

Economic Development and Tribal Discontent in Arunachal Pradesh

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Abstract: India unlike any other nation strived for economic growth and development since Independence. In order to achieve this goal, India needed huge generation and consumption of energy to turn the wheels of industries. But the issue of global warming has pushed for cleaner generation of energy. It is within this context that the hydropower generation has taken a centre stage in field of energy generation and had been justified on many grounds for being a cleaner energy. However, this justification has been opposed by the communities that are affected or to be affected by the hydropower generation projects. This paper deals with the rising discontents among the people of Arunachal Pradesh against the hundreds of upcoming hydropower projects in the state. The paper focus on issues of whether the state needs mega-dams as well as what should be the road map of economic development for the people in the state?

Keywords: Economic Growth, Development, Hydropower, Arunachal Pradesh, Tribal discontent, Sustainable Development

I. Introduction

The very need of power energy kicked off with the nation's quest for economic growth and development in order to have a better tomorrow. The economic growth is a general term frequently used to denote a quantitative increase in economic variables such as growth in food production, industrial production, infrastructure, per capita income etc. over a period of time. Economist believed that, once an economy is able to increase its growth, it would trigger betterment in the lives of the people of the economy which might be seen in variables such as level of nutrition, health facilities, sanitation, education level etc. In fact, economic growth was considered as the cause and effect for the betterment of lives of the people. Such betterment in the quality of life in the economy is termed as development.

One basic understanding at this time was that the quality of life can be enhanced by a minimum level of income and that income is to be generated by productive activities. It means that before assuring development we need to assure growth. So, the general belief was that the higher development requires higher economic growth. Therefore, the nation focused on aspects of expanding the quantity of mass production, infrastructures and income of a country's economy. But to achieve these aspects, profound generation and consumption of energy became utmost necessary. Hence, to meet this necessity the nation formulated energy policies and attempted a shift in technologies for energy generation. In this case, dam technology got maximum preferences.

Dam in a simple term is a technique of alteration to the river for harvesting the water resource. Humankind has been building dam since ancient time for irrigation, flood control, and water supply. But, after industrial revolution the dam was being built for energy generation and without doubt it had transformed the human society completely since then. In fact, dam building technique for hydropower generation has become symbol of human advancement in engineering and technology and symbol of economic growth and development of a nation.

By the end of 20th century, dam occupied a significant position in the field of energy generation technology. The issue of global climate warming and quest for clean and green environment had pushed further the dam building over thermal power plant or nuclear power plant. This is because, the hydropower energy is considered to be clean and viable energy; as a result dam is considered to be best alternative to replace obsolete and polluted energy generation technique like thermal power, nuclear power etc. Therefore, to balance between growing demands of energy on one hand and the cry for cleaner energy on the other hand, a dam construction tend to be regarded as an effective way of meeting energy demand. As a result, at present dam buildings are growing dramatically and exponentially across the globe and in India it is no exemption. Since independence, dam construction has accelerated in India as it aimed for economic growth and development. Many mega-dams were built since then in every major rivers of the country such as Bhagra-Nangal dam on Sutlej River, Hirakund Dam on Mahanadi River, Nagarjuna Sagar dam on Krishna River, Pandoh dam on Beas River, Ukai dam on Tapti River, Gandhi Sagar dam on Chambal River, few to be named. Those dams were regarded as the backbone of the energy security and instruments for achieving economic growth and

development of India. In fact dam was called as a “Modern Temples of Modern India” by Pt. J.L. Nehru, the first Prime Minister of India during his inaugural speech of Bhagra-Nangal dam in 1955.¹

However, dam apparently looked promising when seen from the point of huge power generation and revenue earning (Mahanta, 2010); but irrespective of benefits dams are beset with several adverse impacts and risk i.e. altering both the ecosystem and the socio-cultural system and economic system existing in and around the river system. World Commission on Dam (2000) posits that dams have made significant contribution to development of society in numerous aspects; but at the cost of social, economic and environment. As a result, mounting criticism of dam emerged across the world and glorification of dam as symbol of progress and modernity was being challenged.

India’s enthusiasm for power generation has outweighed the ecosystem, economic system and socio-cultural system in favor of nation’s economic development and progress. Therefore, the dam which was regarded as harbingers of growth and development was seen as the tombs of destruction (Dwivedi, 1997). People and communities that were considered to be beneficiaries became the victims of the developmental projects (Bhaviskar, 1995). Thousands of people were displaced and many of them are at the verge of risk. This clearly shows the reason why the dam became such a controversial technology. As, a consequence many anti-dam movements popped up in the country organized and lead by project affected people, environmentally concerned people, NGOs etc. Few examples of anti-dam movement in India to be named are Silent- Valley movement in Kerela, Narmada Bachao Andolan in Madhya Pradesh, Anti-Tehri dam movement in Utrakand and Anti-Teesta dam in Sikkim etc.

