



## Environment



---

## Water Community and Climate Change Community

### Solution Exchange for the Water Community Solution Exchange for the Climate Change Community Consolidated Reply

#### *Query: Restoration of River Chite, Aizawl, Mizoram – Referrals; Advice*

Compiled by [Nitya Jacob](#) and [Ramesh Jalan](#), Resource Persons and [Sunetra Lala](#) and [Kirtiman Awasthi](#), Research Associates

Issue Date: 22 September 2009

---

From [R. Chamliana](#), Zoram Research Foundation, Aizawl, Mizoram  
Posted 31 August 2009

I work for Zoram Research Foundation (ZORF) which is a grassroots organization working with local communities on livelihood and traditional water management in Mizoram. ZORF is preparing to take-up a project for the Restoration of River Chite in technical collaboration with appropriate agencies/institutions working in similar projects.

River Chite is situated on the eastern side of Aizawl City in an alluvial valley at altitude of 800-1000 m. The river is bound by patches of forested mountains on the other side (left bank). The river is about 200 km long and joins the River Tlawng at the southern end of Aizawl City.

The primary objective of the River Chite Restoration Programme is to re-establish River Chite as a clean and healthy state for the present and future generations and also improve its overall surroundings. In this project, we propose to begin with a detailed study on the water quality and aquatic diversity along the River Chite, both upstream and downstream of Aizawl from at least three main sites to analyze the effects of pollution from the city.

Restoration actions for the river Chite will be based on the following objectives:

- Ecological Health Status Analysis
- Develop Strategies for Improvement of Stream
- Generation of Public Awareness and Participation

In this connection, I would like Community members to respond to the following:

1. What are the appropriate agencies/institutions that we can approach for technical collaboration
2. Please suggest specialists/experts who could assist the project team in design and implementation of the project

3. What are the best practices applied by other agencies in the process of restoration of rivers
- 

### Responses were received, with thanks, from

1. [Suman K Apparusu](#), Independent Consultant, Hyderabad
2. [S Vishwanath](#), BIOME Environmental Solutions Private Limited, Bangalore
3. [Abhay Kumar](#), Toxics Link, New Delhi
4. [Padma S Vankar](#), Facility for Ecological and Analytical Testing, Kanpur
5. [Mrinalinee Vanarase](#), Ecological Society, Pune
6. [N. C. S. Seema](#), WaterHealth India Private Ltd, Secunderabad
7. [Amitangshu Acharya](#), Arghyam, Bangalore
8. [Gaurang Mishra](#), Directorate of Economics and Statistics, Port Blair
9. [Kalyan Paul](#), Pan Himalayan Grassroots Development Foundation, Ranikhet
10. [Arunabha Majumder](#), Jadavpur University, Kolkata
11. [Harish Kumara B.K.](#), Institute for Resource Analysis and Policy (IRAP), Hyderabad

*Further contributions are welcome!*

---

[Summary of Responses](#)

[Comparative Experiences](#)

[Related Resources](#)

[Responses in Full](#)

---

### Summary of Responses

Climate Change is a real threat and requires immediate action. The loss of vital ecosystem functions, for example due to degradation of riparian habitat, reduces ecological resilience and adaptability. It also increases our vulnerability to the adverse impacts of Climate Change. [Studies](#) have shown ecological restoration is a critical tool in addressing Climate Change and increasing the ecological resilience of rivers.

The Chite River, that flows through Aizawl, capital of Manipur state in north-east India, is being polluted by effluent discharged from the city. As is the case with rivers elsewhere in India, conflicting demands for water are also taking their toll on water quality. Encroachment has shrunk and congested rivers; the discharge of untreated or partially treated waste water from cities, towns and industries, surface runoff carrying silt, pesticides, insecticides and agricultural waste, dumping of municipal solid wastes, sewage, mixing of leachates, animals bathing and dumping of dead bodies have adversely affected its health.

