

No.Z.11011/19/82-IA.

तार :

Telegram : PARYAVARAN,  
NEW DELHI

दूरभाष :

Telephone : 4360478

टेलिक्स :

Telex : W-66185 DOE IN

FAX : 4360678

भारत सरकार

पर्यावरण एवं वन मंत्रालय

GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

पर्यावरण भवन, सी. जी. ओ. कॉम्प्लेक्स

PARYAVARAN BHAWAN, C.G.O. COMPLEX

लोदी रोड, नई दिल्ली-110003

LODI ROAD, NEW DELHI-110003

June 8, 1994.

To

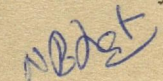
Shri Debroy,  
Former Director,  
Manas Project,  
B-4/V-24, Lodi Road Complex,  
New Delhi-110003.

**Subject :** Constitution of a Multi-disciplinary Committee for environmental investigations of Sankosh Multi-purpose project.

Sir,

This has a reference to our earlier communication of even number dated 3rd March, 1994 regarding the above subject. Due to various reasons, the Project could not be visited so far and now it is proposed to undertake the visit in the middle of July, 1994 in consultation with the Project officials. We have already written to the Chief Engineer concerned to finalise the schedule. On receipt of confirmation from the project officials, the visit schedule will be communicated.

Yours faithfully,



(Nalini Bhat)  
Joint Director

No.Z.11011/1-a/82-IA.I.

तार :

Telegram : PARYAVARAN.  
NEW DELHI

दूरभाष :

Telephone : 4360478

टेलिक्स (द्विभाषीय) :

Telex : (bi-lingual) : W-66185 DOE IN

Fax : 4360678

भारत सरकार

पर्यावरण एवं वन मंत्रालय

GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

पर्यावरण भवन, सी. जी. ओ. कॉम्प्लेक्स

PARYAVARAN BHAWAN, C.G.O. COMPLEX

लोदी रोड, नई दिल्ली-110003

LODHI ROAD, NEW DELHI-110003

March 30, 1995.

To

Shri Deb Roy,  
Former Additional Inspector General of Forests (WL),  
B-4/V-24, Lodi Road Complex,  
New Delhi-110003.

**Subject :** Field Visit of the Multi-disciplinary Committee for environmental investigations of Sankosh Multi-purpose Project, West Bengal.

Sir,

You may kindly recall that a Multi-disciplinary Committee for Environmental Investigations of Sankosh Multi-purpose Project was constituted in March, 1994 to prepare the environmental status report of the region. Due to various reasons, the field visit could not be arranged so far. The Project Authorities have now given the programme of visit and also the route to be undertaken for the inspection (copy enclosed).

2. Keeping in view that fair weather would be available for inspection only upto the first week of May, it is proposed to undertake the visit from April 25-30, 1995. The Chief Engineer has been requested to make necessary arrangements for stay and transport of the Members during the visit. May I request you, therefore, kindly to intimate your tour programme to the Chief Engineer on the following address under intimation to us.

Shri M. Gopalakrishnan,  
Chief Engineer (NER),  
Central Water Commission,  
North Eastern Regional Office,  
"Jamir Mansion", Nongahilliang,  
Shillong-793014.

Tel.No. 226891 (O), 230107(R)

3. We have also requested the Chief Engineer to circulate a brief note on the project including the Index Map for your perusal.

Yours faithfully,

(Nalini Bhat)  
Additional Director

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Programme of Visit of Multi-Disiplinary Team to Sankosh Project

- DAY 1** : Members of team from Delhi arrive at Bagdogra airport from New Delhi. Other members from Calcutta/ Guwahati could either meet the team at Bagdogra airport or New Alipurduar Rly. station. On intimation they will be received and road journey arrangements will be made to Phuntsholing.
- Halt of team at Phuntsholing.
- DAY 2** : By road from Phuntsholing to Kerabari. Visit to Dam site, sites for appurtenant works and halt at Kerabari.
- DAY 3** : By road from Kerabari to Kalikhola to lift dam site. Inspection of proposed canal alignment from Sankosh to Torsa. Halt at Alipurduar.
- DAY 4** : By road to inspect canal alignment between Torsa and Teesta. Discussions at Jalpaiguri with West Bengal officials.
- DAY 5** : Siliguri to Bagdogra by road and return to New Delhi by Air. Other members from Calcutta/Guwahati can disperse at Siliguri/New Alipurduar, as convenient.

**Note:** The itenrary involves 2 nights halt in Bhutan and 2 nights halt in Indian Territory.

Report about the Sankosh Project.

in ~~an~~ extremely hurried visit of 3 days, it is not possible to give a composite analysis of the situation



# ALIPURDUAR NATURE CLUB

Registered Under Societies Registration No. S/70669 of 92-93

NEWTOWN, P. O. ALIPURDUAR COURT ; DIST JALPAIGURI

West Bengal

Pin—736 122

Phone—55064 (P.P.) / 56077 (P.P.)

Ref. No. ANC/025/97-98

Date...02.09.97.....

To,  
Mr. Sanjoy Deb Roy  
Nodal Officer  
Global Tiger Petrol  
A/16, Shaumar Apartment  
South Extension, Plaza- 209  
Masjid Math  
New Delhi- 49.

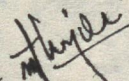
Dear Sir,

Enclosed please find herewith the copy of Fax Memorandum to the Prime-Minister Govt. of India and others. This is in connection with Proposed SANKOSH TO TISTA ACNAL that will pass through 4(four) wildlife Reserve of North Bengal.

You are requested to do needful to restrain the project.

Awaiting your early reaction.  
with regards,

sincerely yours,

  
(MANIK ACHARJEE)  
Secretary



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West Bengal

Pin-736 122

Phone-55064 (P.P.) / 56077 (P.P.)

Ref. No. ANC/004/97-98

Date. 19-08-1997.....

To  
The Honourable Prime Minister,  
Govt. of India  
3, Race Course Road  
New Delhi - 11  
Fax No. 301 6857

Sub.: The Proposed Sankosh To Tista Canal.

Respected Sir,

In pursuance of our letter No.ANC/046(2)/95-96 dated 11th March, 1996 addressed to Shri P.V.Narasiha Rao, the then Prime Minister, we to draw your kind attention to the fact that, we, the environmentalists of the (almost all the NGOs), are vehemently against the proposed Canal which will devastated this area. The 290 metre Canal will destroy 1145.16 hectares of Forest, 936.18 hectares of Tea Gardens, 342.52 hectares of Agricultural Land, 150.17 hectares of Non-Agricultural Land and a total of 21,500 peoples will be directly affected. It will also affect Buxa Tiger Reserve, Jaldapara Wildlife Sanctuary, Garumara Wildlife Sanctuary and part of Mahananda Wildlife Sanctuary.

We on behalf of Nature lovers and Environment-conscious citizen of India humbly beg your kind attention to the destructive consequence of the proposed excavation of this Giant Canal which would obviously cause a serious and unprecedented threat to the Wild lives as well as the Ecological balance of Bengal-Duars Region and the whole of North Bengal as well. The irrigation facilities derived out of the long Canal between river Sankosh to Tista can not be able to legitimise long felt Ecological Balance in this Region.

Now as the matter not get attention despite Official of Buxa Tiger Reserve Authority and NGOs of North Bengal with lots of media coverages during Nov.1996 to June,1997. We find no way left for us to Save the Region the Proposed 'Eco-Killer Canal' in the form of a serious peoples movement throughout North Bengal against the Government of India within a very short time.

Contd. Page 2.



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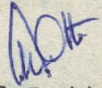
Date.....

Page-2

Hope you would act considerably and take all necessary steps to stop the said Canal Excavation through this Region in the interest of the future of the people and oblige.

With high regards,

Yours faithfully,

  
( Amal Dutta )  
CHAIRMAN

Copy forwarded for information and take necessary action.:

1. The Chief Minister,  
Govt. of West Bengal.  
Writers Building, Calcutta-1
2. The Minister-in-Charge,  
Deptt. of Environment and Forest  
Govt. of India.
3. All NGOs in India.

# उत्तर बंगाल की परिवेश विध्वंसक संकोश नहर परियोजना को रद्द कराने की मांग के आन्दोलन में शामिल होइए

महाशय,

फरक्का में गंगाजल के परिमाण को बढ़ाकर सूखे के मौसम में बंगलादेश को ४० हजार क्युसेक पानी देने एवं सुखे चुके कलकत्ता बन्दरगाह की गहराई बढ़ाने के लिए उत्तर बंगाल की पूर्व सीमा क्षेत्र की संकोश नदी से तिस्ता नदी तक एक नहर काटा जायेगा एवं बाद में महानन्दा नहर के माध्यम से फरक्का के निकट गंगा में उस जल को पहुँचाया जायेगा। इसी परियोजना को संकोश परियोजना कहा गया है। उपरोक्त तथ्य विभिन्न पत्र-पत्रिकाओं एवं खबर के जरिये अब और किसी से छिपा नहीं है।

वाटर एन्ड पावर कन्सलटेन्सी सर्वीस की एक समीक्षा रिपोर्ट के अनुसार 200 मीटर चौड़े एवं करीब 200 किलोमीटर लम्बे इस संकोश नहर परियोजना के सम्पन्न होने से उत्तर बंगाल की 1144.16 हेक्टेयर बनभूमि, 936.18 हेक्टेयर चाय बगान, 342.52 हेक्टेयर कृषि भूमि 150.17 हेक्टेयर गैर आवासीय जमीन नष्ट हो जायेगा। इससे करीब 22 हजार लोग प्रत्यक्ष रूप से क्षतिग्रस्त होंगे। देश की जीव-जन्तुओं के विचित्रता के लिये प्रसिद्ध बक्सा बाघ परियोजना, जलदापाड़ा अभयारण, गोरुमारा राष्ट्रीय उद्यान की बनभूमि को ध्वंस कर इस नहर के काटे जाने के विरुद्ध इस बीच विशिष्ट पर्यावरण एवं विशेषज्ञों ने आपना विचार भी प्रकट कर दिया है। उत्तर बंगाल के विभिन्न प्रकृतिप्रेमी एवं स्वेच्छासेवी संगठन इस मामले में उनके विचार से एकमत हैं कि इन तीनों इलाके से होकर अगर नहर की खुदाई की गई तो उत्तर बंगाल एवं देश की प्रधान सम्पदा “प्राकृतिक वनभूमि” बुरी तरह से क्षतिग्रस्त एवं नष्ट हो जायेगी। उत्तर बंगाल की विचित्र प्राकृतिक परिवेश ध्वंस के कगार पर चल जायेगी। प्रत्येक वर्ष लगातार बाढ़ आयेगी अथवा सुखा होगा। मूल्यवान वन सम्पदा जिस तरह से ध्वंस होगा वही जंगलो के जानवर एवं अन्यान्य प्राणी अपना निवास स्थल छोड़ने के लिये बाध्य हो जायेंगे। उत्तर बंगाल की विचित्र प्राकृतिक परिवेश एवं ऋतुओं का संतुलन गड़बड़ा जायेगा एवं यँहा की निर्मल परिवेश दूषित हो जायेगी।

इस परियोजना को रद्द करने की मांग को लेकर विभिन्न संगठनों की ओर से लम्बे अरसे से केन्द्र एवं राज्य सरकार से आवेदन किया गया, परन्तु कोई लाभ नहीं हुआ, बल्कि इस परियोजना को द्रुत सम्पन्न कराने के लिये केन्द्र एवं राज्य सरकार आपना प्रयास बरकरार रखा है।

संकोश परियोजना को रद्द करने के लिये उत्तर बंगाल के अपार जन समुहों एवं संगठनों को मिलकर बृहत्तर आन्दोलन संगठित करने के सिवाय और कोई विकल्प नहीं है।

राज्य की सबसे बड़ी परिवेश विध्वंसक संकोश परियोजना को रद्द करने की मांग में उत्तर बंगाल की 32 संगठनों ने एक साथ आन्दोलन के प्रथम चरण में जनमत तैयार करने के लिये आगामी २४ अगष्ट से २८ अगष्ट तक संकोश से सिलिगुड़ी तक साइकिल रैली का आयोजन किया है।

उत्तर बंगाल तथा राज्य की परिवेश रक्षा के इस आन्दोलन में आपकी हिस्सेदारी, सहयोग, सहायता, एवं विचार आन्दोलन को सफल करेगा--ऐसा हमलोगों का दृढ़ विश्वास है।

