

Why Kukke I HEP should not be considered for CDM

Submission by: South Asia Network on Dams, Rivers and People
Delhi INDIA

We have pursued the PDD of Kukke Stage I (by Kukke Hydro Projects Pvt Ltd (KHPPL)), its Detailed Project Report (DPR) and other related documents in detail. 24 MW Kukke Stage I small hydro project is proposed on Kumaradhara River, just downstream of the confluence of Gundia and Kumaradhara Rivers in the biodiversity hotspot of Western Ghats, in Dakshin Kannada District of South India. After a careful perusal of the PDD, DPR and other related documents and after actual visit to the proposed dam site and consultation with local communities, we are of the view that Kukke Stage I should be ineligible to receive carbon credits from the CDM mechanism of the UNFCCC Convention.

The reasons for such conclusion are given below:

1. **Non transparent, secretive behaviour of the project proponent, no free prior and informed consent of affected population**
 - The PDD claims that ***'All stakeholders have issued their approval /consents/ licenses for setting up the project.'*** (E2, Stakeholders Comments Page 31):



Above: Protests against Kukke Stage I Dam, 090312 covered in Kannada Paper: <http://www.janathe.com/2012/03/09/urumbi-da/>

This is untrue.

The project which has an MWL (Max Water Level) of 74 masl (meters above sea level, backwater effect will lead to even higher water levels upstream the dam site in monsoon, this region is flood prone, facing regular floods, back water impacts have not even been assessed) as declared in its DPR is set to affect more than 7 villages along Kumaradhara River in the upstream of the project.

The project proponent has not informed any of these villages about the project details nor has it involved these affected villagers in any discussions.

Dolpadi village which is on the opposite bank from Perabe village (where a gram Panchayat meeting was held, as claimed in the PDD) and which will host the dam wall and face maximum submergence has not even been informed about the project. No NOCs (No Objection Certificates) have been solicited for; no land survey has been done, no resettlement and rehabilitation plan has been prepared. So the question of "issuing approval/ consents/ licenses" does not arise, unlike what is submitted by the Proponent.

Even in the Perabe Gram Pachayat, where a meeting was held on 21 January 2012, NOCs have not been issued by all.

- The PDD claims ***'All stakeholders have appreciated and encouraged the initiative taken by M/s Kukke Hydro Projects Pvt. Ltd in implementing the project.'*** (Section E3, page 31: Report on how due account was taken of any comments received)

This is untrue.

The process of identification of stakeholders done by the company has been highly arbitrary, restricted to only one village, whereas more than 7 villages and a small hydro scheme in the upstream will be affected by the dam.

Villagers from other villages have formed the '*Kumardhara Urumbi Anekattu Virodhi Horata Samiti*' (Dam Protest Organisation), have repeatedly sent submissions and requests against this project to 29 government departments in Karnataka.

The small hydro scheme in the upstream, 4.8 MW Hosamatha MHS (mini hydel scheme) has also submitted its opposition to Kukke Stage I to Karnataka Renewable Energy Development Ltd (KREDL), the state government body whose sanction is required before the project can be undertaken.

In fact, KREDL, the nodal agency of Karnataka Power Ministry has issued a 'stop work notice' (Dated 25.02.12) to Kukke Stage I Plant, following complaints by Samiti and Hosamatha MHS. Copy of the letter is attached (Annexure 1). The project proponent should have included this in PDD in the interest of full and transparent information. Not having done is also an attempt to mislead the UNFCCC and general people.

All this clearly shows that the project is unsustainable and faces huge local protests and does not qualify to receive Carbon Credits under the UNFCCC.

- The PDD claims ***"The scheme is run-off-river based and does not involve submergence of land or rehabilitation activity."*** (Section D Environmental impacts, D.1. Documentation on the analysis of the environmental impacts, Page 33)

This is untrue.

Ironically, the DPR of the same project itself states that "there will be minimum submergence of cultivated land" (Detailed Project Report, Section 13.1).

Villagers indicate that at MWL 74 msl as indicated in the DPR, the project will submerge a minimum of 297 acres of Forests, 400 acres of Agricultural lands, many homes along the river of labourers who do not have any alternate land.

The project will cause water levels to be dangerously near a bridge on River Kumaradhara, which is at 75 masl.

