessing the down stream impact on the water needs of the left and right bank canals.
- (ii) The Kerala Water Authority, particularly the water supply project Sub-division, at Chalakudy. This office has crucial data for assessing the down-stream impact on drinking water needs of the people.
- (iii) The Forest department, particularly the Divisional Forest Office, Vazhachal Division, Chalakudy. The project area and catchment fall within the Vazhachal division. The waterfalls and impact area specified in the WAPCOS report, also fall within the Vazhachal division.
- (iv) The Tourism Department, particularly the District Tourism Promotion Council, Thrissur. The data related to tourism projects in the area, tourist arrivals etc., are available here.
- (v) The Tribal department, particularly the office of the Tribal Development Officer, Chalakudy. The data relating to the tribal population, hamlets, livelihood patterns, Welfare schemes, education, etc., is available in this department.
- (vi) The Block Panchayath Office and 25 Panchayaths. Important and crucial data relating to the social impact of the project on the people most likely to be affected by the project is available here.

Details on the population, agriculture, drinking water needs etc., of the people are available with the Panchayath.

25. WAPCOS did not visit any of the aforesaid places for collecting data. In the response to a query under the Right to Information Act, 2005 WAPCOS claims to have visited the following offices:-

- (i) The Executive Engineer, Minor Irrigation Division, Thrissur.
- (ii) The Executive Engineer, KWA, WSP Sub Division, Chalakudy.
- (iii) The Block Officer, Block Office, Chalakudy.
- (iv) The Secretary, Athirappilly Grama Panchayath, Vettilapara Post.

It is also claimed that ERRC had visited the Forest department and Fisheries Departments.

26. As a matter of fact WAPCOS has not visited any of these offices. A true copy of the letter D31437/06 dated 17.08.2007 issued by Assistant Executive Engineer, KWA, WSP Sub Division, Chalakudy, is produced herewith and marked as **Exhibit P18**. An English translation of Ext. P18 is produced herewith and marked as **Exhibit P18(a)**. A true copy of the letter No.HC.979/07 dated 17.08.2007 issued by the Secretary, Block Panchayath, Chalakudy, is produced herewith and marked as **Exhibit P19**. An English translation of Ext. P19 is produced herewith and marked as **Exhibit P19(a)**. It may also be pointed out that Athirappilly Grama Panchayath had filed WP(C) 11254/2005 specifically contending that WAPCOS had not contacted or visited the Panchayath office at any time. A true copy of the letter No. C2-4818/90 dated 14.06.2006 issued by the Divisional Forest Officer, Vazhachal Division, is produced herewith and marked as **Exhibit P20**. A true copy of the letter No. A3-1036/2006 dated 07.06.2006 and 17.08.2007 issued by the Executive Engineer, Idamalayar Irrigation Project is produced herewith and marked as **Exhibit P21**. An English translation of Ext. P21 is produced and marked as **Exhibit P21(a)**. It is submitted that the WAPCOS has not visited any of the office that have

information relevant to the preparation of an EIA report. Even the offices that the WAPCOS claimed to have visited have no notice of their visit. It is abundantly clear that as a matter of fact WAPCOS has not actually conducted any study. The petitioner submits that none of the officials of WAPCOS has come to the project site for conducting any field study. The claim that details of the visit are not available itself indicates that no visits have taken place. A true copy of the reply dated 17.07.2006 issued by WAPCOS is produced herewith and marked as **Exhibit P22**.

27. The study area specified in paragraph 2.2 of the WAPCOS report indicates the impact in respect of '7 Km on either side of the project component' alone was attempted. The down stream impact of the proposed dam on irrigation and drinking water has to be assessed with reference to the Chalakudy River Division Scheme, which is located 20 Km down stream of the proposed dam site. The scheme has an ayyacut area of 14000 hectares and is one of the best maintained irrigation projects in the state. The full impact of the project will be felt by the beneficiaries of the scheme. The study area has been deliberately reduced to downsize the down stream impact of the project. The direction of the expert committee for a study report on down stream impact as a precondition for clearance also evidences the relevance of this aspect. The study in this regard, allegedly conducted by WAPCOS is after the public hearing of 15.06.2006. The report dated 04.01.2007 has not been published and no public hearing has taken place thereon. The scoping mechanism in the EIA notification has been violated in letter and spirit.

28. The WAPCOS report (para 2.3.1) suggests that the meteorological data is adopted from the discredited TBGRI report prepared in 1996. The ecological aspects appears to have been subcontracted to the Environment Resource Research Centre (ERRC), Thiruvananthapuram. Para 2.3.2 indicates that all aspects relating to forestry, wildlife and fisheries have been left to the ERRC. It is alleged that sampling sites were identified and

study was conducted from Jan 2002 to Dec 2002. However, no seasonal data with reference to the sampling sites is specified in the report. In other words, it is abundantly clear that there has been no actual study conducted by either WAPCOS or ERRC.

29. The WAPCOS report (para 2.4) also adopts the Rehabilitation and Resettlement plan of TBGRI. It may be pointed out that TBGRI had deliberately shown that the Vazhachal Tribal Settlement and School as located 5 Kms from the project site. The petitioner, at the public hearing, had pointed out the settlement and the School lie within 400 Mtrs of the project site. In spite of this obvious lacunae the same TBGRI report on rehabilitation and resettlement has been accepted without verification. The petitioner had approached the Hon'ble Forest Minister in this regard. The Minister had sought for a report from the Chief Conservator of Forests, who is also the Tribal Rehabilitation Commissioner. After enquiry and measurement it has been reported that the actual distance is 500 Mtrs and not 4 Km. It is also concluded that the construction of dam will have social, economic and ecological effect on their habitat which must be "suitably addressed." The report refers to the rich flora and fauna of the area and the valuable rights of the tribals which has to be assessed under the "Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights), Act, 2006. A true copy of the report No.RCP-40/2007 dated 27.02.2007 is produced herewith and marked as **Exhibit P23**.

30. The meteorology data referred to in para 3.2 of the WAPCOS report proceeds on the basis that the area receives rainfall from December to February under the influence of the north-east monsoons. As a matter of fact the north-east monsoon is active in October-November. The entire period from December to May i.e. about 6 months is a dry spell with no monsoon activity whatsoever, save the occasional summer showers. The attempt appears to be to make it appear that water would be freely available at the site till February and that there is only a short term period between March and

May when there would be water scarcity. The base line data in this regard is faulty and deliberately flawed so as to make it appear that enough and more water is available.

31. In para 3.3 of the WAPCOS report, the length of the river is shown as 96 Kms. The length of the river is 144 Kms in all, of which 130 Kms is within the State of Kerala. The length of the river itself has been wrongly shown, which by itself indicates the cavalier manner in which the report has been prepared. The total catchment area of the Chalakudy river basin is 1704 Sq.M as per Govt. records and not 1390 Sq.M. In para 3.6 and Table 3.3 of the WAPCOS report, the catchment area is again downsized to 1016 Sq Km. In fact paras 3.3 and 3.6 are mutually inconsistent and irreconcilable. A deliberate attempt to downsize the catchment area is evident.

32. A perusal of para 3.6 and tables 3.4 and 3.5 of the WAPCOS report indicates the extent to which the KSEB and its consultant have gone to fabricate baseline data. The water availability data from 1941-42 to 1995-96 is referred to. However, this has been discarded by the Central Water Commission, while dealing with the self same project. According to the CWC the data from 1970-71 to 2001-02 has to be analysed. The Central Electricity authority has discussed the matter and considerably downsized the project. A true copy of the summary record notes of the Central Electricity Authority dated 28.03.2005 is produced herewith and marked as **Exhibit P24**. The present clearance is also not based on the data studied in the WAPCOS report. Moreover, WAPCOS appears to have relied on the data on water availability furnished by the project proponent, KSEB. The KSEB is routinely in the habit of fabricating data on water availability. In fact, in respect of the Pathrakadavu Hydro Electric Project that the KSEB is simultaneously prosecuting, the MOEF has found that the data furnished on water availability by the KSEB is 'doubtful'. A true copy of the summary of record of discussion of the 48<sup>th</sup> meeting of the Expert Committee for River

Valley and Hydro-Electric Projects held on 18.10.2006 is produced herewith and marked as **Exhibit P25**.

