To / Governor - G. Narain
/ CM - Dlrs.

Dear Sir,

At the outset we thank you for giving us an interview inspite of your busy schedule and on a holiday we are rushing to place before you a few points about the adverse affects on both the people as well as the district on ecological, financial and physical - as the series of hydro electric projects that are being envisaged in the North Kanara District.

This district is unique district. Out of the total area of 25,26,000 acres, 20 lakh acres was forest land. But 1973 survey reveals that it has been reduced to 53% and thereafter because of several schemes like hydel projects as well as Dams another works, 10% has been reduced and the real forest is only 43% now.

As you know, sir, Kali first stage is under completion and while it is under completion, the preliminary work on Kali Stage II and Bedthi known also as Gangavali River Project Ist stage is going on. Besides these, Gangavali Stage II known as Sounda-Pattanda Hole Hydro electric scheme, Aganashini River project and Sharavathi Tail Race and Kali IIIrd Stage are also being considered.

The completion of Kali Ist stage itself which is expected to produce about 800 MW electricity is estimated to cost Rs 250 crores. This has already submerged about 33,000 acres of forest, 47 villages and about 7000 acres of cultivable land and about 15000 people have been rendered homeless. The impact of the distruction of forest are already seen in the district. Kali IInd stage and Gangavali Stage first are each expected to submerge 25,000 acres of forest, besides valuable garden lands. Kali Stage II is expected to produce only 100 MW whereas Gangavali Stage I is expected to produce 250 MW. The estimated cost of these two projects are supposed to 150 crores each. Kali Stage III and Gangavali Stage II are expected to produce about 100 MW and 250 MW electricity and their cost is also expected to be Rs 150 crores each.

Aganashini project is expected to produce 400 MW electricity estimated to cost 300 crores. Besides, this Sar vathi tail race is expected to cost about Rs 70 crores is also being constructed. In all these projects minimum 10,000 hectres of forest under each project are expected to be submerged

Contd...2)

besides the valuable areca garden lands growing nor only areca, but pepper and cardamum. The Aganashini project would submerge about 30,000 acres of forest land and 3000 families would become homeless besides submerging 3000 acres of garden land and equal number of paddy lands. The cost of submerging of these lands and the cost of rehabilitation has not been added and if these are added it would be colossel figure.

The effect of these schemes which are in the belt of 20 to 30 miles radious has given rise to several doubts:

i) The garden lands which come under these belt would vanish. The effect would be that the annual income of corres of rupees including foreign exchange money would be lost.

ii) These garden lands cannot be cultivated/reared elsewhere outside the district as they require vallies and forest. The feature of forest from Palghat to Goa called Western Ghat is the same and it is the ever green forest and it has given shade not only to garden lands but also for other cultivation.

iii) The rehabilitation problem is not small. Firstly it is difficult to rehabilitate the people in an atmosphere which is alien to the present one. Secondly it is very difficult to get same climatic conditions and forest conditions elsewhere outside the district.

iv) The valuable forest land cannot be grown elsewhere as these forests are rain fed and natural forest and not man made forests. Valuable wood like teak, cidar, mathi, honne, jambe and sandle-wood are grown here. 24% of the total forest in the State is in North Kanara giving 42% of the forest income of the State. The amount of income from the district alone comes to Rs 15.00 crores. The cost of rearing one hectre of forest is estimated at Rs 25,000 requiring the period of 20 years and even if on an average of 10,000 hectre per project is taken, it means that to rear the equal area of forests would require Rs 25 crores and for 6 projects it will come to Rs 150 crores. But where shall we grow these forests? The climatic and the regional conditions are not elsewhere suitable to raise these ever green forests and hence it would be a dream to say that equivalent area of forest would be grown elsewhere.

v) Besides all these, the ecological effect on the district is appalling and the adverse effect that denudation of forest would produce on the district. These forests are the sourse of rainfall and water. It is these forests that have stopped

contd...3)

soil erosion. But removal of these forests would erode the soil, lessen the rainfall and lessening of water sources of the district. The cutting of the trees would remove the top soil and would render the soil barren. All the water would flow and would not be stored underground. These would cause flood and land slip.

vi) The slow and gradual removal of the ghat would cause untold misery to the people on both the sides i.e., it will affect the coastal people as well as the people on the ghats and the rivers that are flowing would find less and less water which would create more silt in the sea bed and it would also affect fish wealth of the district.

vii) The removal of the forest would mean more carbondioxide and lessening of oxigen which would polute the atmosphere and water. The removal of forest would distroy the wealth of flora and foura of the district. It is on admitted fact that tigres, bisons, chitas, deers, sambars and elephants were living in large numbers. But with th distruction of the forest the tribe is vanishing and with the removal of these rich forest whole tribe would vanish and this would imbalance the nature which would create complicated problems for the future of the district.

viii) All these projects coming in the same belt in a radious of 20 to 30 miles has given raise to doubt of earthquakes also as the pressure of water in the Dams would cause fissness and if Dams are burst the whole area of North Kanara would be flooded. It may also be added here that during question hour in the Lokashaba in 1974 the then Deputy Minister for Electricity conceded on the basis of Indian Geological Primary Survey this belt came in the 3rd stripe of earth-quake and there is every possibility of instance of Koya Dam being repeated here also. Besides cause Dam burst like Morvi in Gujrat.

ix) These projects, besides causing distruction of forest and valuable lands, would remove tourist attraction centres like Magond falls and Lucington falls and also remove the rare and valuable medicinal herbs that are grown in this forest. Besides several historical places like Sonda, Swarnavalli math and several temples of different sects would be submerged in the water.

