



ANNUAL REPORT 2017-2018

Environics Trust

Email: info@environicsindia.in

Website: www.environicsindia.in

Telefax: +91-11-29533957

177, Nebsarai, New Delhi, 110068



TABLE OF CONTENTS

TO ALL OUR SUPPORTERS	3
Strategic Highlights	3
Financial Highlights	3
Operating Highlights	3
Looking Ahead	3
SNIPPETS FROM Key Efforts	4
Participatory Research	4
Mahakali Basin	4
Raghunathpura Mines, Haryana	17
Community Based Action	22
Fifth National Coal and Thermal Power Gathering	22
Monitoring with Communities: An Example	50
Enterprise Development and Servicing	51
Efforts for Just Transition	51
FINANCIAL STATEMENTS	57

TO ALL OUR SUPPORTERS

Strategic Highlights

Compendium on Mahakali Basin, Uttarakhand and Nepal
Fifth Coal and Thermal Gathering, Dhanbad
Training on Micro-level Planning

Financial Highlights

INR 19 Million raised from Ten Partners

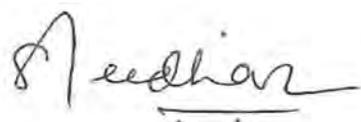
Operating Highlights

A team of 26 professionals from diverse disciplines working closely with community groups across various states

Our search for a Just Transition are showing pathways to pursue and we hope to build upon it

Looking Ahead

There is a lot of effort ahead of us in ensuring the larger goals of the society are met by our little contributions.



R.Sreedhar
Managing Trustee

SNIPPETS FROM KEY EFFORTS

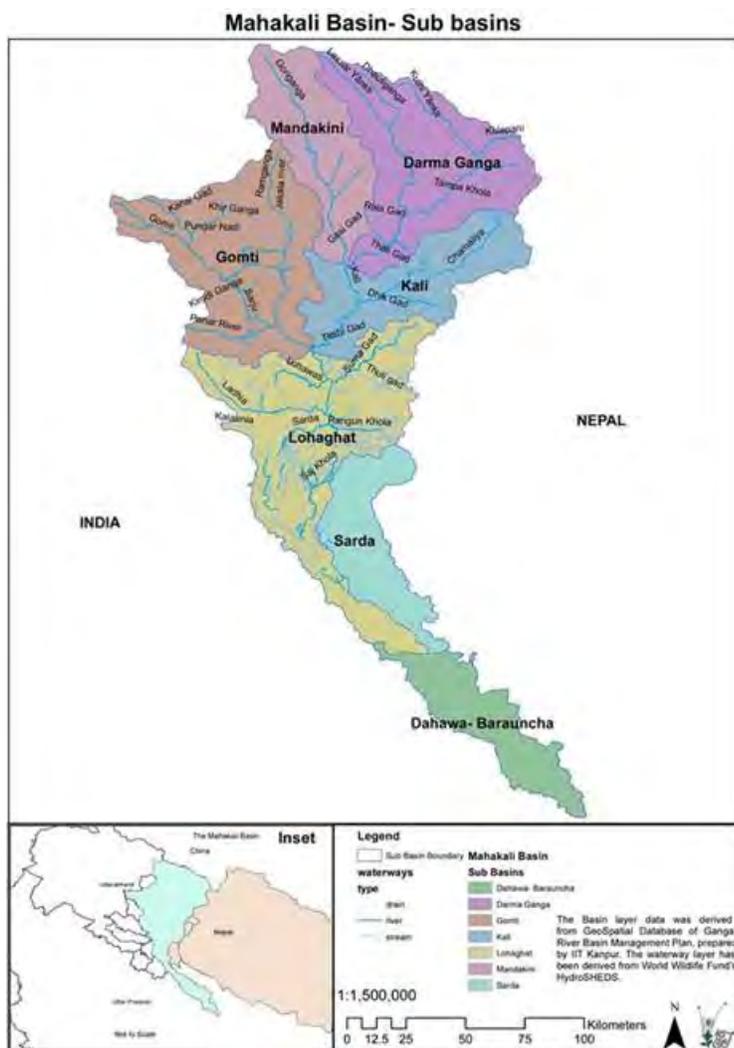
Participatory Research

Mahakali Basin

CREATING A COMMUNITY HUB FOR SUSTAINED INTERACTIONS

Communities have been learning to live in challenging natural environments, especially in the HKH but percolation of finances across the Himalayas, especially for hydropower development has proportionately increased over the last 2 decades, thus presenting a human induced increasing magnitude of issues. Being largely small scale agrarian and rearing communities, these human induced developments do not take a micro view of impacts, making them further vulnerable to their physical environments. The Mahakali Zone in Nepal and its downstream in India represents one such large region / basin which is seeing growth of hydropower development and related infrastructure. In a run up to large scale hydro projects, the challenges are posed to already land locked regions which cannot be addressed merely by compensating the loss. Across both the regions, the cordial social relations have always allowed movement of people and has thus also enabled working of several groups on common issues like migration, floods, environmental impacts and many more such social issues. The relative understanding of the river basin in terms of its environmental characters is one of the important themes which can become a common advocacy, learning and solution oriented theme. The idea of 'confluence conclaves' will provide impetus to the understanding. The affiliation with networks across the borders will help in nourishing a transboundary rivers representative body which would provide breath and blood to the issues faced by the people across both sides. This multi modal approach will provide a much required need for strengthening cooperation between intra basin communities.

The South Asia Water Governance Programme (SAWGP) aims to promote regional cooperation on the Himalayan Rivers to address the challenges of development and climate change. Building on lessons from the South Asia Water Initiative (SAWI) through a deliberative approach it aims to bring together a broad set of stakeholders from different disciplines and walks of life to identify, frame and resolve the challenges on these transboundary waters at regional and national levels. These deliberative multi-stakeholder mechanisms focus on the three river basins – Ganges, Indus and Brahmaputra.



Mahakali or Kali Sharda is the sub basin of Ghagara Basin of the larger Ganges Water System rising from the Himadri or Trans Himalayan zone making its way through narrow gorges and drains out into the Terai-Bhabar zones of India-Nepal and then to the plains of Uttar Pradesh. **Mahakali Basin's catchment area is around 15260 sq. km.** and most of its catchment lies in Uttarakhand (9943 sq. km) and rest lies in Nepal.

The range of ecological setting comprise of terai, outer Himalayas, middle- higher and Trans Himalayas and thus brings through challenges of geographic peculiarities, ecological significance and limitations of expansion, socio-cultural and economic ties and many other characteristics. River Kali or Sarda drains this basin and many known Rivers in Uttarakhand meet the Kali in its run up to the Tanakpur barrage like

Dhauliganga, Goriganga, Lodhiya, a few of them already dammed. The Indo Nepal Treaty of Peace & Friendship 1950 has also allowed open borders between the two countries for ease of movement of people. The socio-cultural and ecological similarities in the basin make it more or less a homogeneous unit – socially, culturally and ecologically. Three districts of Far Western District in the Mahakali Zone of Nepal and 5 districts (partial) of Kumaon Region in Uttarakhand make up the Mahakali Basin.

Emerging Issues in the Basin

Mapping the Environments of Concern

The situations, which are of concern relate to regions that are naturally fragile, regions which have had to face up the challenges of inappropriate development regimes and communities which perceive a lack of mainstream concern. These have to be particularly kept in mind in identifying future action in specific areas. Briefly they are:

Nature Determined Environmental Fragility

1. **Transient Environments** - The periglacial regions where the geographical evolution of glacial environments into fluvial environment is currently taking place is a region, which is prone to avalanches, landslides and rapid change in surface morphology. As the glacial recession is taking place perhaps at a faster pace such eventualities should be kept in mind.

At a more localized level the paleo-slides which have been put to human use and their history forgotten would also be sites where the natural processes would find equilibrium and this will affect some communities.

2. **Transitional Environments** - The varied geographical situations brings about several transitional environments which are prone to dramatic changes with small triggers often beyond the resilience of the systems such as between Bhabhar-Terai, glacial margins etc.
3. **Tectonically Unstable Environments** - The regions along the major thrust and fault belts are intrinsically unstable and will be continually prone to impacts from **seismic events**, small or large. The possibility of human intervention to avoid impacts in these zones is minimal and the best effort would be to understand them in greater detail and address situations where it may snowball into a crisis.

Inappropriate Development Regimes

1. **Denuded Areas** - A number of areas are affected by denudation because of past processes of inappropriate development or neglect such as several areas where mining has degraded the slopes or altered river regimes. The huge costs and time for recovery is well known from the experience of mining in Saryu Valley.
2. **Largely Modified Environments** - The region where dam and power projects are built and the submergence zones have significantly altered the local geography and meteorology and lead to different kinds of problems to be faced. In the Indian part of the basin there are 84 proposed hydro power projects which include 29 large hydro power projects, 20 small hydro projects and 35 mini-micro hydro projects with a total capacity of nearly 12450 MW.

Large tracts have also been allowed for mining especially of soapstone and ubiquitously of river bed materials. The urbanization across the mountains is also impacting local climate regimes.

Lack of Mainstream Concern Perceived by Communities

1. Subsistence Environments - Regions in the rain-shadow areas, isolated valleys and forest villages where the communities have to precariously manage their existence need particular concern and attention than regular process can support.
2. Discontented Environments - At every period in history there are communities, which are discontented with the ongoing social dynamics particularly when they find themselves helpless and the mainstream is unconcerned about their core problems. The communities who are being involuntarily forced to give up their land and other resources for the power projects, mines and other purposes are constantly struggling. The cut-off zones of reservoirs which become more isolated in some parts of the region are making these communities extremely discontented. So is the case with people within or the periphery of the Protected Areas.

Specific Issues

Village Thapaliyal Kheda, Tehsil Poornagiri, District Champawat

The Mahakali River constitutes international boundary between India and Nepal, in major stretches. There exists a peculiar issue of the village Thapaliyal Kheda, Gram Panchayat Sailanigoat, which is located on the Nepali side of the river Mahakali, whereas the Gram Panchayat Sailanigoat is located on the Indian side of river Mahakali (figure 3). Thus the village Thapaliyal Kheda is surrounded by Nepali territory on the three sides, whereas on the one side it faces river Mahakali. It will also be relevant to mention that the village Sailanigoat itself is bifurcated by the construction of Tanakpur canal (1992) in two entities on either side of the canal – Sailanigoat Malla and Sailanigoat Talla.