धन्यवाद सहित --

विनीत --

शक्ति संघ (संकोश बीज), अमर संघ (बारभिषा), इयं स्टार क्लब (बारोभिषा), दिशारी क्लब (बारभिषा), प्रत्युषा कलचरल युनिट (बारभिषा), बसुन्धरा (सलसलाबारी), आलिपुरद्वार नेचर क्लब, रोभर्स एन्ड माउन्टेनीयर्स क्लब (आलिपुरद्वार), आलिपुरद्वार वेलफेयर अर्गनाइजेशन, आलिपुरद्वार जंशन वेलफेयर अर्गनाइजेशन, आलिपुरद्वार चेम्बार् अफ कर्मास एन्ड इन्डास्ट्रीज, आलिपुरद्वार ब्यवसायी समिति, आलिपुरद्वार कन्जुमार प्रोटेक्शन फोरम, रोटाराक्ट क्लब अथवा आलिपुरद्वार, नेचर एन्ड एडभेन्चर स्टाडी ग्रुप (कूचबिहार), युरो क्लब (कूचबिहार), टोटो कल्याण समिति (टोटोपाड़ा), नेसपन (बानारहाट), डियर (बानारहाट), नागराकाटा वेलफेयर अर्गनाइजेशन, लाटागुड़ी सोसाल वेलफेयर अर्गनाइजेशन, मालबाजार सोसाल वेलफेयर अर्गनाइजेशन, जलपाइगुड़ी वेलफेयर अर्गनाइजेशन, सायन्स एन्ड नेचर क्लब (जलपाइगुड़ी), नेचर एन्ड ट्रेकर्स क्लब (जलपाइगुड़ी), सिलिगुड़ी वेलफेयर अर्गनाइजेशन, नर्थ बंगाल एक्सप्लोरर्स क्लब (सिलिगुड़ी), ग्रीन एनम्पायरगमेन्ट प्रिजारभेसन सोसइटी (सिलिगुड़ी), स्काइ वाचार्स एसोसिएसन अथवा नर्थ बंगाल (सिलिगुड़ी), सिलिगुड़ी फोटोग्राफिक सोसाइटी, हिमालयान नेचर एन्ड एडभेन्चर फाउन्डेशन (सिलिगुड़ी), नक्सालबाड़ी बिज्ञान क्लब ।

उपरोक्त संगठनसमूह के पक्ष में युग्म आह्वायक अनिमेष बसु एवं अमल दत्त द्वारा प्रकाशित एवं लिखनी प्रेस, सिलिगुड़ी से मुद्रित।

# উত্তরবঙ্গের পরিবেশ ধ্বংসকারী সঙ্কোশ খাল প্রকল্প বাতিলের দাবীতে আন্দোলনে সামিল হোন।

সুধী,

ফারাক্কায় গঙ্গার জলের পরিমান বাড়িয়ে সুখা মরসুমে বাংলাদেশকে ৪০ হাজার কিউসেক জল দেওয়া এবং শুকিয়ে আসা কলকাতা বন্দরের নাব্যতা বাড়াতে উত্তরবঙ্গের পূর্ব সীমান্তবর্তী সঙ্কোশ নদী থেকে তিস্তা নদী পর্যন্ত একটি খাল কাটা হবে এবং পরবর্তীতে মহানন্দা খালের মাধ্যমে ফারাক্কায় কাছে গঙ্গায় সেই জল নিয়ে ফেলা হবে। এই প্রকল্পকে সঙ্কোশ প্রকল্প হিসাবে চিহ্নিত করা হয়েছে। উপরোক্ত তথ্য বিভিন্ন পত্র-পত্রিকা ও সংবাদ মাধ্যমের মারফত এখন আর কারো কাছে অজানা নেই।

ওয়াটার এণ্ড পাওয়ার কনসালটেন্সি সার্ভিসের এক সমীক্ষার রিপোর্ট অনুযায়ী ২০০ মিটার চওড়া ও প্রায় ২০০ কিলোমিটার লম্বা এই সঙ্কোশ খাল প্রকল্প বাস্তবায়িত হলে নষ্ট হবে উত্তরবঙ্গের ১১৪৪.১৬ হেক্টর বনভূমি, ৯৩৬.১৮ হেক্টর চা বাগান, ৩৪২.৫২ হেক্টর কৃষিজমি এবং ১৫০.১৭ হেক্টর অনাবাদী জমি। প্রত্যক্ষভাবে ক্ষতিগ্রস্ত হবেন প্রায় ২২ হাজার মানুষ।

দেশের অন্যতম জৈব-বৈচিত্র্যের আধার তিনটি বনভূমি — বঙ্গা ব্যাঘ্র প্রকল্প, জলদাপাড়া অভয়ারণ্য এবং গরুমারা জাতীয় উদ্যানের বনভূমি ধ্বংস করে এই খাল কাটার প্রয়াসের বিরুদ্ধে ইতিমধ্যেই বিশিষ্ট পরিবেশবিদ ও বিশেষজ্ঞরা তাঁদের মতামত ব্যক্ত করেছেন। উত্তরবঙ্গের বিভিন্ন প্রকৃতিপ্রেমী ও স্বচ্ছাসেবী সংগঠন এ ব্যাপারে তাঁদের সঙ্গে একমত যে এই বিশালাকায় রক্ষুসে খাল কাটা হলে উত্তরবঙ্গ তথা দেশের প্রধান সম্পদ 'প্রাকৃতিক বনভূমি' দারুণভাবে ক্ষতিগ্রস্ত ও বিনষ্ট হবে। উত্তরবঙ্গের বৈচিত্রময় প্রাকৃতিক পরিবেশ ধ্বংসের মুখে গিয়ে দাঁড়াবে। প্রতি বছর ধারাবাহিকভাবে হয় বন্যা না হয় খরা হবে। অমূল্য বনসম্পদ যেমন ধ্বংস হবে, একই সঙ্গে বন্যপ্রাণীরা তাদের বাসস্থান ছাড়তে বাধ্য হবে। ভেঙ্গে পড়বে উত্তরবঙ্গের বৈচিত্রময় প্রাকৃতিক ভারসাম্য তথা বাস্তুরীতি। দূষিত হয়ে পড়বে উত্তরবঙ্গের নির্মল পরিবেশ।

উপরোক্ত প্রকল্প বাতিলের দাবীতে বিভিন্ন সংস্থার পক্ষ থেকে দীর্ঘদিন যাবৎ রাজ্য ও কেন্দ্রীয় সরকারের কাছে দাবী জানিয়েও কোন ইতিবাচক ফল মেলেনি। বরং এই প্রকল্পের কাজ ত্বরান্বিত করতে কেন্দ্র ও রাজ্য সরকার উদ্যোগ বজায় রেখেছেন।

সঙ্কোশ প্রকল্প বাতিলের দাবীতে উত্তরবঙ্গের আপামর জনসাধারণ ও সংগঠনগুলি মিলে বৃহত্তর আন্দোলন গড়ে তোলা ছাড়া কোন বিকল্প নেই। রাজ্যের সবচেয়ে বড় পরিবেশ ধ্বংসকারী সঙ্কোশ প্রকল্প বাতিলের দাবীতে উত্তরবঙ্গের ৩২ টি সংগঠনের মিলিত উদ্যোগে আন্দোলনের প্রথম পর্যায়ে জনমত গড়ার লক্ষ্যে সঙ্কোশ থেকে শিলিগুড়ি পর্যন্ত এক সাইকেল র্যালির আয়োজন করা হয়েছে আগামী ২৪ থেকে ২৮ আগস্ট পর্যন্ত।

উত্তরবঙ্গ তথা রাজ্যের পরিবেশ রক্ষার এই আন্দোলনে আপনার অংশগ্রহণ, সহযোগিতা ও সাহায্য ও মতামত আন্দোলনের সাফল্য আনবে, এটা আমাদের দৃঢ় বিশ্বাস।

ধন্যবাদসহ,

বিনীত—

শক্তি সংঘ (সঙ্কোশ ব্রীজ), অমর সংঘ (বারভিষা), ইয়ং স্টার ক্লাব (বারভিষা), দিশারী ক্লাব (বারভিষা), প্রতুষা কালচারাল ইউনিট (বারভিষা) বসুন্ধরা (সলসলাবাড়ি), আলিপুরদুয়ার নেচার ক্লাব, রোভার্স এণ্ড মাউন্টেনয়ার্স ক্লাব (আলিপুরদুয়ার), আলিপুরদুয়ার ওয়েলফেয়ার অর্গানাইজেশন, আলিপুরদুয়ার জংশন ওয়েলফেয়ার অর্গানাইজেশন, আলিপুরদুয়ার চেম্বার্স অব কমার্স এণ্ড ইণ্ডাস্ট্রিজ, আলিপুরদুয়ার ব্যবসায়ী সমিতি, আলিপুরদুয়ার কনজুমার প্রটেক্শন ফোরাম, রোটোরায়াল ক্লাব অব আলিপুরদুয়ার, নেচার এণ্ড অ্যাডভেঞ্চার স্টাডি গ্রুপ (কোচবিহার), ইউরো ক্লাব (কোচবিহার) টোটো কল্যান সমিতি (টোটোপাড়া), নেসপন (বানারহাট), ডিম্বার (বানারহাট), নাগরাকাটা ওয়েলফেয়ার অর্গানাইজেশন, লাটাগুড়ি স্যোসাল ওয়েলফেয়ার অর্গানাইজেশন, মালবাজার স্যোসাল ওয়েলফেয়ার অর্গানাইজেশন, জলপাইগুড়ি ওয়েলফেয়ার অর্গানাইজেশন, সায়েঙ্গ এণ্ড নেচার ক্লাব (জলপাইগুড়ি), নেচার এণ্ড ট্রেকার্স ক্লাব (জলপাইগুড়ি), শিলিগুড়ি ওয়েলফেয়ার অর্গানাইজেশন, নর্থ বেঙ্গল এক্সপ্লোরার্স ক্লাব (শিলিগুড়ি), গ্রীন এনভায়রনমেন্ট প্রিজার্ভেশন সোসাইটি (শিলিগুড়ি), স্কাই ওয়াচার্স অ্যাসোসিয়েশন অফ নর্থ বেঙ্গল (শিলিগুড়ি), শিলিগুড়ি ফটোগ্রাফিক সোসাইটি (শিলিগুড়ি), হিমালয়ান নেচার এণ্ড অ্যাডভেঞ্চার ফাউণ্ডেশন (শিলিগুড়ি), নকশালবাড়ি বিজ্ঞান ক্লাব।

উপরোক্ত সংগঠনগুলির পক্ষে যুগ্ম আহ্বায়ক অনিমেস বসু ও অমল দত্ত কর্তৃক প্রকাশিত ও লিখনী প্রেস শিলিগুড়ি হইতে মুদ্রিত।

# বন্দে মাতরম আনন্দবাজার পত্রিকা

৭৬ বর্ষ ১৩৮ সংখ্যা বুধবার ১৪ আগস্ট ১৯০৪

## জল চুক্তিতে ফিডার ক্যানেলের ক্ষতি, মানলেন কেন্দ্রীয় মন্ত্রী

স্টাফ রিপোর্টার, নয়াদিল্লি, ২৯ জুলাই—বাংলাদেশের সঙ্গে গঙ্গাজল চুক্তির ফলে ফরাঙ্কার ফিডার ক্যানেল ক্ষতিগ্রস্ত হতে পারে বলে কেন্দ্রীয় জলসম্পদমন্ত্রী শিসরাম ওলা স্বীকার করেছেন। ক্যানেলের বড়ধরনের কোনও ক্ষতি যাতে না হয়, সেই জন্য ভারত চুক্তিতে কিছুটা রদবদল চায়। ওলা জানিয়েছেন, বাংলাদেশের সঙ্গে এ নিয়ে আলোচনা হয়েছে। বিষয়টি নিয়ে উচ্চ পর্যায়ে আলোচনার জন্য দুই সরকারই রাজি হয়েছেন। গত বছর ডিসেম্বরে গঙ্গাজল চুক্তি হওয়ার পর এই প্রথম কেন্দ্রীয় স্তরে ফরাঙ্কার ফিডার ক্যানেলের বিপদের কথা স্বীকার করা হল।

ফরাওয়ান্ড ব্রক সাংসদ চিত্ত বসুর প্রশ্নের লিখিত জবাবে ওলা বলেছেন, শূন্য মরসুমে দশদিন বাংলাদেশ বেশি জল পায়, পরের দশদিন বেশি জল পায় ভারত। জল সরবরাহের এই তারতম্যের জন্য ফরাঙ্কার ফিডার ক্যানেল ক্ষতিগ্রস্ত হওয়ার সম্ভাবনা দেখা দিয়েছে। কারণ, ফরাঙ্কার ফিডার ক্যানেলের দুই পাড় কাটাচ্ছে। জল সরবরাহের তারতম্যের জন্য পাড় ভাঙতে পারে। ওলা কথায়, "সরকার তাই গঙ্গাজল চুক্তির রদবদল চায়। বাংলাদেশের সঙ্গে আলোচনাও শুরু হয়ে গিয়েছে।"

গঙ্গাজল চুক্তি সম্পাদিত হওয়ার পরই কংগ্রেস নেত্রী মমতা বন্দ্যোপাধ্যায় এবং বিজেপি-র তরফ থেকে বার বার করে এর বিপদের কথা বলা হয়েছিল। এবার কেন্দ্রীয় সরকারও বিপদের কথা স্বীকার করল। তবে গঙ্গাজল চুক্তির ফলে কলকাতা বন্দরে জলের পরিমাণ

কমছে কি না তা ওলা জানাতে পারেননি। এই বিষয়ে একটি প্রশ্নের লিখিত জবাবে ওলা বলেছেন, যাবতীয় তথ্য জোগাড় করা হচ্ছে। পেলিই তা সভায় জানানো হবে।