After protests by villages, the proponent has been ordered by the KREDL (on 07.02.12) to furnish a report about "conducting detail survey of the entire project site with submergence land details and submit a report with land owners consent to process for further execution of the agreement" contour maps indicating submergence to the affected villagers, but it has still not done so, 3 months after the letter from KREDL (scanned copy of the letter attached, Annexure 2). The Project Proponent should have included this information or letter from KREDL in the interest of giving full picture of the on ground situation, not doing so is also attempt to mislead UNFCCC and everyone else. In any case, this shows that project will have huge impacts, the full survey of the impacts has not yet been done.

2. Severe deleterious impact on rare, endangered and threatened Biodiversity

a. Aquatic biodiversity:

- PDD claims, “***The project shall not affect the aquatic life available in this stream, which at present is insignificant.***” (Section D Environmental Impacts: D.1. Documentation on the analysis of the environmental impacts Page 31)

This is entirely untrue and misleading.

- Kumaradhara River flows through biodiversity hotspot of Western Ghats, through some of the richest Reserve Forests and has astounding aquatic biodiversity. Many studies have proved that Kumaradhara has one of the highest endangered fish populations. A study identified 56 different fish species from Kumaradhara River out of which 23 are endemics, 11 are Vulnerable and 8 are endangered as per IUCN and feature in Red List of threatened species (http://wgbis.ces.iisc.ernet.in/biodiversity/pubs/ces_tr/TR122/section2.htm).
- Fish like *Harobagrus brachysoma* and *Etroplus Canadensis* found in Kumaradhara are endemic and also critically endangered.
- Even the DPR of the project states that Kumaradhara river has “fish of ichthyological, commercial and ornamental importance” (Detailed Project Report section 13.4)



Above: Rich reserve forests at Kukke Dam site

- Looking at the extremely valuable fish biodiversity in the region scientists have been recommending that the river should be **declared as a sanctuary and protected area.** (<http://www.iucnredlist.org/apps/redlist/details/169618/0/print>). It is ironical to see that for such a river, the proponent is actually claiming that aquatic life is insignificant.

Below: Endangered Mahseer Fish at Yenekal Fish Sanctuary just upstream of Kukke Stage I



- In addition, there are two very important community conserved fish sanctuaries, one barely 5 kilometres upstream (Yenekal Fish Sanctuary) and one 2-3 kilometres downstream of this site (Nakur Gaya Fish Sanctuary). These fish sanctuaries too protect a number of endangered fish species, apart from their huge cultural significance. Kumaradhara River, near Dharmasthala has a legally protected fish sanctuary, while these two fish sanctuaries near the Kukke I dam site have been protected through centuries of community conservation methods.

The main fish assemblage in these sanctuaries includes *Tor* species (Mahseer), which is an endangered species. Water level fluctuations and blockages affect fish migration, spawning and overall diversity of fish. In this scenario, Kukke I will lead to severe, irreparable loss to fish diversity in the region, which is one of the highest in India. This crucial aspect has neither been assessed, nor this crucial fact stated in the PDD, which is an attempt to mislead UNFCCC and everyone else.

All across the country, fish habitats have been destroyed by dams, hydropower projects, diversions and pollution. Rivers like Kumaradhara, Netravathi (Kumardhara is Netravathi's tributary) and its tributaries like Gundia are the last vestiges of this diversity and any negative impact on these will be extremely short sighted, and detrimental to sustainable development locally and globally.

b. Terrestrial Biodiversity:

- **The Kunthur/Panaja range reserve forests parts of which will be submerged by the project houses some of the most rare and endangered flora of India.**
- The region is home to endangered *Gymnacrahera* swamps, critically endangered *Syzgium travancricum*, amongst many other species.
- **Kumaradhara river banks are the last habitat of Red listed *Madhuca insignis*, which was declared extinct and which has been rediscovered in this region after 125 years. The tree is now critically endangered and is found only in riparian areas (river banks) along Kumaradhara River, which face submergence by Kukke I project.**
- Endangered riparian plant *Ochreinauclea missions* which is threatened, endemic to this region as well as medicinally important can be spotted in the riparian areas of Kumaradhara adjacent to this project and face submergence.
- Significantly, the Karnataka State Renewable Energy Policy clearly states that "Keeping in view the environmental issues, the Mini Hydro projects in the Western Ghats Districts/Forest areas will be restricted to maximum 5.00 MW" (13 ii, Strategy for Small Hydro Projects). Looking at the rich forests affected by Kukke Stage I, this 24 MW should not even be considered according to this Policy.