To develop a strategy for restoring the river, the agency concerned needs to conduct a limnological survey of the river which will establish the specific threats to the river's ecosystem. The survey will form the basis of the river restoration plan. Several organizations have worked on reviving river systems in different parts of India. These initiatives have succeeded because of strong community ownership which has cemented their sustainability.

Community-led eco-restoration initiatives, however, usually have long gestation periods of a decade or more. Therefore, the local water authority can set up water treatment plants to address immediate threats to water quality but it may not be the best option in the long run due to the high capital and operating costs. A mix of local vegetation can serve the same purpose,

but takes longer to set up and helps to restore the health of the river, provide biomass for local communities' needs, help in carbon fixation, and provide livelihoods for the poor.

A strong local leadership can help galvanize local communities into action. Non-governmental organizations and local government authorities can act as catalysts. For example, additional research shows that in Punjab, Baba Balbir Singh Seechewal encouraged his followers to clean the Kaliben River, changing the river from a virtual sewer to a fresh water stream. Strong leadership can also motivate communities to work alongside local NGOs or authorities.

In [Gujarat](#), the Aga Khan Rural Support Programme (AKRSP) has restored the Meghal River. It began by raising awareness (through street plays and folk songs), went on to strengthen village institutions, and built on the community's attachment to the river to ensure participation. AKRSP constructed water-harvesting structures and reduced water use by farmers with a more efficient irrigation system.

In Alwar District, [Rajasthan](#), Tarun Bharat Sangh revived a system of five rivers by translating the traditional knowledge of the local people into action. Over a period of 25 years, the NGO has worked with villages to revive the Arvari River by restoring the traditional social processes of water management. The NGO restored some traditional water harvesting structures, and then the villagers took ownership of the programme.

In Chaskaman, [Maharashtra](#), the Ecological Society experimented with a way to restore fish breeding habitats in a mountain stream. The selected stream originates in the forested slopes in Bhimashankar in the catchment area of the Chaskaman dam built on the river Bhima. The stream joins the reservoir near Bhorgiri village.

In Sirmaur district, [Himachal Pradesh](#), the Pan Himalayan Grassroots Development Foundation initiated Pidyadhar Micro Watershed Development Plan in 2004. This community driven programme was designed to improve the quality of life of villagers living within the catchment of the Palor River. The plan entailed setting up Village Development Committees and Self-Help Groups. They planted 59,507 saplings in the villages, with a survival rate of 44 per cent.

The agency concerned has to follow up community mobilization with appropriate, local technical solutions for river restoration. There are many organizations and experts in different parts of India with expertise on this specialized subject. They could assist in development of a programme for restoring the Chite River by providing inputs on mobilization of the community and also technical solutions.

---

## Comparative Experiences

From [Kirtiman Awasthi](#), Research Associate

### Rajasthan

#### Community Efforts lead to Eco-restoration of a River, Alwar District

Arvari, a small river in Alwar, had been reduced to a rain-fed drain by the early 1980s. Mobilised by Tarun Bharat Sangh, communities started rejuvenating the river in 1987 by constructing a water harvesting structure. This was soon taken up by several villages. As a result, the river is now perennial. A decentralized conservation programme has been created in 70 villages along the river to ensure sustainability of the river and its restoration efforts in the future. Read [More](#)

### Maharashtra

### **Restoration of Stream Habitat Leads to Improved Water Quality, Pune District**

The Ecological Society undertook a programme to restore the fish breeding habitat in a mountain stream. The stream originates from the catchment area of the Chaskaman dam built on the river Bhima. A 1.5 m high and 25 m long cascade dam was built on the stream, which disrupted fish spawning. However, as a result of their efforts the quality of shallow waters of the reservoir has improved and it now provides an ideal habitat for fish spawning. Read [More](#)

## **Gujarat**

### **Community Efforts to Revive the Meghal River Basin meets with Success, Junagadh District**

The River Meghal is 70 km long, and important to the Maliya, Mendarda, Keshod and Mangrol talukas. The Aga Khan Rural Support Programme started a restoration programme by ensuring community participation, constructing check dams and percolation tanks and using traditional rainwater harvesting techniques. As a result, this seasonal, rain-fed river is now perennial and there is increased availability of water for irrigation and drinking. Read [More](#)