ফরাঙ্কার জলের পরিমাণ বাড়তে ভুটানের সঙ্কোশ নদী থেকে খাল কেটে তা ফরাঙ্কার সঙ্গে যুক্ত করার পরিকল্পনা নেওয়া হয়েছে। নবম যোজনায় প্রকল্পটি চোকানো হবে কিনা সে বিষয়ে পরিকল্পনা কমিশন খতিয়ে দেখছেন। কিন্তু বাড়ন্ত মুক্তি মোর্চার সাংসদ শিবু সোরেনের প্রশ্নের লিখিত জবাবে ওলা যথা হিসাব দিয়েছেন, তাতে এই প্রকল্প কার্যকর হবে পরিবেশ সংক্রান্ত সমস্যার মুখে পড়তে হবে ওলা জানিয়েছেন, প্রকল্পটি কার্যকর হলে পরিবেশের উপর তার কী প্রভাব পড়তে পারে সেই বিষয়ে ওয়াটার অ্যান্ড পাওয়ার কমসালটেশি সার্ভিস একটি সমীক্ষা করেছিল। সম্ভ্রতি তারা রিপোর্ট জমা দিয়েছে। রিপোর্ট অনুসারে সঙ্কোশ প্রকল্প রূপায়ণের জন্য মোট ২৫৭৪ হেক্টর জমি লাগবে। এর মধ্যে ৯৩৬.১৮ হেক্টর চা বাগান, ১১৪৫.১৬ হেক্টর বনভূমি, ৩৪২.৫২ হেক্টর কৃষিজমি এবং ১৫০.১৭ হেক্টর অনাবাদী জমি। মোট ২১ হাজার ৫০০ জন ক্ষতিগ্রস্ত হবেন।

সঙ্কোশ প্রকল্প নিয়ে পরিবেশবিদরা প্রথম থেকেই আপত্তি জানিয়ে আসছেন। তাঁদের মতে, এই বিপুল পরিমাণ বনভূমি ও চা বাগান ধ্বংস করে সঙ্কোশ প্রকল্প রূপায়ণ করা আদৌ যুক্তিসঙ্গত নয়। পরিবেশের কারণে রাজ্যের সেচমন্ত্রী দেবব্রত বন্দ্যোপাধ্যায়ও এই প্রকল্পে আপত্তি করেছিলেন।

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## Cycle rally to protest Sankosh project

By PRAMOD GIRI

Siliguri, Aug. 4: Fourteen non-government organisations of North Bengal have decided to oppose the proposed Sankosh-Tista-Water Canal project. In a unique decision, these NGOs have planned to voice their protest by organising cycle rallies from Barasat in North 24-Parganas to Siliguri.

The proposed 'Sankosh-Tista Cycle Rally' will begin on August 24 from Barasat and end four days later in Siliguri. This was declared by Mr Animesh Bose, secretary of Himalayan Nature And Adventure Foundation on Sunday at Banarhat. Mr Bose said that the rally would

cut across several places including Alipurduar, Hasimara, Bispura and end in Siliguri. Criticising the project, Mr Bose said that the proposed Sankosh Water Canal which is supposed to be 200 km-long and 200-metre wide, will come as a bane for the people of North Bengal. Quoting statistics from a survey report on the project by Central Water and Population Consultancy Service, Mr Bose said that the Sankosh project demands 2574 hectares of land, which means that it will destroy 936.80 hectares of tea garden land.

He added that state forest minister Jogesh Barman had admitted in Raiganj that the Tista project had

destroyed many elephants. He also added that HNAF and 13 other NGOs have vowed to put up a strong opposition against implementation of the Sankosh project. The organisations were also ready to move the Supreme Court against the Sankosh project if the government do not listen to the voice of the people.

HNAF is one of the first NGOs to oppose the Sankosh project two years ago. Mr Bose and Mr Amal Dutta of Alipurduar Nature Club were appointed as governor for this joint movement. The NGOs are of the opinion that around 342.52 hectares of agricultural land, 150.11 hectares of non-agricultural

land and 1144.16 hectares of forest are at stake following the project. The project, they feel, will also destroy the Buxa Tiger Reserve and wild life sanctuary, Taldopara wild life sanctuary, and Gorumara National Park.

"Sankosh Water Canal project is the biggest environment damaging project in West Bengal and till our last breath we will oppose it," he said

## সংকোশ খাল প্রকল্প উত্তরবঙ্গের ভারসাম্য নষ্ট করবে

গত ৫ আগস্ট উত্তরবঙ্গ সংবাদে 'সংকোশ খালে বিপদ' জনমত গড়তে সাইকেল র্যালি ২৪ আগস্ট। শিলিগুড়ি ও ডুয়ার্সের ১৪টি স্বেচ্ছাসেবী সংস্থা যে উদ্যোগ নিয়েছেন তা অবশ্যই সমর্থনযোগ্য। কারণ এই সংকোশ খাল কি? এ সম্পর্কে এখনও উত্তরবঙ্গের মানুষের মধ্যে সম্পূর্ণ ধারণা তৈরি হয়নি।

এতদিন রাজনৈতিক দলগুলো বলেছিল যে সত্যি উত্তরবঙ্গ অবহেলিত, বঞ্চিত কিন্তু এই সংকোশ প্রকল্পের মাধ্যমে উত্তরবঙ্গকে সম্পূর্ণ রূপে ধ্বংস করার চক্রান্ত চলছে। সম্প্রতি গঙ্গাজল বন্টন চুক্তির ফলে কলকাতা বন্দরের জল সংকট দূর করার জন্য রাতারাতি সর্বনাশা সংকোশ খাল প্রকল্প তৈরি করা হয়েছে। এখানে উল্লেখ্য যে খরা মরসুমে সংকোশ নদীতে জল থাকে হাঁটু সমান। এই জল নিয়ে গিয়ে কলকাতা বন্দরকে বাঁচানো যাবে না। তাই সংকোশ নদী যেহেতু অসম পশ্চিমবঙ্গ সীমান্তে সেইহেতু সংকোশ প্রকল্প নাম দিয়ে সুকৌশলে রায়ডাক, তোর্ষা, মুজনাই, জলঢাকার ওপর দিয়ে তিস্তা ক্যানেলের মাধ্যমে উত্তরবঙ্গের সমস্ত নদীর জল (বরফ গলা জলে পুষ্ট নদী) হুগলী নদীতে নিয়ে যাওয়া হবে। ফলে উত্তরবঙ্গের মানুষের কপালে কি জুটেবে সহজেই অনুমান করা যায়। খরা মরসুমে উপরিউক্ত নদীগুলিতে বাঁধ দিলে বাঁধের ভাটির অংশের নদীগুলো হয়ে যাবে সুখা, জলস্তর যাবে নেমে, আবাদি জমি হয়ে যাবে বন্ধ। ফসল না আবাদি জমিতে ফসল। বর্তমানে আমরা উপলব্ধি করতে পারছি। বৃষ্টির অভাবে আমন ধানের চাষ মার খাচ্ছে অপরদিকে জলের অভাবে পাট পচাতে না পেরে কৃষকেরা কপাল চাপড়ে মরছে।

আর এক ভয়াবহ দিক হল এই বাঁধের জল বর্ষা মরসুমে কলকাতা বন্দরের প্রয়োজন হবে না কারণ তখন বর্ষার জলে পরিপুষ্ট। বর্ষায় সংকোশ বাঁধের সম্পূর্ণ গেট দেওয়া হবে বলে তারপর বর্ষার জলে আর বাঁধের জলে গ্রামের পর গ্রাম ভাসিয়ে নিয়ে যাবে। তার প্রমাণ আমরা সম্প্রতি ময়ূরাক্ষী বাঁধ ও দামোদর ভ্যালি কর্পোরেশন বাঁধ তারই সাক্ষ্য বহন করে।

সংকোশ খাল প্রকল্প হবে ১৮০ কিলোমিটার দীর্ঘ, ৮০ ডা হবে ২০০ মিটার। এই প্রস্তাবিত খাল প্রকল্প ভারত, ভূটান সীমান্ত হয়ে উত্তরবঙ্গের তিস্তা, জলঢাকা, মুজনাই, তোর্ষা ছুয়ে বঙ্গা ও জলদাপাড়ার অভয়ারণ্যর মাঝ দিয়ে এলিফ্যান্ট করিডোর ছিন্ন করে তিস্তা ক্যানালে মিশবে। উক্ত খাল খনন করতে জমি নষ্ট হবে ২৫৯৪ হেক্টর। যার মধ্যে ৫১ বাগান ৯৭৬.১৮ হেক্টর, কৃষি জমি ৩৪২.৫২ হেক্টর, বনভূমির ক্ষতি হবে ১১৪৪.১৬ হেক্টর। ক্ষতিগ্রস্ত হবে প্রায় ৩০,০০০ হাজার মানুষ যার বেশিরভাগ মানুষ তফসিলি জাতি, তফসিলি উপজাতি ও সংখ্যালু মুসলিম সম্প্রদায়ভূক্ত।

সংকোশ খাল প্রকল্প করলে উত্তরবঙ্গের প্রাকৃতিক ভারসাম্য নষ্ট হবে। ক্ষতি হবে পরিবেশের। বি. আসবে তার বাস্তবতা।

উত্তরবঙ্গের এই সুপরিচালিত সর্বনাশা সংকোশ প্রকল্পের কথা শুনে

হুটে এসেছিলেন বিশিষ্ট পরিবেশপ্রেমী তথা নর্মদা বাঁচাও আন্দোলনের নেত্রী মেধা পাটকর। সংকোশ প্রকল্পের বিরোধিতা তিনি করে গেছেন এবং উত্তরবঙ্গবাসীকে এই প্রকল্পের বিরুদ্ধে রুখে দাঁড়াতে বলেছেন। আন্দোলন করতে যদি তাকে পাশে থাকতে হয় তার সম্পূর্ণ আস্থা তিনি শিলিগুড়ি আলোচনা চক্রে দিয়েছেন গ ২০ জুন।

সংকোশ খালের বিরোধিতা শুধু ১৪টি স্বেচ্ছাসেবী সংগঠন আন্দোলন করলে চলবে না। উঃ বঙ্গের স্বার্থে সমস্ত রাজনৈতিক ভেদাভেদ ভুলে ঐক্যবদ্ধ আন্দোলন গড়ে তুললে হয়ত সংকোশ প্রকল্পকে রোখা যাবে।

কার্তিক চন্দ্র রায়,  
সদস্য, জটেশ্বর ১নং গ্রাম পঞ্চায়েত,  
জলপাইগুড়ি।

৩:৪: ৩১:৩৫ - ২৪ ৩৩৩৩৩

### সংকোশ সাইকেল যাত্রা শুরু আজ

আলিপুরদুয়ার, ২৪ আগস্ট : প্রস্তাবিত সংকোশ থেকে তিস্তা খাল বিরোধী সাইকেল র্যালি সোমবার যাত্রা শুরু করবে অসম-বাংলা সীমানায় সংকোশ নদীর সেতু থেকে। ঐ উদ্দেশ্যে উদ্যোক্তা স্বেচ্ছাসেবী সংস্থাগুলির সাইকেল অভিযাত্রীরা রবিবার বিকালে বারোবিশায় পৌঁছেছেন। সন্ধ্যায় তারা সেখানে পথসভা করেছেন। র্যালির নেতৃত্বে আছেন আলিপুরদুয়ার নেচার ক্লাবের চেয়ারম্যান অমল দত্ত এবং হিমালয়ান নেচার অ্যান্ড অ্যাডভেঞ্চার ফাউন্ডেশনের অধিকর্তা অনিমেষ বসু।

ডুয়ার্সের চা, জঙ্গলের শ্রমিক, আদিবাসীদের সচেতন করা এই র্যালির উদ্দেশ্য। বারোবিশায় উদ্দেশ্যে রওনা হওয়ার আগে রবিবার দুপুরে ৩২টি স্বেচ্ছাসেবী সংস্থার পক্ষে সাংবাদিক সম্মেলনে শ্রীবসু ঐ কথা জানান। সংস্থাগুলির পক্ষ থেকে প্রকাশিত প্রচারপত্রে বলা হয়েছে, ২০০ মিটার চওড়া ও ২০০ কিমি দীর্ঘ ঐ খাল কাটা হলে প্রত্যক্ষভাবে ক্ষতিগ্রস্ত হবেন প্রায় ২২,০০০ জন চা শ্রমিক ও আদিবাসী। বনাঞ্চল, চা বাগান, আবাদী ও অন্নাবাদী জমি মিলিয়ে বিনষ্ট হবে মোট ২৫৭৩.০৩ হেক্টর জমি। এর মধ্যে বঙ্গা ব্যাঘ্র প্রকল্প, জলদাপাড়া অভয়ারণ্য ও গরুমারা জাতীয় উদ্যানের বনভূমিই রয়েছে ১১৪৪.১৬ হেক্টর। সংকোশ প্রকল্প নামে খ্যাত ঐ পরিকল্পনাটির বাস্তবায়ন ঘটলে প্রায় ৫,০০০ কৃষক জমি হারিয়ে পথে বসবেন বলে সাংবাদিক সম্মেলনে দাবি করেন অমলবাসু। এছাড়াও তাদের প্রচারপত্রে জানানো হয়েছে, প্রস্তাবিত খাল কাটা এখানকার বৈচিত্র্যময় পরিবেশ ধ্বংস হবে। প্রাকৃতিক ভারসাম্য ভেঙে পড়ে ডেকে আনবে চরম বিপর্যয়।