A detailed report about endangered terrestrial biodiversity of the Kumaradhara river bank is attached as **Annexure 4, it shows the biodiversity that would be at threat if the Kukke Project is allowed to come up.** This submission is put together for the CDM board by Dr. Shenoy, PhD Botany, and an expert researcher from the region.

Similarly **Annexure 3** is a submission made by Dr. Rajesh Beeranthadka, PhD, Botany to the Western Ghats Task Force, Forest Department of Karnataka about the irreplaceable biodiversity of the region. He also states that the **project proponent has submitted false information about forest land and agricultural land to be submerged by the dam to various departments and the dam should not be taken up.**

3. **The rich biodiversity and social impacts of the dam warrant a serious participatory EIA exercise.** The project proponent however has not done so and hence the project cannot be considered environment friendly or sustainable development.

- The project proponent has not even submitted a copy of a Rapid Environmental Impact Assessment. Such a report is required by Karnataka Pollution Control Board for perusal of the DOE or stakeholders. Many other such small hydro projects which have applied for CDM (Example: 15 MW Neerukatte MHP on Netravathi River, 24 MW Shamburi MHP on Netravathi River, 24 MW Perla MHP on Netravathi river, etc., have furnished a REIA report to UNFCCC, along with PDD.)

4. Kukke Stage I not Additional:

Kumaradhara River alone has more than 12 approved small hydro projects, while the bigger Netravathi river basin (of which Kumaradhara river basin is a part) has more than 44 approved projects. Just upstream of Kukke I, an operational MHS is functioning (4.8 MW Hosamatha MHS) and Kukke Stage I is actually set to submerge the tail race of Hosamatha MHS. (For information about small hydro schemes in Dakshin Kannada District, see: <http://www.kredltest.in/Hydroreportall.aspx>). Many small hydro schemes have been constructed, commissioned and are running without CDM credits, including this 4.8 Hosamatha MHS, to the best of our information.

The district of Dakshin Kannada (where Kukke I is situated) in Karnataka has till date 108 companies with more than 108 approved projects (Greenko, the mother company of Kukke Stage I alone has a minimum of 5 approved projects on Kumaradhara and Netravathi rivers) with a projected total capacity of 636 MW. (<http://www.kredltest.in/hydroreport.aspx>). The project involves no new technology, no new measures to make it more environment or society friendly, it is a business as usual project.

This proves that Kukke I is not an innovative or different project, but a business as usual small hydro project which has been pushed by the proponent and the state. Even though such a huge number of projects are coming up on a small river in ecologically rich area, no proper project level or cumulative impact assessment or even an environment impact assessment is being done for these projects.

As per India's EIA notification of Sept 2006, Kukke small hydro scheme is legally exempt from Environment Impact Assessment, Environmental Clearance, public hearing and implementing an Environment Management Plan and Environmental monitoring, these themselves constitute huge incentives or subsidies or benefits for the projects. The project does need rapid EIA as per Karnataka regulations, but this is only a formality and there is no public consultation, oversight or monitoring.

Incentives: Apart from procedural incentives including Single Window Clearance (Karnataka Renewable Energy Policy 2009-14) Small Hydro Projects in India receive a number of incentives from the Centre as well as various states which include:

- Financial support given by Ministry of New and Renewable Energy at 1.2 crores of first MW and 20 lakhs for each additional MW ¹
- The Small Hydro Schemes in Karnataka receive a preferential tariff at Rs. 3.40 per unit without any escalation for the first 10-year period from the date of signing of PPA (KERF Tariff Order 2009).

¹ Small Hydro Program, Government of India, 2009, Ministry of New and Renewable Energy, Small and Small hydro Projects, Sixteenth Report to the Standing Committee on Energy)

- In addition, according to the Karnataka Renewable Energy Policy 2009-14², the state accepts a Renewable Energy Obligation and “is committed to procure & utilize the Renewable Energy power as required and determined by Government of Karnataka. Due grid strengthening will be undertaken to meet this commitment.”
- Small hydro projects in Karnataka also enjoy tax rebates and revisions like with the Value Added Tax (VAT)
- According to ICRA Report on Small Hydro in India, published May 2012 (www.icra.in/Files/ticker/SHP%20note-.pdf) favourable fiscal policies that have helped in accelerating Small Hydro development in India include:
 - accelerated depreciation benefit,
 - tax holiday under section 80 IA
 - Soft loans by Indian Renewable Energy Development Authority,
 - IREDA and nil/concessional customs/excise duty benefits),
 - state level incentives and
 - financial support from MNRE

CDM credits have been listed not as a first benefit, but the last. This clearly implies that CDM credits are not a limiting factor in the growth of SHPs, but just an added bonus.