We are told that ecological factors are yet to be considered in its full aspects and a State Level Committee is

contd...4)

yet to study the ecological effects of all these projects and safeguards are yet to be implemented.

No doubt the Government has taken it as an 'Implied clearance' which in fact is not as the committee wanted to know first the impact of Kali first stage on the ecological effect of the region. It is also found that the water of Kali taken recently has been found poluted as the cristal water has been turned into black water. And if all these river projects polute water of these rivers, we can just imagine the fate of the district and the people.

Therefore, we urge you, sir, to stop immediately the projects like Kali Stage II, and Gangavali Stage I and disband other projects. We are surprised that when the alternative sources of electricity could be produced in this modern age of technology like thermal projects which would become permanent assurance of electricity as well employment oriented whereas these hydel projects do not ensure regular production of electricity as water would be less and less year after year just like Saravathi, a series of hydel projects are envisaged in the district.

Therefore we urge you sir, to look urgently into the matter in the interest of the people of the district and order to stop the project work which would otherwise adversely affect the ecology of the district as well as concers the whole State.

With kind regards,

Yours sincerely

(Mrs. Anasuya Sharma)
M.L.A.,
President
The North Kanara District Anti-Hydel Project Committee
Sirsi

1-12-79
Bangalore

Subject:- Logging contract in Block XXIV- 1 P coupe No.20 Nidged of Siaaapur Range during 1983.84.

No. EXP/LGC/CR-5/ 1983.84.
Sirsi 2) 11.1983.

To

Shri J.L.Gaonkar, V
Forest Contractor, Sirsi (U.K.).

Sir,

In continuation of this office even No. dated 10.10.1983, I am to intimate you that the logging works entrusted to you shall have to be continued with sufficient progress of work from time to time, as per terms of the agreement. In case you find any obstruction from the members of the public under the garb of 'Chipko movement' you may seek Police assistance for smooth working.

Action taken by you should please be intimated to this office very early.

Yours faithfully,

21/11.
Deputy Conservator of Forests, Sirsi Dn.Sirsi

Copy to the R.F.O. Siaaapur for information and needful action to ~~assist/~~ insist upon the contractor to carry out the work sufficient speed.

ಕರ್ನಾಟಕ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಅಭಿವೃದ್ಧಿ ನಿಯಮಿತ
(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಉದ್ಯಮ)
KARNATAKA RENEWABLE ENERGY DEVELOPMENT LIMITED
(A Government of Karnataka Enterprise)
Coffee Board Building, No. 1, Dr. B.R. Ambedkar Veedhi, Bangalore - 560 001, INDIA
Tel : 2282220, 2282221, Fax : 080 - 2257399,
E-mail : kredl @ blr vsnl net. in

Ref: KRED/HDL/ROR/98-99/101.

PSF F12

To,

5th May, 1998

Mr. Pandurang Hegde
Sirsi

Sub : Gangavalli River Mini Hydro Projects

I wish to thank you for attending the meeting to discuss the proposed "run off the river" projects across Gangavalli river held at Karwar on April 6, 1998.

Please find enclosed answers to important questions raised at the above mentioned meeting, in the form of a letter addressed to The Aganashini Kolla Samrakshana Samiti.

You may like to know that I and my staff would be visiting the project area on 15th May followed with a public meeting on 16th May at Yellapur. The D.C. Karwar has consented to attend. Venue and time of the meeting would be made known through the local press.

Yours Faithfully,

(C.S. Vedant)
Managing Director

ಕರ್ನಾಟಕ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಅಭಿವೃದ್ಧಿ ನಿಯಮಿತ
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E-mail : kredl @ blr vsnl net in

KRED/HDL/ROR/98-99/180

May 25, 1998

PSK
F1

To:

MR. PANDURANG HEGDE
PARISARA SAMRAKSHANA KENDRA
CHOWKI MUTT
SIRSI

Sub: Gangavalli river small hydro projects.

Dear Sir,

Kindly refer to my letter of even number dated 6.5.1998. The public meeting on small hydro projects on Gangavalli-Bedthi river had to be postponed at the request of the local MLA and some prominent citizens. Now they have indicated that it would be convenient for them to meet Government representatives on June 2, 1998. Sri. Vishweshwara Hegde, MLA (Ankola) and leaders of Kolla Samrakshana Samithi have agreed to have the meeting on this date. The meeting would be held at Sankalpa in Yellapur on June 2, 1998 at 11 a.m. I would request you to kindly preside over this meeting.

Yours faithfully

(C.S. Vedant)
Managing Director.