শ্রীদত্ত জানান, কেন্দ্রীয় ও রাজ্য সরকারের কাছে প্রকল্পটি বন্ধ করার নিষ্পত্তি আবেদন নিবেদনের পর সাধারণ মানুষকে এই পরিবেশ রক্ষার আন্দোলনে টেনে আনতে এই র্যালির আয়োজন। র্যালি বারোবিশা, কামাখ্যাগুড়ি, সলসলাবাড়ি হয়ে আলিপুরদুয়ারে পৌঁছাবে। মঙ্গলবার ফের র্যালি রওনা হয়ে রাজাভাতখাওয়া, হাসিমারা, বীরপাড়া, নাগরাকাটা, মালবাজার, ওদলাবাড়ি, গজলডোবা হয়ে শুক্রবার শিলিগুড়ির কাঞ্চনজঙ্ঘা স্টেডিয়ামে পৌঁছাবে। পথে অন্ততঃ ২০টি সভা করবেন তারা। -সংবাদ নিউজ সার্ভিস

## সংকোশ থেকে তিস্তা সাইকেল র্যালি শুরু

আলিপুরদুয়ার, ২৫ আগস্ট : প্রবীণ স্বাধীনতা সংগ্রামী দয়ানন্দ রায় সোমবার ভোরে সংকোশ থেকে তিস্তা সাইকেল র্যালির যাত্রা শুরু করিয়েছেন। অসম-বাংলা সীমান্তে সংকোশ নদীর সড়ক সেতুর ওপর আড়াআড়ি বাঁধা লাল ফিতা তিনি কাটবার পর রওনা হন ৩২ জন সাইকেল আরোহী। প্রস্তাবিত সংকোশ-তিস্তা খালের বিরোধিতায় জনমত সংগঠনের উদ্দেশ্যে ৩২টি স্বেচ্ছাসেবী সংস্থার এই র্যালির সূচনায় বিপুল উদ্দীপনা নিয়ে সামিল হয়েছিল সংকোশ ও বারোবিশা এলাকার ক্লাবগুলি।

এদিনই বিকালে সাইকেল র্যালি আলিপুরদুয়ারে পৌঁছেছে। পথে বারোবিশা, কামাখ্যাগুড়ি, শামুকতলা রোড ও সলসলাবাড়িতে র্যালিতে অংশগ্রহণকারীরা পথসভা করেন। সলসলাবাড়ির দুইটি সংস্থাও ঐ কর্মসূচিতে সামিল হন। সন্ধ্যায় আলিপুরদুয়ার চৌপাশী ও আলিপুরদুয়ার জংশনের রেলবাজারে দুইটি পথসভা হয়েছে। তাতে পরিবেশ আন্দোলনের অগ্রণী কর্মী জগন্নাথ বিশ্বাস সহ অনেক বঙ্গা রাজ্যের সর্ববৃহৎ পরিবেশ ধ্বংসকারী প্রকল্প সংকোশ থেকে তিস্তা খাল খননের প্রস্তাবের প্রতিবাদে সরব হন।

-সংবাদ নিউজ সার্ভিস

## সংকোশ : প্রতিবাদে সাইকেল মিছিল

নিজস্ব সংবাদদাতা, কোচবিহার : উত্তরবঙ্গের পরিবেশের ভারসাম্য নষ্ট করে সংকোশ খাল প্রকল্প বাস্তবায়নের সরকারি সিদ্ধান্তের প্রতিবাদে সোমবার উত্তরবঙ্গের বিভিন্ন পরিবেশ সংগঠন, স্বেচ্ছাসেবী সংগঠন ও ক্লাবের সদস্যরা অসম-পশ্চিমবঙ্গ সীমানার সংকোশ সেতুর উপর থেকে এক সাইকেল-মিছিল শুরু করেছে। ওই প্রস্তাবিত খালের পথ ধরে আগামী ২৮ আগস্ট ভারত-নেপাল সীমান্তের কাছে মেচিনদীর সেতুর উপর গিয়ে ওই মিছিল শেষ হবে। এই দিন সকাল ৮টায় এই সাইকেল-মিছিল শুরু হয়।

পরিবেশ রক্ষার স্বার্থে এই ধরনের উদ্যোগ উত্তরবঙ্গে এই প্রথম। সংগঠনগুলির পক্ষে যুগ্ম আহ্বায়ক অনিমেষ বসু ও অমল দত্ত জানান, “ওয়াটার অ্যান্ড পাওয়ার কনসালটেন্সি সার্ভিসের এক সমীক্ষা রিপোর্টে জানা গিয়েছে, ২০০ কিলোমিটার লম্বা, ২০০ মিটার চওড়া এই খাল কাটা হলে উত্তরবঙ্গের ১১৪৪.১৬ হেক্টর বনভূমি, ৯৩৬.১৮ হেক্টর চা-বাগান ও ৩৪২.৫৮ হেক্টর কৃষিজমি ধ্বংস হবে। প্রত্যক্ষভাবে ক্ষতিগ্রস্ত হবেন প্রায় ২২ হাজার মানুষ। উদ্যোগ্তারা জানিয়েছেন, এই সাইকেল-মিছিল থেকে জায়গায় জায়গায় পথসভা করে প্রকল্প বাতিলের দাবিতে জনমত সংগঠিত করা হবে। তাঁদের অভিযোগ, বঙ্গা ব্যাঘ্র প্রকল্প, জলদাপাড়া ও গরুমারার বনভূমিও এই প্রকল্পের ফলে মারাত্মকভাবে ক্ষতিগ্রস্ত হবে। বন্যপ্রাণীদের উপরেও এর ক্ষতিকর প্রভাব পড়বে।



সংকোশ খাল প্রকল্প বাতিলের দাবিতে জনমত গঠনে উত্তরবঙ্গের ৩২টি পরিবেশ সচেতন সংগঠনের উদ্যোগে সংকোশ ব্রীজ থেকে শিলিগুড়ি পর্যন্ত পাঁচদিনের সাইকেল মিছিল শুরু হয়েছে।

ছবি : পবিত্র দাস

# সংকোশ-তিস্তা খাল : প্রতিবাদে সাইকেল র্যালি

হাসিমারা, ২৮ আগস্ট : সংকোশ থেকে তিস্তা পর্যন্ত ৩২টি সংগঠনের মিলিত উদ্যোগে সাইকেল র্যালি ২৬ আগস্ট দুপুর বারোটায় পুরাতন হাসিমারাতে এসে পৌঁছায়। র্যালিতে ছিলেন ২৫ জন সাইকেল আরোহী। তাদের মাথায় সাদা টুপিতে লেখা সংকোশ তিস্তা খালের বিরুদ্ধে প্রতিবাদ। বাংলা হিন্দি ও ইংরাজীতে লেখা প্লাকার্ডে লেখা ছিল : 'প্রস্তাবিত ধ্বংসকারী রাস্কুসে সংকোশ তিস্তা খাল খনন প্রকল্প বন্ধ হোক। রাস্কুসে সংকোশ খাল বাতিল করতে হবে।' পুরাতন হাসিমারা চৌপাথে তারা একটি পথসভা করেন। এরপর তারা সুভাষিনী চা বাগানের ম্যানেজার ও আলিপুরদুয়ার নেচার ক্লাবের পরমর্শদাতা ভানু

ব্যানার্জির নিটব উপস্থিত হন। আন্দোলনের অন্যতম যুগ্ম আহ্বায়ক অমল দত্ত জানান, ১৯৯৫-৯৬ সালে প্রস্তাবিত খালের বিরুদ্ধে বিক্ষিপ্তভাবে আন্দোলন করে এসেছেন। এখন, সংগঠিতভাবে আন্দোলনের প্রথম পর্যায়ে জনমত গঠনে সংকোশ থেকে শিলিগুড়ি পর্যন্ত সাইকেল র্যালির আয়োজন করেছেন। আন্দোলনের দ্বিতীয় দিন রাজা ভাতখাওয়া থেকে সকাল সাতটায় শুরু করে কালচিনি-হ্যামিল্টনগঞ্জে পথসভা করেন। সর্বত্র তারা জনগণের থেকে বিপুল সাড়া পাচ্ছেন বলে শ্রীদত্ত জানান। র্যালিতে অংশগ্রহণকারীরা হচ্ছেন জলপাইগুড়ি, শিলিগুড়ি, কোচবিহার, আলিপুরদুয়ার, বীরপাড়া, নাগরাকাটা, বানারহাট, লাটাগুড়ি, জয়ন্তী, রাজা ভাতখাওয়া, বানেশ্বরের ছাত্র ও যুবক। র্যালিতে অংশগ্রহণকারী অরুণ কান্তি ব্রহ্ম (৩২) বিকাশ দাস (২২) রণজিৎ দাস (২৪) অনুরুদ্ধ দে (২০) জানালেন, উত্তরবঙ্গের সম্পদ যাতে নষ্ট না হয়, সংরক্ষিত বনভূমি হারিয়ে যা যায়-এর জন্য মানুষকে সচেতন করতে তারা নেমেছেন। অমলবাবু জানান, ১৯ জুলাই তারা ফ্যান্স বার্তার মাধ্যমে প্রধানমন্ত্রী ও রাজ্যের মুখ্যমন্ত্রীকে খাল না করার জন্য আবেদন জানিয়েছেন। দেশের বড় বড় এন জি ও দেবও জানাবেন। জোর পূর্বক যদি খাল কাটা হয় তবে তারা আদালতে যেতে বাধ্য হবেন। ভানু ব্যানার্জি এবং চন্দ্রিমা ব্যানার্জির ব্যবস্থাপনায় দুপুরের ভোজ সেরে সুভাষিনী জাতীয় সড়কের সংলগ্ন স্থানে দুপুর আড়াইটায় একটি পথসভা করেন তারা। বক্তা ছিলেন ভানু ব্যানার্জি ও অমল দত্ত। শ্রীব্যানার্জি তাঁর বক্তব্যে বলেন, ২০০ মিটার চওড়া ২০০ কিমি প্রস্তাবিত খালের জন্য ২৫৭৩.০৩ হেক্টর জমির প্রয়োজন হবে। ফলে নষ্ট হবে উত্তরবঙ্গের ১১৪৪.১৬ হেক্টর বনভূমি, ৯৩৬.১৮ হেক্টর চা বাগান ৩৪২.৫২ হেক্টর কৃষিজমি এবং ১৫০.১৭ হেক্টর অনাবাদি জমি। প্রত্যক্ষভাবে ক্ষতিগ্রস্ত হবেন প্রায় ২৫ হাজার মানুষ, চা বাগিচার ক্ষেত্রে শুধু উৎপাদন কম নয় রাজস্ব এবং বৈদেশিক মুদ্রার উপর হাত পড়বে। ২০০০ সালে দেশের চায়ের উৎপাদন এক হাজার মিলিয়ন কেজি করার লক্ষ্যমাত্রা রাখা হয়েছে, তা পূরণ হবে না। চা উৎপাদনের জমির পরিমাণ সংকোচনের জন্য শিল্পে শ্রমিক হাঁটাই হবে।

আমন্ত্রিত অরণ্য প্রেমী ও হাতি বিশেষজ্ঞা পার্বতী বরুয়া এই প্রেক্ষিতে মতামত ব্যক্ত করতে গিয়ে বলেন, প্রস্তাবিত সংকোশ খাল সংরক্ষিত বঙ্গা ব্র্যাম প্রকল্প, জলদাপাড়া অভয়ারণ্য এবং গরুমারা জাতীয় উদ্যানের বনভূমিকে ধ্বংস করে যদি করা হয় তবে পরিবেশের ভারসাম্য যেমন নষ্ট হবে অপর দিকে বন্যপশু, বাঘ, হাতি, বাইসনের স্বাভাবিক

পথে চলাচলে ব্যাঘাত ঘটবে এবং লোকালয়ের মানুষের জীবনহানি ঘটবে, অত্যাচার আরো বৃদ্ধি পাবে। তিস্তা খাল বন এক বন্যপ্রাণীদের যে ব্যাপক ক্ষতি করেছে তার জলজ্যান্ত প্রমাণ চোখের সামনে থাকা সত্ত্বেও যদি শিক্ষা না নেওয়া হয় তবে উত্তরবঙ্গের জন্য খাল কেটে কুমির আনা হবে বলে শ্রীমতী বরুয়া বলেন। র্যালি এরপর মাদারীহাটের উদ্দেশ্যে রওনা হয়।-সংবাদ নিউজ সার্ভিস

দুই উত্তরবঙ্গ সংবাদ ২৯ আগস্ট ১৯৯৭

# উত্তরবঙ্গ সংবাদ

কোচবিহার ১২ ভাদ্র ১৪০৪ শুক্রবার ১.২০ টাকা \* 29 August 1997 Friday Rs. 1.20



সংকোশ খাল খননের বিরোধিতা করে সংকোশ ব্রীজ থেকে শুরু হওয়া পাঁচদিনব্যাপী সাইকেল মিছিল বৃহস্পতিবার শিলিগুড়ি এসে পৌঁছয়। ছবি : তপন কর্মকার