The report states: “Under the Central Financial Assistance (CFA) Scheme of the Ministry of New and Renewable Energy, Govt of India (MNRE), capital subsidy is now provided to both private and State projects and for renovation & modernisation of SHP plants. Besides, technical support is being provided to SHP units through Alternate Hydro Energy Center (AHEC), IIT, Roorkee. MNRE is also organizing technical support towards survey and investigation, preparation of DPRs, project monitoring and training through Alternate Hydro Energy Center (AHEC), IIT, Roorkee.”

“Since January 2011, SHP projects totalling over 131 MW have been set up in the state of Karnataka. A supportive policy framework has been one of the key factors for achieving this rapid pace of project development. The Karnataka Renewable Energy Policy 2009-14 envisages 600 MW of SHP capacity additions by 2013-14, requiring 100-150 MW of addition every year.”

- All the above points make it amply clear that small hydro projects are being pushed hard at the centre as well as the state and receive many financial and procedural benefits. In a latest case, States have actually been selling power generated from small hydro projects by Independent power producers to other states at a very high tariff of Rs 4.14 per unit or higher rate. (<http://www.tribuneindia.com/2012/20120515/himachal.htm#2>) This has become possible because of the scheme of trading Renewable Energy Certificates, introduced in India by the Central Electricity Regulatory Commission, the National electricity sector regulator. This underlines the fact that small hydel projects in India enjoy a lot of incentives, which should be included in the cost benefit calculations, not doing that, as is the case with Kukke I PDD, means the project proponent is misleading everyone and should be disqualified.

²http://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CFQQFjAC&url=http%3A%2F%2Fkredl.kar.nic.in%2FRenewable%2520Energy%2520Policy%2520Karnataka%2520Draft.doc&ei=lfS5T6SsLIXRrQe03oThBw&usg=AFQjCNEekkIZ-YZ_6ZQY4HOvjAQ1nubEbQ