33. The observations in para 3.66 and Table 3.6 of the WAPCOS report indicate that the criteria fixed for assessment of baseline data on water availability is not correct. If the average monthly flow is 270 Cu.Secs (7.65 M<sup>3</sup>/Sec) in the stream during the dry months (September to May) then there will not be any balance water available for operating the main power house. The observation that the falls can be maintained with a flow of 200 to 250 Cu Secs (5.66 to 6.1 M<sup>3</sup>/Sec) is not correct. As per the minutes of the expert appraisal committee which cleared the project, 7.65 M<sup>3</sup>/Sec has to be maintained 24 hours, 365 days for maintaining the waterfalls. The observation that the tourist season is limited to nine months from September to May is incorrect. The data maintained by the forest department reveals that there is tourist arrival throughout the year. A true copy of the details of collection charges and details of visitors furnished by the Divisional Forest Officer, Vazhachal Division, is produced and marked as **Exhibit P26**.

34. It is also to be noted that power generation from the main power house is estimated as 376.5 MU. However, the central electricity authority has found that the power generation can at best be only 233 MU. A true copy of the office memorandum No.2/KEL/9/89-PAG/331-55 dated 31.03.2005 prepared by the Central Electricity Authority is produced herewith and marked as **Exhibit P27**. Therefore, the base line data on generating capacity is fabricated. The clearance is not granted on the data referred in the WAPCOS report. As a matter of fact, the entire data relating to water availability and generating capacity has been substituted by the KSEB in its new detailed project report submitted before the clearance. This Detailed Project Report has not been published or subjected to a public hearing. The practice of granting clearances on the basis of unpublished reports has been deprecated by this Hon'ble Court while quashing the earlier Environment Clearance in 2006.

35. It is to be noted that the water availability at the Dam toe power house, particularly in the summer months from Feb to May, is dependant on water discharged from the Poringalkuthu Power House, which in turn depends on the water released by the State of Tamil Nadu into the Kerala Sholayar. The state of Kerala and Tamil Nadu have entered into an inter-state agreement for sharing of waters. The agreement, i.e., the Parambikulam – Aliyar Project, 1970 (PAP), enjoins the State of Tamilnadu to discharge specified quantities of water on specified dates. It has been reported by the Legislative Committee of the Kerala Legislature that the State of Tamil Nadu is violating the terms of the agreement on a regular basis. A perusal of the report of the Ad-hoc Committee on Parambikulam-Mullaperiyar River Water agreements – Report 1994 indicates that Tamilnadu has consistently violated the terms of the agreement. The agreed water of 7.25 TMC ft. of water exclusive of unutilisable flood waters has not been released in any of the years. It is not prudent to depend on the releases by the state of Tamil Nadu and/or make projections on that basis. The entire data is clearly fabricated. There have been years when no water at all has been released. Tamil Nadu has constructed the Kadambara Dam (400 MW pumped storage system) and two saddle spill ways in the Tamil Nadu – Sholayar dam to divert water, in violation of the agreement. Tamil Nadu diverts water through the Sarkarpathi Power House illegally. Tamil Nadu is not maintaining the level of 2658 ft. between 02 September and 31 January at Kerala Sholayar. There are numerous unaccounted lift irrigation schemes below the Manacadu weir. A new pipeline has been illegally constructed to divert water from the contour canal near Tirumoorthy to Udamalpet to irrigate 2477 hectares ayyacut. The list of violations is numerous. Suffice it to say that any calculation based on the water that meant to be released by the State of Tamilnadu as per the agreement is likely to be flawed.

36. Para 3.7 of the WAPCOS report is drawn from the discredited TBGRI EIA report. WAPCOS has not set up any sampling point at all. The

land use data referred to in para 3.9 of the WAPCOS report indicates the casual manner in which the data has been analysed. The land use category given for the catchment area is far less than the land use category of the study area. It is unclear as to how the total area under the study could exceed the catchment area by a multiple of six. Para 3.10 and table 3.11 of the WAPCOS report proceed on the basis that the total land area in Athirappilly Grama Panchayath is 50.66 Hectares out of which the total agricultural land is 49.35 Hectares. Some details of the crops and number of trees allegedly sourced from the Agricultural Office, Vettilappara, Thrissur, is referred to. The details are hopelessly incorrect. The total area of Athirappilly Grama Panchayath is 489 Sq. Kms. According to the data base of the Kerala State Land Use Board, Thrissur and the development plans maintained by the Panchayath, an extent of 1853.15 Hectares in the Panchayath is cultivated with cash crops. There are 26 grama panchayaths which are part of the Chalakudy river basin. Several grama panchayths like Athirappilly fall in the high land category, some others in the midlands and plains category and some others in the coastal zone surrounded by backwaters. The details of the Panchayaths in the river basin is produced herewith and marked as **Exhibit P28**.

37. It is submitted that over and above the extent mentioned hereinabove, forest areas falling within the Athirappilly Grama Panchayath limits have been leased out to the Plantation Corporation of Kerala, a Government of Kerala undertaking, for agricultural plantation. An extent of 3545.50 Hectares is leased out for agricultural plantation activities, mainly for cultivating oil palms. In Plate III of the WAPCOS report, a photograph of the oil palm plantation on the right bank down stream of the project area is given. A photograph of the forest plantation lining the dam site and teak plantation is given in Plate II as areas affected by the execution of the project. The environment base lines status which depicts a miniscule area under agriculture and a total agricultural income of Rs.2,20,000/- is neither



believable nor correct. It is submitted that the data has been fabricated so as to down size the impact of the proposed project on agricultural activities. The attempt in the WAPCOS report is to make it appear that the impact on agriculture, if at all, is minimal.

38. The statement that there are only two lift irrigation scheme along the bank of Chalakkudy river is not correct. As a matter of fact, there are 19 lift irrigation schemes down stream of the proposed project site which have been implemented by the Athirappilly Grama Panchayath. There are atleast 26 local bodies down stream of the proposed project site which have established innumerable lift irrigation scheme for drawing water for irrigation and agricultural purposes. For example, a major drinking water scheme has been implemented at Vynthala in Kadukutty Grama Panchayath to lift water from the Chalakkudy River to cater to the drinking water needs of the six grama panchayaths in coastal area. It is submitted that the down stream impact of the project has deliberately been down sized so as to make it appear that the project will not affect the drinking water and irrigation needs of the population.

39. The analysis of the terrestrial flora in para 3.11 of the WAPCOS report and Tables given thereunder is hopelessly flawed. The terrestrial flora and habitat specified in para 3.12 of the WAPCOS report is also completely flawed. It is obvious that the data has been sourced from here and there. No actual study has taken place. In para 3.11.1 to 3.11.6 various vegetations in the project area are described. However, no quantitative data showing the extent of all these vegetation type is given in the report. An EIA study, in order to be meaningful, must provide such data for drawing conclusions on the total loss of biodiversity in the area. The pie diagram given as Table 3.8 is most misleading and conveys an incorrect impression of the vegetation of the area for several reasons. The kind of data used for preparing the diagram is not indicated. No attempt is made to extrapolate the sample data to the total area of each vegetation type. The methodology for quantitative

vegetation analysis is apparently based on belt transects of 100 Mtrs length and 5 mtr width. The total number of belt transects laid is only five. Four of these areas are marked as submergence area and the fifth along the Kannankuzhi thodu as being affected by the flow of water. Therefore in respect of the submergible area the total area sampled from 4 transects is 250 Sq M x 4 i.e., 1000 Sq.M. The total area of the riparian vegetation submerged area as indicated in Table 4.3 is 28.40 Hectares. The percentage of sampling works out to 0.352 per cent which is not acceptable. There should be a minimum of 5% sampling. The sample size for other vegetation type is still smaller. Sampling frequency is not mentioned anywhere. The quantitative analysis done on herbs, shrubs, etc., is based on sample size of 8 Sq.M. and on trees of 200 Sq.M. The actual number of plants, trees, and species in the vegetation area is several hundred times more. The formula used for density analysis itself is wrong. In fact, a detailed critic of the methodology and sampling technique is found in the submissions made by Dr. V.S. Vijayan, the Chairman of the Kerala State Biodiversity Board.