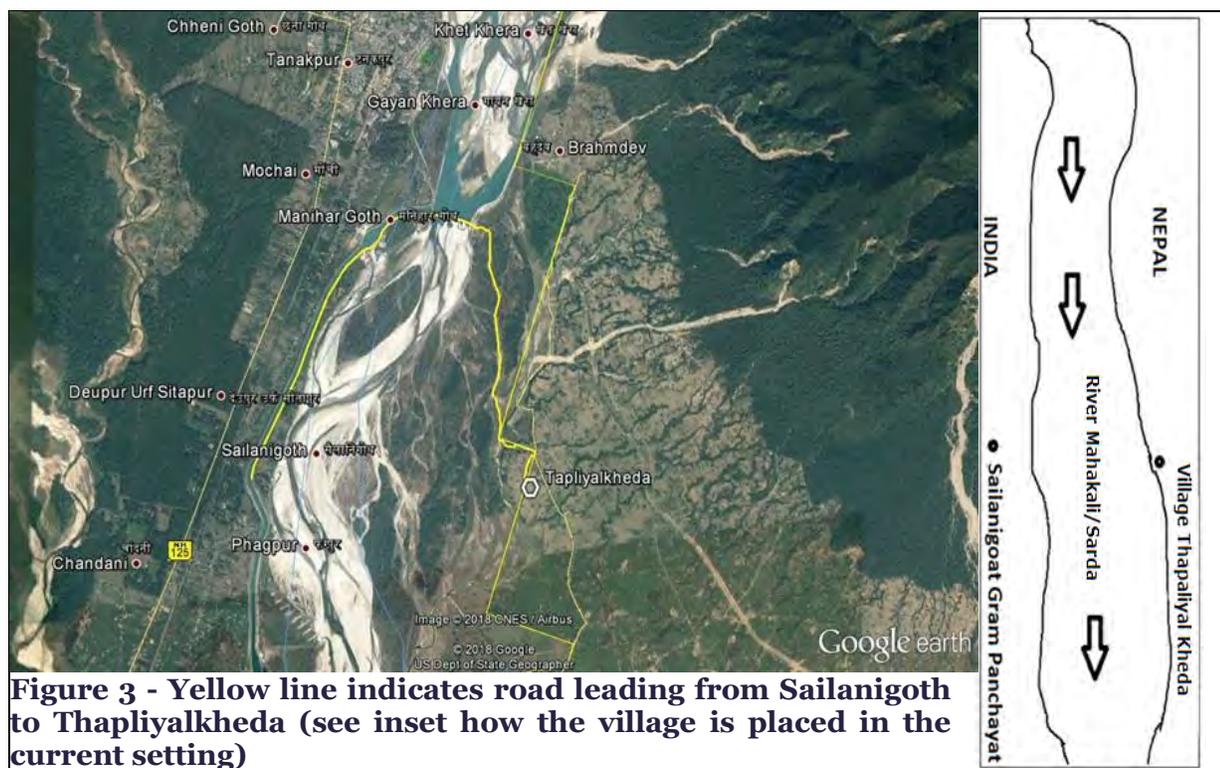


Figure 3 - Yellow line indicates road leading from Sailanigoth to Thapliyakheda (see inset how the village is placed in the current setting)

Village Thapaliyal Kheda (Gram Panchayat Sailanigath, Tehsil Poornagiri, District Champavat, Uttarakhand) is 10 km away from Tanakpur town where 40 families having a population of 200 people live. Out of 40 households, 37 belong to Brahmins and other higher castes and 3 to Dalit. Except two families from Lohaghat, all hail from Manch (now renamed as Tamli Manch), Champavat (25 km being the distance). The village (along with its agricultural fields) is settled over an area of 25 acre of forest land.

History of Settlement

Unlike the other forest settlements, established under the Taungia system, this village Thapaliyal Kheda has a different history of settlement.

[The Taungia system was devised by the then British Forest department during the colonial rule. In the early years of the century, erstwhile British Government introduced the policy of reservation of forests. For laying and protecting new plantations, often in place of the newly-exploited and clear-felled natural forest, labors were required. For the purpose of procuring cheap, in fact, free labor *Taungia* system was devised, more or less on the line of the *Begari* system (work without wage). Under this system, labor was brought and put in the middle of the forest in make-shift settlements and permitted to raise short-term rows of the plantation for few years. Once these trees grew to a certain height and were capable to grow naturally, then labors were shifted to new plantation sites. In 1946, the Government was hastily involved in more important work related to freedom of India and everyone forgot about these settlements. Thus they remained within the forest and continue to struggle for their rights. Government

of Uttarakhand has not taken any initiative regarding ‘Forest Rights Act’ which has compounded their problems. There are 28 such forest villages under the *Taungia* system in and around Banbasa area.]

As already mentioned, the origin of village Thapaliyal Kheda is different, despite being a forest village. The ancestors of the residents of village Thapaliyal Kheda used to come here in winter with their cattle for grazing and returned to their native place in summer and it continued for a few decades. Subsequently, when the hilly areas remained untouched by development, about four decades back, these nomads decided to settle here permanently, in the hope that they will be benefitted by development in plains. But this hope soon crash-landed on the ground, as expressed by Suresh, a resident of Thapaliyal Kheda – *“We neither had road and electricity in hills nor here.”* Today, in contrast to this village, their native village Manch/Tamli Manch (from where they migrated) has road, electricity, police station, and an SBI Branch.

Issues Arising from Peculiar Physical Location

The villagers of Thapaliyal Kheda have been struggling with a plethora of problems since last forty years, as summarized below.

A. Loss of Land

- Before the construction of Brahmdev Bridge in 1991-92, river Sarda was flowing towards opposite side, but after the construction of bridge started flowing towards this side and consequently significant chunk of fertile agricultural land was lost to river owing to severe erosion and **submergence. Yet the forest department (government of Uttarakhand) didn’t take any preventive action for future.**

B. Crossing International Border on Daily Basis

- Crossing international border on a daily basis has emerged as a major hurdle, especially if one is bringing some household paraphernalia. The process is typically too cumbersome and permission needs to be taken from NHPC. For example, if one has to bring some sand, bricks, cement, etc. from Tanakpur then he has to give an application to the HR Manager, NHPC office. It is scrutinized and signed first by HR Manager, NHPC, followed by sign of Gram Pradhan, then sign of NHPC official, finally signed by the AC of CISF and then the pass is issued. It specifically mentioned the **number and quantity of items, details of the vehicle (like number, type, license, driver’s name and his license’s details), etc. If by some unexpected reason, the belonging couldn’t be transported on specified date, new application needs to be submitted for issuing a fresh pass.** Yet, one has to spent considerable time at check-post to explain everything to the guard – why each item is needed. Even bringing 5 kg salt of a bag of fertilizer is questioned. If allowed, we can bring the house-hold articles jointly and save a lot of money in transportation.

C. Inertia in Development Activities

- The forest department has taken serious objection to any pucca and permanent construction **in/around the village, on the ground that all the 25 acre land is technically ‘forest land’ and laying down road or erecting electricity poles will be a violation of provisions enshrined in Forest and Environment Act**, so people are doomed to live in hutments, with only tin roof. Though 20 odd houses have managed to make brick and stone houses, they too have not been permitted to have pucca roof.

D. Existing Government Facilities

- **In 2001, a primary school was opened under ‘Education for All’ (*Sarv Shiksha Abhiyan*) and *Aanganwadi* is also operational.** There are two teachers in the school, but the shrinking number of students is a matter of concern. Presently, there are only three Indian students (three other students are Nepali). Though there are about 16 school-going children in village but they are studying in the boarding schools in nearby Nepali town – Mahendranagar – as villagers are not satisfied with the quality of education imparted in the primary school of village. Villagers are paying Rs. 600 (INR) per month for boarding school in Nepal.
- In the absence of electricity, in 2007 SSB has provided solar lamps in the village on subsidy so all 40 families has light in their homes. Each family paid Rs. 3000 for getting these solar lamps.
- During Parliamentary and Assembly elections, polling booth is established in the village so the villagers are saved from the drudgery of 10 km walk. But for Gram Panchayat elections and meetings, villagers have to go to Sailanigoth. There are 110 voters in the village.
- There is only one tube-well installed by the government and it is functional. It serves the domestic purposes only. Two other tubewells in the village are personal.
- Grazing is allowed by the forest department at a nominal fee of Rs. 100 per season. In fact, the receipts issued towards grazing fees are the sole basis for issuing Permanent Resident Certificate to these villagers. Only on the basis of this permanent residential status, Aadhaar card, Election **Commission’s voter Identity Card, etc. are issued to** the residents here.
- There is no dispensary or medical facility – only the ASHA animator (Maya Devi) lives in this village.
- Ration cards have been issued but the fair-price shop is located in Sailanigoth so villagers have to cross river for purchasing edibles and other paraphernalia. There is no fixed time for opening of this fair-price shop and consequently villagers have to make several trips before being lucky to find the shop open.

E. Lack of Irrigation and Importing Water from Nepal

- As there is no electricity in the village, irrigating agricultural fields becomes a major issue. Almost everyone belong to farming community, and beside main crops also grow vegetables. So villagers

are importing water from Nepal, at a rate of Rs. 150/hour. The villagers inform friends across border to start pump (say at 5 PM to 9 PM), which is collected in a pool. People of both nations across the border are living in peace and harmony and till date no issue has emerged. Villagers say that water is available in plenty here (at a depth of 18 feet) and if electricity is provided they will install their own pump for irrigating fields.

F. Problems of Rainy Season

- During rainy season, in the absence of a bridge, the village gets cut off from all sides and virtually becomes an island. Villagers merely wait for water levels to recede. In these times, school remains closed, essential daily goods are purchased from Nepalese markets at steep prices, floods in Sarda destroy crops, etc.

G. Other Aspects

- Mohan Singh Bohra, ex-Pradhan informed us that according to information procured under RTI, filed by a Champavat-based NGO a few years back Rs 33 Lakh and Rs. 3.8 lakh was sanctioned and allocated for construction of bridge and school building, respectively for Thapaliyal Kheda village, but nothing happened. This made Madan Singh Mehar, a local resident, to file another RTI to know what happened to this money. He was informed that all this 25 acre land belongs to forest department and hence no permanent structures can be constructed.
- Mohan Singh Bohra, ex-Pradhan said that he requested administration that for want of basic amenities they can be shifted from here or facilities be provided but nothing was convincingly affirmed. Mohan Singh Bohra and many other believe that being a border the community of ours is a natural check on the border and many also believe that had they not been here, there would not have been any forest left in the area.
- Villagers informed that 20 years back, there was a 30 feet **no-man's land here but encroachments** have taken place and today it has shrunk to hardly 10 feet.
- There is strong cultural affinity on both sides – Nepalese visit Poornagiri mela in India and Indian visit Mahendranagar Shivaratri Mela with equal zeal, vigor and enthusiasm.

The issue is compounded as forest falls under the Central Government. Further there are dozens of **'forest-villages' and any decision involving them requires a policy-level change**, towards which both the state and central governments should be in consensus. Yet another aspect is that Uttarakhand government is dilly-dallying on the implementation of Forest Rights Act (2006), which enables forest-dwellers and tribals to reside within their natural habitats and fructify rights. Henceforth, the **issue of changing status of 'forest-villages' into 'revenue-villages' (a long-standing demand of affected communities)** is not so simple as it appears, rather it is deeply entangled in policy-inertia, bureaucratic red-tapism and political apathy.