## সংকোশ সাইকেল র্যালি শিলিগুড়িতে

শিলিগুড়ি, ২৮ আগস্ট : সংকোশ খাল প্রকল্প বাতিলের দাবিতে ২৩ সদস্যক সাইকেল র্যালি বৃহস্পতিবার শিলিগুড়িতে পৌঁছেছে। ২৪ আগস্ট পশ্চিমবঙ্গ-অসম সীমান্তের সংকোশ সেতু থেকে ওই র্যালিটি যাত্রা শুরু করেছিল। এদিন ৩২টি গণসংগঠনের পক্ষে যুগ্ম আহ্বায়ক অনিমেস বসু এবং অমল দত্ত সাংবাদিকদের বলেছেন, দ্বিতীয় পর্যায়ের আন্দোলনের জন্য বিভিন্ন সমাজসেবী, গণসংগঠনকে ১৪ সেপ্টেম্বর বৈঠক করে পরবর্তী কর্মসূচি গৃহীত হবে। শ্রীবসু ও শ্রীদত্ত জানিয়েছেন, সংকোশ প্রকল্প রূপায়িত হলে উত্তরবঙ্গের ১১৪৪.১৬ হেক্টর বনভূমি, ৯৩৬.১৮ হেক্টর এলাকার চা বাগান, ৩৪২.৫২ হেক্টর কৃষি জমি এবং ১৫০.১৭ হেক্টর অনাবাদী জমি চলে যাবে ২০০ মিটার চওড়া প্রায় ২০০ কিলোমিটার দীর্ঘ খালের গহ্বরে। এর ফলে প্রায় ২২ হাজার মানুষ ক্ষতিগ্রস্ত হবেন প্রত্যক্ষ হবে। ব্যাপকভাবে ক্ষতিগ্রস্ত হবেন বক্সা ব্যাঘ্র প্রকল্প, জলদাপাড়া অভয়ারণ্য এবং গুরুমারা জাতীয় উদ্যান।

তারা জানান, ৩২টি সংগঠন যৌথভাবে এই সাইকেল র্যালির আয়োজন করেছিল। ৩২ জন সাইকেল আরোহী অসম সীমান্তের বারভিশায় থেকে ৭ কিলোমিটার দূরে সংকোশ সেতু থেকে র্যালির যাত্রা শুরু হয়। যাত্রার সূচনা করেন ১৯৪২ সালে স্বাধীনতা আন্দোলনের সময় কুমারগ্রাম থানা অভিযানকারী দলের সদস্য দেওয়ান রায়। ২৩০ কিলোমিটারের এই অভিযানে মোট ১৮টি স্থানে পথসভা করা হয়েছে। বিভিন্ন স্থানীয় নেতৃত্ব ও গণসংগঠনের প্রতিনিধিরা পথসভায় অংশ নেন। তারা জানান, ইতিমধ্যে এই প্রকল্প বাতিলের দাবিতে প্রধানমন্ত্রী, মুখ্যমন্ত্রী এবং কেন্দ্রীয় বন ও পরিবেশ মন্ত্রীর কাছে গণ ফ্যাক্স পাঠানো শুরু হয়েছে।

এদিন এই প্রতিবাদী আন্দোলনের প্রকাশ্যে প্রাথমিক পর্যায়ের সমাপ্তি সমাবেশ করা হয় শিলিগুড়ির রোড স্টেশন মোড়ে। এছাড়াও এদিন সাইকেল র্যালি শিলিগুড়ির বিভিন্ন পথ পরিক্রমা করেছে।-সংবাদ নিউজ সার্ভিস

### Sankosh Dam and the Canal

It is <sup>in</sup> record that Govt. of India and the Royal Govt. of Bhutan has entered into a bilateral agreement to construct a dam and a lift dam on the river Sankosh for purposes of generation of hydel power and in a later phase to use part of the flow of water in irrigation, agricultural land in two districts of Bihar.

As it appears, no environmental impact assessment had preceded the signing this bilateral accord, which is strange. The dams will be constructed inside Bhutan and hence, theoretically speaking no such environmental clearance may be mandatory. But fact remains that such a dam constructed on a major river in the Eastern Himalayas is likely to have very pronounced environmental effects, which will be relevant not only in Bhutan, but also in India. Besides, Govt. of India should not and cannot exploit the natural resources of its neighbouring country on ethical grounds, without first making sure that the consequences of building such a dam and creating a large water reservoir in an area, which is known to be geologically extremely fragile and considered, on the other hand, to be on the zone of Hot spot, if biodiversity values are taken into consideration, ~~are not adverse.~~

#### Ecological factors

The Sankosh basin area is recognised to be in the Hot spot of Biodiversity resources. The composite biodiversity value probably remains yet unexplored and therefore indeterminate. But high endemism and ecotone effect between two Biogeographic realms (Indomalayan & Palearctic zones) is not only high in order of scientific importance, but also may be regarded as the store house of various gene pools, which may hold invaluable

implications for survival of future generations of human community. Such values are always dormant and cannot be identified, much less evaluated immediately.

However, the floral diversity that this area holds is enormous and the altitudinal variation supports a large cross section of natural ecosystems in a limited and rather small geographical area, which adds to the ecological importance of the Sankosh basin. Though many parts of this area has seen exploitation of forest resources during the past, yet the area generally contains good forest cover till now, as most of the area remains yet uninhabited. The area is extremely rich in orchids and <sup>lichens</sup> ~~bidens~~, which is indicative of the richness of biodiversity productivity of the area. Much of the area will go under submergence, which means a great loss of biodiversity.

The potential area, which is the valley between hills holds a rich faunal diversity also, some of which is endemic to this region. For example Golden langur (Presbytis gazi) is found only in the eastern bank of the river Sankosh, its range of occurrence being limited from Sankosh in the west ~~to~~ Manas in the east. Amongst other import species Elephants, Gaur, Tiger, Leopard, Dhole, various lesser cats, Ghoral etc. are found in this area amongst many more species of wild animals. Most of these animals except Ghoral utilise mainly the valley areas and naturally with the submergence of ----- ha wildlife habitat, the viability of most of these species of wild animals will be in jeopardy. Almost all the gregarious species like the Elephants, Gaur, Dhole etc. who utilise large habitat areas will be more severely affected. Populations of such species will be divided and

isolated. Besides the proposed canal downstream will fragment the population even on that side. This will seriously effect the resident wildlife in the area and many lesser life forms are likely to be lost for ever, which may remain unrecorded for ever. The ecological damage in totality seems to be impossible to even identify, much less quantify. This loss is impossible to reconcile, though some 'compensatory' afforestation may be taken up.

#### Oter factors

Unstable tertiary ~~bed~~ rock in this region of the Himalayas where the dam is being proposed to <sup>be</sup>~~the~~ constructed is definately fraught with serious probability of future breach in the area of the reservoir, even if the dam itself holds. The dam break analysis is really dreadfull, as far as the results are concerned. I don't think in this country, or far that matter anywhere else, any reasonable disaster management plan to counter the probable catastrophe can be worked out or even planned. This is one major area of consideration, which has not been property of thousands and thousands of people downstream of Sankosh, both in Assam and West Bengal.

Occassional unusually heavy rainfall is a characteristic of this area. There are several such instances during the recent past when unusually heavy rainfall in a span of 24 and 72 hours caused havock int he downstream areas. The most dreaded example is probably of October, 1968 when such heavy rainfall (some thing like 42 inches in 24 hours) had first caused a huge landslide, that blocked the course of the river Teesta for over a day. Then

the block was forced open by gushing accumulated waters, which descended on the plains in a deluge which caused havoc. In Jalpaiguri township and its neighbourhood countless people perished, the number of which remains indeterminate, but much higher than 10,000. As recently as in 1993 there had been another flash flood on the downstream areas of the river Torsa, which caused havoc. In 1968 October even the Sankosh river had seen serious flash floods, which caused immense damage to wide spread areas downstream. This is a serious matter, though quite unique to this region of the <sup>outer</sup>~~other~~ Himalayas, but pertains to the area of the proposed dam and the reservoir, which gives the whole matter a different dimension of unusual importance.

Due to unstable tertiary rock formation the region, like any where in the <sup>outer</sup>~~other~~ Himalayas, is extremely vulnerable to heavy soil runoff and erosion. This natural process is further accentuated by the very heavy and, sometimes erratic, rainfall that this area receive. I don't think accurate data about siltation of this area (dam site and the reservoir area) is available. Such data may be available at Srirampur, where C.W.C. has a data collection ~~data~~---. But this data will not be applicable to the dam site, which is situated amongst the gorges and where the rate of siltation is much higher. This will have direct effect on the life of the reservoir, which is directly linked up with the economic viability of the project itself. If the calculated life span of the proposed reservoir is reduced, than obviously the economic projection of the entire project will go haywire. This cannot be taken lightly for any reason, whatsoever, for power generation or for anything else.

The dam and reservoir thus appears to be in a very ecologically sensitive and fragile region. Besides another point possibly discuss utmost carefull consideration. This area falls within extremely sensitive and vulnerable seismic zone recognised anywhere. An earthquake of over 8 richer scale is recorded in this area in 1897.

### **Sankosh - Teesta Canal**

A concrete canal 26 metres wide and 6 metres deep has been proposed to be built station from the lift dam inside Bhutan, within a short distance from the Indo-Bhutan international boundary. This canal will cut across three protected areas, including the core of the Buxa Tiger Reserve, besides running through some reserve forests, as many as ----- Tea estates and other civil areas. The proposed canal will cut across numerous streams that run from the North to South including sizeable rivers like the Revidak, Torsa, Dina, Galdhaka and the Tasta etc. to name only the major ones. Once completed, the canal should be an engineering marvel with few purs any where in the world. All these streams and the others are known for this characteristic frequent change of course, which will have to be very carefully considered. There is considerable slope from North to South in the entire area, which makes the natural flow of water from the Himalayas down south and the canal will run across this natural direction of water flow in the area, which may considerably more different to tackle.

### **Legal aspects**

Since ----- hectares of Forest land including some in the protected areas will have to be utilised for this purpose, it will attract the provisions of the Forest Conservation Act. Obtaining such clearance will be extremely difficult, specially in the core area of the Buxa Tiger Reserve where no human interference, much less use of such land for non forestry purpose is normally not to be allowed. However, even if such permission is allowed, no "compensatory plantation" will compensate the

ecological loss that is sure to surface due to the canal construction. The possible legal scope for allowing the Conservation Act clearance seems to be to 'deserve' the required forest area within the protected areas. This seems to be near impossible in today's context, where there are many public interest litigation cases are coming against the Ministry of Environment and Forest against violation of Conservation Act.

Besides, ----- hectares of Tea Estate land is ----- Estates will have to be acquired for the purpose. I had the change of taking to some of the Tea people in this ----- . They are all, without exception, strongly opposed to such acquisition, even on payment of adequate compensation. I feel, there will be nearly insurmountable problems coming out from this issue, as the alignment of the canal cannot be altered.

#### **Ecological aspects**

The area of North Bengal is ecologically very important area, as far as the rich biodiversity that the area holds. This area had supported a very rich and extremely varied natural habitat for a wide spectrum and wild animal life not very long ago. But expansion of human habitation and various development activities, including setting up a string of Tea Estates along the foothills and down south pushed the wildlife with the back to the wall. Besides shrinking of natural habitat due to such activities, natural mixed forests in extensive areas of this region has been converted into plantation of commercial species like Teak, Sal and some other selected timber, species. This has surely altered the natural ecosystems, the likes of which may be available only in small isolated pockets in some areas.

Extraction of the forest produce and conversion to monoculture has been going on in this area since the second or third decade of the current century. To add to this a great demographic change took place after independence, when a very large population of expatriate East Bengal (Now Bangladesh) population settled in this region, occupying all the low lands, which suited not agriculture, but had been excellent finding ground for wild animals.

After the Chinese aggression on 1962 large scale arriving deployment was done in extensive areas of this region and an elaborate network of roads was established, which had been regarded as one of the most inaccessible areas in the Himalayan foot hills. All such human activities and above all human settlements in the area drastically fragmented the natural habitat of the wildlife communities.

All the above human activities along with physical persecution of wild animals of all kinds severely depleted the wild animal population of this area. The Lesser Indian Rhinoceros had been a casualty in the last part of the Nineteenth Century and the Pink headed duck disappeared probably by the late twenty or early thirties. The ----- Indian Rhinoceros had been found scattered in many areas in this region, but is restricted only in two pockets now in Goldapara and Garumora wildlife sanctuaries. Both these protected areas will be affected by the proposed canal.

The whole area between the rivers Sankosh and Tasta and beyond had originally been contiguous elephant country and the estimated number of elephants found here during the last century could have

been not less than zoo. Elephant herds used to migrate eastward beyond Sankosh and westward beyond Tasta. The composite habitat of the elephants also includes the lower parts of southern Bhutan, particularly the valeys. Unfortunately the lower areas in Bhutan also were settled and gradually the plough got over exploited and many areas, specially along the valley came under the plough which resulted in shrinkage and fragmentation of the natural habitat. However, the total elephant population in this area stands at present below 100. But even this small remnant population is causing an enormous man-elephant problem. These elephants have to have large contiguous natural habitat to themselves for their survival and viability. The large bodied ----- has an intake of about 2.5 to 3 quintols of food every day. When adult. Further the elephant eats only about 1/3 of the vegetative matter, which it may uproot or pull down. This naturally signifies that true sustainability will call for complete restoration of the loss of vegetative cover because of elephant (or other animal) feeding, by the time the elephants visit the same area again. Besides the availability of adequate nutrition gradient is also very important. If the optimum nutrition is not available due to some reasons like conversion of the natural ecosystems into monoculture or general degradation through overuse, instinctively larger areas will be constituting home range of the elephants (other animals). Presently the state of habitat available to the elephants as also other animals in the area has been rendered such that natural living of the animal communities have been in jeopardy. The elephants have been forced to roam large areas, which includes

human settlements, tea estates etc. and brings them in direct conflict with man. There are patches of forest areas pocketed by such human settlements and the elephants, specially the herds, regularly and frequently cross through these settlements to reach from one forested area and other. Every year on average more than 50 persons are killed in this area by the elephants, besides causing extensive damage to agricultural crop, caused by their irregular movement in the entire area of the proposed canal alignment.