---

## **Related Resources**

### ***Recommended Documentation***

From [Kirtiman Awasthi](#), Research Associate

### **Standards for Ecologically Successful River Restoration**

Article; by M. A. Palmer, et al; Journal of Applied Ecology; April 2005; Available at [http://restoringrivers.org/PDF/standards/Palmer\\_et\\_al\\_2005\\_JAE.pdf](http://restoringrivers.org/PDF/standards/Palmer_et_al_2005_JAE.pdf) (PDF; Size: 128KB)

*Proposes five criteria for measuring the success of river restoration projects aimed at improving ecosystem health and services*

### **Why Climate Change makes Riparian Restoration more Important than Ever: Recommendations for Practice and Research**

Article; by Nathaniel E. Seavy, et al; Organization; Ecological Restoration; September 2009; Available at <http://er.uwpress.org/cgi/reprint/27/3/330> (PDF; Size: 630KB)

*Argues in favour of river restoration as rivers need to be made resilient, since climate change will alter water temperature, run-off, and distribution of plants and animals*

### **Arvari Sansad (Parliament) The Voice of Common People**

Article; by Tarun Bharat Sangh; Alwar;

Available at <http://www.tarunbharatsangh.org/programs/water/arvariparliament.htm>

*Discusses the role of the Arvari River Parliament, which through community mobilisation and community involvement was able to revive the River Arvari*

### **Restoration of Stream Habitats at Chaskaman**

Article; by Ecological Society; Pune;

Available at

[http://www.ecological-society.org/index.php?option=com\\_content&task=view&id=18&Itemid=36](http://www.ecological-society.org/index.php?option=com_content&task=view&id=18&Itemid=36)

*Discusses an experiment that was carried out to restore fish breeding habitat in a mountain stream which enhanced the quality of water of the Chaskaman reservoir*

### **Palor River Basin**

Article; by Grassroots; Ranikhet, Uttarakhand

Available at <http://www.grassrootsindia.com/palorriverbasin.html>

*Describes the Pidyadhar Micro Watershed Development Plan - a community programme aimed to improve the quality of life for villagers living in the catchment of the River Palor*

### **Villagers March to Revive the Meghal River**

Article; by Suresh Babu S. V.; Down to Earth; New Delhi; 2003;

Available at <http://www.indiaenvironmentportal.org.in/node/39259>

*Describes the foot march of thousand of people in order to create pressure on the authorities to revive the River Meghal in Gujarat*

### **Recommended Contacts and Experts**

#### **Prof. V. Subramanian, School of Environmental Studies, Jawaharlal Nehru University, New Delhi** (from [Abhay Kumar](#), *Toxics Link*, New Delhi)

School of Environmental Sciences, Jawaharlal Nehru University, New Delhi 110067; Tel: 91-11-26704316; Fax: 91-11-26717502; [subra42@gmail.com](mailto:subra42@gmail.com);

<http://www.jnu.ac.in/Faculty/vsubramanian/>

*Expert who works on research projects that include Environmental Information System, ground water quality, biogeochemistry of rivers and ecorestoration of rivers*

#### **Dr. Padma S. Vankar, Facility for Ecological and Analytical Testing, Indian Institute of Technology, Uttar Pradesh** (from [Padma S Vankar](#))

Kanpur, UP 208016; Tel: 91-512-2597844; [psv@iitk.ac.in](mailto:psv@iitk.ac.in)

*A senior scientist at IIT Kanpur, has been involved in chemical analysis, metal or colour remediation and is also intrested in ecorestoration of rivers and lakes*

#### **I. S. Rao, Children's Environment Science Congress, Andhra Pradesh** (from [N. C. S. Seema](#), *WaterHealth India Private Ltd*, Secunderabad)

Tel: 91-9290216923,91-40-64514677; [israo46@gmail.com](mailto:israo46@gmail.com)