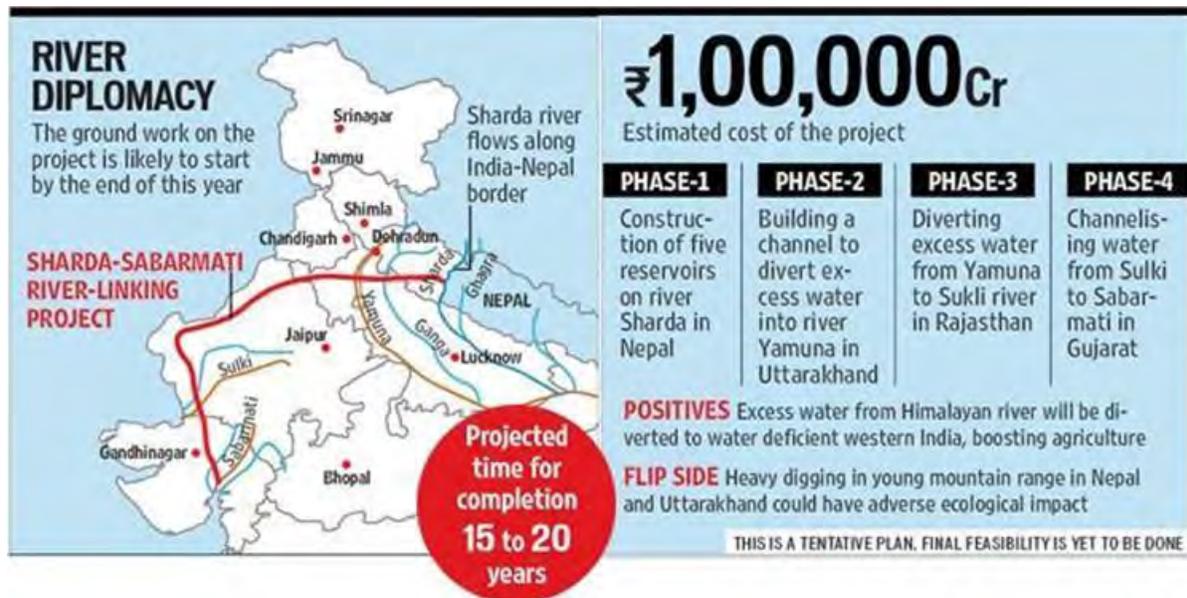
- The Supreme Court has issued notices to six states including Uttarakhand, seeking the progress on implementation of Forest Rights Act (2006) and submit report within a month. For the time being, some administrative steps need to be taken up to ease the hardship of the residents of Thapaliyal Kheda (making transportation easier, simplifying process of bringing articles, providing basic amenities, etc.).

Few Glimpses of Thapliyalkheda



Sarda Sabarmati Link of Indian Interlinking Plan

India's ambitious plan of interlinking of rivers' has been a matter of grave concern for Bangladesh but Nepal too join it later protesting against Sarda Sabarmati link. In the first phase, India will develop five reservoirs on Sharda River. This issue is important from the people as well as environmental perspective as it will pass through the terai forests as well as many agricultural lands. The current apathy of Sharda canal is that people are not allotted water for irrigation, even those whose lands were acquired long back. Infact, ground water extraction is thriving in the terai region when the canal just passes by the agricultural fields. Such issues might emerge as water is becoming more scarce with the changing weather patterns and climate change.



- As per the initial plan, excess water stored in reservoirs to be built on Sharda river will be channelled into Yamuna in Uttarakhand, from there to Sukli river in Rajasthan via Haryana and finally into Sabarmati, about 2,000 km from the main source. The cost of the project is estimated to be over Rs 1 lakh Crore over the next 15-20 years. Execution of such big multi-purpose Hydrel and irrigation projects in India has taken over 30 years and Narmada Valley project is one such example with work still going on after it was initiated in 1979.

River Erosion

Pithoragarh town located at a higher altitude is highly susceptible to erosion by Mahakali as well as other rivers flowing in the area. In this regard, an effort was made to get an overall picture of the district in 2016 by procuring information under RTI from the district officials. This information was collated and synthesized. The following can be summarized from the data gathered, in Pithoragarh district -

- Kali/Mahakali river is causing erosion at 12 sites and is threatening to wash away the road at 13 sites
- Gori river is causing erosion at 21 sites and leading to rise in river bed at 3 sites
- Madakaniya river is threatening to wash away the road at 6 sites
- Ramganga river is causing erosion at 4 sites and leading to rise in river bed at 1 site
- Bhujgad river is causing erosion at 1 site and leading to rise in river bed at 1 site
- There are two other rivers (Dhaulti and Jakul) and few local nallahs (Aelagaad, Taangagad, Queerijimiagad, and Barargad) which are also causing erosion and/or rise in river bed at one site each

Erosion and Devastation by Mahakali in Nepal

Nepal is ranked in 30th position in incidence of water induced disasters in the world. The country is also suffering from other disasters like earthquake, drought, windstorm, fire, epidemics, etc. Especially

extreme high rainfalls during monsoon, topography, fragile geology massive deforestation and unsystematic village road construction are the main causes of water induced disasters in Nepal.

India Supported River Training Program (Bharatiya Sahayogma Sanchalit Nadi Niyantaran Yojana)

The big to small sized rivers that flow through the Terai to India occurring floods and inundation problems during monsoon season are considered major disasters - destroying human life and property. Embankments have been constructed in some of the river based on agreement and understanding between Nepal and India. Joint Committee of Inundation and Flood Management (JCIFM) plays an important role to initiate the program in particular river. JCIFM is being steered by a high level team from DWIDP (Nepal) and Ganga Flood Control Commission (India) and along with the representatives from Ministry of Finance and Ministry of Foreign Affairs from both the countries. Ongoing projects are Sunsari, Gagan, Kamala, Lal Bakaiya, Bagmati and Banganga. By the end of the fiscal year the total length of the embankment constructed in the above rivers is about 188 km.

Fury of Mahakali in Nepal in 2012

- The incessant rainfall in the mid and far western regions of Nepal affected 20 districts in Nepal with occurrence of floods in the major river such as Mahakali, Seti and Karnali. The discharge in the Mahakali River rose from 139,000 cubic feet per second to 440,716 cubic feet per second on 17 June 2013, well in excess of the flow of 398,000 cubic feet per second recorded in the 2012 monsoon. See the 3 link below.
- <http://www.kantipuronline.com/2013/06/18/top-story/massive-floodsin-mahakali-river-6-killed-update/373456/>
- Some of the pronounced impact of these floods are listed below.
 - The Mahakali river has swept away an entire settlement in Khalanga of Darchula District. Actually the full extent of the devastation in Nepal is yet to be known but the report shows the flood swept away 77 buildings and displaced 2,500 people in Darchula
 - <http://www.nepalnews.com/archive/2013/jun/jun18/news12.php>
 - The swollen river also has smashed a suspension bridge at Khalanga, the head quarter of Darchul and swept away the Kalagadh Micro Hydro project's power house and its transformer, two storied building of Resource Centre of District Education Office, and the District Hospital's morgue (Fig.4). While a few houses collapsed in Rigaune Tal, Brahmadev and Khalanga-2, Khalanga-5 has been worst hit.
 - Six people were killed in Achham and Baitadi districts and eight people also were missing in Dhungaad. It is reported that 150 families have been rendered homeless in Dodhara and Chadani and around 30 families have been affected in Kuda. Four houses in Salyan have been

damaged due to a landslide. In Kalikot district, 4 people were dead and 11 were missing and 27 families have been displaced. Flood in the Karnali River has affected many villages in the southeast region of Kailali, inundating large areas in Tikapur Municipality and the VDCs of Lalbojhi, Bhajani, Thapapur and Khailad. In Bardiya the floods have intensely affected the Rajapur Tappu region where 2,000 houses were inundated by the Karnali River. Approximately 600 families were at great risk in Khairichandanpur.

- <http://www.ekantipur.com/2013/06/19/headlines/Monsoon-furyclaims-at-least-20-many-missing/373488/>



Swollen Mahakali River smashes suspension bridge at khalanga, the head quarter of Darchula on Monday June 17, 2013



Left Bank of Mahakali River at Pipariya



Confluence of Saryu with Mahakali



Pitthoragarh Town in Mahakali Basin

Raghunathpura Mines, Haryana

BACKGROUND

Joginder Singh Versus the State of Haryana and others, a writ petition filed under Articles 226, 227 of the Constitution of India inter alia is seeking a writ of Prohibition mandamus directing the respondents to disallow the mining company from carrying out mining operation blasting which allegedly is endangering human life and property. This writ petition was filed on 01/08/2017. In an order issued on 05.09.2017 the Hon High Court appointed Adv Arjun Sheoran as a Local Commissioner and allowed him the use of experts to aid his investigation of whether or not the blasting from the mine is causing damage to the buildings around the area and whether or not such blasting is causing further environmental hazard and hardship to the residents of the area.

Adv Arjun Sheoran contacted Environics Trust which has been assisting courts and other communities in several environmental issues. This report combines observations made by the teams during these visits and list out a set of recommendations.

DUST POLLUTION

1. The road leading to the mine was uneven and un-metalled from the main road and about 1.5 km long. The mine entrance is located about 400-500 mts on this un-metalled road.
2. As per the affidavit filed in the High Court para 9 point III, the company states it has a 570 m long underground pipeline fitted with 62 water sprinklers to suppress dust on the road leading from mine to Narnaul by-pass. Sprinklers purchased and installed in first week of October 2017. However, during the visit it was noticed that there are only 4-5 sprinklers on one side of the road and only near the mine entrance. These sprinklers are not sufficient even to cover the entire road width let alone the entire road till the Narnaul by-pass from the mine site.
3. On our arrival on 12th of January, the roads were dry and the dust was everywhere, water was sprinkled only before 4:30 pm when we were about to leave. When we arrived on 22nd January, the roads were freshly sprinkled with water. But according to the villagers the sprinkling is done only once in a while (especially when some official visits) and not that frequently which leads to the increase of the dust particles in the atmosphere.
4. The air pollution monitoring was done on 12th January at various locations as shown in the table below with their coordinates at different timing.

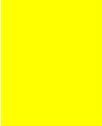
S.No.	Location	Coordinates	Time	Avg AQI	Avg PM2.5	Avg PM10
1	Opposite Mine Gate	N28 03.357 E76 04.715	1:51 to 1:56 PM	86.00	33	86
2	Afforestation area near field	N28 03.407 E76 04.512	2:01 to 2:19 PM	90.87	33	92.6
3	Road Closed by boulders	N28.055971 E76.07856	2:21 to 2:33 PM	394.64	68.19	376.50
4	Kamla Devi	N28 03.435 E76 04.259	2:35 to 2:56 PM	82.70	28.39	84.67
5	Anand's House	N28 03.208 E76 04.589	3:07 to 3:50 PM	83.75	30.71	83.75
6	Hazari's House	N28 03.298 E76 04.836	3:59 to 4:04 PM	103.19	29.50	109.19
7	At the By Pass road	N28 03.188 E76 05.119	4:17 to 4:20 PM	152.33	41.25	169.83
8	Gaushala	N28 03.991 E76 04.844	4:21 to 4:40 PM	665.60	60.95	307.46
9	Near Sumer Singh's house	N28 03.781 E76 04.962	4:43 to 5:00 PM	210.25	52.17	259.25

5. The air pollution monitoring was done on 22nd January at various locations as shown in the table below with their coordinates at different timing.