The elephants also use quite a few natural salt licks, all of which exist on the foot hills of Bhutan. This makes the elephants make obligatory movement south to north and vice versa. If one look is taken into the movement pattern of the elephants in this area, it will be observed clearly that the movement takes place both south-north as also east-west. During their movement to the north, elephants regularly cross into Bhutan and return. There exists a very large natural salt lick about 3/4 km west of the river Sankosh. This salt lick is situated inside Bhutan, about 2 km to the north of the Indo-Bhutan international boundary. All the elephants, resident in Buxa, as also some elephants, who cross over Sankosh from Assam regularly and invariably visit this salt lick. Elephants visiting the salt lick traditionally has been taken advantage of in capturing these animals in Khada operations, which has been abandoned since early seventies.. But not only elephants all other wild animals also regularly utilise this salt lick, which has a definite bearing on the health condition of the animals. All these natural salt licks on the

Bhutan foot hills are very significant for survival of the animal communities of the area.

The proposed canal will obviously force these animals to abandon the traditional use of the salt licks. Their, specially the elephants movement pattern will be drastically changed, which shall have a catastrophic result on the very survival of the elephants, which is a Schedule-I species and special efforts are on for production and management of the species in this region under Project elephant. The canal will effectively divide all three Protected areas of this region, which will include even the core area of Buxa Tiger Reserve, which is National Park in status. No human activity or any interference is legally allowed in such areas under the wildlife (Protection) Act. The core area of Buxa contains some of the finest stand of moist deciduous and semi evergreen forests, interspersed with magnificent stands of Class-I mixed Sal forests, ----- of te natural luxuriant ecosystems, that still support broad spectrum of fauna, which includes at least 5 species of lesser eats, the leopard and the Tiger, which reflects conservation. Buxa has two effect of the Biographic zones, the Palearctic and the Indo malayan recalms which produces a strong ecotonal effect in the area, resulting into great diversity in floral and faunal richness.

The importance of conservation of this area, which has also immune variety of airfauna and insect life cannot be overemphasised as an area of tremendous gene pool resource reservoir, which has unlimited potential for further human survival. Such ecological values of gene pool resources is impossible to qualify, much less to quantify as such values are

dosement. It is this only sensible not to take any risk in conservation of the ramnent biodiversity at hand when a large part has already been lost to human advant during the recent part.

If and when the canal, the feeder road (including for maintenance) and the antierosion structures are established, discting the Protected areas, the future viability of wild life forms of most species shall be in serious jeopardy. Wildlife is render extreme pressure anyway and the status has fallen far below, what may be considered optimum in this area of very high biodiversity productivity. Further pressence and fragmentation of the already inadequate natural habitat will render all conservation efforts in the area completely meaningless. I have no shade of doubt about the disastrous consequences on conservation, which has been taken up as per a national wildlife and forest conservation policy. A decision should be taken to abandon the conservation policy in favour of establishing the canal, which is not compatible to conservation in any stress of imagination. Any so called remedial measures to justify establising the canal and simultaneous conservation efforts to run is nothing short of a simple eye wash and cannot even be considered.

The area of .Galdpara sanctuary has only recently been extended towards the north in an attempt to offer some more space to the wild animal communities, specially to the elephants, whoo are already far too short of adequate habitat, which is causing unnatural man elephant conflict. The proposed canal will cut across this extended area and will directly act against the

conservation efforts undertaken after a lot of detailed consideration. This seems to be really quite ridiculous, as one decision more than nullify another. Both Galdapara and Gorumara sanctuaries support some Rhino populations, which are the only areas outside Assam, where this species still occur naturally. The importance of these two areas thus stands unusually high in conservation. Both these areas, specially Gorumara, which is a small conservation island will be adversely effected to such an extent that conservation efforts to continue will be rendered meaningless..

#### **Other factors of significance**

The Himalayas and for that matter any mountain system anywhere has natural drainage through rivers, riverechts and channels, which are formed through millions of years natural processes. The drainage system cannot be improved upon by man, despite his scientific achievements, which is truly incredible. Some attempts to divert natural courses or ----- ) the same has either failed or resulted into serious adverse impacts in other countries. Such a major effort to divert natural course of a river for irrigation in Russia had to be abandoned midway through, when it could be realised that the results would turn disastrous.

The proposed attempt to divert substantial parts of the natural flow of Sankosh river is in reality loaded with extremely dangerous consequences, which should be carefully examined.

The catchment area of this river in Bhutan is known for extremely heavy and uncertain rainfall in very short period of time. Such unusually high rainfall often is accompanied by severe cloudbursts. Frequent landslides are rampant in the whole area and can be observed pock marking the outer mountain slopes towards the south. This phenomenon which may be quite, unique to this region, after results into severe flash floods, which have been devastating to catastrophic in nature during the past. In October, 1968 one such unusual spell of extraheavy rainfall in this area had caused an unusual flash flood, resembling a ----- in the river Teesta. This flood resulted into death of scores of people downstreams. The number of people thus perished will never be known but various estimates puts it between 20,000 to 25,000. The damage done to the human property will also never be known. During the rainy season of 1994 an unusual flood on the river Torsa had devastated the downstream areas, which caused extensive damage to human property, though not many lives were lost.

The proposed canal shall be constructed against the natural flow of all the streams of this region and will include several sizeable rivers. The entire area between Teesta and Sankosh is known for the above type of extreme natural calamity and I foresee that such a concrete canal along the contours and across the natural slope will not be able stand the pressure of the ----- quantity of water and silt (sand, pebbles, stones and boulders) included that is carried down along the effected streams during such unusual floods. Even if the canal structure may hold the initial pressure, seepage, and consequent breaking of the canal cannot be ruled out. The canal structure,

in any case, will act as a 'dam' against the flow of water all along, even if rivers and streams are allowed to flow normally by taking engineering measures like providing aqueducts etc. This is found to produce abnormal situations as a large quantity of the ground flow of water is not carried by the rivers and streams.

The bed rock in these areas is extremely unstable. The deposit of sand and soil overlying sand stone (mainly) is extremely forms and subsoil drainage is thus almost a certain definite result. The natural ecosystems, if were present to-day, could have absorbed at least parts of the probable results. But since such ecosystems have either been modified heavily or in some areas completely lost (due to establishment of resettlements) such buffer effect to reduce the impact is not longer available and naturally the results can simply be devastating.

From the above it should be clear that construction of such a canal across the natural drainage of an area, which is known for unusually heavy rainfall in a very short spill of time with unstable rock and soil conditions may not be an ideal engineering plan for irrigation. More common sense may provide a check to this riddle.

The entire canal area falls in a hghly sensitive seismic zone, where earthquake around 8 in Rhichts scale has been in record during the current century (late Twenties). In such an event of high intensity earthquake, the canal will, without doubt vulnerable and with devastating consequences. The length of the canal will weight heavily against possible guarantee against breaking of the canal.

No data is available about the required quantum of water for irrigation in the command area of Katihar and Purma districts in the state of Bihar. These two districts are not known for lacking in ground water resources. On the contrary these are flood prone areas with scattered wetlands. What may be required is proper harnessing of the ground water resources in the area. However, propose data on the command area is required to justify the constructs of the canal, involving huge expenditure.

No data has been made available on the command areas, downstream of Sankosh river, from where water is planned to be flown down the canal. However, it is known that agriculture is a large and wide spread area of 4 districts in Assam and West Bengal is heavily dependant on the flow of the river Sankosh. Diverssion of water from this river is found to affect agriculture in these heavily populated extensive areas. The river also is a big source of fish which is very extensively utilised by the local people of their chief source of protein. This very important source of food for the local prople, who are mostly poor to very poor will be very badly depleted.

### **Conclusions**

From the above it may be clearly understood that the proposed canal, when constructed, is bounds to have disastrous effects on the ecological conditions of the entire region, which is situated in a very fragile zeological area with extremely uncertain and variable precipitation. The area is also situated in one of the highly sensitive seismic zones to add to the uncertainty.

Forest and Wildlife in the area will be surely affected and no remedial measure will be able to readily contain the damage. The compensatory afforestation may be able to keep the total forest cover unchanged, but loss of forest cover in the crucial foothills area and its disastrous ecological consequences cannot be checked by such compensatory plantations (even of much larger areas) taken up elsewhere, as the proposed canal alignment runs through a vital areas.

The natural productivity of the entire region, south of the canal will severely decline, because the concrete canal will effectively stop or at least drastically reduce the natural silt deposition flowing down from the hills, which periodically rejuvenates the natural productivity, which is lowered by intensive agricultural practice.

As pointed out earlier attempting to divert substantial parts of the natural water flow from a monsoon fed sub-himalayan area through a concrete canal smacks of engineering arrogance, but a lack of essential ecological understanding and is loaded with probable ecological disaster in the future.

Such an extremely dangerous proposal cannot therefore be supported even if all the preconditions and proposed remedial measures are religiously undertaken. In this regard the calculations of EICL and EMP seems to be irrelevant. The two positive values in EMP i.e., of power generation and employment generation can in no way improve the ecological situation in the proposed dam area, through admittedly this may result into economic upliftment. In other words such economic development

acrossed from the dam and the reservoir is billed against nature. Such temporizing of nature is ill-advised.

Besides the above another aspect may also be relevant in this regard. The layout of the proposed canal runs through not only Forest area, where clearance of Forest Conservation Act is mandatory, but the same also runs through a series of Tea estates. I had consulted some of these Tea people and none will be agreeable to give up any Tea estate land for the canal. This is certain to get involved in legal litigations, which will lbe extremely difficult to clear.

The ascent of the State Govt. of West Bengal will also be essential to lay the canal. But in a talk with the Minister Forests I understood that the Stage Govt. is not at all agreeable to allow the canal to be constructed to this area. This will certainly be a very difficult barrier to cross.

From all the above it will probably be clear that the proposed canal cannot be justified. It is not known how the proposal had been considered and even a lot of funds have already been spent as preinvestment expenditure, before even consulting the state govt.

## Dangers of development

*A proposed Indo-Bhutanese power plant poses an ecological threat to large areas of North Bengal*



ENVIRONMENT

In March 1995, when King Jigme Singye Wangchuk visited Delhi, grand plans were drawn up by the two countries to set up a power project in Bhutan. But now it is clear that the proposed Rs 140-crore hydro-electric project poses a serious ecological threat to large parts of North Bengal and Assam.

This Tala project is to be set up on River Wangchu in Bhutan (known as



ASHOK MAJUMDER

River Sankosh in India), to generate 1020 MW power. As per the agreement, India will finance 60 per cent of the project cost as grant and the rest 40 per cent as loan. Moreover, the agreement says that India will buy the surplus power from Bhutan.

Amidst all these technical and financial deliberations, the vital question of the project's ecological impact has been completely ignored. But now, as aware-

### IN PERIL: the Jaldapara Sanctuary

ness about the damage potential of the hydro-electric project is spreading, various organisations in North Bengal are taking a stand.

According to Amal Dutta, chairman of Alipurduar Nature Club, "This project includes a 200-metre-wide irrigation canal proposed to be excavated within the core areas of three important wildlife reserves and national parks situated within this northern part of

Bengal, namely the Buxa Tiger Reserve (BTR), Jaldapara and Gorumara." Dutta goes on to explain that the "excavation of the giant canal would cause a serious and unprecedented threat to wildlife in the area."

Concurs Animesh Bose, director of the Siliguri-based Himalayan Nature and Adventure Foundation (HNAF), "This proposed canal through the Dooars will definitely add to the miseries of the people here. We have no alternative but to go for a widespread movement throughout North Bengal."

And the voices of protest against the Tala power project have already reached Prime Minister H.D. Deve Gowda. In a memorandum to the Prime Minister, Amal Dutta stated: "We find no way left for us to save the region from the 'eco-killer' canal but to go in for a people's movement throughout North Bengal."

Resentment against the proposed power project has been on the boil since last year. It probably began with an article entitled 'Sankosh Project: A Threat To Buxa Tiger Reserve' published in the BTR newsletter. "The ministry of water resources, Government of India, is planning an ambitious project on the River

Sankosh in Bhutan for irrigation and hydro-electricity. Major dams and power stations are proposed to be constructed within Bhutan, but the distribution canals and transmission lines will pass through West Bengal. This will have a disastrous impact on the forests and the wild animals of the area," stated the article.