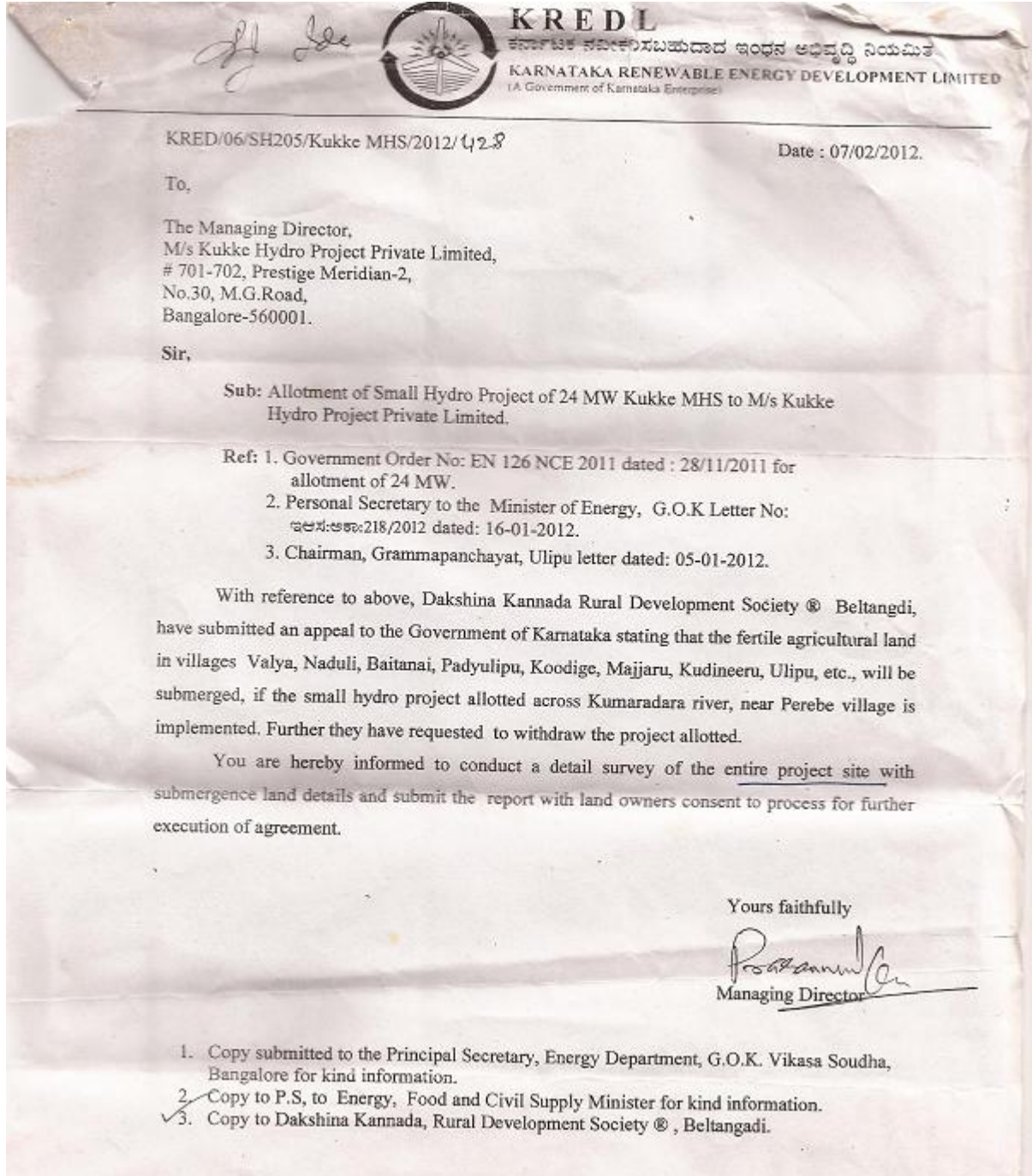
- This goes on to prove that in India small hydel projects are a much supported, profit making business which is currently running without any sort of environmental checks and balances in place. Projects like this do not need external support in terms of CDM on the other hand, governance mechanism around small hydro in India need to be strengthened.

All in all, looking at all the above issues, Kukke Stage I does not deserve to get carbon credits under the UNFCCC. Doing so will only be a mockery of the displaced population and submerged forests, damaged biodiversity, clean development mechanism concept and global climate.

Parineeta Dandekar (parineeta.dandekar@gmail.com)
www.sandrp.in

May 21, 2012

ANNEX 2: KREDL's Letter to Kukke Hydro power Pvt Ltd asking them to complete a detail survey about submergence.



ANNEX 3: Endangered Biodiversity of Kumaradhara River Banks

PRILIMINARY REPORT ON THE VEGETATION OF GUNDYA AND KUMARADHARA RIVER BANKS AND ADJOINING FOREST AREA WHICH IS UNDER THREAT DUE TO HYDRO POWER PROJECT DAM CONSTRUCTION AT URUMBI, KUNTHOOR VILLAGE (PUTTUR TQ, DK)³

Dr. H. Surya Prakash Shenoy*, M. Sc., M. Phil., Ph D.

(* Renowned researcher of Botany and author of many publications, Resident of Hosmatha region)

Introduction

India is one among the 17 mega diversity countries of the world. The varied physiographic as well as climatic conditions influence the development of diversified floristic composition representing more than 17500 taxa of Angiospermic plants (Karthikeyan 2000). Of the 34 Hot Spots (area with highest number of endemic plants) in the world, three hot spots namely **Western Ghats, Western Himalaya and Indo Burma** occur in India. All these Hot Spots have innumerable number of rare and threatened Angiospermic flowering plants which are not represented in any parts of the world.

Western ghats originates from Tapti River in Gujarat and passes through the Maharashtra, Goa, Karnataka and Kerala with a distance of 1600Km and ends at Kanyakumari. In the Western Ghats region there are about 4500 species of flowering plants. Of these 1720 species and 135 infra specific categories are endemic (Ahmadulla & Nayar 1986). Nearly a third of these species are rare or threatened and several are believed to be extinct. Many endemic species of plants from the Western Ghats must have become extinct even before the botanists had a chance to describe them.