ಕರ್ನಾಟಕ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಅಭಿವೃದ್ಧಿ ನಿಯಮಿತ
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E-mail : kredl @ blr vsnl net. in

No. KREDL/HDL/ROR/98-99/11

April 20, 199

The President
Aganashini Kolla Samrakhshana Samithi
Sirsi
Uttar Kannada District.

Sub : Run of the River small hydro power projects proposed on Bedthi-Gangavalli River

Sir,

This has reference to the meeting held with members of the public in Karwar on the proposed run of the river projects across Bedthi-Gangavalli river and the views expressed therein by the participants. At the outset I am grateful for the feedback we got from the meeting and I hope to be able to provide clarifications to the queries posed by the participants.

1. Procedure for allotment of small hydro projects to private entrepreneurs

Government have liberalised the policy of private sector participation in development of non-conventional energy based power projects. According to the new policy such power projects are exclusively set apart for private sector participation in development. Public sector can also participate in developing such projects but they would not necessarily get any preference. The private sector entrepreneurs have been allowed to propose projects on the basis of their own investigation of the potential and feasibility survey. Thus many small hydro, wind power, solar and biomass based power projects have been allotted or are in the process of allotment to private sector entrepreneurs on the basis of investigation and surveys carried out by them on their own. Some examples of such projects are cited here :

Small hydro projects

1. Dhupdal left bank canal	Gokak Mills, Dhupdal, Belgaum	0.425 MW
2. Hemavathi river bed (run of the river), Hassan	Sandur Manganese and Iron Ores	8 MW
3. Mundaje Hole (run of the river), D.K.	Trinetra Energy Conversions Ltd.	3 MW
4. Dhanagere Anekat, Mysore	Balaji Engineering Works Ltd.	2.5 MW

Wind power projects

1. Arasinagundi wind zone, Jagalur Taluk	M/s. Arul Mariamman Textiles Ltd.	15 MW
2. Bharamapura wind zone, Chitradurga	M/s. Enercon Ltd.	15 MW

Biomass based power projects

1. Malavalli biomass project	Malavalli taluk	3.35 MW
2. Ugar Sugar Works Ltd.	Ugar Khurd, Belgaum	30 MW
3. Godavari Sugar Works Ltd.	Sameerwadi, Mudhol Taluk	27 MW
4. Mysore Sugar Company	Mandya	24 MW
5. Bannari Amman Sugar Pvt. Ltd.	Nanjangud Taluk	11 MW

The allocation of the government is accorded on the basis of a pre-feasibility study conducted by the entrepreneurs establishing economic viability of the project. At this stage it is not necessary to ascertain whether local people are supportive of the project or not. After the allocation of the capacity to the entrepreneur, he is expected to take up a rigorous survey to determine the exact site for locating the project, ascertain the availability of land, evacuation arrangements required to remove the power from the power house, the alignments of roads and other infrastructure required for the project. The entrepreneur is also required to obtain all clearances from statutory authorities such as environment, forest, pollution control, highways, irrigation, electricity board, and in some cases post and telegraphs and airport authority. The project can not be implemented till these authorities grant the requisite clearance. The process of obtaining clearances from these authorities is time consuming and takes 1 to 3 years in an average small hydro project, 3 months to 2 years in the case of wind projects, 3 months to an year in the case of biomass based projects. There are any number of cases where a project after allotment has been found to be not viable upon detailed investigation and have been surrendered by the entrepreneurs. Some examples of such projects are cited below :

Small hydro projects :

1. Vrushabhavati valley, Bangalore	M/s. Vrushabhavati Power Co.	0.5 MW
2. Payasvini (run of the river), Chickamagalur	M/s. Thermit Alloy Ltd.	3 MW
3. Rajalu Bande, Raichur	M/s. Bommadevana Naik & Co.	1.4 MW
4. Bolle falls, Dakshina Kannada	M/s. Bhuwalka Steels Ltd.	4 MW

Wind power projects :

1. Kappattagudda	M/s. Subhadra Textiles Ltd.	2 MW

Thus you will appreciate that whether a project allotted to a private entrepreneur would ultimately come up or not is difficult to predict without a detailed survey. No entrepreneur will invest money, nor will it be available from any financial institution, if there is no guarantee on the returns.

2. Furnishing copies of MOU between government and the entrepreneur

The MOU signed between the government and the six allottees of the run of the river projects on Bedthi-Gangavalli are essentially similar in content and wording. Copies of the six MOUs are furnished.