*A resource person for the Ministry of Rural Development, has worked in the field of ecorestoration of rivers*

### **Recommended Organizations and Programmes**

From [Suman K. Apparusu](#), *Independent Consultant*, Hyderabad

#### **IRAMCONSULT, New Delhi**

15, Zakir Bagh, Okhla Road, New Delhi 110025; Tel: 91-11-26844192; [iram@vsnl.com](mailto:iram@vsnl.com), [ram05@sify.com](mailto:ram05@sify.com); <http://www.iramconsult.com/Envproject.htm>

*Organization associated with the National River Conservation of Government of India and has been providing consultancy services for river and lake conservation projects*

#### **WWF India, New Delhi**

172 B, Lodhi Estate, New Delhi 110003; Tel: 91-11-41504815; Fax: 91-11-24691226; [http://www.wwfindia.org/about\\_wwf/what\\_we\\_do/freshwater\\_wetlands/index.cfm](http://www.wwfindia.org/about_wwf/what_we_do/freshwater_wetlands/index.cfm);

Contact Parikshit Gautam; Director, Freshwater and Wetlands Conservation Programme; Tel: 91-11-41504820; [pgautam@wwfindia.net](mailto:pgautam@wwfindia.net)

*The Freshwater and Wetlands Conservation Programme of WWF India focuses on conservation of freshwater ecosystem including rivers and wetlands*

#### **Tarun Bharat Sangh, Rajasthan**

Bhikampura, P.O. Kishori Thanagazi, Alwar 301022, Rajasthan; Tel: 91-1465-225043; <http://www.tarunbharatsangh.org/national%20level.html>; Contact Rajendra Singh; President; Tel: 91-1465-225043; [rajendrasingh@tarunbharatsangh.org](mailto:rajendrasingh@tarunbharatsangh.org), [watermantbs@yahoo.com](mailto:watermantbs@yahoo.com)  
*NGO that triggered the process of water harvesting by building Johads and has undertaken community led river restoration efforts in Alwar, Rajasthan*

**Sankat Mochan Foundation, Uttar Pradesh**

B-2/15, Tulsi Ghat, Varanasi 221001, Uttar Pradesh; Tel: 91-542-2313884; Fax: 91-542-2314278; [http://www.sankatmochanfoundationonline.org/save\\_ganga.html](http://www.sankatmochanfoundationonline.org/save_ganga.html); Contact Veer Bhadra Mishra; Founding President; Tel: 91-542-2313884; [veerbhadramishra@swatchaganga.org](mailto:veerbhadramishra@swatchaganga.org)  
*Works on the implementation of restoration activities for the River Ganga and to mobilise community interest and participation*

**Ecological Society, Maharashtra (from [Mrinalinee Vanarase](#))**

B-2, Jayanti Apartments, Near Ratna Hospital, Senapati Bapat Road, Pune 411016, Maharashtra; Tel: 91-20-25677312; [ecological.society@gmail.com](mailto:ecological.society@gmail.com); [http://www.ecological-society.org/index.php?option=com\\_content&task=view&id=35&Itemid=52](http://www.ecological-society.org/index.php?option=com_content&task=view&id=35&Itemid=52); Contact Mrinalinee Vanarase; Executive Director; 91-9822000862  
*Works on restoration of streams and rivers; designs and conducts training programmes to create awareness and capacity building for restoration and conservation projects*

From [Amitangshu Acharya](#), Arghyam, Bangalore

**Department of Environmental Science, North East Hill University, Meghalaya**

Umshing, Mawkynroh, Shillong 793022, Meghalaya; <http://www.nehu.ac.in/Schools/Environmental%20Sciences/Centre%20for%20Environment/>; Contact O. P. Singh; Head of Department; Tel: 91-364-2721156/2721159; [hodces@nehu.ac.in](mailto:hodces@nehu.ac.in)  
*Engaged in advisory and consultancy services along with research in the area of natural resources, particularly conservation of fragile ecosystems and rivers in northeast India*