Endemic plants : An endemic species is one which occurs in a restricted area i.e.; an island, a peninsula, a phytogeographic region or mountain range. Since the endemic species have restricted distribution, many of them are extinction from particularly of their habitats are distributed (shetty et al 2000) and smaller the area of distribution of an endemic species, greater is the threat. The possible beneficial feature of many of the species of the rare plants will be hard to obtain at first, because the rare species are only in a small population. Another reason why we should be concerned about the rare threatened species is in a stable ecosystem. All species plants, animals & microbes form a close web and they are in dynamic equilibrium they are so closely inter linked to one another that any disturbance in one gives to imbalance to others. According to Peter H Raven former director of Missouri botanic garden USA a vanishing plant species can take with 10-30 depended species such as insects, higher animal and other plants. Endemic taxa have a fascination for the taxonomists as they are make their area floristically unique and these elements of a region throw some light on the bio geography of the area, centers of speciation areas of extinction, vicariance adaptable evolution of the flora and fauna of the area.

Dakshina Kannada district has varied vegetation like coastal, semi evergreen, Evergreen, sholas valley forest, wet bamboo breaks and myristica swamps. It is one of the HotSpot in the western ghat region. Of the 1720 species and 135 infraspecific flowering plant endemic to Western Ghats, 213 species and 15 infraspecific categories occur in Dakshina Kannada district (Shetty 2000). These includes 17 species, one sub specie and 3 varieties of tree, three species of canes 2 species of reed bamboos, 65 species of under shrubs, 73 species of herbs. Some of them are *Callophyllum apetalum*, *Ochreinauclea missionis*, *Hydnocarpus pentandra*, *Myristica malabarica*. Some species are probably become extinct eg:- *Karnataka bethamii* which is known only by the type collection from Dakshina Kannada Dist. Many endemic species have been originally described based on the collections made from Dk Dist. Everal species believed to be extinct and now rediscovered like *Madhuca insignis* and *Hopea canarensis*. Many of these endemic species have multiple uses *i. e.* they yield good timber, medicinal properties and miscellaneous properties. Many local medicine practioners depend on the forest medicinal plants which are naturally occurring for the raw

³ This submission has been specifically put together by Dr. Shenoy in response to Kukke Stage I project, based on his decades old work in the region.

materials to prepare different types of medicines. Along the Gundya and Kumaradhara river bank, huge trees are growing naturally.

With this back ground on the vegetation of DK district, an attempt has been made to describe the floristic composition of Gundya and Kumaradhara river and river banks which is facing a threat to the ecosystem, biodiversity and agrobiodiversity due to the construction of Hydro power project Dam.

Gundya and Kumaradhara rivers originate from Western Ghats and flow towards West Coast. These rivers are life line of the region of Puttur and Sullia Taluk (DK). It sustains thick vegetation on the bank and adjoining regions. Although agricultural activity is highest in these region since time immemorial.

The vegetation is evergreen to semievergreen, with formation of large number of small islands. The important tree species on the river banks are *Ochreinauclea missionis*, *Madhuca insignis*, *Hydnocarpus pentandra*, *Syzygium zeylanicum*, *Syzygium cumini*, *S. hemisphericum*, *S. claviflorum*, *S. gardenari*, *Trewia polycarpa*, *Madhuca longifolia*, *Calophyllum apetalum*, *Diospyros malabarica*, *Diospyros ferrea*, *Myristica malabarica*, *Knema attenuata*, *Sclecheria oleosa*, *Dillenia pentagyna*, *Strychnos nux vomica*, *Hopea ponga*, *H. parviflora*, *Flocourtia montana*, *Ficus sp.*, *Holigarna arnotiona*, *H. ferruginea*, *Ixora brachiata*, *Dysoxylon malabaricum*, *Blepharistemma membranifolia*, *Mallotus phillepensis* etc. The shrubs include *Psychotria dalzellis*, *Ardesia solanacea*, *Maesa indica*. Herbaceous flora includes *Psychotria flavide*, *Ophiorrhza hirsutla*, *Geophila repens*, *Torrenia sp.* Fernas like *Pteris vittata*, *Schizaea digitata*, *Blechnum orientale* etc.