3. Preparation of project report and executive summary etc.

It has been alleged that the promoters of the six projects have already conducted the requisite survey as evidenced by some of the documents seized from the survey parties which visited the field in January / February. I have obtained a copy of the document from the project promoter M/s. Canara Hydel Power (Pvt.) Ltd. This document is titled "The Gangavalli River Cascade Hydropower Development — Pre-feasibility study on Bairekoppa Hydropower Project ; Volume - 1 ; Executive Summary". Some of the calculations and figures in this report have created doubts in the minds of the people that the survey has already been done and the promoters are trying to only locate the dam site on the ground. This interpretation, I submit, is not correct. We have ascertained that the pre-feasibility report is based on hypothetical data collected purely from collateral documentation such as topographic map sheets, river flow data from

irrigation department etc. These documents are easily accessible to anybody. The height of weir etc. still has to be determined on the basis of detailed contour survey. The pre-feasibility report has been prepared to initiate the process of discussions with financial institutions. Even the financial institutions would not sanction a loan without a detailed project report. Approval of the detailed project report by KREDL is required before project implementation can start. Therefore I once again reiterate that preparation of this document is an internal exercise of the promoter to initiate financial negotiations and as such can not under any stretch of imagination be taken as a final project report. I request you not to be misled by scraps of incomplete information.

4. Coupling hydro generation with diesel generation

A question asked was that whether a diesel generating unit would be installed to generate power during the lean-flow period. In the proposed run of the river power projects it is not possible to connect the generator to a diesel engine to generate power during lean-flow period as hydro turbines are heavy and precision equipment which can not be frequently uncoupled and connected to diesel engine without permanently damaging the systems. As the generating company would be paying KEB over 14 % of the energy generated towards synchronising, wheeling and banking charges it is considered uneconomical to generate power by using diesel engine as a prime mover and transmit power over long distances (even KEB's Peenya diesel power plant is proving to be uneconomical though the power is to be used within the adjoining industrial area). Moreover the cost of transport of fuel oil etc. would further add to the diseconomies of the project rendering the project uneconomical from the very beginning.

5. Will there be shortage of drinking water?

We do appreciate your concern on this question. Run of the river projects do not envisage storage of water so as to generate power during lean-flow period. The weir to be constructed is only for the purpose of collecting water and leading it into penstock pipes. The height of the weir being lower than the high flood level of the river would not result in reduction in the flow of the river at any time of the year. There will be no consumptive use of water as there will be no diversion of water away from the main river course. After generation of power the water will flow back to the main river course. Hence there should be no apprehension in the minds of the people of the area that they would suffer drinking water shortages on account of the project. Further the flow in the river during the months of June, July, August, September is nearly 1299 cumecs while the penstock and turbine can only handle 500 cumecs of water to generate bulk of the power in an operational year. This is to say that less than half the river flow will go through the penstock for generation of power. The rest will flow directly over the weir.

6. Submersion of private and forest lands

As I have already pointed out the location of the weir and its maximum would depend upon the local topography and the high flood level. The top height of the weir would be necessarily below the high flood mark. These can be determined only after a detailed survey of the area. Since the weir height will be below the high flood mark there will be very little or no submersion of lands.

The alignment of the evacuation lines can be so designed to avoid forest areas as far as possible.

7. Arranging a visit of the people of Bedthi to a run of the river project

This is a welcome suggestions and we would get back to you on this as soon as details are worked out. You may like to send us a list of names and the period or the approximate dates when you would like this programme organised.

8. KREDL officers should visit the site to gain first hand information of the area

I look forward to visiting the area soon. I would like to assure you that as a forest officer I have great affinity for forest areas in the Western Ghats.

9. Future meetings should be held in the area so that local people can participate

This suggestion is fair and the next meeting would be arranged at a mutually convenient place.

10. Carrying capacity studies should be taken up in North Kanara district

This suggestion has been passed on to the Department of Forest, Ecology and Environment as they are more competent to do such studies.

11. GOI letter no. 14(7)-77 Env IA-I dated 16.10.1992

As per notification no. S.O. 60(E) dated 27.11.1994 (published in the Gazette of India, Extraordinary dated 27.1.1994 Pt. II, section 3(ii)) under the Environment (Protection) Act 1986 the requirement and procedure for seeking environmental clearance has been done away with for river valley projects including hydel power, major irrigation and their combination including flood control if the investment is less than Rs. 50 crore.

I hope all the important points raised by members of public have been answered. I would like to meet you and the local public soon to dispel any doubts and fears they may have.

Yours faithfully,

(C.S.Vedant)
Managing Director

PSK

NATURE LOVERS' CLUB - BELGAUM

Estd : 1985 Regd. No. : DR/SOR/55 84-85

ENVIRONMENT PROTECTION CELL

Biology Department, G. S. S. College, Belgaum.

F 12

Ref. No. ; ..... Date : 30/11/99

To,

SHRI Panduranga Hegde
Parisara Samarakshana kendra
Huli Mallige Building.
Chowkimath Road.
SIRSI – 581401

Sir,

SAVING MAHADAI VALLEY : BELGAUM DISTT, NORTH KARNATAKA

I am enclosing a copy of our preliminary study of the Mahadai river, its bio-richness and relevance, as it is being drawn into the grip of destruction and submergence due to latest Govt schemes.

We hope you will help us publicise this and ensure the schemes do not get operative.

Yours faithfully

Sardeshpande.