Sl.NO.	Location	Coordinates	Time	Avg AQI	Average PM 2.5	Average PM 10
1.	Anand's House (Before Blasting)	N28 03.208 E76 04.589	12:23PM to 12:27PM	137.18	63.30	155.77
2.	Mining Site(before blasting)		12:47PM to 1:05PM	131.02	62.10	146.53
3.	Mining Office		1:21PM to 1:55PM	129.73	63.18	144.59

4.	Anand's House(At the time of blasting)	N28 03.208 E76 04.589	2:09PM to 2:57PM	134.50	60.37	151.75
5.	Mining Site(After Blasting)		3:24PM to 3:45PM	145.91	66.54	168.86

6. The tables above show the value of Average AQI (Air Quality index) monitored at different locations. Although the intervals are small, these provide a baseline figure for the pollutants at different locations. The results show that the levels of air quality are already poor and crossing the norms issued by CPCB. An AQI of about 400 near the mine site is a dangerous precedent which requires careful and regular monitoring.
7. As per National Ambient Air Quality Standards issued by CPCB on 18th Nov 2009 (<http://cpcb.nic.in/displaypdf.php?id=aG9tZS9haXl1tcG9sbHV0aW9uL1JlY3ZlZC10YXRpb25hbC5wZGY>) the PM 10 in Industrial, Residential, Rural and Other Areas should not be more than 60 µg/m³ (Annual average) and 100 µg/m³ (24 hourly average) and PM 2.5 should not be more than 40 µg/m³ (annual average) 60 µg/m³ (24 hourly average).
8. According to CPCB, the Air Quality Index are shown in the table given below:

AQI	Remark	Color Code	Possible Health Impacts
0-50	Good		Minimal impact
51-100	Satisfactory		Minor breathing discomfort to sensitive people
101-200	Moderate		Breathing discomfort to the people with lungs, asthma and heart diseases
201-300	Poor		Breathing discomfort to most people on prolonged exposure
301-400	Very Poor		Respiratory illness on prolonged exposure
401-500	Severe		Affects healthy people and seriously impacts those with existing diseases

9. In the context of air pollution, the norms in the country are still very lax. The World Health Organisation has been recommending 25 microgram per meter cube whereas the CPCB norms allow for nearly four times the recommended value. Therefore, meeting the standards laid down is a minimal requirement to ensure that the local people are not affected by dust prone diseases. The norms of WHO and few other countries and those of the CPCB are given below:

TABLE 1
International Comparison of Ambient Air Quality Standards and Guidelines,²¹ as compared with recommendations of the World Health Organization (WHO)

POLLUTANT	WORLD HEALTH ORG	EUROPEAN UNION	AUSTRALIA	UNITED STATES	CANADA
Ozone 8 hour, parts per billion	50	60	80	80	65
Fine particulate 24 hour, micrograms per cubic meter	25	50	25	65	30
Sulphur dioxide 24 hour, ppb	8	48	80	140	115
Nitrogen dioxide Annual, ppb	21	21	30	53	53
Carbon monoxide 8 hour, ppm	9	9	9	9	13
Lead Micrograms per cubic meter	–	0.5	0.5	1.5	–

NOTE: A dash (–) indicates that no standard or guideline has been established for a particular parameter.

<https://www.aeroqual.com/air-quality-standards>

Table 1: Indian national ambient air quality standards (MoEF Gazette, 2009)

Pollutants	Time - weighted Average	Concentration of Pollutants in Ambient Air	
		Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area
Ozone (O ₃), µg/m ³	8 h *	100	100
Carbon Monoxide (CO), mg/m ³	8 h *	02	02
Nitrogen Dioxide (NO ₂), µg/m ³	24 h *	80	80
Particulate Matter (size less than 10 µm) (PM ₁₀), µg/m ³	24 h *	100	100
Particulate Matter (size less than 2.5 µm) (PM _{2.5}), µg/m ³	24 h *	60	60

* 24 hourly or 08 hourly monitored values, as applicable, shall be compiled with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.



Thick layer of dust on plants



The trees gone grey due to the dust



A black sheet turned grey due to the dust



Holes meant for plantation of trees

10. The Haryana State Pollution Control Board issued the Consent to Establish on 4-5-2015 and had some of the specific conditions in relation to air pollution;

Necessary arrangement shall be made for the control of Air Pollution before commissioning the plant. The emitted pollutants shall meet the emission and other standards. The records show that the mitigation measures are inadequate. Further consent issued under section 21/22 of the Air (Prevention and Control of Pollution) Act, 1981 dated 15-3-2016 valid from 01/04/2016 to 30/09/2020 the company should have developed a green belt (having sufficient tall and dense trees) but sparse plantations have been carried out only apparently after the proceedings in the court.

11. The Haryana State Pollution Control Board report dated 3-8-2016 based visit done on 14-7-2016, noted following violations such as Not provided adequate sprinkler system / dust suppression system to control process emission caused due to vehicular movement at mining site on approach road upto bypass road. This is still not adequately practiced. Similarly, the overburden material continues to be improperly dumped. The plantation is still very sparse to be effective. The Mine Company had given its reply to HSPCB against this adverse report. As per this report dated 31-8-2016 it states that, **“Adequate dust suppression**

S.no	Dates	No. of Trucks	Dispatch in Tons
1	6-Jan-18	111	4377.48
2	7-Jan-18	106	4386.37
3	8-Jan-18	110	4373.94
4	9-Jan-18	78	2342.97
5	10-Jan-18	67	1452.72
6	11-Jan-18	71	1857.52
7	12-Jan-18	53	1589.31
8	13-Jan-18	52	1488.2
9	14-Jan-18	39	1041.16
10	15-Jan-18	55	1304.77
11	16-Jan-18	69	1826.55
12	17-Jan-18	61	1708.88
13	18-Jan-18	98	1599.91
14	19-Jan-18	101	1490.97
15	20-Jan-18	107	1577.83
16	21-Jan-18	109	1629.69
	Total	1287.00	34048.27
	Average per day	80.44	2128.02

system in place. The haul road to the mine site has been converted to a pucca road. Monitoring of Ambient Air quality is regularly carried out by an external agency. Found to be within **prescribed standard of NAAQ 2009**”. The road is still unmetalled and prone to generation of dust with the movement of heavy vehicles. Further the trucks are open and prone to disperse the dust further.

12. As on 22.01.2018 only one air monitoring station is functional.

13. The production is now under control because of the restrictions placed by the court. Even during this period an average of 80 trucks a day of material is being transported. Any increase in production, particularly if allowed to the extent of three times the current volume will result in very adverse air quality.

We conclude that the Air Pollution Mitigation Measures are inadequate. The emissions are beyond the permissible limits as measured from random observations.

1. The monitoring needs to be continuous, done with online equipments since they will be more transparent and needs to be in adequate number.
2. The quantum of mining should be continued to be capped to 4000 Tonnes per day.
3. The density and quality of plantation need to be vastly improved to have any role in dust suppression.

Community Based Action

Fifth National Coal and Thermal Power Gathering



The Fifth National Coal and Thermal Power Gathering organized by Environics Trust was held in Dhanbad in Jharkhand from 8th to 10th October, 2017. Participants from across India came for the meet bringing with them various experiences surrounding the mining industry and the thermal power plants. The participants included ground level activists who have been working tirelessly in their respective areas for years.

They have been working with the worst affected communities who are extremely vulnerable and exposed to the horrors of mining in India. These activists have been raising their voices against the extreme injustice meted out to the people and have been advocating for their basic human and community rights. Most of them are personally affected by the mining industry and have taken up this task in order to fight for their own cause and of many other affected people. The participants engaged in extensive discussions regarding some of the prevailing situations in the mining industry.

OBJECTIVES

The gathering was held in order -

- To bring together affected communities from the coal mining and thermal power plants across the country.
- To discuss about the present status of mining in India along with a discussion about various new and amended policies and laws regarding mining and thermal power plants.
- To provide them with support in order to further the fight against the coal industry and the government which is constantly making anti-people mining laws thereby pushing them into even worse conditions than before.
- To give them a platform in order to voice their narratives and provide them with the perspective that their narratives are actually a part of the larger global narrative where the corporate is pushing its agenda of mining, affecting millions of people worldwide.
- To strengthen the ongoing struggle against the big corporations by garnering solidarity from each other.
- Towards forging a unified struggle and make use of each other's experiences of struggle.

BACKGROUND

This National Coal and Thermal Gathering in Dhanbad was the fifth gathering held in the wake of rising aggressive corporatization in the country. The new Government in power has been trying to intensify coal mining and has come up with several proposals for future thermal power plants. Various laws regarding mining are also being amended in order to fit the interests of the corporate. Several anti-labour policies and laws are also being made which in turn is worsening the situation of the workers in the mines.

The first national gathering was held in October 2013 at Gare village in the Raigarh district in Chhattisgarh. The Coal Satyagraha was also conducted in this gathering where people from 18 villages pledged to break the law that forbids them from mining coal in their own lands. They maintain that if coal is essential for the consumptive needs of the nation then it should be mined by the people themselves. This gathering was the first of its kind which brought together communities affected by mining from across the nation and gave them a platform to voice their grievances. This meet also acted as a national platform where people came in solidarity with each other and provided strength to each other in the ongoing fight.

The second national gathering was held in Angul, Odisha in the year 2014 and the third was held in October 2015 in Dumka district of Jharkhand. The fourth meet was held in Korba in Chhattisgarh which has massive coalfields and is home to thousands of people affected due to mining.

WHY DHANBAD

Dhanbad was chosen for the fifth gathering because of its historical relevance. Dhanbad has some of the largest coal mines in India and is thus called the Coal Capital of India. The city is surrounded by about 112 coal mines with a total production of 27.5 million tonnes and an annual income of 7000 million rupees generated through the coal business. Tata Steel, Bharat Coking Coal Limited (BCCL), Eastern Coalfields Limited (ECL) and Indian Iron and Steel Company (IISCO) are some of the companies who operate the biggest coal mines in the district. The area around **Dhanbad produces India's highest grade** of coking coal, which in turn fuels the blast furnaces used for smelting steel. The economy of Dhanbad is majorly based on coal related industries. Jharia Coal Field is the one of the most exploited coalfields in India, with mining going on there since over a century because of its valuable metallurgical grade coal reserves. This area is particularly affected by the coal fires raging under the Jharia region for almost a century. The working of Jharia, Bokaro and Karanpura coalfields started in the year 1856. The large scale exploitation of mineral and other industrial resources in this area began after the opening of coal mining in Dhanbad area during the second half of the 19th century and the establishment of the Tata Iron and Steel Company in Jamshedpur in Singhbhum district in 1907. Therefore coming together of activists for this gathering from all over India to Dhanbad, which is the heart of the coal-belt, can itself be seen as a challenge to the Government and Corporate pushing its coal agenda.

PROCEEDINGS OF THE GATHERING

Day 1 (8th October)

The meet started with the performance on Ganesh Vandana by a group of differently abled children of a local school after which they were felicitated with a small token of appreciation by Sreedhar Ramamurthy and Vanitha Sreedhar from Envirionics Trust.