40. Dr. V.S. Vijayan, the founder Director of the Salim Ali Centre for Ornithology and Natural History, Coimbatore and Chairman – Managing Trustee of the Salim Ali Foundation is presently the Chairman of the Kerala State Biodiversity Board constituted under the Biodiversity Act, 2002. He has made written submissions pointing out the lacunae in the WAPCOS EIA report. He has questioned the methodology and the sampling techniques adopted. He has pointed out the contradictions in the EIA report. He deprecated the manner in which the adverse ecological impact of the project had been downsized and diluted. A true copy of the submissions made by Dr. V.S. Vijayan at the public hearing held in 2006 is produced herewith and marked as **Exhibit P29**.

41. Para 3.12.3 of the WAPCOS report suggests that there are only 98 species of birds belonging to 31 families in the project area. Table 3.45 and 3.46 are allegedly the details of the birds and species richness in the

proposed project area. The data given is incorrect. Studies have indicated that there are atleast 264 birds species in the impact area of the project. The survey report prepared in 2001 of the birds of Athirappilly and Vazhachal area by Warblers and Waders reveals that 196 species of birds were sighted in the project area. The said study also refers to a check list of birds recorded in the previous survey between 1995 and 1998. According to the report the total number of species recorded upto 2001 is 222. The study period of the said report coincides with the commencement of the alleged study conducted by WAPCOS. A true copy of the survey report 2001 on the Birds of Athirappilly and Vazhachal prepared by the Warblers and Waders is produced herewith and marked as **Exhibit P30**. The Common Birds Monitoring Programme in its report (1991-2007) has found that 234 species are recorded in the area. The survey specifies the birds which are globally threatened and those species which are protected by the Wild Life Protection Act, 1972. A true copy of the report on the Birds of Athirappilly and Vazhachal – a Report (1991-2007) prepared by Mr. Raju, the Programme Co-ordinator, Common Birds Monitoring Programme, is produced herewith and marked as **Exhibit P31**. A check list prepared by Dr. P.O. Nameer, Asst. Professor (Senior Scale) Department of Wild Life Sciences, Forestry College, Kerala Agricultural University and the South Asian Co-ordinator of IUCN identifies 185 birds species over a short period of study. A true copy of the check list of birds prepared by Dr. P.O. Nameer is produced herewith and marked as **Exhibit P32**.

42. A combined check list of all the birds of Athirappilly and Vazhachal made with reference to the three reports aforesaid, indicates that there are atleast 264 birds species within a small stretch of 7 Kms between Athirappilly and Vazhachal. A true copy of the combined check list of birds of Athirappilly and Vazhachal is produced herewith and marked as **Exhibit P33**. It is submitted that the Kerala Forest Department has commenced a birds survey in the area in 2007. Atleast 70 species were spotted in just a half

an hour and this indicates the diversity and richness of the area. A true copy of the news report published in Online Edition of “The Hindu” daily dated 20.01.2007 is produced herewith and marked as *Exhibit P34*. The Vazhachal Forest Division is an important bird area in the State according to Bird Life International. A true copy of Bird Life International IBA fact sheet is produced and marked as *Exhibit P35*.

43. Several birds surveys in Kerala have concluded that the only available nesting site of the Malabar Pied Hornbill is found in the low altitude riparian forest of Vazhachal area. The Vazhachal forest division, the River Research Centre and the Kadar Tribes had been conducting survey and taking steps to protect the nesting and breeding size of hornbills. The hornbills and the fragile eco system supporting the hornbills is being studied by the forest department. The forest department, is in fact, following a unique conservation technique for the protection of the hornbills involving the Kadar Tribes. It may also be pointed out that the Great Indian Hornbill is the State Bird of Kerala. A true copy of the project report prepared in March 2005 by the Vazhachal Forest Division on the protection of fragile eco system supporting Hornbills is produced herewith and marked as *Exhibit P36*.

44. Para 3.12.4 of the WAPCOS report proceeds as though mammals are comparatively less abundant in the project area and its vicinity. This observation is without any basis whatsoever. Table 3.47 does not give details of sampling. The formula used for abundance calculation is not specified. Nonetheless, Table 3.47 admits that one half of the species noted are ‘threatened’. At least these species are endemic to the Western Ghats. The riparian vegetation is indispensable for the survival of the mammals. This aspect has been completely ignored in the WAPCOS report as part of its efforts to downsize the adverse impacts of the project.

45. The importance of the mammals found in and around the project area can be gauged with reference to the IUCN status of some of the

mammals. They are all included in the red list and the degree to which they are endangered alone varies. The UNEP – WCMC species data base for the Tiger, elephant, Malabar Civet, Sloth bear, Cochin Forest Cane Turtle, Nilgiris Langur, and Lion tail Macquaque is produced herewith and marked as **Ext. P37 series, i.e. Exhibit P37(a) to Exhibit P37(g).**

46. Para 4.2.2 of the WAPCOS report interalia deals with the impacts on riparian vegetation. The conclusion is that though there will be an adverse impact, the same is not ‘expected to be significant in magnitude’. The submergible area of the project has the most extensive low elevation riparian forest eco-system in the state. The 80 hectares of evergreen forest between the Poringalkuthu Power House and the Vazhachal Water fall is the only stretch of relatively undamaged riparian vegetation located below 800 Mtr anywhere in the state. It is an irreplaceable and invaluable representative habitat which has to be protected at all costs.

47. In the Chalakudy river, highly niche specific riparian forests within a 60 Km stretch are already submerged on account of manmade projects. 28.815 Kms of the river has dried up due to the existing projects. Nearly 40-50% of the river course and the connected riparian vegetation has been lost. The remaining riparian forests are found upstream of the project site alone. The submergence of 28.5 hectares, which is stated to be only 1.09% of the total riparian vegetation, gives a misleading picture of the actual situation. The upstream area has not been studied by WAPCOS as admitted in the report. The figure of 1.09% is totally incorrect and is arrived without any basis.

48. Paras 4.2.2 and figure 4.1 of the WAPCOS report clearly contradict the statements made in para 3.12.5. The baseline data suggests that there is no elephant corridor or migratory route whereas the impact of the project on the elephant corridor is acknowledged and sought to be analysed. The proposed project site falls within the last remaining, frequently used elephant corridor across the Chalakudy river. The entire project area is part

of the Anamalai Parambikulam elephant reserve which is notified as Elephant Reserve No.9 by the MOEF under its 'Project Elephant'. The migration of elephants from the Parambikulam Plateau, across the Chalakudy river, has become unavoidable. The Parambikulam plateau has been deforested and planted with teak by the forest Department under its plantation and afforestation programmes. Water and vegetation is scarce and consequently the migration of the elephants to the Pooyamkutty forests in the Periyar river basin is an annual affair. The small stretch of 80 Km of the river from its source now contains only one elephant corridor which passes through the proposed project site. The stretches upstream are mountainous and have deep gorges. The area is also over exploited. Down stream of the proposed project site is fully inhabited and consequently the only undeveloped area which remains in use, as an elephant corridor, is through the proposed project site. The reservoir of the proposed project begins from just next to the power house of the Poringalkuthu hydro electric project. Consequently the impact of the loss of the migratory corridor will have serious adverse consequences on the elephants putting a question mark on their future. The state has recognised the importance of the area and notified the area as a forest reserve. A true copy of the notification G.O.(P) No. 19/2002/P & WLD dated 2.4.2002 is produced herewith and marked as **Exhibit P38**.