Despite colossal number of resistance by the people across the country and being aware of the massive socio-economic costs, India is determined to continue developmental pattern embedded with mega dam project. In this process of developmental path, in the year 2000 the Central Electricity Authority (CEA) carried out a “preliminary ranking studies” that identified Northeast region of India as a new site for producing electrical energy with Arunachal Pradesh as the highest site. In fact Arunachal Pradesh was declared as, ‘India’s power house’ by CEA. Subsequently, NHPC (National Hydropower Corporation limited) one of the public sector pioneer in dam building was given the mandate of generating the hydropower in most of the sites in the said region.

However, environmental and livelihood issues surfaced since the inception of the plan and there was an emergence of resistance against the plan. Therefore, this paper focuses on the mounting discontent among the communities in Arunachal Pradesh. The paper also focuses on the issue of the need of mega dam in state and future road map of economic development in the state.

II. The State

Arunachal Pradesh, known as the land of rising sun and land of dawn lit mountains is geographically located in the North-East Himalayan region of India. It is home to diverse indigenous tribal communities with vibrant culture living a sustainable life depending on natural resources. The region is ecologically rich and is one of the biodiversity hotspot of the world known for endemic and endangered flora and fauna. Due to its geographical location it is drained by many rivers and rivulets. There are five major rivers that flows through the state; Kameng, Subansiri, Siang, Lohit and Tirap. Each of these rivers had hundreds of tributaries. The five major rivers along with its tributaries form the mighty Brahmaputra river system. In fact, the Siang River merges with Dibang and Lohit River at the foothill in Sadiya, Assam and flows as Brahmaputra in Assam. Those rivers are perennial in nature as it is feed by snow, south west monsoon rains as well as north-east monsoon rains; making the state rich in water resources. This is the reason for being named as “Power House of India.”

In a view to lead the country towards economic growth and development, harnessing of water resources of the state became utmost necessary. And subsequently, the large hydro power projects became a part of the Govt.’s official plan in the centre and the state. This plan was given a color of development activities. Subsequently, the Government of Arunachal Pradesh release state policy document that stated that the state would float on hydro dollars if all the water resources were tapped through dam building (Barua, 2012). Next, the state government went ahead with the plan by signing multiple memorandums with power developers both public and private developers. Till October 2010, the Govt. of Arunachal Pradesh has assigned 132 projects to both companies in the private and public sector for a total capacity of 40,140.5 MW (Vagholikar and Ahmed, 2003).

Few upcoming mega dams to be named are- Siang Lower Hydro-electric Project (2,700 MW), Siang Upper Stage II (3,750 MW), Siang Upper Stage I (6,000 MW), Dibang Multipurpose Project (3000 MW), Upper Subansiri Hydro-eletric Power Project (2000 MW), Lower Subansiri Hydro-electric Project (2000 MW), Nyamjang Chu (780 MW).

The state government has justified its plan and action in terms of economic growth of the state and development of the people i.e. the hydropower projects would bring revenue to the state and generate employment. The revenue thus generated would increase public expenditure on public good. The hydro-power plan was also justified as environmentally benign on the ground that it does not contribute to the global warming and would involve smaller submergences and less destruction of environment as they were all run - of- the river project.

¹ “Nehru opens work on Bhakra Dam”. The Indian Express 18 November 1955. Retrieved 10 October 2015.

However, justification of the government did not appeal the people and the decision of the government was resisted by the people from the state as well as the downstream state Assam. In this context, an important question arises i.e. why is the hydro plants which is regarded as environmental benign, subjected to increased public concerns when the state is in need of economic growth and development? Let's look into this question in detail

III. Reason of Discontent

It is quite evident from the previous dam project from across the country that the economic growth and development plan based on mega dam projects have created risks, threats, hazards and dangers to the physical and human world and have created a society in Ulrich Beck's term 'a Risk Society'. The decisions made by the government to construct dams in order to fulfill the thirst for economic growth and development (materialistic and consumerist idea) have been responsible for the risk to the people's livelihood in terms of social, economic, cultural and environment supported by the river and the surrounding environment. Across the nation there is still on-going discontent and conflict against the dam projects. Similarly, in Arunachal Pradesh there is growing discontent and resistance at several sites of hydropower projects (planned or constructed) on various issues.