The meeting was then taken forward by the Director of Envirionics Trust, Sreedhar Ramamurthy. He addressed the meet by welcoming the participants and extending a vote of thanks to all those who travelled from various parts of the country and made this gathering a success. He reported about the Reclaim Power Week which is being observed world-wide against the corporate loot. He spoke about the dual hypocritical stance of the Indian State which gives concessions to the corporate and calls it incentive whereas people are given concessions in

the name of subsidies. He also spoke about how land is being made available to all the companies at minimal cost. He also gave an overview of the present situation at hand in the country where loans are being waived off for the corporates. He informed that around INR 5 crore 40 lakhs of loan given to the corporate was waived off by the government banks and non-banking financial institutions last year alone whereas a poor man has to pay tax even when he buys a packet of biscuit and today with indirect tax increasing day by day, his tax would never be waived off. He spoke about the flawed taxation system and also about the problem of going towards a digitalized economy. The digitalization of economy is another way of making the poor more vulnerable. The government is trying to bring about a new policy where a new bank will be formed merging all the existing banks and so the previous balance sheets which records the bad debts of the corporates can be cleared easily. He also spoke about the money which has been accumulated by the government in the name of affected people in the mining areas. Policies like District Mineral Fund, Clean Energy Cess, and compensatory afforestation had been made in order to help the affected communities in restoring the chaos that had been created. But the Government is smartly trying to use this money which amounts to around INR 2 lakh crore in order to compensate for the bad loans of the corporate. Around 40 thousand crores of rupees have been kept for the development and security of the building workers which the government has not used until now. Around 50 thousand crores kept in the name of ESI is still not used by the government. The government is neither building hospitals nor giving compensations to the workers. The government has been trying to put all this money together to save the banks which have been destabilized because of crores of bad debt of the corporate. He said that we need to ask questions regarding the acquisition of land and to what use it is being put. We even need to question the environmental issues and financial issues regarding projects. He spoke about the number of proposed thermal power plants which have been **mentioned in the website of the Project Managing Group made by the Prime Minister's Office.** The projects will be fast tracked and all the clearances would be provided by the PMO directly. His address ended with a message of solidarity to all the activists who are questioning the present structure for its anti-people decisions and policies. He then called upon the speakers for the first session.

Review of the Last Four Meetings: Rajesh Tripathi

An activist who has worked for several years in the mining areas of Raigarh. He has successfully led the Coal Satyagraha for six years now. He represented Chhattisgarh where the first gathering was held.

In the first gathering they successfully held the coal Satyagraha which was inspired from Gandhi's Dandi March. He narrated how they started the coal Satyagraha with the idea that the land belongs to the inhabitants and the natural resources beneath the land also belongs to them. Therefore mining should be done by the people of those areas.

Villagers enthusiastically participated in the coal Satyagraha. He informed that the coal Satyagraha has been successfully conducted since last 6 years, the first being organized on 2nd October 2012. The sixth coal Satyagraha was conducted with the consent of all the villagers in Gare and also in Korba where 10,000 people from 17 villages took part. Severe threats were issued to the people



and the police harassed them continuously but the villagers were determined to make this struggle a success. He also stressed on how Environics Trust has provided unprecedented support to them and how Sreedhar Ramamurthy has always provided advice and support for the welfare of the village. When the coal Satyagraha started, not many women participated in it. This was a serious concern for activists like him. So they started a campaign which led to the participation of 7000 women and a strong team of women was formed. Even youth from across India was mobilized. He stressed on the need for proper discipline in the struggle because struggles like this would fail without that. He said that as the inspiration for the Coal Satyagraha was the historical Dandi March therefore they also tried to maintain discipline as was done during that time. They informed the local administration that they would want to take part in the development of the country. They wanted this to be a part of discussion in the whole world. They were promised benefits of health, education and shelter but the Government failed to deliver any of these basic necessities in the last 10-15 years. He even questioned the low compensation which is paid to the people whose lands are taken by the mining companies. The people are paid only six lakhs of rupees for a hectare of land beneath which there is coal worth 85 crores.

He informed that after the coal satyagraha, the people from their villages have taken to mining coal every day and around 600 families make 500-900 per day by selling that coal. These people had lost their lands at the hands of mining companies and they were not even given any basic skill training. He wanted this Satyagraha to be an example for the whole world and inspired activists from other states so that they can also start a similar process in their respective states.

Smitarani Pattanayak

She is a fierce activist from Angul in Odisha.

She reported that the Odisha Mining Corporation has been doing extensive mining in this region. She spoke about the people who have given a strong fight to the Adani group and therefore mining is stalled presently. Due to the second coal gathering at Angul, a lot of pressure has been created on the government. She informed that her group held consultations with local people and they created block committees to look into the matters arising out of mining. The biggest issue according to her was the issue of the ash ponds. Sreedhar Ramamurthy from Environics had helped them in their fight and they were even planning to file a case in the NGT. She informed that it was decided in the last election as a form of protest that the villagers from 5 Gram Panchayats would not cast their votes. She reported that there are many underground mines in Orissa. Extreme violations including rights violations, rapes, abuse, child sexual harassment, child labour and murders take place which have become regular events. The Government does not acknowledge these violations most of the times and therefore justice is not delivered. She requested lawyers to come forward and take up these cases. She also informed that they would be holding training and capacity building programmes for the youth to fight against the mining corporations very soon.

Corruption in Power Sector: Paranjoy Guha Thakurta

A renowned journalist and activist who has written extensively about the present scams regarding mining. He has authored several articles and books. He has also served as the editor of Economic and Political Weekly.

He spoke about The Wire's news report on Jay Shah's company making huge profits in the last three years. Jay Shah is the son of BJP president Amit Shah and owned a small company which started making huge profit after 2014 when Modi Government came into power. He spoke about the sweet heart deals which are taking place every day.



These deals expose the nexus of the government and the corporate and also show how the near and dear ones of the people in position of power are being given constant benefits. He explained how this present capitalism is a form of crony capitalism. He spoke how land, forests, natural resources which belong to the people are being looted by the capitalists and the government is helping them in this process. The resources which also belong to the future generations are all being taken away by the mining companies. The government is completely responsible for restricting these resources in the hands of very few people who are now controlling most of it. He spoke about the belt which is richest in natural resources and

forest that is called the Red Corridor. The resources have now become a curse for the local people as it gives the government an excuse to exploit and oppress the poorest section of the country that lives there. This incessant corporate loot is affecting women, tribals, dalits and the poor the most. He spoke about Adani who is facing a strong opposition from the people of Australia where he has planned to build a power plant. He is also planning to mine coal and build a port there from where coal will be exported to India. There is a strong resistance to this project and banks have also refused to give loans for the project which would affect lakhs of people.

Adani and Arundhati Bhattacharya of the SBI have signed a MoU of crores of rupees for this project. The State Bank of India belongs to the people of this country and the Government is the representative of the people. But both of them do not have any accountability towards the people. Therefore the people have to ask questions and carry out the functions which were supposedly the functions of the Government. The Directorate of Revenue Intelligence has been investigating bad loans of the corporate since long. They have exposed the government about the coal imports from Indonesia. The DRI has named several companies and also issued show cause notices to them. But nothing has happened since then. The Government is not taking any action against these companies which include Adani, Ambani, Jindal, etc. Presently, Adani is the only company which imports coal and also the biggest company which mines coal in India. They are the biggest producer of solar power in India too. Paranjyot also talked about the Non- Performing Assets which the banks are burdened with because of the bad loans to the corporate. The condition of the public sector banks is also deplorable. Even the companies do not have enough money to pay back their loans. Therefore the economy is in ruins. After demonetization, the situation has only worsened. The only way forward is to strengthen resistance against this loot. People who are speaking against the present regime are under attack. People like Gauri Lankesh, Narendra Dabholkar are being killed and with this the freedom of expression is also being murdered. Therefore, we need to fight back and raise questions. It is the only way to go ahead and reclaim our rights.

Accountability of Banks and Coal: Joe Athially

An activist and researcher from Centre for Financial Accountability that has been campaigning for accountability among national and international financial institutions.

He spoke about how public banks in India are signing off loans to big corporate. State Bank of India has given around 450 million dollars as loan to a company which makes cluster bombs. Cluster bomb has the capacity to kill lakhs of people at one go. A public bank is investing in companies which are destroying lives of millions of people. When a common man goes to take loan from a bank, he has to mortgage some of his property as security for his loan. But when it comes to giving loan to corporate then there is no such rule for them to mortgage any of their property. The banks give them loans only on the basis of a prospective profit which the company shows only on papers. In fact when the company

is unable to pay back the loan, the government does not even confiscate any of their property. He stressed on reflecting upon economic and financial issues as much as stressing on issues regarding violation of environmental laws and other such laws. It is necessary that one asks questions to the financial institutions of the country which gives these companies loans very easily for projects which are anti- people. This issue needs to be taken up seriously and we need to include this as one of our agendas in our struggles. This session ended with the screening of a short film of highlights from the previous four gatherings.



Coal Policies, District Mineral Fund and Clean Energy Fund: Nishant Alag

He has been working on community based planning and information management for years now. He has contributed extensively to environmental impact review and has trained local communities on the issues of mining and environmental legislation.

He gave a presentation on the present coal policies and status of the District Mineral Fund of all the states where mining is going on. A summary of the presentation is as follows-



The presentation started with a brief history of how Mines and Minerals Development Act was amended. The amendment in the act brought some major changes, the most important of which is the introduction of auctioning leases. In 2015 another amendment increased the number of years for leasing from 30 to 50 years. He even spoke about how the Government has already declared 31 minerals as minor minerals. He also gave an overview of how District Mineral Fund came into being in 2016. Each state has to formulate its own DMF and notify rules keeping in mind the PMKKKY guidelines. He spoke about how much money has been collected from each state in the name of DMF. The objective of the DMF was to mitigate the adverse effects of mining on environment and people and generate long term sustainable

livelihoods for people affected by mining. He even explained how the DMF has been directed to be used. 60% of the funds from the DMF need to be utilized for Drinking water supply, environment preservation and pollution control measures, health care, education, welfare of women and children, welfare of aged and disabled people, skill development and sanitation. 40% of the funds are to be used for physical infrastructure, irrigation, energy and watershed development and any other measures for enhancing environmental quality in mining district. The Government has easily shifted the decision making power for issues related to the DMF to the states so that it does not have answer to the people about the loopholes. The Government has smartly put the onus on the state governments regarding the data of the funds and how it is being used. The money which has been accumulated over the years is huge which is around 5000 crores in December 2016 and has not been spent on the above said heads. He then moved onto how illegal mining is not being accounted for and therefore it does not come under the ambit of DMF.

The most recent development is that, more than 65000 mineral concession applications had lapsed with the amendment of MMDR Amendment Act 2015 and so the state governments have been instructed to prepare a road map for auctioning of leases which are due to expire in 2020 [8A]. He made a difference between CSR which is a profit linked fund and DMF which is a fund on the royalty and the affected community has a major role in DMF which is not the case in CSR. He gave an overview of the DMF rules in different states and made a comparative analysis of those. He then informed that the rules would entail that the Managing committee and Gram Sabha through its representatives will then be entrusted to work on various aspects of listing of activities, identification of affected people, annual plan making, and information exchange for enabling planning etc. in every quarter. Lastly he explained how one can learn from the past mistakes and make the process of DMF more effective for the affected people. To view the presentation, please [click here](#)

Activists Speak

Activists from different states spoke about the condition of DMF and other crisis from coal mining.

Umesh Rishi (Dhanbad)

He spoke about Jharkhand which is very rich in coal but the irony is that most of the people who live there are equally poor. Coal and thermal power plants are very much linked with each other. The most recent struggle which is going on is the struggle against the stalling of rail in the Dhanbad-Chandrapura line of the East Central Railway. He spoke about the railway route which has been closed down due to its proximity to the Jharia Mines Fire. The DGMS had stated in its report that the land above the coal mines have started caving up and therefore is no longer safe. This route was one of the major routes for people to travel. The cancellation of railways along this route has affected several people who were

regular travelers. Livelihoods of several people are also at stake. It was already 101 days since the protest had started. They have filed a petition but there has been no hearing for it so far. The Government is very tactically trying to displace people from the area. Fire in the mines is not just affecting the environment but also thousands of human lives.