Lt Gen (Retd)
President
(SC Sardeshpande)
111/1/1-B, Changulewadi
Belgaum-590006
(Karnataka)
Tel- 0831 – 469728

SAVING MAHADAI VALLEY

Little known but queen of nature's bounty and beauty in her own right in the pristine evergreen forests of the Western Ghats in Belgaum District, North Karnataka, is the 80 odd Km. Long Mahadai river, originating near Degaon in Khanapur forests on the Eastern slopes of the Sahyadri crestline, looping eastward into an arc around the ridges before turning north, then west across the crest line into Goa to meet the Arabian sea near Panaji as Mandovi river, Goa's main waterway. Between the Malaprabha at Kankumbi in the north, Khanapur to the east, Anmod Ghat on the Goa highway in the South, and Molem – Madei sanctuaries across the crestline in Goa to the west the virgin Mahadai valley forests are ensconced in an area roughly 700 sq. Km.

It is a tiger corridor, bison resort, bear habitat, king cobra host and the only home in the world to Wroughton's Freetailed Bat (Otomops Wroughtoni) at Barapedi cave near Talewadi on the crestline. Barely a km. below it there are a series of rock cave amphitheatres, 1000 –1500 ft in height, descending vertically into the lower Mahadai loop, flanking its smaller tributaries arising on the crestline and rushing down into the basin. These are Krishnapur caves, one of the three homes to another rare bat, Taphozous Theobaldi in the whole of the country. The area is rich in flora and fauna; high in biodiversity, abundant in cane, bamboo, rosewood, matti and other hard timber, but low on high commercial value like teak etc. A general study carried out by Belgaum's Nature Lovers Club reveals the existence of more than 25 types of mammals, 15 of reptiles, 120 of birds, 30 of butterflies and moths and 100 of plants. A medicinal plant conservation park source has identified more than 170 types of medicinal plants.

It's richness in minerals like manganese, bauxite, copper and lime has been fortunately spared the looting spree because of difficult access. With nearly 2200 mm rain in a year the valley remains cut off for 4-5 months during monsoons. The thirty odd villages remain poor, backward, ill served, and neglected in the midst of regal forests.

Of about 13500 acres of thick forests in the loop alone nearly 2500 acres in Gavali, Bhimgad, Krishnapur and Amgaon are Malki (private) forests, another 2500 acres are Govt. lands and the remainder, 8500 acres, are reserved forests. There is no difference in the Malki and reserved forests, both are equally luxurious.

The origin of the Mahadai at Degaon is a plethora of over 30 streams from within the fan shaped surrounding hills, a beautiful spot of graceful peaks, luxurious forests and flat terraces of paddy fields at the bottom. The main tributaries of the Mahadai in the upper and middle catchment area, as one follows the flow, are Bhandura Nullah near Kongla, Singar, Doli, Kotni, Irti and Bail Nullahas on the right, and Pansera and Marduhalla Nullahs on the left near Krishnapur in the lower loop. The last two, Pansera and Marduhalla, rise on the crestline astride Talewadi and rush down on either side of the Barapedi cave within a Km each. North of the loop near Kankumbi, the catchment area of Malaprabha river, two potent streams, Kalsa and Surla, join east of Chorla and flow across the crestline as Surla river in Goa, emptying into lower Mahadai in Goa above Volpoi. Bhimgad, an old Maratha Fort, Poya Vajhar a water falls over a hundred feet, below Gavali, the rapids above and below the water falls, the Krishnapur rock caves mentioned earlier, the Bhimgad rocks, Surla waterfalls of a hundred feet, and the beautiful, thick forest cover varying between 50 to 60 percent as we trek the valley with high degrees of difficulty. Special mention needs be

are the treasures

made of the vertical rock cave amphitheatres of Krishnapur rising like gigantic walls astride gushing streams and erecting a wall curtain around Krishnapur east. These caves, extremely difficult of access, have remained untouched and as nature's tantalizingly challenging secret as well as safety to a large number floral and faunal species.

A street of about 20 or so huts makes up Degaon. Most other villages have a few more or less huts, close by at Jamgaon and Talewadi the creeping intrusion of mining, an extension of active mining in the adjoining Tinaighat range, has been brought to a halt through the din and noise created by environmentalist groups like NLC Belgaum, SPS Dharwad and a group of BNHS enthusiasts of Mumbai. Similar has been the case with illegal tree felling in Malki forests in violation of December 1996 Supreme Court Order. The main areas of illegal tree felling have been Gavali, Bhimgad and Krishnapur. Though the destruction has been largely contained the intent and spurt to tree cutting are provided by the people's poverty, backwardness and gullibility, with the timber contractors, forest officials, revenue authorities and the police exploiting the loose situation in cohoot. It took a few interested NGO's and some venturesome lovers like Prof. G.S. Kallur and wild-lifers like Kasbekar and Sant to shout from housetops at local forums and dash off communications to other NGO's, big and small, bureaucracy, politicians and other do-gooders. The response was less than modest, yet those few who put their shoulders to it took over a year to bring the destruction to a gradual halt.

Although mining and tree felling, the two earlier dangers have been overcome fairly successfully, a new threat in two forms has emerged, equally ominously. The first is the large scale monocultured plantations of acacia (Australian) and mangium not only in the heart of denuded/destroyed forests but also in the rich, apex, natural grasslands between forest expanses and over the plateaux, which dangerously disturbs the very bio-composition of the flora itself, and adversely affects the dependent fauna, particularly birds, bees and insects. The plantations in the close proximity of the sensitive Barapedi caves near Talewadi are too dangerous even to contemplate, as its occupant, the threatened Freetailed Bat, will suffer irreparably.