49. The Asian Nature Conservation Foundation has an Asian Elephant Research and Conservation Centre. On survey and census, the Foundation has concluded that the highest density of Asian elephants in the State is found in the Vazhachal Forest Division. According to the 1993 census there are 947 elephants in the division. A true copy of the report in [www. Asian Nature. Org./Vazha.html](http://www.AsianNature.Org/Vazha.html). is produced herewith and marked as **Exhibit P39**. The foundation has conducted a study of the different forest divisions within the Anamudy Elephant Reserve No.9. It was noticed that the elephant density/sq.km. is second highest in the Vazhachal Forest Division. The highest density is noted in the adjacent Malayattor Division,

which indicates elephant movement along the corridor. A true copy of the Chart on population density of elephants prepared by Dr. N. Bhaskaran is produced herewith and marked as **Exhibit P40**.

50. As a matter of fact the biggest threat to the elephant is from the existing dams and manmade projects. The MOEF recognises that the conservation problems for the elephant “include habitat fragmentation by the network of reservoirs and canals (elephants have fallen several times into these canals), degradation of moist forests due to fire and poaching of tuskers”. The conservation strategy includes “security, safe corridors for the migration of elephants”. A true copy of the relevant extracts from the conservation strategy and action plan issued for project Elephant by the MOEF in 1993 is produced herewith and marked as **Exhibit P41**. A true copy of the management plan for elephant reserves in Kerala, 1994 prepared by the KFRI for the Kerala Forest Department is produced herewith and marked as **Exhibit P42**.

51. The observations in the WAPCOS report on the fish diversity of the Chalakudy River is completely flawed. As a matter of fact, authentic published study reports indicate that the Chalakudy river basin has exceptionally unique fish diversity. 104 species have been noticed. Five new species have been discovered. Nine species are critically endangered and twenty two species are vulnerable as per IUCN norms. Even the Periyar, which at 244 Km is the longest river in the state, has only 77 recorded fish species and their threat status is lower than that of the fish species noted in the Chalakudy river. The relevant extract from the Annual report of the National Bureau of Fish Genetic Resources (1999-2000) is produced herewith and marked as **Exhibit P43**.

52. The endemic fishes in the Chalakudy river are as high as 54.3%. This is the highest among all rivers in the state. The river stretch between 75 and 500 Mtrs msl altitude range holds the maximum fish diversity in the river.

At least 68 species have been recorded from the stretch where the project area forms. The National Bureau of Fish Genetic Resources (NBFGR) has recommended the declaration of the upstream areas of the Chalakudy river as a fish sanctuary having regard to the endemic and endangered fish population. A true copy of the relevant pages of the Endemic Fish Diversity of Western Ghats published by the National Bureau of Fish Genetic Resources is produced herewith and marked as *Exhibit P44*.

53. A detailed study conducted by the School of Industrial Fisheries, Cochin University of Science and Technology indicates that out of six critically endangered species restricted to the Chalakudy river two are restricted to a single location at Vazhachal. Two of the five new species of fish have been found at Vazhachal. The study has found that the Chalakudy river has the highest diversity index ranging from 1.76 to 3.9. The altitudinal range where the dam is proposed has an index of 3.28. A true copy of the paper – Biodiversity status of fishes inhabiting rivers of Kerala (South India) with special reference to endemics threats of conservation measures is produced herewith and marked as *Exhibit P45*.

54. It is submitted that the Chalakudy river is recognised as unique to the country in terms of fish diversity, abundance, endemics, endangered status etc., The WAPCOS report (para 3.13.8 and Tables 3.53 and 3.54) refers to 30 species alone. The work of Sri. Ajithkumar referred to is not attached. The expert appraisal committee under the EIA Notification 2006 has expressed grave concern about the five fish species in the Kunthi river while considering the Pathrakadavu Hydro Electric Project. The uniqueness of the Chalakudy river in terms of fish diversity and abundance has been downgraded in the WAPCOS report and ignored by the MOEF.

55. A large number of objections were received in response to the notice of public hearing. A large number of NGOs, environmental groups, scientists, tribals, farmers, and other affected persons from various parts of



the state and the country submitted written objections to the public hearing panel. The petitioner, in her written submission, asserted that WAPCOS had not visited the project site at any time. The location of the tribal habitat had been wrongly stated so as to take it out of the areas likely to be affected by the implementation of the project.

56. Dr. Sathish Chandran Nair, the foremost authority on the Southern Western Ghats is the watershed consultant of the State Planning Board, Govt. of Kerala. He is a member of several working groups constituted by the State Government on matters concerning the environment, forests, watershed management etc. He has pointed out in his written submissions that ecological importance of the Chalakudy River basin to the western ghats has been largely ignored in the WAPCOS report. A true copy of the submission made by Dr. Sathish Chandran Nair at the Environment Public Hearing 2006 is produced herewith and marked as **Exhibit P46**.

57. Dr. Latha, an Agricultural Scientist, pointed out the biodiversity significance of the project area and surrounding catchment. In particular, reference is made to the unique and high fish and bird diversity of the area, elephant corridor and the long term conservation value of the area. A true copy of the submission made by Dr. Latha at the Environmental Public Hearing 2006 is produced herewith and marked as **Exhibit P47**. Dr. Elizabeth Joseph, a fisheries Scientist [Asst. Professor (Retd.), Kerala Agricultural University] filed written objections stating that the EIA report does not refer to any single fish species that is endangered or endemic to the Chalakudy river. However, studies have established the presence of many rare, endangered and endemic species of fishes exclusive to the Chalakudy River. A true copy of the objection submitted by Dr. Elizabeth Joseph at the Environmental Public Hearing 2006 is produced herewith and marked as **Exhibit P48**.

58. Sri. Krishnan, a retired member of the Indian Economic Service, is residing and cultivating properties lying adjacent to the left bank canal of the Chalakudy River diversion scheme. He is a person likely to be affected by the down stream impact of the proposed dam in terms of water availability for drinking and agricultural purposes. The proposed peaking operations of the AHEP will lead to significant intra-day variation in the availability of water at the Thumburmuzhi weir and in the two canal systems. Moreover, during the peaking operations the intense water flow in the river will spill over the crest of the weir into the stream without providing enough flows in the canals for irrigation, thereby adversely impacting an already water starved CRDS. However, in their wisdom, WAPCOS conveniently short-circuited this peril by showing the monthly cumulative water availability/discharge of the CRDS (Table 4.11, page 4.37 of the EIA). WAPCOS have not even attempted to discuss this critical aspect of water budgeting with either the CRDS authorities, local Panchayaths or the water users! A true copy of the submissions made by Sri. Krishnan at the Environmental Public Hearing 2006 is produced herewith and marked as **Exhibit P49**.

59. A large number of NGOs from across the country also made written objections to the project. The submissions were made by Sri. Himanshu Thakkar of the South Asia Network on Dams, Rivers & People (SANDRP) Delhi. Yet another submission depicting the deep concern of the Conservation Action Trust, Mumbai about the adverse environmental and ecological impact of the proposed Athirappilly Project dated 12<sup>th</sup> June, 2006 was also submitted. The Wildlife Protection Society of India through its Project Officer and Co-ordinator (S.India) had also submitted its objections at the said Public Hearing and urged the authorities to prevent the decimation and submergence of important forest areas by the proposed Athirappally Dam, on the Chalakudy River.