Surendhra Pratap Rathore (Korba)

He spoke about the money that has been collected in the name of DMF and has not been utilized for the basic benefits of the local people. There are around 41 villages which are affected by the coal mines. The situation has been continuing since 1984 and is even getting worse. He spoke about the need for the CSR of the companies to be devised for the local people affected by mining. The Government is accumulating all the money from the DMF. In many areas they are building Panchayat Bhawans which cannot be done with this money. The Government schools face shortage of teachers whereas the companies are trying to build education hubs with the DMF. He reported that around 7-8 villages in their area are badly affected due to mining and the people from those villages need to be immediately rehabilitated. He informs that they have been fighting tooth and nail for this.



Samitra Pere (Odisha)

All citizens of India have equal rights on land, water and forest. But the way the companies are destroying it, it becomes clear that nothing would be left for the future generations. Rivers are being affected badly because of coal mining and fisher folk communities are also at the receiving end. She informs that the money from the DMF has not been utilized for the welfare of the affected communities.

Ashok Shrimali (Gujarat)

The discussion on DMF, mines, and other natural resources is going on since morning. The first thing which is to be done is to think that why it is that today one has to have such a discussion. 90% of mining is illegally done in the country and DMF is only for the legal mines. He stresses on the need to think about the illegal mines which amount to huge coal production. The Government is doing nothing against such mines. One needs to have a comprehensive understanding about whatever little provisions the legal systems have provided for the people. DMF was constituted after the order of the Supreme Court

which directed the Government to draft the National Minerals Policy of 2008. The DMF has to be strictly utilized under the heads as specified in the Mines and Minerals Amendment Act for the people affected by mining.

The Government needs to be pressurized to compensate people affected by illegal mines which it does not want to bring under its purview. Local people have rights on these minerals and it belongs to the villagers. He stressed on the need to motivate people to raise these issues on ground apart from necessary litigations. The people need to raise questions to the Government about spending of DMF and hold the Government accountable.



Goldy M.George (Chhattisgarh)

He spoke about the fight that thousands of people are fighting against the capitalists and how the fight is a question not only about their sustenance but also about their existence. He spoke about the importance of land for the adivasis which is not just property for them but they are culturally attached to it. The oppression against the people is not only economical but also cultural. For years Goddess Durga has been shown as a symbol of truth emerging out of killing the Asur and this is seen as a form of celebration whereas Asur is a symbolization of the tribal community. The tribal community needs to bring up its own narratives of oppression and should resist the celebration on the name of killing one of their own. This resistance has also started in some places. Therefore he stressed on the need to reclaim the culture of the tribals is as much important as the other fight against the capitalists.



Dilip Kumar Sahu (Angul)

He informed that some people from the Singrauli Coalfields came to the village and tried to acquire land by claiming it to be private property. The villagers resisted this move and it was found that the land belonged to the villagers and therefore the company could not acquire the land. There are some new mining companies which have acquired some coal blocks in Orissa. They have just paid 50 lacs as compensation to the villagers for an acre of land. None of the villagers were provided jobs as had been promised earlier. Adani Group has also got land for mining in Orissa. He informed about the money collected as DMF which is still lying unutilized. The Government is not transparent about the DMF and he also stresses on the need to pressure the Government so that it provides information about the

utilization of DMF to the people. He informed that the collector visits the affected areas only when there is a complaint against environmental violations. There are 8 blocks which are hugely affected in Angul due to coal mining.

Smitarani Pattanayak (Odisha)

She informed that the people in the affected areas have come up with a new idea of creating a coal committee and 4 committees have already come up of which local people are the members. Any action plan is charted out after consultations with the local affected people. On the other hand local people have no participation in the DMF process. The collector is the chief authority when it comes to the DMF. She also informed that they have started building consciousness among people about DMF. 15 public meetings related to issues of water, road and health have been conducted by them. They also plan to train people for developing skills for sustainable livelihood of the people.

Day 2 (9th October)

The day started with a puppet show by Ramlal Bhatt and songs by several activists.



Land Acquisition & Alienation: Debayan Gupta

He is a legal researcher from the Centre for Policy research.

He made a presentation on the current laws related to land acquisition. He gave an overview of the laws for acquiring land for mining coal. He explained how the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR) is also needed to be implemented apart from the Coal Bearing Areas (Acquisition and Development) Act, 1957 while acquiring land for mining. The other laws which are relevant with respect to acquisition are the Panchayat (Extension to Scheduled Areas) Act, 1996 and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. He then explained every step which is required to be followed during land acquisition under the Coal Bearing Areas (Acquisition and Development) Act, 1957. The steps are as follows:-

- **“Section 4(1): Intention to Prospect.** A notification passed under this section is valid for 2 years which can be extended by a year.
- Section 7(1): Intention to acquire the land.
- Section 8: Objection to acquisition of land.
- **Section 9(1): Notice for acquiring the land after disposing off objections.”**



He then went on to show how the 2013 Act of Land acquisition can be used for the betterment of the people. The Act of 2013 has better provisions of compensation and a more comprehensive R&R scheme. This Act also gives much more importance to consent as the consent of landowners is deemed necessary before acquiring land.

He stated that the stress on Social Impact Assessment is another advantage of the Act. He also informed that initially acquisitions under the CBA and 12 other Acts were exempted from the provisions of the RFCTLARR. However, on 28th August 2015 a statutory order was passed by the Government extending the benefits related to compensation, infrastructural amenities and R & R to acquisitions under the earlier exempted Acts. He tried to show how these acts are now brought into the purview of the RFCTLARR. Lastly, he stressed on the fact that most of the companies take optimum land which can be used later for other purposes. The local people need to be wary of this and therefore understanding of all these acts related to acquisition is a primary task. To view the presentation, [click here](#)

Land Conflict & Water: Bhaskar Tripathi

He is a journalist presently working with Land Conflict Watch

He spoke about the various voices which can be heard from across the country against land acquisition and other conflicts. There are laws which protect the citizens but these laws are not being implemented. These laws will not be implemented by the company or by the Government. He stresses on the need for the



people themselves to gather and raise their voice against these injustices and coerce the Government to implement these laws properly. He spoke about the failure of building a database about land conflicts going on in different parts of India. In 2016, few journalists working on land issues came together and tried to build such a database.

This database would have all the information about how much land is being acquired, how many people are getting affected, what laws are being used for acquiring land. He informed about how this data website can be effective in the land struggles. He made a presentation about how to gather information regarding land conflicts in the country. Link to the database: - <https://landconflictwatch.org/>

To view the presentation, [click here](#)

Activists Speak

Activists coming from different regions spoke about the conflicts in their areas.

Swaraj Das (West Bengal)

He spoke about the present situation in the Sunderbans area of West Bengal. He spoke of Rampal, a block in Bangladesh which is just 14kms from Sunderbans. India has been providing assistance to Bangladesh for its thermal power plants. The Government informed them that half of the work is already completed but the real situation on the ground is different from what the government communicates. Only a part of the plant is operative presently. The mangroves which are an integral part of the flora of Sunderbans will be hugely



affected by this thermal power plant. The company is doing nothing to protect the mangroves and is proposing to plant other trees such as mango, jamun, etc but has no specific proposals for protecting the mangrove forests. The thermal power plant is also polluting the river. The power plant would completely destroy the natural flora and fauna of the sunderbans along with the lives of thousands of people.

Paresh Mondal and Minati Halder (West Bengal)

The river is getting highly affected due to the thermal power plant in Rampal. The main occupation of the local people is fishing. Therefore, their livelihood is completely at stake because of the power plant. The Government is doing nothing to address the woes of the fisherfolk. After the cyclone Aila many islands have been completely destroyed and only 54 islands are populated in which most of the people are migrants from Bangladesh. There is a dearth of cultivated land in this area. Therefore people



are left with very little resources for their sustenance. The thermal power plant is also affecting the health of the local people. They informed about the poor quality of coal which the Indian Government exports to the thermal power plant leading to even worse conditions. The people of Sunderbans are pushed to utmost poverty and are not being heard either by the Indian side or the Bangladesh side. She urged for help so that Sunderbans can be saved from such a situation and the biodiversity can be replenished.

Joe Athially

He reports about emerging environmental dangers from the thermal power plant in Rampal and the attitudes of both the Indian and Bangladesh Governments towards the affected people from the plant. He says that the destruction of Sunderbans which is in Bangladesh where the power plant is situated will automatically lead to the destruction of the Indian part of Sunderbans. This truth is not being acknowledged by the Indian Government and both the Governments have a very callous attitude towards the upcoming crisis which will engulf the whole of Sunderbans. He informs that the project is a joint venture of the NTPC and the Bangladesh Government. The upcoming crisis would even tarnish the healthy relationship between both the countries. Sunderbans which is a world heritage site as declared by the UNESCO is already facing the brunt of several natural calamities. He emphasises on the

need for the people give a relentless fight and to coerce the Government to take appropriate actions so as to avoid the upcoming disaster.

Santosh Upadhyay (Bihar)

He reported about the various ongoing struggles in Bihar against coal mining. The Government acquired land for mining which belongs mostly to the adivasi communities. The Government did not provide them even with basic amenities after snatching their lands. Instead the Government brands them as maoists when they try to raise their voice against the injustices. He strongly urged for help from lawyers to take up cases which have been filed against local innocent people while fighting against the mining companies.

Air Pollution: Shalini Singh

She works with Environics Trust and she along with her colleagues visited the coal mining areas in order to note the level of pollution in the adjacent areas. She presented an analysis of the data collected during her visit. She took readings of the air quality from different parts of Dhanbad, Lodna Village, Lodna Mines, Lebada Mines, Mudidih Mines, Katras Mines and Bank More.

She made a presentation where she explained the meaning of the term air pollution and then **spoke about how air pollution affects one's health**. She informed that Environics Trust has procured some devices which perform the task of measuring different sizes of dust particles (PM 1, 2.5, 10), temperature and humidity. She informs that there are sensors available to measure other polluting and harmful factors like CO, SO₂, NO_x etc, and these sensors may be incorporated in future devices which will be procured.



Then she described how the air pollution monitoring instrument works and different parts of it. She informed that the former Minister for Environment, Forests & Climate Change, Shri Prakash Javadekar had launched The National Air Quality Index (AQI) in New Delhi on 17 September 2014 under the Swachh Bharat Abhiyan. There are six AQI categories, namely Good, Satisfactory, Moderately Polluted, Poor, Very Poor, and Severe. The proposed AQI considers eight pollutants (PM₁₀, PM_{2.5}, NO₂, SO₂, CO, O₃, NH₃, and Pb) for which short-term (up to 24-hourly averaging period) standards are prescribed. Based on the measured ambient concentrations, corresponding standards and likely health impact, a sub-index is calculated for each of these pollutants. To view the presentation,

[click](#)

The next session had two presentations, one on “Occupational Safety & Health in Coal & Thermal Power Plant” and the other on “Status of OSH in Thermal Power Plants cases in High Courts”.

Occupational Safety & Health: Raghunath Kalsalgi Manwar

He is the coordinator of Occupational Health and Safety Association (OHSA). He has worked for 37 years in a power plant. He undertook a mission to improve the health of the industrial workers in Gujarat and also in other states.