**Ashoka Trust for Research in Ecology and the Environment (ATREE), West Bengal**

E2, Second Floor, Golden Heights, Gandhi Road, Darjeeling 734101, West Bengal; Tel: 91-354-2259297; <http://www.atree.org/vembanad.html>; Contact Suman Rai; Regional Director; Tel: 91-354-2259297; [suman@atree.org](mailto:suman@atree.org)  
*Works in the area of freshwater conservation, conservation of lakes, rivers and wetlands; has developed several programmes for restoration of rivers and streams*

**Wangjing Women and Girls Service Society, Manipur**

Wangjing Bazaar, Thoubal District 795148, Manipur; Tel: 91-3848-222575/222605; Contact Jelshyam Singh; [wwagss@gmail.com](mailto:wwagss@gmail.com)  
*Besides advocacy on women and child's rights issues, this NGO has recently started working on restoration of River Wangjing in collaboration with Global Water Partnership*

**Pan Himalayan Grassroots Development Foundation, Uttarakhand (from [Kalyan Paul](#))**

Post Bag No. 3, Ranikhet 263645, District Almora, Uttarakhand; Tel: 91-5966-221516/222298; [apaul@grassrootsindia.com](mailto:apaul@grassrootsindia.com); <http://www.grassrootsindia.com/riverbasinrestoration.html>  
*Organization involved in a community driven programme aimed at restoration of a river basin in the Himalayas*

**CONCERN For Better Living, West Bengal** (from [Arunabha Majumder](#), Jadavpur University, Kolkata)

BE 420, Salt Lake, Kolkata 700064, West Bengal; Tel: 91-33-2557919; Contact Sujit Kumar Bhattacharya; Secretary; Tel: 91-9339749695; [sujitbhatta@hotmail.com](mailto:sujitbhatta@hotmail.com)

*Organisation of a group of scientists and technologists with experience of river pollution management, river restoration, etc*

**Institute for Resource Analysis and Policy, Andhra Pradesh** (from [Harish Kumara B.K.](#))

202, Riviera Apartments, Dwarakapuri Colony, Punjagutta, Hyderabad 500082, Andhra Pradesh; Tel: 91-40-42617392; <http://www.irapindia.org/projects.html>; Contact M. Dinesh Kumar; Executive Director; Tel: 91-40-42617392; [dinesh@irapindia.org](mailto:dinesh@irapindia.org)

*Works on ecosystem services, eco-hydrology, hydrogeology, environmental flows, biodiversity and livelihood support for riverine communities*

**National River Conservation Directorate, Ministry of Environment and Forests, New Delhi** (from [Kirtiman Awasthi](#), Research Associate)

B-Block, Paryavaran Bhavan; CGO Complex, Lodi Road, New Delhi 110003; Tel: 91-11-4362281; Fax: 91-11-4360009; [nrcd@envfor.delhi.nic.in](mailto:nrcd@envfor.delhi.nic.in); <http://envfor.nic.in/nrcd/NRCD/table.htm>; Contact R. H. Khwaja; Additional Secretary and Project Director; Tel: 91-11-24362285; [rhkhwaja@hotmail.com](mailto:rhkhwaja@hotmail.com)

*Coordinates the implementation of river action plans, river classification, pollution, monitoring mechanisms, etc*

### **Recommended Portals and Information Bases**

**India Water Portal, Arghyam, Karnataka** (from [S. Vishwanath](#), BIOME Environmental Solutions Private Limited, Bangalore)

<http://www.indiawaterportal.org>; Contact Vijay Krishna; Director; Tel: 91-80-41698941

*The portal is a rich online resource on water. Has several case studies of river restoration and a comprehensive database of organisations working on water in India*

### **Related Consolidated Replies**

**Eco-Restoration of Streams/Rivers, by Mrinalinee Vanarase, Ecological Society, Pune (Experiences). Water Community, Solution Exchange India,**

Issued 09 May 2008. Available at <http://www.solutionexchange-un.net.in/environment/cr/cr-se-wes-19040801.pdf> (PDF; Size: 217KB)

*Shares experiences and outcomes of activities of communities involved in eco-restoration of streams and rivers across India and challenges involved in river restoration.*

---

## **Responses in Full**

**[Suman K Apparusu](#), Independent Consultant, Hyderabad**

You can contact the following organisations that are working in relevant areas:

1. Iram Consulting (<http://www.iramconsult.com/Envproject.htm>) and
2. WWF India - Living Ganga Programme - experts could be of help.