List of threatened plants in the submerging area and adjoining areas of proposed project (Annexure I)

(Ref: IUCN- International Union of Conservation of Nature & Natural Resources & www.frlht.org)

Si. No	Plant species
1	<i>Myristica malabarica</i>
2	<i>Ochreinauclea missionis</i>
3	<i>Gymnacranthera farquhariana</i>
4	<i>Calophyllum apetalum</i>
5	<i>Madhuca insignis</i>
6	<i>Hydnocarpus pentandra</i>
7	<i>Syzygium travacoricum</i>

List of medicinal plants in the proposed project area (Annexure II)

Medicinal plants are the National Repository of medicine. These could be explored for the isolation of noval medicinal compounds. Due to the over exploitation of medicinal plants some medicinal plant species have already become endangered. Following medicinal plant species are endangered which occur in these areas.

Si. No.	Plant species
1	<i>Ochreinauclea missionis</i>
2	<i>Myristica malabarica</i>
3	<i>Calophyllum apetalum</i>
4	<i>Hydnocarpus pentandra</i>
5	<i>Garcinia indica</i>
6	<i>Garcinia gummigutta</i>
7	<i>Dysoxylon malabaricum</i>

8	<i>Diospyros ebenum</i>
9	<i>Crataeva magna</i>
10	<i>Elaeocarpus serratus</i>
11	<i>Entada pusaetha</i>
12	<i>Ficus microcarpa</i>
13	<i>Garcinia Morella</i>
14	<i>Madhuca longifolia</i>

Important facts to be considered

- The river banks of Gundya and Kumaradhara have large number of endemic plant species of western ghats (around 70 species)
- Exploration of area resulted in the existence of several endemic species which are new to Karnataka (Scientific papers enclosed)
- Area has good population of *Madhuca insignis* – a rediscovered species of W. Ghats after a gap of 120 years.
- *Helminthostachys zeylanicus* and *Schizaea digitata* are also occurs in this area where both plant species are very rare plant species.
- Adjoining area has many *Gymnacranthera* swamps which are fragile ecosystems of the world.
- Area has large number of medicinal plants and non timber forest product (NTFP) yielding plants.
- Every year lakhs of worth *Myristica malabarica* aril is collected
- There is large number of islands with unique type of vegetation.
- Conservation of naturally occurring (River banks and adjoining area) plant species is very essential since most of the plant species are under endangered and rare. Most of them are highly medicinal useful.

Conclusion

The proposed area of the project consists of large population of IUCN threatened category of Endemic threatened plants. However indepth studies regarding phonological behavior and regeneration capacity of the species is required. There is no base line data regarding the flora and fauna of the region. Since the whole area of the district is considered as Hot Spots due to the concentration of endemic elements. Many species of migrating birds, animals, fishes, microorganisms show dependence on these plant species. So any disturbance and destruction will harm the whole ecosystem including them.

Island effects: The specialty of Gundya and Kumaradhara river system is the existence of large number of small islands. These islands possess rare combinations of riparian flora. Any increase in the water level could destroy them permanently. These islands could be declared as Bird sanctuary and tourism can be promoted.

ANNEX 4: Submission against Kukke Stage I Project sent to Western Ghats Task Force, Government of Karnataka

Date 06-05-2012

To,
Chairman,
Western Ghats Task Force (WGTF)
Vidhana Soudha 3rd Floor Room No. 307
Bangalore

Sub: Conservation of vegetation of River banks of Gundya and Kumaradhara and adjoining area and request to Abandon the proposed Urumbi (Kunthoor, DK) hydro power project dam construction-reg

Respected Sir,

As mentioned above, Kukke Hydro Projects Private Limited Bangalore, (Greenco Private company, Hyderabad) has planned and processed to construct the dam with a name of '**Kukke Hydro Power Project**' across Kumaradhara River at **Urumbi located in Kunthoor Village, Puttur Taluk, DK**. As per the informations from the company, the water will be at 74 MSL and capacity of power production is 24 MW. The company has surveyed some areas and marked the submerging area but not completely. According to them the area with the height of 74.5mt MSL will be submerged. The survey has carried out with lot of opposition from the farmers and other people. There are many anti dam committees have been formed. Company has made agreement with some farmers to purchase the land. With this background, I would like to bring out the actual facts for your consideration and further action.