And it is not that the ministry of environment and forests (MOEF) is blind to the ecological threat posed by the proposed project. A team of MOEF led by S. Deb Roy, a wildlife expert and member of the steering committee of Project Tiger, visited the site of the proposed project way back in April '95. The team comprised senior experts from the Zoological Survey of India, the Botanical Survey of India and Delhi University. The field director of Buxa Tiger Reserve had accompanied the experts and apprised them of the grave implications of the proposed project. While there is no news of the MOEF having given its go-ahead, the power project which could upset the ecological balance of this region has neither been shelved nor modified. •

Iva Guha/Siliguri

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29/8  
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Head (Env. Unit)  
WAPCOS, JAKET

NEWS

## Sankosh Dam and the canal.

It is in record that Govt. of India and the Royal Govt. of Bhutan has entered into a bilateral agreement to construct a dam and a high dam on the river Sankosh for purposes of generating hydro power and in a later phase to use part of the flow of water in irrigating agricultural land in two districts of Bihar.

As it appears, no environmental impact assessment had preceded the signing this bilateral accord, which is strange. The dams will be constructed inside Bhutan and hence, theoretically speaking, no such environmental clearance may be mandatory. But fact remains that such a dam constructed on a major river in the Eastern Himalays is likely to have very pronounced environmental effects, which will be relevant not only in Bhutan, but also in India. Presid. Govt. of India should not and cannot exploit the natural resources of its neighbouring country on ethical grounds, without first making sure that the consequences of building such a dam and creating a large water reservoir in an extremely fragile area, which is known to be geologically extremely fragile and considered, on the other hand, to be on the zone of Hot spot, if biodiversity values are taken into consideration, are not adverse.

Ecological factors The Sankosh basin area is recognised to be in the Hot spot of Biodiversity resources. The composite biodiversity value probably remains yet unexplored and therefore indeterminate. But high endemism and ecotone effect between two Biogeographic realms, (Indomalayan & Palearctic zones) is not only high in order of ~~importance~~ scientific importance, but also may be regarded as the store house of various gene pools, which may hold invaluable implications for survival of future generations of human community. Such values are always dormant and cannot be identified, much less ~~not~~ evaluated immediately.

However, the floral diversity that this area holds is enormous and the altitudinal variation supports a large cross section of natural ecosystems in a limited and rather small geographical area, which adds to the ecological importance of the Sankosh basin. Though many of parts of this area has seen exploitation of forest resources during the past, yet the area generally contains good forest cover till now, as most of the area remains yet uninhabited. The area is extremely rich in orchids and lichens, which is indicative of the richness of biodiversity productivity of the area. Much of the area will go under submergence, which means a great loss of biodiversity.

The potential area, which is the valley between hills holds a rich faunal diversity also, some of which is endemic to this region. For example Golden langur (*Presbytis quii*) is found only in the eastern bank of the river Sankosh, its range of occurrence being limited from Sankosh in the west to Manas in the east. Amongst other important species Elephants, Gaur, Tiger, Leopard, <sup>Shole</sup> various ~~lion~~ cats, Ghoral etc. are found in this area amongst many more species of wild animals. Most of these animals except Ghoral ~~inhabits~~ mainly the valley areas and naturally with the submergence of ~~the~~ factors of wildlife habitat, the viability of most of these species of wild animals will be in jeopardy. Almost of all the gregarious species like the Elephants, Gaur, Shole etc.

who whose large habitat areas will be more severely affected. Populations of such species will be decimated and isolated. Besides the proposed canal downstream will fragment the population even on that side. This will seriously affect the resident wildlife in the area and many lesser life forms are likely to be lost for ever, which may remain unrecorded for ever. The ecological damage in totality seems to be impossible to even identify, much less quantify. This loss is impossible to reconcile, though some 'compensatory' afforestation may be taken up.

#### Other factors

Unstable tertiary bed rock in this region of the Himalays where the dam is being proposed to be constructed, is definitely fraught with serious probability of future breach in ~~the~~ the area of the reservoir, even if the dam itself holds. The dam break analysis is really dreadful, as far as the results are concerned. I don't think in this country, or for that matter anywhere else, any reasonable disaster management plan to counter the probable catastrophe can be worked out or even planned. This is one major area of consideration, which has not been properly cared for. But this aspect is linked up with future safety of life and property of thousands and thousands of people downstream of Sankosh, both in Assam and West Bengal. ~~This area~~

occasional unusually heavy rainfall is a characteristic of this area. There are several such instances during the recent past when unusually heavy rainfall in a span of 24 to 72 hours caused havoc in the downstream areas. The most dreaded example is probably of October, 1968 when such heavy rainfall (something like 42 inches in 24 hours) had first caused a huge landslide, that blocked the course of the river Teesta for over a day. Then the block was forced open by gushing accumulated waters, which descended on the plains in a deluge which caused havoc. In Jalpaiguri township and its neighbourhood countless people perished, the number of which remains indeterminate, but much higher than 10,000. As recently as in 1993 there had been another flash flood on the downstream areas of the river Teesta, which caused havoc. In 1968 October even the Sankosh river had seen serious flash floods, which caused immense damage to wide spread areas downstream. This is a serious matter, though quite unique to this region of the outer Himalays, but pertains to the area of the proposed dam and the reservoir, which gives the whole matter a different dimension of unusual importance.

Due to unstable tertiary rock formation the region, like anywhere in the outer Himalays, is extremely vulnerable to heavy soil run off and erosion. This natural process is further accentuated by the very heavy and, sometimes erratic, rainfall that this area receives. I don't think accurate data about siltation of this area (dam site and the reservoir area) is available. Such data may be available at Srirampur, where C.W.C has a data collection center. But this data will not be applicable to the dam site, which is situated amongst the gorges and where the rate of siltation is much higher. This will have direct effect on the life of the reservoir, which is directly linked up with the economic viability of the project itself. If the calculated life span of the proposed reservoir is reduced, then obviously the economic projection of the entire project will go haywire. This cannot be taken lightly for any reason, whatsoever, for power generation or for anything else.

The Dam and reservoir thus appears to be in a very ecologically sensitive and fragile region. Besides another point possibly deserves utmost careful consideration. This area falls within extremely sensitive and vulnerable seismic zone recognised anywhere. An earthquake of over 8 richter scale is recorded in this area in 1897.

## Sankosh Dam.

The proposed main dam as also the left dam will be located within the area of Bhutan. The main dam will be located about 12 km. inside Bhutan, while the left dam will be located close to the Indo-Bhutan international boundary. These two dams and the resultant reservoirs will occupy hectares of the catchment area within Bhutan and will naturally alter the natural ecological situation drastically, which requires attention.

Ecological considerations: - The area of the proposed dam and the submergence in Bhutan supports very rich floral and faunal resources, as can be seen from the enclosed list and the description of the forest types supported by this area. The forest types include mixed Sal, moist deciduous semi-evergreen and even subalpine moist deciduous and semi evergreen forests. Many of these forests are extremely rich in ferns, ~~and~~ epiphytes and lichens, being located in extremely moist conditions. Endemism is strong and the seasonal effect of two biogeographic zones (Palearctic and Indomalayan) is pronounced which results in a wide broad spectrum of biodiversity contained in the area, which is recognised as a 'Hot spot'. The eastern bank has the Golden langur (*Presbytis gis*) which is not found beyond the river Manas to the east.

The importance of this area as a storehouse of genetic resources is indeed incalculable and should be rated in top priority bracket for preservation for future human interests. With the coming up of the proposed dam and the reservoir, most of the valley bottoms will lose this natural wealth of renewable resources, which will be lost for ever, as no amount of compensatory forest raised elsewhere will be able to recreate this biodiversity, which will be lost for ever, as most of these resources are confined in the ~~valleys~~ valleys and not only the mountain slopes. The floral and faunal list provided in the annexure is, by no way, composite and requires elaborate exploration specially to assess the magnitude of arifauna and the invertebrate life forms.

Seismicity: - The area is situated in one of the most sensitive seismic zones. Earthquake reaching 8 in Richter scale is in record during the last hundred years. The bed rock is of tertiary origin and is very unstable. Besides there are some natural faults in this area. All this makes up to apprehensions of a dam break or some break elsewhere in case of any unfortunate severe earthquake.

The dam break result analysis is dreadful and it appears that no human precaution can be any effective safeguard against the possible catastrophe that is likely to sweep through the highly populated downstream areas. The unnatural extra heavy weight of the water of the reservoir is also suspected to alter the seismic factors adversely and unpredictably. The promise of power generation from the dam may not therefore outweigh the possible catastrophic results on the large human habitations as a result of ~~a~~ even a remotely possible dam break or any breach.

Economic viability: - I don't know of any reasonable data being available about the natural rate of siltation in the area of the proposed reservoir. Such some such data is probably available near the Lateral road near Sivampore, where C.W.C. has a riverside station. But such data, I am afraid, will not be wise to use in the reservoir area, because the station is situated on the plains, while the reservoir is on the gorges, where the siltation must be much higher.

~~Thus~~ However, the expected life of the reservoir depends directly on the accurate siltation data. Besides this area is notorious for short bursts of unusually heavy rainfall, which is accompanied by strong cloudbursts. This causes very frequent landslides, which is evident from even a casual look at the area. Such rather unusual phenomenon accelerates the erosion and <sup>causes</sup> unusually high siltation, which is more than likely to upset the calculation of the life of the reservoir.

In case of shortening of the ~~estimated~~ calculated life of the reservoir for any reason, the economic viability of the hydro project may go haywire. Because power will have costed <sup>at</sup> much higher higher rate than envisaged to neutralise shortening of time. This aspect requires careful study and analysis. As per some prominent geophysicists, eastern Himalayas are unsuitable for hydro projects, mainly as such projects are not likely to be economically viable, because of unstable bed rock, consequent heavy riltation and short life of the reservoir. All these factors will naturally be multiplied by unusual and erratic rainfall.

The analysis of EIU and EMP at para 6.4 (Epilogue) is also not acceptable. The ecological loss that will be sustained because of construction of the dam and the reservoir cannot be restored, much less E.I.U. improved upon the natural value through power and employment generation, which shall definitely improve the economic situation. In fact the employment generation will not be available to the local people, many of whom will become 'outsiders' involving problems of relocation. People from elsewhere are likely to ~~have~~ gain access to the employment, most of which will be technical in nature. Thus increase in human pressure and change in lifestyle is likely to cause future erosion of ecological values in the area. Thus the plan does not seem to be environmentally sustainable, as claimed in the 'Epilogue'.

Sankosh - Tusta canal

Concept  
A canal 26 metres wide and 6 metre deep has been proposed to be built starting from the left dam inside Bhutan, within a short distance from the Indo-Bhutan international boundary. This canal will cut across three Protected areas, including the core of the Buxa Tiger Reserve, besides running through some Reserve forest, as many as — Tea estates and other civil areas. The proposed canal will cut across numerous streams that run from the North to South including sizeable rivers like the <sup>Residual</sup> Roydak, Torsa, Dima, Jaldhaka and the Tusta etc to name only the major ones. Once completed, the canal should be an engineering marvel with few peers anywhere in the world. All these streams and the others are known for their characteristic frequent change of course, which will have to be very carefully considered. There is considerable slope from North to South in the entire area, which makes the natural flow of water from the Himalays down south and the canal will run across this natural direction of water flow in the area, which may considerably more difficult to tackle.

Legal aspects:- Since . . . . . Hectares of Forest land including some in the Protected areas will have to be utilised for this purpose, it will attract the provisions of <sup>the</sup> Forest Conservation Act. Obtaining such clearance will be extremely difficult, specially in the Core area of the Buxa T.R. where no human interference, much less use of such land for non forestry purpose is normally not to be allowed. However, even if such permission is allowed, no "compensatory plantation" will compensate the ecological loss that is sure to surface due to the canal construction. The possible legal scope for allowing the Conservation Act clearance seems to be to 'downsize' the required forest area within the Protected areas. This seems to be near impossible in today's context, where there are many public interest litigation cases are coming against the Ministry of E & F against violation of Conservation Act.

Besides, . . . . . Hectares of Tea Estate land in . . . . . Estates will have to be acquired for the purpose. I had the chance of talking to some of the Tea people in this connection. They are all, without exception, strongly opposed to such acquisition, even on payment of adequate compensation. I feel, there will be nearly insurmountable problems coming out of this issue, as the alignment of the canal cannot be altered.

Further, I am also aware that the State Govt. of West Bengal has not been consulted about this planning, much less taken into confidence. As a result there will be very strong opposition even from the State Govt. It is probably essential that the matter is taken up with them.

Ecological aspects. The area of North Bengal is ecologically very important area, as far as the rich biodiversity that the area holds. This area had supported a very rich and extremely rich habitat varied natural habitat for a wide spectrum of wild animal life not very long ago. But expansion of human habitation and various development activities, including setting up of a stream string of Tea Estates along the foothills and down south pushed the wildlife with the back to the wall. Besides shrinking of natural habitat due to such activities, natural mixed forests in extensive areas of this region has been converted into plantation of commercial species like Teak, Sal and some other selected timber species. This has severely altered the natural ecosystems, the likes of which may be available only in small isolated pockets in some areas.

Extraction of the forest produce and conversion to monoculture has been going on in this area since the second or 3rd decade of the current century. To add to this a great demographic ~~to~~ change took place after independence, when a very large population of expatriate East Bengal (Now Bangladesh) population settled in this region, occupying all the low lands, which suited wet agriculture, but had been excellent <sup>wild animal</sup> feeding ground for

After the Chinese aggression in 1962 large scale Army deployment was done in extensive areas of this region and an elaborate network of roads ~~work~~ was established ~~in this area~~, which had been regarded as one of the most inaccessible areas in the Himalayan foot hills. All such human activities and above all human settlements in the area drastically fragmented the natural habitat of the wildlife communities.