Secondly, more threatening, is the energetic resurrection of the Karanatak Government's old projects of diversion of Mahadai waters into the Malaprabha – at two places, near Kanakumbi (waters of Mahadai tributaries) and near Asoga above Khanapur (waters of Mahadai itself) to augment its irregation and drinking water capacity, and the rejuvenation of the Mahadai valley power projects. The government of Karnatak has lately been showing unusually determined interest in early completion of water diversion schemes, which have been hanging fire for more than a decade. In sum the Mahadai diversion scheme involves building six dams on the Mahadai and its tributaries and other streams near Kankumbi – Chorla to divert 9TMC of water into the Malaprabha, while the Mahadai Hydro-electric project plans to build another five dams on the tributaries, to produce 300 MW of power.
The main diversion dam on the Mahadai, known as Kotni dam, is also designed to produce power, apart from diverting 4 TMC of water into the Malaprabha above Khanapur. The remaining 5TMC of water is to be diverted into the area of Kanakumbi – Chorla. These dams are: one on Kalsa (below its confluence with Surla), one on Haltar Nullah, diverting its water into Kalsa reservoir near Chorla, and three small ones on Potli nullah above Kanakumbi (it meets the Tilari river in Maharastra), interconnected and led into Kalsa reservoir. Kalsa reservoir, cumulatively then, is diverted to Malaprabha through a tunnel

near Kankumbi. The water from the main Kotni dam is to be led through a 5.5 Km. tunnel to the Malaprabha at Asoga, near Khanapur.

These six diversion dams apparently involve 1.6 Km of dam length, 6.4 Km of tunnels through forested ridges, and 3.5 km of open channels as excavations, designed to divert 5 TMC of Haltar-Surla-Kalsa-Potni streams and another 4 TMC from the Mahadai itself into Malaprabha. Areas of submersion amount to 4300 acres of prime forests and 1000 acres of dry and wet agricultural land, while their catchment area is approximately 160 sq. km. Paradoxically this entire catchment area falls within the Mahadai catchment area, raising serious questions regarding the wisdom/feasibility/advantage of having a catchment area within a catchment area!

The second project is the Mahadai Hydro-electric Project, consisting of twin purpose Kotni dam on the Mahadai and one each on its tributaries Irti, Bail, Anderi on the right bank – all interconnected through tunnels, and Marduhlla and Panseeri on the left Bank, and going past Barapedi – Krishnapur caves within 1-2 kms of each, and one again on the Mahadai – tailrace-at Krishnapur. These tributaries will contribute another 400 acres of prestine forests to submergence.

Apart from submergence these forests will suffer destruction additionally because of construction of roads, bridges, storage parks, living and technical accommodation, dumps of construction material, movement of mechanical plants and labour and mushrooming of supporting/ sustaining needs like hotels, repair bases, transport facilities, commercial activities etc. It needs to be emphasized that within 20 –25 kms there will be as many as 11 dams and extensive excavation, blasting etc on account of tunnels and channels. The Mahadai valley will be virtually inundated with construction and human activities. And all this in the well known seismic area and the area already planned to be declared as ecologically sensitive zone, with Bhimgad Sanctury designed to come up as a pride of ecological security. The backwaters of Kotni dam will get up close to the Barapedi cave at a few km, in addition to the Panseeri and Marduhalla activities getting dangerously close.

Although rainfall on the crestline and its vicinity, according to geographers, has remained heavy, it has decidedly decreased as we move away eastward, Belgaum – Khanapur – Dharwad receive less rainfall. Rains have become erratic, irregular, uneven, with heavy dosages doled out farther east in the erstwhile drier areas of Bijapur, Bagalkot, Gulburga, Raichur wherein recent rains have been causing havoc. Agricultural needs, timber trade, commercial plantations in place of forests, and mining have taken a heavy toll of forests and forest cover, resulting in decreased rainfall on the eastern slopes, quick runn-off of rain water on and near the crest line, reducing its water arresting and retaining capacity. Subsoil water level has gone down as has soil fertility, soil erosion has increased, climatic cycle has been affected. This appears to be a trans- Western Ghat phenomenon. In particular, if one insists on example Malaprabha basin provides a potent pointer. Barely 10 km away from the Mahadai valley, separated by the Jamboti ridge the Malaprabha basin has witnessed marked deforestation, denudation, water scarcity and environmental deterioration within a span of 25 years when the Malaprabha dam was put in place. Since then it has filled to capacity only thrice, and its 9TMC water deficiency calculated in 70's when its left bank project was also taken up, seems to still linger on as a ghost-in –being over yet untouched Mahadai.