60. The public hearing was conducted at the Gopalakrishnan Auditorium on 15.06.2006. The hearing panel consisted of 10 members, but

only 9 of them could attend. The member secretary of the PCB was the Chairman of the Hearing panel. The public hearing was attended by 1200 people. The capacity of the hall was only 1,000 and the hall was overflowing on to the corridors. Except the service organisations connected with the Kerala State Electricity Board, its Staff Members and their families, the project was opposed by every other person attending the public hearing. The public hearing commenced at 11 AM and continued till 5 PM. The project was introduced by the Chief Engineer of the KSEB. After his presentation 60 persons in all were permitted to make oral presentation. On account of paucity of time, several persons could not make their presentation. All the 60 persons who made their presentations opposed the project. The presentations highlighted the grievances of persons from various walks of life, regarding different aspects of the proposed projects. Tribals, farmers, the MLAs of Mala, Chalakudy and Angamaly Assembly Constituencies, representatives of the Grama Panchayaths, Scientists, various NGOs, Merchant Associations, Kerala Hotel and Restaurants Association, etc. etc., opposed the project.

61. Seven members of the public hearing panel met on 08.07.2006 at the Aluva IMA Hall. It would appear that the meeting was inconclusive. There was no unanimity in the hearing panel on the report that had to be forwarded to the MOEF. Some of the members of the hearing panel were insistent on submitting an alternate report as they were unwilling to toe the line proposed by the KSEB. It would appear that Shri Premachandra Kurup, IAS, the District Collector, Thrissur, who was an important member of the hearing panel, was under orders of transfer. Instead of convening another meeting, the KSEB and the PCB hit upon a plan to fabricate a report. Since there was no unanimity the members were approached individually by the KSEB and the PCB with a purported last page of the report. Each of the last pages contained the name, address and designation of the members of the hearing panel (there were six different page No.10 for the purpose). Each last

page contained the signature of the Chairman of the hearing panel and the District Collector, Thrissur. Thereafter, these last pages were taken separately to various individual members to obtain their signature. It would appear that various coercive methods were employed by the PCB and the KSEB for getting the signature of the members. The true purport of the report was not revealed to the members. Some of the members affixed their signatures. Some others registered their protest. Three dissent notes were also attached. The PCB and the KSEB appear to have attached a questionnaire forwarded along with report of the hearing panel to the MOEF. As a matter of fact, the proceedings and the report itself including the questionnaire have not been circulated to the members of the Public Hearing Panel till date.

62. The proposed project site is a biodiversity hotspot. The Biodiversity Act 2002 provided for the conservation of biological diversity. The Kerala State Biodiversity constituted under that Act has advised the Government of the damages of the proposed project. The recommendation of the Board is valid and binding on the Government under Section 23 of the Act. The Govt. is duly bound to consider the advice with necessary seriousness before proceeding with the project. The minutes of the Meeting are yet to be published. Newspaper reports however evidence that such advice has actually been tendered by the Board. A true copy of the report dated 27.09.2007 in 'the Hindu' daily is produced herewith and marked as **Exhibit P50**.

63. The National Environment Appellate Authority Act, 1997 (Act 22 of 1997) is enacted with the specific objective of providing an appellate forum to hear appeals from Environment Clearances granted by the MOEF. The Act has been notified on 26.03.1997. However, the appellate authority contemplated by the Act has been a non-starter. The Appellate Authority is to be constituted with a Chairman, a Vice-Chairman and a member. No Chairman has been appointed till date. The Authority does not have a vice

chairman also. It would appear that some retired Govt. officials have been appointed as members of the appellate Authority from time to time. However, the appellate Authority is dysfunctional. In the period from 1997 to 2004, fifteen grievances relating to Environment clearances were filed. Most of the cases were rejected at the threshold on the ground of delay, lack of jurisdiction etc. The appellate authority has not set aside or interfered with even one environment clearance since its inception. In this situation, the aggrieved persons have lost faith in the appellate authority altogether. In 2003, two cases were filed whereas in 2004, no case was filed. In subsequent years there is no filing of cases before the authority.

64. The non-appointment of Chairman and Vice chairman of the Appellate Authority and the highly unsatisfactory manner of its functioning was considered by the Delhi High Court in WP(C) No. 17682/2005 and connected cases. The Delhi High Court by its order dated 29.09.2005 directed the Union of India to take steps for appointing the Chairman and to reconstitute the authority within 45 days. The orders were not complied with. The Union of India proposed to set up Central and Regional Environment Tribunals to replace the National Environment Appellate Authority. The Delhi High Court was informed that the bill is being introduced in the Budget Session of Parliament in 2007. This statement is recorded by the Delhi High Court in its order dated 07.02.2007 in WP(C) 17682/2005. At the next hearing of 04.04.2007, the Union of India submitted that the bill could not be tabled as some modifications have been suggested by the Committee of Secretaries, which are being considered. It is understood that the bill is likely to be introduced shortly. It is submitted that the National Environment Appellate Authority is unlikely to be constituted as the said authority is being abolished and replaced by the Environment Tribunals under the National Environment Tribunals Act. The Union of India has realised that the National Environment appellate Authority does not furnish an effective and efficacious alternate remedy to persons aggrieved by Environmental clearances.

65. This Hon'ble Court has set aside the environmental clearance for the project on two earlier occasions. The contention that the Writ Petitions are not maintainable, because there is an effective alternate remedy before the National Environment Appellate Authority, was raised. In spite of the said contention this Hon'ble Court entertained the Writ Petitions and quashed the clearances. The Writ Petition raises issues relating the protection of the Environment and violation of fundamental rights. In such circumstances, there is no bar to this Hon'ble Court entertaining this Writ Petition. The petitioner has no other effective or efficacious alternative remedy to challenge the environmental clearance to the Project other than to invoke the extraordinary original jurisdiction of this Hon'ble Court under Article 226 of the Constitution of India. The Writs prayed for are liable to be issued on the following among other:

### **GROUND S**

A. The proposed project of the KSEB, if implemented, will lead to an infraction of the petitioner's right to life and livelihood guaranteed by Article 21 of the Constitution of India. The implementation of the project will lead to the forcible displacement of the members of the Kadar community from the Athirappilly area. The contention of the KSEB appears to be that physical displacement of Kadars will be minimal. But, if the river does not flow and large tracts of forests in the area are denuded then the lack of fishing opportunities and inability to collect minor forest produce will drive the Kadars out of the area. On account of the reduction in the river flow in summer there is already acute water shortage and spread of water borne diseases like typhoid, in the settlement. Such negation of the fundamental rights of the poorest of the poor persons belonging to a primitive and mostly illiterate people is an affront to the Constitution of India. Appropriate directions are liable to be issued to protect the fundamental rights of the petitioner.

B. The petitioner is entitled to resist the construction of the dam and have her voice heard by the authorities. The displacement of the Kadar community is a vital issue that has to be taken note of by the authorities before sanctioning and implementing the project. The right to object to the project, so as to ensure the consideration of the relevant issues by the decision making authority, is part of the due process of law. In order to ensure that the opportunity to object is real it is necessary to give relevant details of the project to all concerned persons. In the present case, the environment clearance is based on the EIA report of WAPCOS, a document that proceeds as though the project will have only a minimal impact of the Kadars. Even the location of the habitats is not correctly noted in the WAPCOS report. The WAPCOS report draws on the TBGRI report without verification. The lacuna in the TBGRI report in this regard has been pointed out at the public hearing. Even this was not prompted a proper study. The WAPCOS report is unreliable. There is a negation of the fundamental right to equality guaranteed by the Article 14 of the Constitution of India. Appropriate directions are liable to be issued by this Hon'ble Court.