His presentation started with an overview of the different sections of a thermal power plant and he **explained how working in each of these sections lead to the worker’s exposure to various hazardous materials.** He then went on to list various diseases borne out of working in the plant which includes

silicosis, asbestosis, noise induced hearing loss, cancer, occupational cataract, headache, blood pressure and also various skin diseases. He added how every thermal power plant is required to appoint one doctor for the workers and how these doctors manipulate the medical reports of workers. It is very common for these doctors to conceal the medical conditions of the workers which they develop during their work in the factory. The doctors cover up the actual reason of the diseases or most



of the times do not even accept that the worker has any medical condition caused due to their work. They do this in order to save the company from having to pay any compensation to the workers. He then spoke about the various kinds of pollutants which can be found in a thermal power plant. He shared his experiences of working with affected workers in the Sabarmati Thermal Power Station and various other plants. He stated that none of the power plants conduct regular medical tests for the worker which is necessary by law. Apart from such diseases, many other accidents take place in the plants such as slipping on the floors, getting injured due to some heavy object falling on them, spilling of acid on them, short circuit, blasting, etc. He then exposed the power plants for failing to provide even basic safety equipment to the workers thereby exposing them to all the dangers. His presentation helped the participants to understand the various diseases and conditions which occur during work in hazardous conditions. To view the presentation, [click](#)

Update on OSH Cases in High Courts: Mohit Gupta

He has been working with Environics Trust and has worked for improving the occupational health of industrial workers.

He presented the current status on the Occupational health and safety in Thermal power plants in India. He gave some facts about thermal power plants such that there are 286 coal based power plants in India which have a capacity of producing 3,16,322 MW of power using coal. He reported that more than 400 workers have been identified for having noise diseases only in Gujarat. He then made a unit wise categorization of coal based power plants which are operational, announced, non-operational, proposed, under construction, shelved in all the states.



He informed that in the year 2014, the Supreme Court of India had ordered the thermal power plants to provide reports on occupational health of their workers and also report whether they are abiding by the norms. The Supreme Court order also mandated plants to conduct comprehensive free medical check-ups for all the workers by doctors appointed in consultation with trade unions and provide free medical treatment to all the workers found to be suffering from any occupational disease or any other accident that occurred in the plant. It directed the plants to provide proper compensation to the workers who are affected while working in the plant. It also directed the plants to not to terminate workers during their illness. It also made it mandatory for the plants to provide all kinds of safety equipment and also create safe working conditions for the workers. It was also ordered by the SC that all the workers should abide by the Code of Practice on Occupational Safety and Health Audit as developed by the Bureau of Indian Standards.

He then presented a state wise summary of cases related to occupational health which are pending in various High Courts. Cases are pending in High Courts of Chhattisgarh, Gujarat, Maharashtra, Delhi, Punjab, Haryana, Karnataka, Madhya Pradesh, Jharkhand and West Bengal. The cases at Assam, Tamil Nadu and Rajasthan High Courts have been disposed off. The other cases are going on with substantial evidence against the power plants. The cases in various high courts in the country prove that the power

plants and Government have not taken proper actions and have violated severe norms even after the **apex court's directive**. To view the presentation, [click](#)

The day ended with the discussion with various participants who questioned both the presenters regarding various norms on occupational health and how further litigations need to be done.

Day 3 (10th October)

Gender Aspects in Mining Areas

Durga Jha (Chhattisgarh)

She is a woman activist from Chhattisgarh working mainly with affected people in the mining areas. She said that often discussions about mines, land, water, and forest do not include the narratives of women but only focuses upon on the narratives of workers and farmers. Any discussion about the mining effects on environment should also include discussions about effects on women. She spoke about her own



activism which started when she was very young. She has been part of different social movements and always fought for the rights of women. She stresses upon the need for a woman to carve out her own space in her family and this holds true for every women. She also spoke about the thermal power plant which is situated in the vicinity of their village. The company had promised to provide jobs to the villagers in order to uplift their social positions but none of the people

from the village had got jobs. The women being the most vulnerable are affected by both the thermal power plants and also mining. Physical abuse and violence is rampant apart from the negative impacts of mining placing a severe impact on their health. She also spoke about the lack of medical care for women and children leading to women and child mortality.

She spoke about forming Gram Sabhas in order to deal with problems related to women where decision making will be in the hands of women. For land to be acquired, 50% of the women folk have to agree in the decision to hand over the land. Even during rehabilitation, women should be given prime importance. She appealed to all to provide legal support so that the cases can be taken up. She informed that they have also formed the Chhattisgarh Mines Society in order to provide all kinds of aid and assistance to affected people from the mines and thermal power plants.

Rakesh Kumar Singh

An advocate for human rights has been travelling across India in a cycle campaign to interact with people and address various social, political and economic issues. He spoke about the ever increasing occurrences of violence against women in the mining areas. He reported that many organizations have taken up this issue in various places and are fighting against the rising injustices on



women. He stresses upon the need to reach out to more women who are bearing the brutality of the state and the corporate. He says that while travelling and interacting with several communities he tried to understand the various factors behind the rising disparity between men and women. He even tries to understand the various social factors behind dowry and female infanticide and foeticide. He states that violence against women is a hard reality today even within the so called educated urban India. He speaks about the need to create an equal world where men and women would enjoy equal social, political and economic rights.

Raju Devi (Rajasthan)

She is one of the affected women who contracted silicosis while working in the mines. Her husband also contracted silicosis while working in the mines and eventually died. Her family also got affected as they live in the vicinity of the mines. After her **husband's death she was the only earning** member of her family but lately she also contracted the disease. She has been given only 3 lakh as compensation for her **husband's death** which was not enough for



the family. She has been fighting vehemently against the mine owners. Her youngest daughter also has developed symptoms of silicosis though she does not work in the area. The company is not ready to **accept the daughter's condition**. Her account of grief reveals the horrifying face of both the Government and the company which pushes the innocent and poor workers to the edge leaving behind zero trail of justice for them.

Savita Rath (Chhattisgarh)

She is an activist who works on issues relating to women in the mining areas of Raigarh. She spoke about how after much examination she and her group could identify three main issues relating to women which persist in the area. Because of mining that is going on for ages, there are some areas which have sparse population. These areas get desolate after the dark therefore making it unsafe for women to travel. This leads to an inconvenience as women cannot travel freely after work. Another matter which is also equally important is that the new mining companies are not providing jobs to women. This limits their opportunities to empower themselves financially rendering them dependent on the male members of the family. The other negative impact of mining is the decreasing amount of grazing land. This makes it even more difficult for women as they were the ones involved in livestock rearing in the villages. The mines have directly and indirectly snatched away economic opportunities of the local women. Tribal women went to the forests to gather leaves to sustain themselves. Due to mining, forests are being cleared, thereby affecting the livelihood of families which survive on the income from selling forest products.



She also speaks about the failure of the Government to include expenditure for women and children in the DMF fund. She then speaks about a woman whose 8 acres of land was taken by the mining company. She was the only child of her parents who died but she did not receive any job in return. The ACCI stated the 1982 law which prohibits women from working in mining areas. She then informed how her group helped the women by filing litigations in the High Court. The judgement turned in favour of the woman and therefore she was given a job by the company. This achievement paved a way for several other litigations and it resulted in 165 women getting jobs as mine workers. They have been filing RTIs and motivating women to fight for their rights. She also appealed for support from lawyers to take up cases in their area.

Brototi Ray

A researcher from Barcelona University who is working on various social issues in coal fields of India. She spoke about 250 cases which have been reported globally regarding violations in mining areas. Most of the cases are from India.

She informed that the form of exploitation in mining areas is almost same throughout the world so it is important to understand the alliance of the mining companies. The strategies of almost all the companies are to exploit the people of different countries. It is important

that women from all over the world take stand against such violations and give a vigorous fight to the companies. She urged for a global unity that needs to be created in order to fight climate change.



Smitarani Pattanayak (Odisha)

She is a member of the Nari Suraksha Committee in Angul which works on women and child rights in mining areas. She talks about the miserable condition of women as they are not getting jobs in the mines. They have been fighting spiritedly against this injustice since many years. As a result some women have got jobs in the mining companies. Until the last few years, the local adivasis were hugely dependent upon the forest and water bodies for their sustenance which has been largely hampered by



the mining companies. Another grave consequence of mining is the problem of migration. People are migrating to other parts of the state and even country because the area is hugely affected by mining. She informed about the awareness programmes which her group has started in order to create awareness in people regarding DMF and CSR. There is a lack of monitoring on the part of the people and therefore one cannot understand the loopholes in the functioning of the Government. Therefore the Government cannot also be held accountable. Northern Coalfields is not providing any jobs to women. She spoke repeatedly about the augmenting violence against women in the mining areas. She also spoke about the lack of representation of women in Gram Panchayats which does not allow enough women voices to address their issues.

Bacchi Singh Bisht (Uttarakhand)

He is an activist from Uttarakhand who has been working on various social and political issues. He talks about the Chipko movement which took place in Uttarakhand and huge number of women participated in that movement. They have been working for last 25 years for this cause. Apart from this, women have been fighting against mining companies. He urged to motivate women so that they can be part of such movements across the country. He also speaks about the horrible conditions of women in India.

One can already notice huge climate and environmental change in the country and hence one has to forge a continuous fight against this.



Presentation by DGMS

The next presentation was by Raghupathy Peddireddy who is the Director General of Mines Safety in India. This is the regulatory agency under the Ministry of Labour and Employment of the Government of India.

He started his presentation by giving a brief history of mining in India. He then presented the structure of DGMS and how it functions. His presentation showed the Regulatory Body in a positive light and he tried to explain how they have been successful in implementing almost all the norms relating to safety in mining across India. He explained the role and function of the DGMS which is as follows.



1. Inspection of mines.
2. Investigation into –
 - a) Accidents
 - b) dangerous occurrences – emergency response
 - c) Complaints & other matters
3. a) Grant of :

- i) Statutory permission, exemptions & relaxations - pre-view of project reports & mining plans
 - ii) Approval of mine safety equipment, material & appliances
- b) Interactions for development of safety equipment, material and safe work practices through workshop etc.
 - c) Development of Safety Legislation & Standards
 - d) Safety Information Dissemination.
4. Conduct of examinations for grant of competency certificates.
 5. Safety promotion initiatives including:
 - a) Organization of – Conference on Safety in Mines National Safety Awards Safety Weeks & Campaigns.
 - b) Promoting Safety education and awareness programs - **Workers' participation in safety management through- Workmen's inspector Safety committee Tripartite reviews.**

He also confirmed that he carries out inspection in all the mines every year to see if the norms are being followed. His data shows that the number of accidents is decreasing in mines. He also told about the publication of annual reports. He also informs about conducting occupational health surveys in mines. He fielded several questions from the activists who were present in the meeting. The activists claimed that the facts of the DGMS are untrue and have no validity on the ground. The activists had several questions to him many of which were left unanswered.

Sreedhar Ramamurthy spoke about the need to build solidarities across the country and a need to have a proper monitoring committee to understand and keep a watch on the Government.



The last session was on **Future Strategies and Building Structure**

All the participants from various states joined for this discussion where future strategies were made. Activists from Odisha spoke about the failure of the institutions at the local level in terms of not taking forward the decision of the affected people in the right manner and spirit. Rajesh Tripathi from Chhattisgarh spoke about the need for the formation of a three tier structure so that information can be disseminated to the grass root people. Activists from Gujarat suggested that there should be exchange of information within states for a more stringent fight. Raghu Tripathi from Uttarkhand spoke about the need for a loose structure in the beginning.

