

Press Release

Krishak Mukti Sangram Samiti, Assam

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- **Seeking a moratorium on clearances for large dams in Northeast India;**
- **withdrawal of clearances granted to 2000 MW Lower Subansiri, 1750 MW Demwe Lower & 1500 MW Tipaimukh;**
- **future steps on hydropower projects and dams only after full, prior and informed consent of people in the region;**
- **protect the Brahmaputra river basin as a cultural and ecological endowment**

Background:

The Northeast of India is an ecologically and geologically fragile, seismically active and culturally sensitive region. There are plans to harness around 63,000 MW of hydropower through 168 large dams in the Brahmaputra and Barak river basins. **The state of Arunachal Pradesh alone plans to develop 168 projects for a cumulative capacity of 57,000 MW.** MoUs/MoAs have already been signed for over 120 projects until now by the state government. An important role is played by the Central Government which grants environmental and techno-economic clearances to projects. The environmental clearance process also assumes significant importance as it is currently the only clearance in which comprehensive social impact assessment and public consultation has to be done. Recent times have seen many concerns raised both about individual and cumulative impacts (downstream and upstream) of multiple dams planned in the region.

After downstream agitations in the Subansiri river basin an expert committee of IIT Guwahati, Gauhati University and Dibrugarh University was set up to study the downstream impacts of the 2000 MW Lower Subansiri project. In their report submitted in June 2010 this committee has recommended that: *"...The selected site for the mega dam of the present dimension was not appropriate in such a geologically and seismologically sensitive location...Therefore, it is recommended not to construct the mega dam in the present site..."* A House Committee set up by the Assam Legislative Assembly to investigate the impacts of dams in its final report submitted in July 2010 supported the Expert Committee recommendations on Lower Subansiri.

Downstream concerns

Terms of Reference (ToR) for Environment Impact Assessment (EIA) studies have been granted by the Ministry of Environment & Forests (MoEF) for at least 54 large dams in Arunachal Pradesh since September 2006. In most cases the 'baseline data' collection has been asked to be restricted to only 10 km. downstream and the actual 'impact prediction' has been asked to be restricted to an even smaller distance downstream: only between the dam and powerhouse! There is only one aspect which has been mandatorily asked to be studied beyond 10 km. downstream in all cases; this is the 'dam-break analysis' which predicts what will be flooding downstream in case the dam actually breaks. But dam-break is not the only downstream risk a dam poses. Unfortunately, most detailed downstream studies are only prescribed as post-clearance studies as has been done in the 2000 MW Lower Subansiri project on the Subansiri river, the 1500 MW Tipaimukh Multipurpose project on the Barak river and the 1750 MW Demwe Lower project on the Lohit river as recently as February 2010. This clearly indicates that the projects are being treated as a *fait accompli* and downstream studies and consultations a formality. It is

only recently that partial downstream impact assessment in Assam has been prescribed as pre-construction studies in a couple of projects in the lower reaches of rivers such as Dibang and Siang. But these ToRs are clearly inadequate and importantly conduct of public consultation in Assam is still not required for projects impacting the state.

Downstream impact concerns relevant to the Northeast include: loss of fisheries; changes in *beel* (wetland) ecology in the flood plains; impacts on agriculture on the *chapories* (riverine islands and tracts); impacts on various other livelihoods due to blockage of river by dam (e.g. driftwood collection, sand and gravel mining); increased flood vulnerability due to massive boulder extraction from river beds for dam construction and sudden water releases from reservoirs in the monsoons; dam safety and associated risks in this geologically fragile and seismically active region; the ecological and social impacts of drastic flow variations on a daily basis since the projects are peaking hydropower projects (particularly in winter).

For example, the usual winter flow in the Subansiri river is approximately 400 – 500 cumecs (cubic metres per second), flowing uniformly through the day. After the commissioning of the 2000 MW Lower Subansiri project, flows in the Subansiri river in winter will fluctuate drastically on a daily basis from 6 cumecs for 20 hours (when water is being stored behind the dam) to 2500 cumecs for 4 hours when the power is generated at the time of peak power demand. Such fluctuations in the river flow in the major tributaries of the Brahmaputra are likely to seriously impact critical downstream areas such as Daying Ering sanctuary, Dibru – Saikhowa National Park, Majuli island and Kaziranga National Park. This will also destroy the livelihoods of people in the Brahmaputra floodplains which are adapted to the natural river flows which are like the ‘heartbeat’ of the river.