C. The protection of the ecology, the Forests and Wild life is the fundamental duty of every citizen and mandated by Article 51A of the Constitution of India. The project requires the cutting of lush evergreen forests from an area of at least 140 hectares of reserved forest land. The project will also sound the death knell of the riverine riparian forests found in a stretch of land from the Poringalkuthu project to the Chalakudy river diversion scheme. On account of various development projects, the riverine riparian forest from the source of the river till the proposed project site is already lost forever. There is no riverine riparian forests downstream on account of human habitation and activity. Compensatory afforestation of teak and Eucalyptus trees for commercial gain cannot at all undo the damage proposed to be caused by the present project. Appropriate directions are liable to be issued by this Hon'ble Court.

D. The last remaining frequently used elephant corridor across the Chalakudy river will be lost, if the project is implemented. The entire area falls within the area of project elephant. The migration of the elephants is inevitable as food and water in the teak plantations of the forest department is scarce. The seasonal migration across the river has become unavoidable. The elephants are genetically and instinctively likely to follow the selfsame corridor each year for migration. The construction activities, blasting operations, and presence of thousands of people for a few years during the construction of the dam will by itself prevent the use of the elephant corridor. Once disrupted, the impact on the elephants will be drastic. The manner in which the elephants will react towards the human population in the area is also unpredictable. Appropriate directions are liable to be issued by this Hon'ble Court.

E. The forests, proposed to be denuded, is home to several species of mammals like tiger, leopard, gaur, Malabar giant squirrel, Nilgiris Langur and the highly endangered lion tailed Macaque. Four species of hornbills, the Great Indian Malabar Pied, Common Gray and Malabar Grey are not found together anywhere else. The Cochin forest cane turtle, a highly endangered species, listed in the International Union for Conservation of Nature (IUCN) red data book, is found in the area. This species has been rediscovered in the Vazhachal division after 60 years. The Chalakudy river is known to have the highest fish diversity in India with 104 identified species of fishes. Appropriate directions are liable to be issued by this Hon'ble Court to protect the wildlife diversity of the Chalakudy river basin.

F. The WAPCOS report is not based on any real study of the project area. The base line data is flawed. The assumptions and projections are not justified. The WAPCOS report is tailor-made to suit the requirements of the project proponent, KSEB. The WAPCOS report is prepared by downsizing the various base line parameters and impacts. This



trend is visible in respect of material aspects like mammals, fisheries, birds, riverine riparian vegetation etc. The clearance based on the WAPCOS report is vitiated. Ext.P17 is liable to be quashed by this Hon'ble Court.

G. The WAPCOS report ignores completely the real likelihood of man – animal conflicts, during the construction stage and thereafter. The environmental issues arising and existing out of the manmade projects on the river have yet to be addressed. In fact, there is no real effort to solve any of those problems. Instead, the present project is proposed seemingly to multiply the existing problems. Appropriate directions are liable to be issued by this Hon'ble Court.

H. WAPCOS has not conducted any study for one year. It appears to have sub-contracted the work to some agencies. WAPCOS has not visited the site at all. Even the offices that WAPCOS claims to have visited have no notice of the visit. The EIA process has been reduced to a farce. Appropriate directions are liable to be issued by this Hon'ble Court.

I. The public hearing process has been reduced to a farce. Reports have been prepared and furnished after the public hearing. The scoping mechanism has been defeated. The members of the public hearing panel had no clue to the report being forwarded. The PCB and the KSEB have actively prevented a fair report being forwarded. The MOEF has ignored the legitimate objections raised at the public hearing. Ext.P17 is liable to be quashed.

J. The grant of Environmental clearance is illegal, arbitrary and without complying with the mandatory requirements of the EIA Notification, 1994, as amended in 1997 and 2002 and/or the EIA Notification 2006. No project of the nature included in the schedule to the notification can be established without Environment Clearance in accordance with law. The violation of the mandatory requirements of the EIA Notification is in turn a

violation of the Environment Protection Act, 1986. The grant of Environment Clearance, without following the procedure prescribed by law, is also in violation of the orders passed by this Hon'ble Court. In the light of the judgement of this Hon'ble Court the decision for clearance had to be on the basis of the proceedings of the proposed public hearing that should accompany a fresh application for clearance. The said application was filed only after the EIA Notification 2006 was issued and therefore the matter could be treated only under the EIA Notification, 2006. The application cannot be treated as an application to be dealt with under the EIA Notification 1994. The observations in this regard by the expert Committee constituted under the EIA Notification under 1994 are without jurisdiction and or authority of law. The application itself is made in terms of the EIA Notification, 1994 which is not applicable to the case on hand. Appropriate directions are liable to be issued by this Hon'ble Court.

K. The failure to follow the procedure prescribed by law before granting environmental clearance is illegal and arbitrary. The petitioner and other affected persons have a legitimate expectation that the decision making authority will observe the procedural requirements and comply with them in letter and spirit and take note of all relevant aspects before taking a decision. There is a serious violation of the principles of natural justice both before and after the decision. The decision making process is vitiated as it proceeds under a repealed notification though the order itself appears to be under both the new and old Notifications. There is no fairplay in action. Arbitrariness is anathematic to the Constitution and violative of the fundamental rights of the petitioner guaranteed under Article 14 of the Constitution of India. Appropriate directions are liable to be issued by this Hon'ble Court.

L. The Clearance is vitiated by non-application of mind. The decision is taken ignoring relevant materials and on the basis of the irrelevant materials. The order is unreasonable in the Wednesbury sense. The order is non-speaking. The order is passed ignoring the repeal of the EIA notification

1994 and the issuance of the EIA Notification 2006. The order proceeds as though the comprehensive EIA report is validly prepared and is relevant. The objections raised at the public hearing have not been considered while granting clearance. The judgement of this Hon'ble Court, which has become final, has held that the clearance has to be based on the EIA notification, as amended, and in force on the date of such clearance. Hence the MOEF ought to have verified as to whether there is compliance with the EIA Notification, 2006. The order passed is illegal and vitiated by an error of jurisdiction. A Writ of Certiorari is liable to be issued by this Hon'ble Court quashing Ext.P17.

M. The Chalakudy River falls from a height of 45 Mtr at Athirappilly. The location is scenic and is visited by tourist round the year. The KSEB and the MOEF proceed as though the water falls can be maintained. This assumption is baseless as the bulk of waters (86% by some estimate) will be led by the main power house by passing the water fall. There is no justifiable reason for relying on the promises of the KSEB. The Jog falls on the Sharavathy river is a prime example. The Sharavathy Hydro Electric Project has virtually sounded the death knell of the Jog falls. The lines of the Kannada poet, Basappa, to the effect '*what have you seen after being born as a human being, see atleast once the jog falls before you die*' echoed on deaf ears. The project was implemented and the water fall died on account of the impounding of waters for the hydro-electric project. The same fate will befall the Athirappally project also if the project is implemented. The respondents have no right to snatch away a bounty of nature from the citizens of this country. The principles of inter-generation equity are also relevant and applicable. The scenic location is liable to be preserved for future generation. Ext.P17 is liable to be quashed.

N. The precautionary principle is liable to be applied to scrap the project. It is evident that the proposed project site is a unique location in several respects. It is a bio-diversity hotspot. The respondents have failed to

establish that the project is environmentally benign. Ext.P17 is liable to be quashed.

O. The state is duly bound to act on the advice of the Kerala State Bio-diversity Board and to scrap the Project. Appropriate directions are liable to be issued by this Hon'ble Court.

P. The clearance, Ext.P17, is unreasonable in the Wenesbury sense. The safeguards sought to be imposed are not sufficient for mitigating the environmental catastrophe that will take place on the implementation of the project. There is no sufficient water for maintaining a minimum flow of 7.65 Cu. Metre/Sec at all times. The general conditions and specific conditions are also unlikely to be implemented or honoured by the KSEB. The MOEF has ignored the innumerable objections raised at the public hearing. The clearance does not consider or refer to the important environmental issues that arise in the case. There is a non-consideration of the relevant aspects. The constitution of various committees and sub-committees will not make the order legal and proper if as a matter of fact important aspects have not been studied. Ext.P17 is liable to be quashed.