- The Gundya and Kumaradhara River flow in the middle of Western Ghats towards W coast in between large forest areas. Both the rivers join at Kudige (Beeranthadka, Kunthoor Village) and passes through Urumbi, Idala, Kuntiyana, Sharavuru, Shanthimogaru and Uppinangady. On either side it is covered by lush forest area and agriculture land. However, these rivers sustain good forest vegetation falling under the Jurisdiction of Panja Range Office (DK).
- The proposed hydropower project dam is located in Urumbi, Kunthoor Village (Puttur TQ) and lies between 75^o 24' to 75^o 27' longitude and 12^o 44' to 12^o46' latitude (Apporximately). Kunthoor extension reserve forest has an area of 900 hectares. It is an evergreen type and composed of large evergreen trees, lianas, shrubs, herbs, orchids and ferns with endemic and endangered with huge amount of medicinal plant species (Annexure -I).
- This region falls under Hot Spot of the Western Ghats. The preliminary study of this region has been carried out (Research Articles Shenoy and co workers attached -Annexure II)) and identified various economically important plant species which are under endangered and rare species categories (**IUCN- International Union of Conservation of Nature and Natural Resources**). Many plants are rediscovered. Many medicinal plants are endemic to this region. According to their studies, area comprises large timber yielding plant species (more than 100 years old), medicinal plants, wild spice species, wild fruit yielding plants and wild fiber yielding plants. Hence protection of the area is the need of the hour (Annexure II).
- **These areas have large number of sacred groves (Devara kadu), naga banas, sacred ponds with vegetations, temples and a few historical monuments. According to preliminary studies more than 25 sacred groves, above 50 nagabanas, around 10 sacred ponds have been identified. Hence preservation of this is very essential.**

- These rivers are also connected by many small streams which are covered by the vegetations of unique type. On either side of the river banks covered by the different species of bamboos. There are many islands in this region.
- These area has more than 500 families who depend only agriculture.
- Company has been submitted request letter to Kunthoor –perabe panchayat to obtain NOC and company has mentioned survey numbers 137/1A1, 138/P1, 184/5, 185/1, 185/5, 187/6, 187/7, 187/8 of kunthoor village & 272, 6/3, 2P, 6/1, 6/1P, 6/2P, 2P29, 2P30, 2P13, 2P14, 2P24, 2P25 of perabe village (Puttur Tq) only to undertake construction activities (Annexure-). But the submerging area will be more than 1000 acres including forest land, agricultural land etc of Puttur Taluk and Sullia Taluk.
- Also, Company has mentioned that the project comes under Western Ghats and the construction will be in the private land .But the river flows in the middle of western Ghats and many small streams joining the river. Due to the construction of the dam across the Kumaradhara river many forest land will be submerged and the valuable and endangered flora and fauna will be affected. However company has submitted false information in this regard to the respective departments.
- To get clear information about the biodiversity and socioeconomic factors of affecting areas in depth study is required because it is not possible to conclude from the preliminary study. If the company constructs the dam at Urumbi (Kunthoor) across Kumaradhara river, there will be a threat to many important plants of this region since many plant species are endemic, rare and endangered categories. Large forest and agriculture land will be submerged due to the construction of dam will permanently affect the ecosystem of the area.

- **Details available of the proposed power project**

Location of the Dam	: Urumbi, Kunthoor Village, Puttur TQ, DK
River name	: Kumaradhara
Company name and Add	: Kukke Hydro projects private Limited, Prestige meridian 2 No. 30, M G Road, Bangalore 560 001 (Copy enclosed)
Project name	: 24mw kukke stage 1 mini hydel scheme Hydro electric power Project
Water stored at	: 74 mt MSL
Capacity	: 24 MW
Affecting areas	: Places of Sullia & Puttur TQ (Kaniyoor , Pulikukku, Ullippu, Hosmata, Nadoli, Kemmathakutelu, Beeranthadka, Idala, Kuntyana, Keddote, Aenaje
Forest area	: Panja Range Forest (DK)

On behalf of affected people of this area my sincere appeal to take necessary action immediately to abandon the proposed hydropower project dam which affects the fragile ecosystem. Also you are requested to recommend for carrying out a detail study of the affecting area. The existence of large number of endemic, RET, New report to Karnataka Geographical area has been given in Annexure.

Thanking sir

Yours faithfully,

Date 12/05/2012

Dr. Rajesh B., Ph D (Botany)
Beeranthadka, Ballya, Kadaba Puttur Taluk
DK