All the above human activities along with physical persecution of wild animals of all kinds severely depleted the wild animal population of this area. The Lesser Indian Rhinoceros had been a casualty in the last part of the Nineteenth century and the Pink headed duck disappeared probably by the late twenties or early thirties. The ~~Greater~~ Indian Rhinoceros had been found ~~in~~ scattered in many areas in this region, but is restricted only in two pockets now in Jalapara and Garumara wildlife sanctuaries. Both these Protected areas will be affected by the proposed canal.

The whole area between the rivers Sankosh and Tusta & beyond had originally been contiguous elephant country and the estimated number of elephants found here <sup>during the last century</sup> could have been not less than 300. Elephant herds used to migrate ~~east~~ <sup>eastward</sup> beyond Sankosh and westward beyond Tusta. But the composite habitat of the elephants also includes the lower parts of southern Bhutan, <sup>particular</sup> the valleys. Unfortunately the lower areas in Bhutan <sup>were settled</sup> <sup>gradually</sup> got over exploited and many areas, specially along the valleys, <sup>came under the plough</sup> which resulted in shrinkage and fragmentation of natural habitat of the wild animals in general and that of the Elephant in particular.

A string of tea estates came up in this region, which also added to the shrinkage and fragmentation of the natural habitat. However, the total elephant population in this area ~~stands~~ stands at present below 100. But even this small remnant population is causing an enormous man-elephant problem. These elephants have to have large ~~an~~ contiguous natural habitat to themselves for their survival and viability. The large bodied pechydom has an intake of about 2.5 to 3 quintals of food every day, when adult. Further the elephant eats only about  $\frac{1}{3}$  of the vegetative matter which ~~it~~ may uproot or pull down. This naturally signifies that 'true sustainability' will call for complete restoration of the loss of vegetative cover because of elephant (or other animal) feeding, by the time the elephants visit the same area again. Besides, the availability of adequate nutrition gradient is also very important. If the optimum nutrition is not available due to some reasons like conversion of the natural ecosystems into monoculture or general degradation through over-use, instinctively larger areas will be constituting the home range of the elephants (other animals).

Presently the state of habitat available to the elephants as also other animals in the area has been rendered such that natural living of the animal communities have been in jeopardy. The elephants have been forced to roam large areas which includes human settlements, tea estates etc and brings them in direct conflict with man. There are patches of forest areas pocketed by such human settlements and the elephants, specially the herds, regularly and <sup>frequently</sup> often cross through these settlements to reach from one forested area to another. Every year on average more than 50 persons are killed in this

area by the elephants, besides causing extensive damage to agricultural crop, caused by their irregular movement in the entire area of the proposed canal alignment. The elephants also use quite a few natural salt licks, all of which exist on the foot hills of Bhutan. This makes the elephants make obligatory movement South to North and vice versa. If one look is taken into the movement ~~map~~ pattern of the elephants in this area, it will be observed clearly that the movement takes place both South-North as also East-West. During their movement to the North, elephants regularly cross into Bhutan and return. There exists a very large natural salt lick about 3/4 km. west of the river Sankash. This salt lick is situated inside Bhutan, about 2 km. to the North of the Indo-Bhutan international boundary. All the elephants, resident in Buxa, as also some elephants, who cross over Sankash from Assam regularly and invariably visit this salt lick. Elephants visiting this salt lick traditionally has been taken advantage of in capturing these animals in kheda operations, which has been abandoned since early seventies. But not only elephants, all other wild animals also regularly utilise this salt lick, which has a definite bearing on the health condition of the animals. All these natural salt licks on the Bhutan foot hills are very significant for survival of the animal communities of the area.

The proposed canal will obviously force these animals to abandon the traditional use of the salt licks. This, specially the elephants' movement pattern will be drastically changed, which shall have a catastrophic result on the very survival of the elephants, which is a Schedule I species and special efforts are on for protection and management of the species in this region under Project elephant. The canal will effectively divide all three Protected areas of this region, which will include even the Core area of Buxa Tiger Reserve, which is National Park in status. No human activity or any interference is legally allowed in such areas under the Wildlife (Protection) Act. The core area of Buxa contains some of the finest stand of moist deciduous and semi evergreen forests, interspersed with magnificent stands of class I Sal mixed Sal. forests, reminiscent of the natural luxuriant ecosystems, that still support a broad spectrum of fauna, which includes at least 5 species of tiger cats, the leopard and the tiger, which reflects the importance of this protected area in connection with Biodiversity conservation. Buxa has the effect of two Biogeographic zones, the Palearctic zone and the Indo-malayan realms which produces a strong ecotonal effect in the area, resulting into great diversity in floral and faunal richness.

The importance of conservation of this area, which has also immense variety of avifauna and insect life cannot be overemphasised as an area of tremendous gene pool resource reservoir, which has unlimited potential for future human survival. Such ecological values of gene pool resources is impossible to qualify, much less to quantify as such values are dormant. It is thus only a reasonable not to take any risk in conservation of the remnant biodiversity at hand when a large part has already been lost to human advent during the recent past.

If and when the canal, and the feeder road (including for maintenance) and the anti erosion structures are established, dissecting the Protected areas, the future viability of wild <sup>life forms</sup> of most species shall be in serious jeopardy. Wildlife is ~~is~~ under extreme pressure anyway and ~~to~~ the status has fallen far below, what may be considered optimum in this area of very high biodiversity productivity. Further pressure and fragmentation of the already inadequate natural habitat will render all conservation efforts in the area completely meaningless. I have no shade of doubt

about the disastrous consequences on conservation, which has been taken up as per a national wildlife and forest conservation policy. A decision should be taken to abandon the conservation policy in favour of establishing the canal, which is not compatible to conservation in any stress of imagination. Any so called remedial measures to justify establishing the canal and simultaneous conservation efforts to run is nothing short of a simple eye wash and cannot even be considered.

The area of Jaldapara sanctuary has only recently been extended towards the north in an attempt to offer some more space to the wild animal communities, specially to the elephants, who are already far too short of adequate habitat, which is causing unnatural man elephant conflict. The proposed canal will cut across this extended area and will directly act against the conservation efforts undertaken after a lot of detailed consideration. This seems to be really quite ridiculous, as one decision completely more than nullify another! Both Jaldapara and Gorumara sanctuaries support some Rhino populations, which are the only areas outside Assam, where this species still occurs naturally. The importance of these two areas thus stands unusually high in conservation. Both these areas, specially Gorumara, which is a small conservation island will be adversely affected to such an extent that conservation efforts to continue will be rendered meaningless.

#### Other factors of significance.

The Himalays and for that matter any mountain system anywhere has natural drainage through rivers, rivulets and channels, which are formed through millions of years natural processes. The drainage system cannot be improved upon by man, despite his scientific achievements, which is truly incredible. Some such attempts to divert natural courses or altering the natural course same has either failed or resulted into serious adverse impacts in other countries. Such a major effort to divert natural course of a river for irrigation in Russia had to be abandoned midway through, when it could be realised that the results would turn disastrous.

The proposed attempt to divert substantial parts of the natural flow of Sankash river is, in reality, ~~for~~ loaded with extremely dangerous consequences, which should be carefully examined.

① The catchment area of this river in Bhutan is known for extremely heavy <sup>and uncertain</sup> rainfall in very short period of time. Such unusually high rainfall often is accompanied by severe cloudbursts. Frequent landslides are rampant in the whole area and can be observed peck marking the ~~hills~~ <sup>more</sup> outer mountain slopes towards the South. This phenomenon which may be quite unique to this region, often results into severe flash floods, which <sup>have been</sup> are devastating, to catastrophic in nature during the part. In October, 1968 one such ~~an~~ unusual spell of extraheavy rainfall in this area had caused an unusual flash flood, ~~which~~ resembling a deluge in the river Teesta. This flood resulted into death of scores of people downstream. The number of people thus perished will never be known but various estimates puts it between 20,000 to 25,000. The damage done to the human property will also never be known. During the rainy season of 1994 an unusual flood on the river Torsa had devastated the downstream areas, which caused extensive damage to human property, though not many lives were lost.

The proposed canal shall be constructed against the natural flow of all the streams of this region and will include several sizeable rivers. ~~All~~ The entire area between Teesta and Sankash ~~has~~ is known for the above type of extreme natural calamity and I foresee that such a concrete canal along the contours and across the natural slope will not be able stand the pressure of the

quantity of (5)  
uncalculable water and silt (sand, pebbles, stones and boulders that included) that is carried down along the affected streams during such unusual floods. Even if the canal structure may hold the initial pressure, scourage surface, scourage and consequent breaking of the canal cannot be ruled out. The canal structure, in any case, will act as a 'dam' against the flow of water all along, even if rivers and streams are allowed to flow normally by taking engineering measures like providing aqueducts etc. This is bound to produce abnormal situations as a large quantity of the ground flow of water is not carried by the rivers and streams.

The bed rock in these areas is extremely unstable. The deposit of sand and soil overlying sand stone (mainly) is extremely porous and subsoil drainage is a characteristic of the area. Scourage under the canal is thus almost a certain definite result. The natural ecosystems in this vital foot-hill areas are nearly non-existent now. Such ecosystems, if present to-day, could have absorbed at least parts of the probable results. But since such ecosystems have either been modified or in some areas completely lost (due to establishment of settlements) and hence such buffer effect to reduce the impact is no longer available and naturally the results can simply be devastating.

① From the above it should be clear that construction of such a canal across the natural drainage of an area, which is known for unusually heavy rainfall in a very short spell of time and with unstable rock and soil conditions may not be an ideal engineering plan of irrigation. More common sense may provide a clue to this riddle.

② The entire canal area falls in a highly sensitive seismic zone, where earthquake around 8 in Richter scale has been in record during the current century (late Twenties). In such an event of high intensity earthquake, the canal will, without doubt be vulnerable and with devastating consequences. The length of the canal will weigh heavily against possible guarantee against breaking of the canal.

③ No data is available about the required quantum of water for irrigation in the command area of Katihar and Purnia districts in the state of Bihar. These two districts are not known for lacking in ground water resources. On the contrary these are flood prone areas with scattered wetlands. What may be required is proper harnessing of the ground water resources in the area. However, proper data on the command area is required to justify the construction of the canal, involving huge expenditure.

④ No data has been made available on the command areas, downstream of Sankosh river, from where water is planned to be flown down the canal. However, it is known that agriculture in a large and wide spread area of 4 districts in Assam and West Bengal is heavily dependant on the flow of the river Sankosh. Diversion of water from this river is bound to affect agriculture in these heavily populated extensive areas. The river also is a big source of fish which is very extensively utilised by the local people as their chief source of protein. This ~~is~~ very important source of food for the local people, who are mostly poor to very poor will be very badly depleted.

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Conclusions: - From the above it may be clearly understood that the proposed canal, when constructed, is bound to have disastrous effects on the ecological conditions of the entire region, which is situated in a very fragile ecological area with extremely uncertain and variable precipitation. The area is also situated in one of the highly sensitive seismic zones to add to the uncertainty.

Forest and wildlife in the area will be severely affected and no remedial measure will be able to really contain the damage. The compensatory afforestation may be able to keep the total forest cover unchanged, but loss of forest cover in the crucial foothills area and its disastrous ecological consequences cannot be checked by such compensatory plantations (even of much larger areas) taken up elsewhere, ~~as~~ as the proposed canal alignment runs through a vital area.

The natural productivity of the entire region, south of the canal will surely decline because the concrete canal will effectively stop or at least drastically reduce the natural silt deposition flowing down from the hills, which periodically rejuvenates the natural productivity, which is lowered by intensive agricultural practice.

As pointed out earlier attempt, to divert substantial parts of the natural water flow from a monsoon fed sub-Himalayan area through a concrete canal smacks of engineering arrogance, but a lack of essential ecological understanding and is loaded with probable ecological disaster in the future.

Such an extremely dangerous proposal cannot therefore be supported even if all the precautions and proposed remedial measures are religiously undertaken. In this regard the calculations of EIU and EMP seems to be irrelevant. The two positive values in E.M. i.e., of power generation and employment generation can in no way improve the ecological situation in the proposed dam area, though admittedly this may result into economic upliftment. In other words such economic development coming from the dam and the reservoir is billed against nature. Such tampering of nature is ill-advised.

Besides the above another aspect may also be relevant in this regard. The layout of the proposed canal runs through not only Forest area, where clearance of Forest Conservation Act is mandatory, but the same also runs through a series of Tea estates. I had consulted some of these Tea people and none will be agreeable to give up any Tea estate land for the canal. This is certain to get involved in legal litigations, which will be extremely difficult to clear.

The ascent of the state govt. of West Bengal will also be essential to lay the canal. But in a talk with the Minister Forests I understood that the state govt. is not at all agreeable to allow the canal to be constructed in this area. This will certainly be a very difficult barrier to cross.

From all the above it will probably be clear that the proposed canal cannot be justified. It is not known how the proposal had been considered and even a lot of funds have already been spent as an pre-investment expenditure, before even consulting the state govt.