Q. The Project Proponent, KSEB, is duty bound to display the copy of the clearance letter at various Govt. offices and also cause publication in two local newspapers including one vernacular daily. A copy of the clearance letter has also to be marked to the concerned Panchayath and the local NGO. The order, Ext.P17, is dated 18.07.2007. The project proponent has taken various steps in pursuance of the clearance for implementation of the project. However, till date, the clearance letter has not been communicated or published to any of the persons or offices as required in the clearance order. This itself would indicate the illegal attempt on the part of the KSEB to deny the public access to the clearance letter and to all other relevant material regarding the project. The KSEB intends to deprive the

affected persons and institutions of an opportunity to challenge the aforesaid clearance. Ext.P17 is liable to be quashed.

It is therefore humbly prayed that this Hon'ble Court may be pleased to direct the Respondents to produce the records relating to the Environmental clearance to the Athirappilly Hydro Electric Project and:

- (i) issue a writ of certiorari or any other appropriate writ or order, quashing Ext.P17 i.e., the environmental clearance granted to the Athirappilly Hydro Electric Project;
- (ii) issue a writ of mandamus or any other appropriate writ, order or direction, restraining the respondents from proceeding with the implementation of the Athirappilly Hydro Electric Project;
- (iii) issue a Writ of Mandamus or any other appropriate writ, order or direction, directing Respondent No.2 to act on the advise of the Kerala Bio-diversity Board before taking a final decision on the implementation of the Athirappilly Hydro Electric Project;

and

- (iv) issue such other reliefs as this Hon'ble Court may deem fit and proper to grant on the facts and in the circumstances of the case including the costs of this Writ Petition.

Court Fee

Rs.100/-

Dated this the 07<sup>th</sup> day of October, 2007.

*PETITIONER*

*COUNSEL FOR THE PETITIONER*

**INTERIM RELIEF**

**(UNDER RULE 150 OF THE RULES OF THE HIGH COURT OF KERALA)**

It is humbly prayed that this Hon'ble Court may be pleased to *pass an interim order of stay of operation of Ext.P-17 and of all further proceedings with regard to the implementation of the Athirappilly Hydro Electric Project including calling tenders and/or taking possession of forest land and cutting or removing of trees*, pending disposal of the above Writ Petition.

Dated this the 07<sup>th</sup> October, 2007.

***COUNSEL FOR THE PETITIONER***

**IN THE HIGH COURT OF JUDICATURE OF KERALA  
AT ERNAKULAM  
(Special Original Jurisdiction)**

**W.P. (C) No.                      OF 2007**

Geetha

... Petitioner

Vs.

**AFFIDAVIT**

I, Geetha, D/o Karimbayan, aged 25, residing at Kadar Colony, Vazhachal, P.O. Poringalkuthu, Thrissur District, now come to Ernakulam, do hereby solemnly swear, affirm and state as follows:-

1. I am the Petitioner in the accompanying Writ Petition. I am conversant with the facts of the case.

2. The above Writ Petition is filed by me, inter-alia, for the issuance of Writ of Certiorari quashing Ext.P17 and other reliefs.

3. I submit that the facts stated in the Writ Petition are true and nothing relevant has been suppressed therefrom. I also submit that the exhibits produced along with the Writ Petition are true copies of their respective originals.

4. I also submit that I have not filed any earlier Writ Petition for the same or substantially similar reliefs as prayed for in this Writ Petition.

All the facts stated above are true to the best of my knowledge, belief and information.

Dated this the 07<sup>th</sup> day of October, 2007.

DEPONENT

Solemnly affirmed at Ernakulam on this the 07<sup>th</sup> day of October, 2007 and signed by the deponent in my presence.

P.B. Krishnan,  
Advocate, Ernakulam

23A

35A. The petitioner begs to submit that the Chalakudy river and its waters are the lifeline of the Kadar community. The petitioner is a member of that community and she resides at the Kadar Colony located within the Athirappilly





Vs.

Union of India and others ... Respondents

**INDEX**

<b>Sl.No.</b>	<b>Contents</b>	<b>Page No.</b>
01	Synopsis and List of Dates and Events	01 - 04
02	Memorandum of Writ Petition, Interim relief	05 - 46
03	Affidavit	47
04	<b><u>Exhibit P1.</u></b> Dated 27.1.1994. True copy of the EIA Notification bearing No.S.O. 60 (E) amended upto 1997.	48 -57
05	<b><u>Exhibit P2.</u></b> Dated 20.01.1998. True copy of the Communication bearing No.11016/36/B3-1A issued by Respondent No.1.	58 - 61
06	<b><u>Exhibit P3.</u></b> Dated 17.10.2001. True copy of the Judgement of this Hon'ble Court in O.P. No. 3581 of 2001 (B).	62 - 98
07	<b><u>Exhibit P4.</u></b> Dated Nov 2001. True copy of the Executive Summary published by the Kerala State Electricity Board	99 - 122
08	<b><u>Exhibit P5.</u></b> Dated 28.12.2001. True copy of the Notice issued by Respondent No.4 bearing No. PCB/TSR/CE/59/2001 appeared in the New Indian Express daily dated 03.01.2002.	123
09	<b><u>Exhibit P6.</u></b> Dated 06.02.2002. True copy of the Proceedings of Environmental Public Hearing on the Athirappally Hydro-Electric Project.	124 - 138

(ii)

<b>Sl.No.</b>	<b>Contents</b>	<b>Page No.</b>
10	<b><u>Exhibit P7.</u></b> True copy of the EIA Notification SO 60 (E) dated 27.01.1994 as amended upto	139 - 148

13.06.2002.

11	<b><u>Exhibit P8.</u></b> Dated 10.02.2005. True copy of the Govt. Order No. J-12011/6/97-IA-1 (Vol.II) granting Environmental Clearance for the Athirappally Hydro-Electric Project.	149 - 153
12	<b><u>Exhibit P9.</u></b> Dated 23.03.2006. True copy of the Judgement of the Hon'ble High Court of Kerala in WP(C) No. 9542 of 2005 (S).	154-169
13	<b><u>Exhibit P10.</u></b> True copy of the Report of WAPCOS	170 - 534
14	<b><u>Exhibit P11.</u></b> True copy of the proceedings of the Environment Public Hearing forwarded to the MOEF.	535 - 585
15	<b><u>Exhibit P12.</u></b> Dated 14.08.2006. True copy of the EIA Notification, 2006 (S.O.1533).	586 - 627
16	<b><u>Exhibit P13.</u></b> True copy of the Summary record of discussion of the 49 <sup>th</sup> meeting of the Expert Committee for River Valley and HEP held on 15.11.06.	628 - 636
17	<b><u>Exhibit P14.</u></b> True copy of the summary record of discussion of the 52 <sup>nd</sup> meeting of the Expert Committee for River Valley and HEP held on 21 & 22 Feb 2007.	637 - 639
18	<b><u>Exhibit P15.</u></b> True copy of the site visit report of the Sub Committee of the Expert Committee for River Valley and HEP on visit held on 12 & 13 Apr 2007.	640 - 643
19	<b><u>Exhibit P16.</u></b> True copy of the summary record of discussion of the 2 <sup>nd</sup> meeting of the Expert Appraisal Committee for River Valley and HEP held on 16.5.07.	644- 660

(iii)

---

Sl.No.	Contents	Page No.
20	<b><u>Exhibit P17.</u></b> Dated 18.07.2007. True copy of the Govt. order No.J12011/6/97-IA-1 (Vol.III) granting Environmental Clearance	661- 667

---

for the Athirappally Hydro-Electric Project.