The strong cane and commercial crop lobbies and political – administrative lobbies of vote bank dictat want quick-fix results and advantages, unmindful of the long gestation- cum-manifestation period demanded by ecological and environmental responses and reactions. Ecological decay and disaster start manifesting after 10-15 years. The next generation then cannot put the clock back or roll back their parents' doing, will be forced to suffer, as Malaprabha is now suffering with its basin shorn of forest cover, its contents sucked out in the catchment area itself. Diversion of Mahadai waters is bound to suffer the same fate once the forests disappear by drowning or destruction. Which will be the river we choose to divert?

Diverting waters from one river to another is not the answer therefore. Regeneration of destroyed, denuded, degraded forests and increasing the forest cover is. It is probably a pity that such mundane, simple, painstaking and patient thought and action remain sidelined, unanalyzed and unexamined for their employment potential, peoples' participation, public awareness and environmental health. Lobby pressures relegate public weal in the long run, or are given a veneer of public interest, often deceptively.

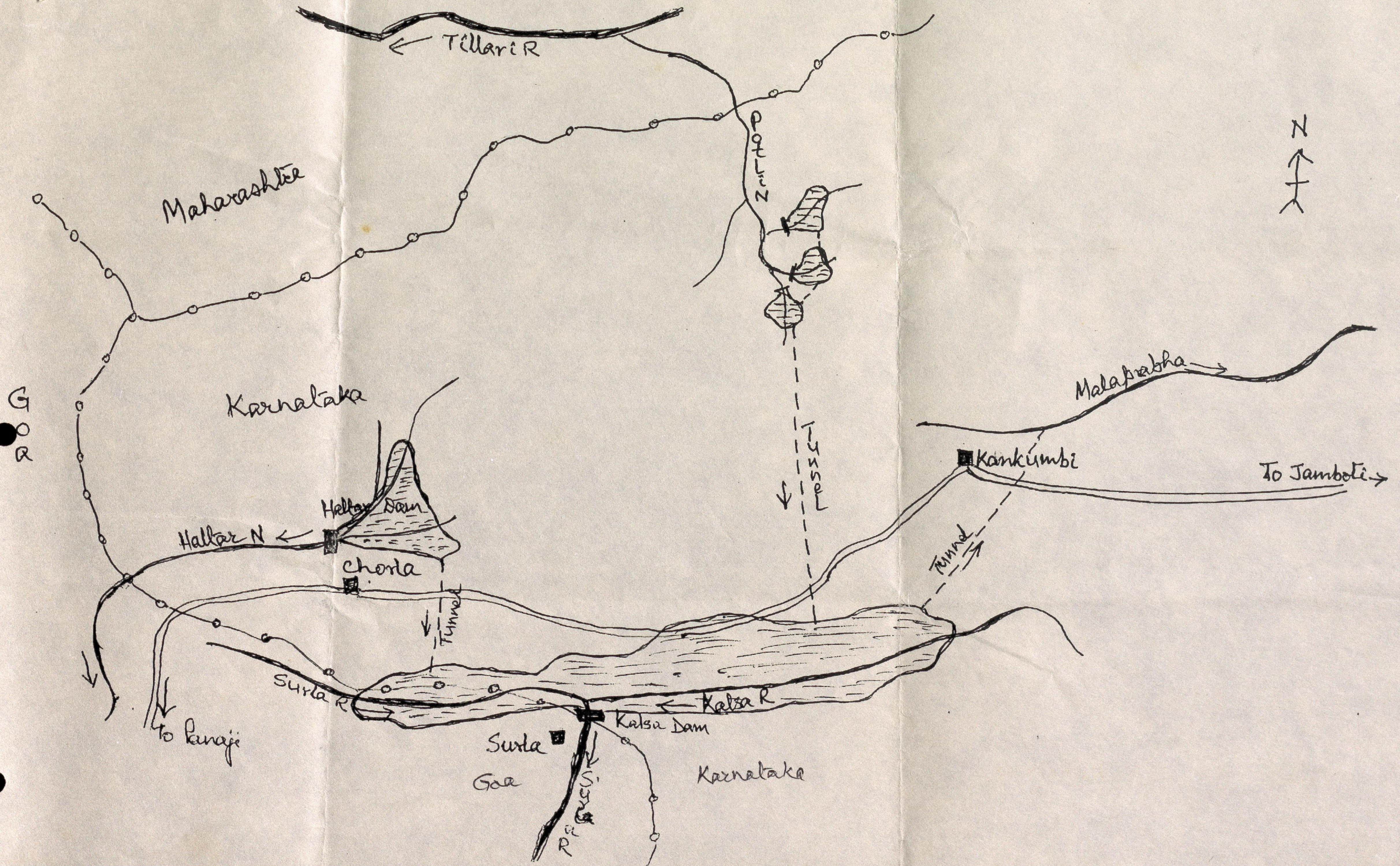
Quick and rapid results take precedence over the dangers of longterm environmental losses which simply cannot be recouped, replaced or reappropriated, leaving people to suffer, while their chosen representatives and their bureaucratic accomplices prosper.