Suggestions from all the activists were taken up and a committee was formed with representation from different states. The committee would have three tiers with the central, state and local tier. At the central level Environics Trust is given the responsibility to coordinate with the members from each state thereby providing them with any required assistance or information for the struggle. The state would have their own state level coordinators and at the local level every organization would be responsible for collecting information and carrying out various activities.

The main objective of the committee is to coordinate between each other and disseminate information to each other.

The members responsible from various states are	
Jharkhand	Umesh Rishi
Madhya Pradesh	Ramji Rai, Yusuf Baig
Gujarat	Raghunath Kumar Manwar, Rajendra
Rajasthan	Bansi Lal Binjana
Chhattisgarh	Laxmi Chouhan, Rajesh Tripathi
Odisha	Smitarani Pattanayak, Bhakti Kisan
West Bengal	Swaraj Das
Maharashtra	Prahlad Malvedkar

Lastly, some young activists performed a play which portrayed how lies are constantly being fed to the public everyday by the leaders and politicians and how dissent is crushed but when everyone comes together, the oppressors can be overthrown.

There was a presentation and video documentation by the sanitary napkin unit from Environics Trust where they demonstrated the procedure of the production of the sanitary napkins. Vanitha Sreedhar

spoke about the idea behind setting up the unit and how this is a step ahead in empowering the local women.



The meeting ended with a pledge to continue and strengthen the struggle with even more vigour and perseverance. The activists took back with them more hopes and energy for the fight ahead.



Solidarities extended from the Meeting

- Reclaim Power is a collective effort to draw global attention to the climate crisis and the urgency of transforming energy systems. It is about organizing actions and reaching out to as many

people, communities and movement in as many countries as possible to raise awareness, deepen understanding, and provide opportunities for people to get directly involved. This year actions were planned across the world from 1st to 15th October. The coal Gathering in Dhanbad was part of the action programmes held across the world. Other actions included African Week of Action for Climate Justice, Fight for Climate Justice March, etc.

To know more, click on <http://www.reclaimpower2017.net>

- The Fight Inequality Mobilisation Week from 9-15th October 2017 was to call out the inequality which is being intensified by the World Bank and the IMF. Solidarity was extended to the fight inequality mobilization week from the meeting



- Citing a report submitted by the Director General of Mines Safety to the PMO, the North-eastern section of the Railways announced the discontinuation of the Dhanbad-Chandrapura rail line because of which 18 pairs of trains have been discontinued permanently. This has greatly affected the communities travel and transport of goods. The stalling of trains in this section has even led to the destruction of livelihood for many who depended on the railways for their sustenance. The local people, mainly students who travelled to different parts of the state and other states have been left with no option but to avail costlier modes of transport. The reason which has been stated for the discontinuation of railways is the fire in the coal mines beneath

the ground. They stated that it is no safe to run trains as the land has started to cave in. On the second day of the National Coal Gathering in Dhanbad, participants went to the Katrasgarh where local people have been sitting in protest since 101 days against the discontinuation of railways. Activists from different states expressed their solidarity to the ongoing movement and promised to provide all kinds of assistance.



Protest and March in Solidarity demanding re-starting the railway line

Monitoring with Communities: An Example

Date	Name of the Mine and Location	Sound Pollution	Air Pollution (AQI Avg.)	Comments
17 th Dec 2017	Vikash Kumar Tulshiyar (Vill. Tarod, Tehsil. Akaltara, Janjgir Champa) (N21 58.529 E82 25.991)	64.4dB	126.22	The workers of this site had no safety equipment, No pollution mask. There are no green belt has been found.
				
Start of Air Pollution Monitoring		Mining Company Board		Limestone Mining Area
End of Air pollution monitoring		Ground water breached due to mining		Dust found in near mining area
				

Monitoring of air quality is being undertaken in various locations across coal mining areas and detailed assessment is being done periodically to sensitise local communities and decision makers on the issues of pollution.

Enterprise Development and Servicing

Efforts for Just Transition



Blue: Household units; Green: Electric poles; Yellow: Anganwadi centres; White: Electric transformers; Purple: Drinking water supply tube wells; Wave: Drinking water supply point of source; Pink: Middle School

Gare village belongs to Tamnar sub-district which is located in Raigarh District of Chhattisgarh. The nearest town which is also the sub-district head quarter (TAMNAR) is located at a distance of 10 km and district head quarter (RAIGARH) is located within 45 km from Gare. The geographical area of the village is

approximately 413.21 hectares (1,021.06 acres).¹ Gare village falls under the Gare IV/6 coal block in Mand Raigarh Coalfield in Raigarh district of Chhattisgarh. The coal block was allocated to M/s Jindal Steel & Power Limited and M/s Nalwa Sponge Iron Limited by the Central Government vide MOC letter No. 13016/34/2005-CA-I on 13/01/2006 for mining coal to meet the requirement of their respective Sponge Iron Plants situated at a distance of 45 km and 25 km from the coal block at Raigarh and Taraimal respectively. The environmental clearance was accorded to the project on 18/05/2009 by the Ministry of Environment and Forest vide letter no. J-11015/110/2007-IA-II. From the onset the local community objected to the allocation of coal block and the acquisition of 382.42 hectares (942.53 acres), total mine lease area for the Gare IV/6 coal block mine lease area. Things took an ugly turn during the 2008 public hearing where large scale violence broke out and innocent villagers including women were severely beaten up by the state police. The National Green Tribunal (NGT) took cognisance of the **villagers' complaints and in its judgement dated 24/02/2012 cancelled the environmental clearance** accorded to the project. The block was finally deallocated by the Supreme Court and has since then not **been put up for auction. Encouraged by the victory in NGT's judgement, the villagers of Gare registered**

¹ 1 Hectare = 2.47 Acre

their own firm called **“Gare Tap Upkram Producer Company”**. The idea behind establishing the firm was to mine the coal themselves rather than surrendering their land to industrialists. More than 500 villagers from 12 adjoining villages of Gare had pledged nearly 700 acres of land to the producer company. As days passed on, the villagers further decided against mining altogether and instead proposed setting up of production of alternate energy so that the land is not devastated by mining. The Gare Tap Upkram Producer Company approached Environics Trust and requested to conduct a study on the feasibility and willingness of the inhabitants of Gare in adopting alternate sources of energy predominantly in solar and bio-gas energy. With this objective, a blanket complete household survey was conducted across Gare to capture the following parameters/characters of the village:

Sources of energy for cooking purpose

	Wood	Kerosene	LPG	Bio Mass cakes	Bio Gas	Coal	Total
AAY	26	27	-	6	1	2	62
APL	7	6	4	1	1		19
BPL	80	77	23	29	4	8	221
Total	113	110	27	36	6	10	
Percentage	93%	90%	22%	30%	5%	8%	

Home Lighting: Solar Panel and Bio-gas (preference)

	Solar panel	Bio-gas	Solar + Bio-gas	Didn't respond	Total
AAY	15			12	27
APL	5		1	2	8
BPL	55	1		31	87
Total	75	1	1	45	122
Percentage	61%	1%	1%	37%	

Food preparation (Preference)

	Solar cooker	Bio-gas	LPG stove	Wood	Didn't respond	Total
AAY	11	1	8	1	7	28
APL	4		3		2	9
BPL	37	4	28	2	24	95
Total	52	5	39	3	33	132
Percentage	43%	4%	32%	2%	27%	

Water heating (Preference)

	Solar water heater	Electric rod	Bio-gas	Wood	Coal	LPG	Didn't respond	Total
AAY	10	1		2			15	28
APL	4					1	3	8
BPL	38	6	2	9	1	1	33	90
Total	52	7	2	11	1	2	51	126
Percentage	43%	6%	2%	9%	1%	2%	42%	

Drying of cereals (Preference)

	AAY	APL	BPL	Total	Percentage
Under the sun	14	2	47	63	52%
Solar dryer	2	3	15	20	16%
Didn't respond	11	3	25	39	32%
Grand Total	27	8	87	122	

Irrigation by Solar-pump (Preference)

	AAY	APL	BPL	Total	Percentage
Solar pump	5	4	44	53	43%
Didn't respond	22	4	43	69	57%
Grand Total	27	8	87	122	

Received training in use of solar appliances

	AAY	APL	BPL	Grand Total
Yes		2	2	4
No	27	6	85	117
Grand Total	27	8	87	122

Preferred use of Biomass

	Flooring	Bio-mass cakes	Compost	Bio-gas	Fish feed	Total
AAY	19	11	7	3		40
APL	6	1	4	2	1	14
BPL	58	32	31	10		131
Total	83	44	42	15	1	185
Percentage	68%	36%	34%	12%	1%	

Reasons for not using solar appliances

	AAY	APL	BPL	Total	Percentage
Lack of awareness	14	1	21	36	30%
Lack of access to appliances	4	2	30	36	30%
Uneconomical			2	2	2%
Lack of awareness + lack of access to appliances	8	4	26	38	31%
Lack of access to appliances + uneconomical			1	1	1%
Didn't respond	1		7	8	7%
Total	27	7	80	121	

Potential Market for Renewable Energy

Section 86(l)(e) of the Electricity Act, 2003 (the Act) mandates the State Electricity Regulatory Commission to promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee.

The National Electricity Policy has emphasized urgent need to promote electricity generation based on renewable sources of energy. The Tariff Policy also provides that pursuant to the provisions of section 86(1)(e) of the Act, the SERCS shall fix a minimum percentage for purchase of energy from such sources taking into account availability of such sources in the region and its impact on retail tariffs.

Keeping the above in view, the Chhattisgarh State Electricity Regulatory Commission, in exercise of the power vested to the Commission under section 86(1)(e) of the Act read with section 181 of the Act, notifies Chhattisgarh State Electricity Regulatory Commission (Renewable Purchase Obligation and REC framework implementation) Regulations, 2016, for the period 2016-2021. It has been noticed in the year 2015-16 none of the distribution companies (discoms) fulfilled their obligation. In the year 2015-16 Discoms had a shortfall of 99.06 Million Units and the other entities with captive power plants had a shortfall of 36.01 Million Units for the reporting period 2014-15. There is a huge potential for shifting to renewables and the demand from the members itself can initiate the process.



The Chhattisgarh Renewable Energy Development Agency was invited to present the schemes available **to members as a part of the government's initiative**. There is a ripe time to install and use alternate energy solutions especially Solar Energy. The area receives large amount of sunshine throughout the year and the people have also shown a willingness to move to alternate energy. The issue of lack of finances is a major roadblock and the villagers through the producer company have already identified 4-acre plot which can be used to install a 1 MW solar based power plant which can benefit the entire village and help in preserving their land and environment. A cooperative farm has been started. Three solar irrigation pumps have already been installed with the help of CREDA.

KORBA BHU VISTHAPIT PRODUCER COMPANY LIMITED

In Korba coal mining region over 2400 families who have been displaced but have not been provided jobs have come together to form this producer company. The main objective of the company is to demonstrate that communities can undertake activities including transportation, plantation, renewable energy and to maintain moral pressure on SECL to provide opportunities for ancillary activities to the displaced members.

The company has identified 15 acres of land for a solar project. Environics is identifying the tie-ups possible for investment and technology for a 3-5 MW plant.

The company has also started a dialog with Vaspar Technologies, Bangalore to initiate innovative building materials production unit which can also utilise flyash. Honeycomb panels will be produced by the unit which are excellent walling material.

These developments are in an early stage and capacity building for management of large activities is currently the focus.

FINANCIAL STATEMENTS

The Independent Auditors Report and Balance Sheet is available [here](#)