Upstream: The myth of ‘benign’ projects

While Pandit Nehru and the former adviser to NEFA, Verrier Elwin, argued for development interventions in the state needing to be sensitive to the local indigenous ethos of the state, the current Central and State government policies seem to contradict this philosophy. The current plans involving building of 135 dams to harness 57,000 MW of hydroelectricity, leaving no river or stream to flow free in the state. In parts of the state, for example Dibang and Siang valleys, citizens (particularly youth) are opposing this juggernaut of large dams which threatens the very ecological and social fabric of their homelands. Opponents of dams in the Dibang and Siang basins certainly want development and economic activity, but that which is socially and ecologically appropriate. Not multiple large dams which will: submerge large tracts of forests and agricultural landscapes; destroy the rivers including sacred and historical sites; bring in massive socio-cultural and demographic changes due to influx of large labour populations in the state outnumbering the local populations; give little opportunity of sustainable livelihoods for local populations; cause major downstream impacts both within Arunachal Pradesh and neighbouring Assam.

Both the push by the Central Government to accelerate hydropower development in the state and the hurried signing of MoUs with power companies by the State Government has only sown the seeds of conflict. The people of the Dibang Valley have opposed the holding of the public hearing for the 3000 MW Dibang Multipurpose project no less than ten times. With huge upfront premiums already paid by companies’ to the state government before public consultation and green clearances, citizens opposed to the Dibang dam believe that it is pointless having cosmetic public hearings. In the Siang Valley, villagers protesting the 2700 MW Lower Siang project near Pongging had to face violent action by the paramilitary forces in May 2010, injuring several people. This is the first such incident in the state and has set a dangerous precedent in the otherwise peaceful state.

The Expert Appraisal Committee on River Valley & Hydroelectric projects and the MoEF have granted environmental or pre-construction clearances to virtually all projects in the state, indicating a clear pro-project bias. These clearances have only further perpetuated several myths about the projects coming up in Arunachal Pradesh at the national level. One such myth is that ‘*Social impacts of projects in Arunachal Pradesh is less as it is relatively thinly populated as compared to other parts of the country*’.

The small displacement argument to sell dams in AP is one of the most misleading arguments. Firstly project affected persons (PAPs) are being grossly underestimated as only people whose lands are being directly acquired are being treated as PAPs. Rights and resource use of local communities in a much larger landscape will be impacted. These include the following: submergence of jhum lands will shorten jhum cycles over a larger area; land use restrictions over large tracts for Catchment Area Treatment and Compensatory Afforestation (particularly in the context of FRA); impacts on downstream livelihoods due to major fluctuations in flow regimes.

AP is home to small populations of culturally sensitive indigenous communities. Therefore, direct and indirect displacement is high if looked at in the perspective of local population (as opposed to the population of the country). The land in the state has been customarily delineated between different communities and clans and there is no place to resettle people or provide alternative land. Moreover, these large hydel projects being labour intensive and long gestation projects will involve influx of large labour populations for long stretches of time. This will have serious socio-cultural and demographic consequences for this tribal state.

Environmental Risks

Being a geologically and seismologically sensitive region, comprehensive environmental risk assessment assumes great significance in the Northeast (both during construction and operation of project) to decide the viability or otherwise of mega dams in the region. Unfortunately, in the current environmental decision-making process, 'dam-break analysis' is the only risk assessment which is done. The Lower Subansiri Expert Committee report has thrown up many issues related to the paucity of understanding of earthquakes and their impacts in the region while planning and designing dams. Beyond the impact on the dam structure itself, there are other risks both during earthquakes, for example: heavy sedimentation impacting viability of dam and overtopping of dam due to heavy landslides in reservoir inducing floods downstream. These and other environmental risks need to be properly understood while evaluating the viability of dams in the Northeast.

Experience of existing small dams: flood, loss of agrarian land etc

Dam Induced Flash floods

Whenever there is excessive rainfall in upstream areas of the dams, the large inflows cannot be stored in the reservoirs and flow is released by opening spillways of the dams. This causes flash flood havoc in downstream areas in the plains of Assam. Such events of dam-induced floods have been experienced several times in different part of Assam. In most cases release of additional flows in such circumstances is operated secretly by the dam operators to escape responsibility of downstream impacts. Lack of prior information and early warning systems increase flood damage and casualty.

For example, a landslide dam that formed in the Tsatichu River in 2004 breached on July 10 2004 resulting in a large flood wave flowing through the Kurichu River. The Kurichu Hydropower project released the excess water that flooded several rivers in Assam including the Hakua, the Beki and the Manas. Moreover, it was a period of heavy monsoon. As a result it created an unprecedented flood hazards in western Assam. Flash floods carrying trees and huge amounts of silt washed away parts of the Manas National Park killing a large number of wild animals. A large number of fibre glass and inflatable boats of the Forest Department in the park were also washed away leaving the staff stranded. The road from Barpeta to Kokrajhar was breached completely cutting off access to the park.