For question 3, there are two NGOs - namely - Tarun Bharat Sangh and Sankat Mochan Foundation are known for their river revival and public awareness/participation expertise.

---

**S Vishwanath, BIOME Environmental Solutions Private Limited, Bangalore**

You can take a look at [www.arghyam.org](http://www.arghyam.org) for information about the agencies you can approach for assistance.

---

**Abhay Kumar, Toxics Link, New Delhi**

You can also contact Prof. V. Subramanian, School of Environmental Studies, Jawaharlal Nehru University, New Delhi on [subra42@gmail.com](mailto:subra42@gmail.com), and Anana Pant of WWF India-[APant@wwfindia.net](mailto:APant@wwfindia.net) for expert opinions on the matter.

---

**Padma S Vankar, Facility for Ecological and Analytical Testing, Kanpur**

I am a senior scientist at IIT Kanpur, if the restoration of the river requires any chemical analysis, metal or colour remediation, I will be happy to help. I have had several projects where I have worked on bioremediation and chemical remediation.

---

**Mrinalinee Vanarase, Ecological Society, Pune**

Glad to hear about Chamliana's plan for river restoration.

We work in the field of ecological restoration of streams and can certainly help you with ecological assessment of the river. It is primarily a matter of methodology formation for how to bring different disciplines (like hydrogeology, biodiversity) related to restoration together, how to define objectives and decide action plan. We would certainly like to help in this process for integrated approach in design and implementation.

---

**N. C. S. Seema, WaterHealth India Private Ltd, Secunderabad**

Chamliana could contact I. S. Rao, who is presently Director, Children's Environment Science Congress for expert opinion his contact number is 09290216923 and his mail id [israo46@gmail.com](mailto:israo46@gmail.com). He has been a resource person for Ministry of Rural Development.

---

**Amitangshu Acharya, Arghyam, Bangalore**

First of all best wishes to Chamliana for taking up a challenging task. Here are a few local contacts which may be of use:

Ecological Health Status Analysis - North Eastern Hill University, Shillong, Meghalaya. Dr. Tiwari who heads the Center for Environmental Sciences can be of great help. The Centre's contact number is 0364-2721159.

Develop Strategies for Improvement of Stream: ATREE North East can give good pointers. Their North East office is located in Darjeeling. Try and contact Samuel Thomas, his contact email is [samuel@atree.org](mailto:samuel@atree.org)

Generation of Public Awareness and Participation: People's Learning Centre, Located in Shillong has taken up this issue and has been working on River and Lake Conservation in Shillong City. Their initiatives are in a nascent state but they can provide you with good ideas. Their email id is [plcshillong@gmail.com](mailto:plcshillong@gmail.com)

**What are the appropriate agencies/institutions that we can approach for technical collaboration** - ATREE and NEHU. Also you can try and contact North East Space Application Centre (NESAC) in case use of GIS/Satellite imagery is required. Often State departments have a lot of information which is generally not known, mining into that would be of help.

**What are the best practices applied by other agencies in the process of restoration of rivers**-Wangjing Women and Girls Service Society; an NGO based in Manipur has recently started working on restoration of Wangjing River in partnership and with support from Global Water Partnership. The head of the institution is Mr Jelshyam Singh who can be contacted at [wwagss@gmail.com](mailto:wwagss@gmail.com).

There are a lot of these initiatives taking place locally, so do try and tap into them.

---

**[Gaurang Mishra](#), Directorate of Economics and Statistics, Port Blair**

I am happy to note that something from the North-east has come up on the National forum.