Maharastra has virtually lost its Western Ghat forests, barring some feeble remnants in South Kolhapur and Savantwadi tracts. Goa gyrates on the Mahadai (Mandovi) for its life, waterway, estuary produce, and paddy and prawn cultivation of its wetlands. It can hardly feel comfortable with an arrangement where Karnataka retains and controls all dams and diverts portions of Mahadai waters in return for some wattage of power. Every variation in Mahadai level will be crucial for Goa's ecology, transportation, agriculture and marine produce.

Whatever the arrangement to garner the huge monsoon runoffs in the Ghats streams and their catchment areas, it should not affect or disturb the forests, the ecology and environment, and suffer the mortification of submitting to political expediency, commercial lobbying, financial grab and quickfix solutions. Regeneration of degraded/denuded/destroyed forests and extending forest cover to wider areas are a viability and a rational answer – economy-wise, employment-wise and environment-wise. In this effort what needs to be definitely excluded is the monocultured plantations and commercial greenery of Australian acacia and Mangium and other such misfit varities, under which nothing grows and over which nothing sits.

This request in sequel, and in all earnestness is to help save the Mahadai valley from destruction, submergence and denudation, and preserve its gift of ecology and environmental balance.

S. C. Sardeshpande
Lt. Gen. (Retd)
Chouglewadi,
Belgaum 590 006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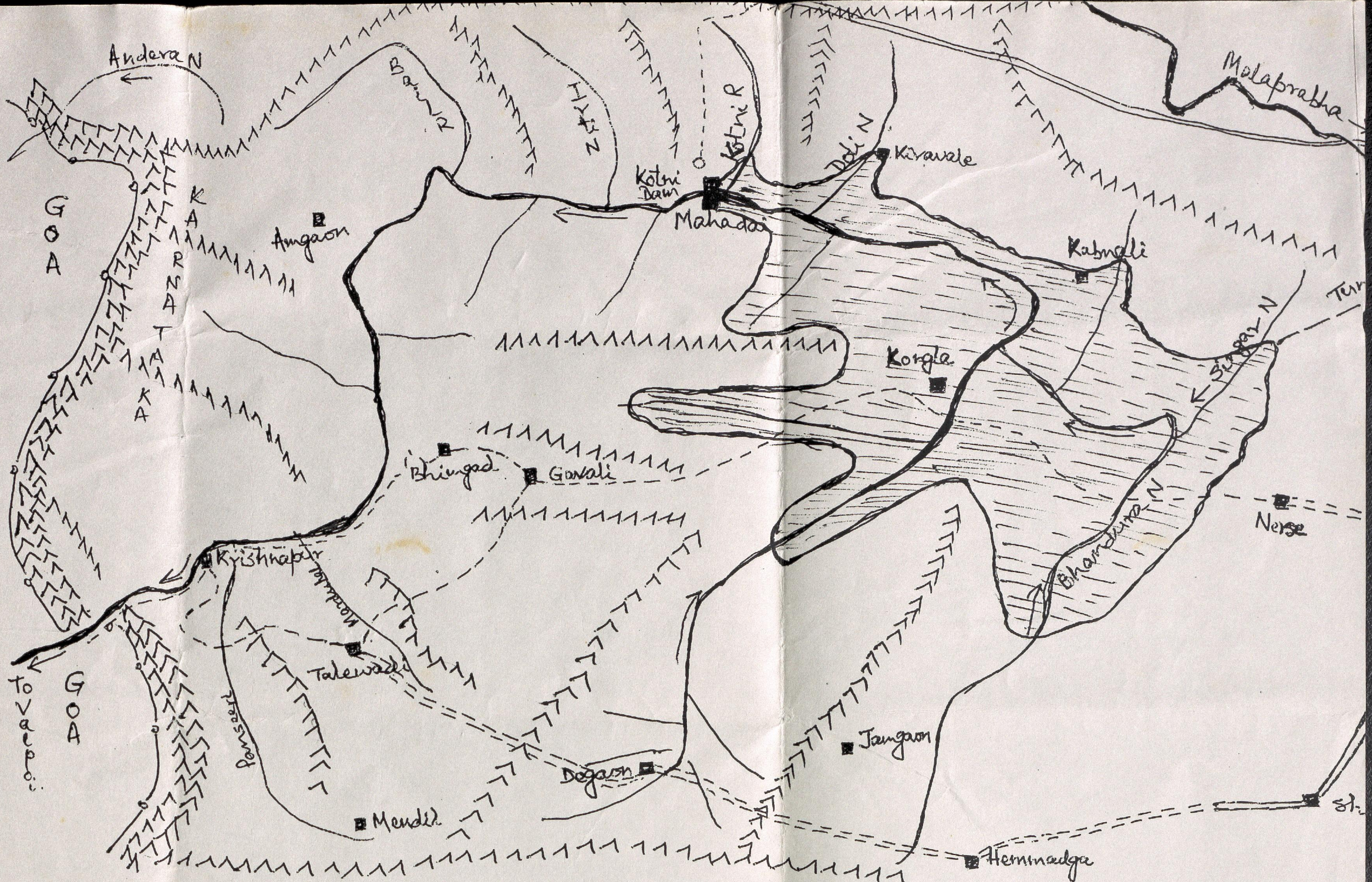
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