In the month of October in 2004 a similar incident took place in the Kopili River in southern Assam. The Kopili Hydro Electric Project of NEEPCO could not hold the large inflows created by heavy rainfall in the Umrangchu area. The water leaked caused devastating flood in Nagaon and Morigaon districts of central Assam.

It has been established beyond doubt that the flash floods in the river Ranganadi on June 14, 2008 were triggered by unwarranted release of excess water from the river dam on Ranganadi that is a part of the

Ranganadi Hydro Electric Project. More than 22 people including farmers working on their fields were killed by these floods. More than 50 villages were inundated leading to displacement of more than 10,000 people. This flash flood breached the National Highway-52 at Ganesh Uddyan in North Lakhimpur on 14th June and deluged a wide area.

Ecological degradation of downstream areas

One of the most serious impacts of the dams on rivers is the ecological degradation suffered by the river and the riparian land in downstream areas. Since in all operational dams norms of environmental flows are not maintained, the storage and release pattern is anomalous and erratic. In the existing dams the no assessment of environmental flows were made, that means there is no knowledge of how much flow in the river is to be ensured down the dam in different stretches of the river so that needs of environmental use (forest, wildlife) and human consumptions are adequately fulfilled. As a result the rivers are dying a slow death being deprived of seasonal water content. Lack of sufficient flow results in changed pattern of siltation on river bed and river banks. This has intensified river bank erosion in some areas while other areas have become vastly silted. Gradual drying of the river The Ranganadi is a live example how a river become degrades and dies due to a dam. However, the same river suddenly is surged with excessive flood due to release of water from the dam and causes flooding.

Fragmentation of the flow regime has seriously affected the aquatic biodiversity and the ecosystems of riparian wetlands. The river dolphins once found in plenty in the Ranganadi is no longer seen there. The Satrajan beel (wetland) on the bank of the river Ranganadi used to be a safe haven of migratory birds and had rich stock of fish. However, due to lowered water level in the Ranganadi and deficiency of flow in the winter the feeder channels that link the main river to the wetland have dried up or become congested. Therefore, the Satrajan has also become dried, shrunk and degraded. It is no longer a suitable water body for birds and fishes.

Siltation and land degradation

The rate soil erosion from the hills of NE India is naturally high because the hills are made of soft rocks and soil that gets weathered and eroded in a climate characterised with heavy seasonal rainfall. Construction of dams causes significant destabilisation of hills at local scale aggravating soil erosion. Huge amounts of boulders have been extracted from foothill areas on many rivers of eastern Assam to fulfil construction needs of dams. Removal of boulders untraps silt and sand increasing their content in the sediment load of the river. Further, flash floods caused by dams also carry more debris and sediment than normal riverine floods. All these factors have led to increase in intensity and area of siltation on river banks of river having dams operational or under construction in upstream areas. Recently sand content in the sediment load has been found to be much higher than the fine silt causing widespread sand casting on fertile agricultural land. Farmers in thousands of numbers have lost livelihoods and become wage earners. Important examples are the riparian areas on the banks of the rivers Ranganadi, Subansiri, Kopilli, Beki and Manas.

Ignoring downstream (EIA etc) The EIA farce

Considering the unique features of the region and the scale of intervention planned, it is critical that the social and environmental impacts are carefully assessed before deciding whether these projects are truly feasible. Large hydroelectric projects need to pass through mandatory 'environmental clearance' procedures, administered by the Ministry of Environment & Forests (MoEF), to evaluate their viability on environmental and social grounds. Based on their specific location they could also require other clearances such as 'forest clearance' from MoEF and approval from the Standing Committee of the National Board for Wildlife (NBWL) where areas inside wildlife protected areas (PAs) are involved. A key feature of the environmental clearance process is the Environmental Impact Assessment (EIA) report, which is a critical document aiding the decision-making. It is important to note that this is the only study under current clearance mechanisms which also has a mandatory component on social impact assessment.

How has the quality of these EIA reports been for dams in Northeast India? Let us for example look at certain biodiversity aspects of the EIA reports. Renowned naturalist from Northeast India, Dr. Anwaruddin Choudhury, has examined EIA reports of at least five large hydroelectric projects – Kameng, Lower Subansiri, Middle Siang, Tipaimukh and Dibang – and finds all poor on wildlife aspects. A common feature of his introductory comments on these reports has been: "contains innumerable (instances of) incorrect data, unverified and superfluous statements, and above all reveals the casual approach," referring to the power companies and EIA consultants. Dr. Choudhury says: "It is shocking that mega hydel projects in the northeast are being granted clearances based on such reports. How can we decide the fate of some of the country's most important wildlife habitats based on sub-standard impact assessment studies?"