Rivers cannot be separated from livelihoods and traditional life styles or cultures. So to save all this we have to save the river also. Boards like the state water boards, the Botanical survey of India, Zoological Survey of India, Fisheries survey of India, Geological Survey of India, state part of forest and wildlife department of the Mizoram, which have been in existence for 62 years after independence have to more vigilant and prove their objectives, for which these were created. The State is headed by an elected Chief Minister and ministries of Mizoram all have to work in a coordinated manner. Nowadays, with Panchayati Raj coming to the fore, we can collaborate with the local PRI as it will have a greater say in any planned development of the area.

These panchayats can regulate the developmental work on the banks of the River Chite. If the panchayats are not given power in Mizoram, the Tribal Councils of the villages can play a major role. First of all these panchayats/tribal councils can impose taxes on the effluents discharged in the river directly. The pollution control board of the state and districts can be roped into this exercise. Under the 73<sup>rd</sup> Amendment, few subjects have been devolved to the PRIs and these PRIs can develop the plan of these activities, which can be passed in the district planning committee meetings.

The accountability of all departments has to be ensured first. M. S. Swaminathan, Vandana Shiva, and R. Pratap Singh of Rajasthan who have worked for water conservation in Rajasthan, and Sunita Narain of Down to Earth are few experts who can be invited to present their views. I am sure they will certainly help the cause.

---

**[Kalyan Paul](#), Pan Himalayan Grassroots Development Foundation, Ranikhet**

The Pan Himalayan Grassroots Development Foundation is involved with initiating a community-driven programme regarding the eco-restoration of a small river basin in the central Himalayas for the last few years. It would perhaps be worthwhile for stakeholders of the Chite river basin to visit us and exchange ideas and actions. Our website may also provide some ideas about the program - [www.grassrootsindia.com](http://www.grassrootsindia.com).

---

**[Arunabha Majumder](#), Jadavpur University, Kolkata**

You may contact CONCERN For Better Living (CFBL) for technical collaboration. The Cfbl is an organisation of group of scientists and technologists. The members of Cfbl include river experts,

pollution control experts, hydrologists, geologists, environmentalists etc. The members of Cfbl have experience of abatement of river pollution (Ganga Action Plan, Damodar Action Plan). The mail address of Cfbl: [sujitbhatta@hotmail.com](mailto:sujitbhatta@hotmail.com) or [arunkanti@yahoo.co.in](mailto:arunkanti@yahoo.co.in).

---

**[Harish Kumara B.K.](#), Institute for Resource Analysis and Policy (IRAP), Hyderabad**

We work on Ecological Status, Ecosystem Services, Eco-hydrology, Hydrogeology, Environmental flows, Biodiversity, Livelihood support for riverine communities. Please visit our website for more information [www.irapindia.org](http://www.irapindia.org).

---

*Many thanks to all who contributed to this query!*

*If you have further information to share on this topic, please send it to Solution Exchange for the Water Community in India at [se-wes@solutionexchange-un.net.in](mailto:se-wes@solutionexchange-un.net.in) and Climate Change Community at [se-clmt@solutionexchange-un.net.in](mailto:se-clmt@solutionexchange-un.net.in) with the subject heading "Re: [se-watr] [se-clmt] Query: Restoration of River Chite, Aizawl, Mizoram – Referrals; Advice. Additional Reply."*

**Disclaimer:** *In posting messages or incorporating these messages into synthesized responses, the UN accepts no responsibility for their veracity or authenticity. Members intending to use or transmit the information contained in these messages should be aware that they are relying on their own judgment.*



*Copyrighted under Creative Commons License "[Attribution-NonCommercial-ShareAlike 2.5](#)". Re-users of this material must cite as their source Solution Exchange as well as the item's recommender, if relevant, and must share any derivative work with the Solution Exchange Community.*



*Solution Exchange is a UN initiative for development practitioners in India. For more information please visit [www.solutionexchange-un.net.in](http://www.solutionexchange-un.net.in)*

---