21	<b><u>Exhibit P18</u></b> . Dated 17.08.2007. True copy of the letter No.D31437/06 issued by the Asst. Executive Engineer, KWA, WSP Sub Division, Chalakudy	668
22	<b><u>Exhibit P18(a)</u></b> . Dated 17.08.2007. True English Translation of letter No.D31437/06 issued by the Asst. Exe. Engineer, KWA, WSP Sub Division, Chalakudy	669
23	<b><u>Exhibit P19</u></b> . Dated 17.08.2007. True copy of the letter No.HC.979/07 issued by the Secretary, Block Panchayath, Chalakudy	670
24	<b><u>Exhibit P19(a)</u></b> . Dated 17.08.2007. True English Translation of letter No.HC.979/07 issued by the Secretary, Block Panchayath, Chalakudy	671
25	<b><u>Exhibit P20</u></b> . Dated 14.06.2006. True copy of the letter No.C2-4818/90 issued by the Divisional Forest Officer, Vazhachal Division.	672
26	<b><u>Exhibit P21</u></b> . Dated 07.06.2006 & 17.08.2007 - True copy of letter No.A3-1036/2006 issued by the Executive Engineer, Idamalayar Irrigation Project	673-675
27	<b><u>Exhibit P21(a)</u></b> . Dated 07.06.2006 & 17.08.2007 - True English translation of letters No.A3-1036/2006 issued by the Exe. Engr., Idamalayar Irrigation Project	676-677
28	<b><u>Exhibit P22</u></b> . Dated 17.07.2006. True copy of the reply of WAPCOS	678-693
29	<b><u>Exhibit P23</u></b> . Dated 27.02.2007. True copy of the Report No.RCP-40/2007 submitted by the Chief Conservator of Forests and Tribal Rehabilitation Commissioner on the project.	694- 700

(iv)

---

Sl.No.	Contents	Page No.
30	<b><u>Exhibit P24</u></b> . True copy of the Summary Records Notes issued by the Central Electricity Authority on 28.03.2005.	701-703

31	<b><u>Exhibit P25.</u></b> True copy of the summary record of discussion of the 48 <sup>th</sup> meeting of the Expert Committee for River Valley and Hydro Electric Projects held on 18.10.2006	704-710
32	<b><u>Exhibit P26.</u></b> True copy of the details of collection charges and details of visitors furnished by the Divisional Forest Officer, Vazhachal Division.	711-715
33	<b><u>Exhibit P27.</u></b> Dated 31.03.2005. True copy of the Office Memorandum No.2/KEL/9/89-PAC/331-55 issued by the Central Electricity Authority	716-727
34	<b><u>Exhibit P28.</u></b> True copy of the details of the Panchayaths in the river basin.	728
35	<b><u>Exhibit P29.</u></b> True copy of the submissions made by Dr. V.S. Vijayan.at the public hearing held in 2006.	729 - 744
36	<b><u>Exhibit P30.</u></b> True copy of the Survey report - 2001 on the birds of Athirappilly and Vazhachal prepared by the Warblers and Waders	745 - 789
37	<b><u>Exhibit P31.</u></b> True copy of the report on the birds of Athirappilly and Vazhachal (1991-2007) prepared by Mr. Raju, of Common Birds Monitoring Programme.	790 - 794
38	<b><u>Exhibit P32.</u></b> True copy of the Check List identifying 185 bird species of Athirappilly and Vazhachal prepared by Dr. P.O. Nameer	795 - 800
39	<b><u>Exhibit P33.</u></b> True copy of the combined Check List of 264 bird species of Athirappilly and Vazhachal area	801 - 804

(v)

Sl.No.	Contents	Page No.
40	<b><u>Exhibit P34.</u></b> Dated 20.01.2007. True copy of the news report published in “The Hindu” daily Online Edn.	805-806

41	<b><u>Exhibit P35.</u></b> True copy of the Bird Life IBA fact sheet pointing out the importance of Vazhachal Forest Division of Kerala	807-809
42	<b><u>Exhibit P36.</u></b> True copy of the relevant pages of the project report prepared in March 2005 by the Vazhachal Forest Division on the protection of fragile eco system supporting Hornbills of Vazhachal/Athirappilly area.	810-835
43	<b><u>Exhibit P37 (a) to (g)</u></b> – True copy of the UNEP - WCMC – Species Data Base	836-842
44	<b><u>Exhibit P38.</u></b> Dated 02.04.2002. True copy of the Notification G.O.(P) No.19/2002/P & WLD	843-845
45	<b><u>Exhibit P39.</u></b> True copy of the report down loaded from the web site of <a href="http://www.AsianNature.Org/Vazha.html">www.Asian Nature. Org/Vazha.html</a> . on the protection of elephants.	846-847
46	<b><u>Exhibit P40.</u></b> True copy of the report on the Chart on population density of elephant in the project area prepared by Dr. N. Bhaskaran.	848
47	<b><u>Exhibit P41.</u></b> True copy of the extract of report prepared by the MOEF in 1993 on the conservation strategy and action plan for the Project Elephant	849-864
48	<b><u>Exhibit P42</u></b> – True copy of the Management plan for elephant reserves in Kerala, 1994.prepared by the KFRI for the Kerala Forest Department	865-881
49	<b><u>Exhibit P43</u></b> – Relevant Extract from Annual Report of the National Bureau of fish genetic resources (1999-2000)	882-883

(vi)

---

Sl.No.	Contents	Page No.
50	<b><u>Exhibit P44</u></b> – Relevant pages of the Endemic Fish diversity of Western Ghatts published by the National Bureau of Fish Genetic Resources	884-886

---

51	<b><u>Exhibit P45</u></b> – True copy of the paper – Bio-Diversity Status of Fishes inhabiting River of Kerala (South India)	887-906
52	<b><u>Exhibit P46.</u></b> True copy of the submissions made by Dr. Sathish Chandran at the Environmental Public Hearing 2006.	907-911
53	<b><u>Exhibit P47.</u></b> True copy of the submissions made by Dr. Latha at the Environmental Public Hearing 2006.	912-923
54	<b><u>Exhibit P48.</u></b> True copy of the submissions made by Dr. Elizabeth Joseph at the Environmental Public Hearing 2006.	924-929
55	<b><u>Exhibit P49.</u></b> True copy of the submissions made by Sri. Krishnan at the Environmental Public Hearing 2006.	930-940
56	<b><u>Exhibit P50.</u></b> True copy of the Report in the Hindu Daily dated 27.09.2007	941

---

Dated this the 10<sup>th</sup> day of October, 2007.

**COUNSEL FOR THE PETITIONER**

*PRESENTED ON : 11.10.2007*

*“PUBLIC INTEREST LITIGATION – ENVIRONMENT CLEARANCE TO ATHIRAPPILLY HYDRO ELECTRIC PROJECT – ENVIRONMENT PROTECTION ACT, 1986”*

**IN THE HIGH COURT OF JUDICATURE OF KERALA  
AT ERNAKULAM.  
(Special Original Jurisdiction)**









(Special Original Jurisdiction)

W.P.(C) No. OF 2007

Geetha ... Petitioner  
Vs.  
Union of India and others ... Respondents

**WRIT PETITION (CIVIL) FILED UNDER ARTICLE 226**  
**OF THE CONSTITUTION OF INDIA**

-----  
COURT FEE PAID : Rs . 100.00  
-----

**[VOL. IV]**

**EXT. P29 TO P50**

VOL. I - (WP, EXT. P1 TO P9)	PAGES 1 TO 169
VOL. II – (EXT. P10)	170 - 534
VOL. III – (EXT.P11 TO P28)	535 - 728
VOL. IV – (EXT.P29 TO P50)	729 - 941

**M/s. S.V.Balakrishna Iyer (B-75) &**  
**P.B. Krishnan (K-119)**  
Advocates,  
‘Geetanjali’, Warriam Road, Kochi–16.  
**COUNSEL FOR THE PETITIONER**