Here are a few more samples from these EIAs: The Middle Siang EIA lists 5 bird species in an area which has over 300 and even in this short list has a bird which is non-existent on this earth; the Kameng EIA reclassifies carnivores such as the red panda, pangolins and porcupines as herbivores; the Lower Subansiri EIA lists 55 species of fish in a river which has at least 156 and reports an area called the 'Arctic' in the Eastern Himalayas. But these days' citizens' groups are cynical of sending in their comments on poor EIA reports to the government. Based on these comments, the reports are only sanitised and the projects often granted clearances without necessary additional detailed studies.

Assam-Arunachal conflict

Critics have pointed out that anti-mega dam propaganda will stop development activities in Arunachal: We are asking who/by whom/for whom development is carried forward. Some of the communities will have serious and non-reversible social impacts: for instance Iddu-Mishimi and Dibang valley projects. The ecological terrain of Assam and Arunachal bear similar profile. All environmental impacts in Arunachal will have severe and challenging impacts on Assam, particularly in the foot-hills of Arunachal.

Social and political movement against dams

The region (particularly in downstream Assam) has seen a major grassroots social and political movement against the mega dams in the past few years. Very recently KMSS submitted a memorandum signed by 1,12,000 signatories to the Indian Prime Minister seeking his urgent intervention on dam issue. The Prime Minister hardly responded to this public appeal.

Scientific Committee on Lower Subansiri HP:

The scientific/technical recommendations of the Lower Subansiri expert committee clearly suggest the need for scrapping of mega dams in the Northeast, questioning the reports dished out by pro-large dam technocracies on earlier occasions. This committee has recommended that: "...The selected site for the mega dam of the present dimension was not appropriate in such a geologically and seismologically sensitive location...Therefore, it is recommended not to construct the mega dam in the present site...".

This has further strengthened and reinforced the concerns of the people of the region who have been expressing concerns against the imminent dangers of mega dams.

The Expert Committee's report has been categorically endorsed by the **Assam Legislative Assembly's House Committee in its report on dams submitted to the Assembly in July 2010**. The House Committee's report embodies a clear political mandate against mega-dams in the region. The House Committee was set up after a major debate in the Assam Legislative Assembly in July 2009. We would also like to draw your attention to the fact that this committee has undertaken widespread discussions with different stakeholders while working on the report.

OUR DEMANDS:

The KMSS has strongly objected to the manner in which democratic deliberations on mega dam question in NE India has been thwarted by the powerful pro-dam lobby in the last couple of days. It is to be mentioned here that following a massive public hearing in Guwahati on 10th September last, Jairam Ramesh, union minister of Environment and Forests sent a letter to the PMO on the issues of mega dams in NE India. We welcomed this move and recognized as first step towards heightening the anti-dam movement in Assam. The letter from Jairam Ramesh accepted several facts like the concerns of downstream people and absence of environmental governance in granting permission to various projects. However, the meeting could not take place due to strong pressure exerted by power companies and other lobbies and also lethargy shown by Assam Chief Minister. We demand that the meeting takes place on an urgent basis. We strongly challenge the wrong claims made by power lobbies against the interest of the people of Assam. The best example of such mis-campaign is that of the Arunachal Chief Minister who has written a childish letter in defence of mega dams. We have sent a strong rebuttal of his claims. The copy of this rebuttal is sent to the PM, Power Minister and Minister of Environment and Forests. The role played by the Assam Chief Minister is almost dreadful. While the entire province is crying and up against the Mega dam, he is giving the people of Assam a lesson of technology. We urge him to solve all the problems caused by Ranganadi etc. before he talks of technology. We also demand that the PMO office gives an urgent attention to the issue and takes a pro-people decision on a priority basis. Our lives are more important than any other trivial issues.

KMSS demands

- **A complete moratorium on all clearances (including pre-construction clearances) by the MoEF to large dams/hydropower projects in Northeast India.**
- **Immediate withdrawal of clearances granted to the 2000 MW Lower Subansiri project, 1750 MW Demwe Lower and 1500 MW Tipaimukh which were granted environmental clearance without downstream impact assessment and public consent.**
- **Commission of a special study group consisting of Independent Reviewers (including scientists, people's representative) to study the environmental and social impact off all the existing dams in Assam.**
- **A complete review of pre-construction clearances granted to projects in the region.**
- **Future steps on hydropower projects and dams to be taken only after full, prior and informed consent of the people of the Brahmaputra & Barak river basins.**

- **The Brahmaputra River and its tributaries to be protected as a cultural and ecological endowment of the people of the region and the country as a whole. Development plans will need to respect the environmental and cultural sensitivity of the region.**