The main issues raised in anti-dam protest are the issue that revolves around the submergence of villages and agricultural land, and displacement of the community because it causes huge material losses and social disruptions. The Siang People's Forum (SPF), Lower Siang Dam Affected People's Forum (LSDAPF) and Siang Dialogue (SD) are the groups that are spearheading the movement against the proposed mega-dam on Siang River on above issue. Bijay Taram of Siang Dialogue argue that, "the mega dams once completed on the Siang River will submerged the villages, agricultural land and destroy their forest. It will affect their livelihood, hunting ground and will displace thousands of people of Siang belt."²

They argue that the problem of displacement is not just a problem of numbers displaced but mainly a problem of social and economic aspects. The displacement will cause loss of traditional culture and ancestral land. The displacement would impoverish the displaced communities as they would lose their source of livelihood, land, properties etc. The submergence of arable land and village will affect their livelihood and would force people to migrate in search of unsustainable livelihood as they are illiterate and unskilled; thus ending up in poverty. Migration may further, distract the social and communal bonds. The issue of displacement will also raise the issue of communal conflicts among the tribes. In Arunachal Pradesh each tribe has customary rights over land, river and forest of their dwelling places and the surrounding areas where the outsiders are prohibited from venturing into it. The displacement of one tribal communities and their resettlement in the land of other tribes may result into inter-tribe conflict.

Affects on downstream livelihood is another issue raised by downstream people of Assam against the upcoming 2000 MW in upstream Subansiri River. In downstream river basin, agriculture is based on the natural and limited annual floods and people have adapted their agricultural patterns to it. So damming the river will limit the annual floods as water is trapped behind the reservoirs. It will also disrupt the flow of sediments and rich nutrients which is vital for fertilizing the agricultural land, which will disrupt agriculture that may cause food insecurity in self-sufficient region. Alteration of the river flows will also destroy river ecology by disrupting the flow. This disruption will alter the linkage between the river and its floodplain. It will create an obstacle to the movement of migratory fish species and reduce their access to spawning and rearing grounds, thus affecting the fishing activities (Mahanta, 2010). It will have impact on the wetland ecology, affecting the habitat of the endangered species. It will also have impact on the river islands and groundwater domain in downstream Assam. The tunneling and building of dam is done in geologically fragile landscape creating more risk as the region is geologically fragile and seismically active area. These are the central issues raised by the protestors in the downstream Assam.

The people also fear of demographical change due to inflow of outsider workforce. The Idu- Mishmi Cultural and Literary Society (IMCLS) and All Idu-Mishmi Student Union (AIMSU) are protesting against the Dibang Valley Project on this ground since 2008. At present the survival of Idu-Mishmi dialect is at risk as a result, the dialect has been identified as endangered language by UNESCO. They argue that the sudden inflow of large construction workers in the less tribal populated area may cause social and cultural problems at the local community level since they will outnumber the local people and will have tremendous influence on the local culture and language. They also fear for of loss of land, forest and future disaster due to construction of dam.

The other issue, raised by the anti-dam protestors in the state is Loss of cultural heritage such as building structure or places that have cultural, spiritual or religious meanings. On this issue, the Buddhist monks in Tawang are protesting against the hydro projects that are being planned on Tawang Chu and Nyamjang Chu rivers. The protest is being organized under the banner of "Save the Mon Region Federation (SMRF) under the leadership of Lama Lobsang Gyatso. The monks and the people fear that the 780-MW Nyamganj Chu project will ruin the winter habitat of the Black-necked Crane, which is worshiped as the incarnation of the sixth Dalai Lama. They also fear that the project will cause severe damage to the fragile ecology of the region by submerging the forest land. Another issue of fear and anxiety that is raised by the people of Tawang region is the vulnerability of construction of mega dams near the Chinese border.

² Telephonic Interview held on October 20, 2014.

Another common issue for discontent is the exclusion of local communities in decision making process. All of them argued that the government had not provided any opportunity to local people to participate in the decision for project implementation. Each of these MOUs was inked without any public consultations and with mandatory clearances from concerned authorities. They also states that the project agencies had not done a proper empirical assessment to measure the impacts of the project on the environment, livelihood, social and cultural life of the tribal people. No risk assessment has been carried out.

Thus, fear of adverse impacts and apathy of government had created discontent and spirit of resistance movement at the grassroots level in the state. This has forced the people to communicate with each other to take action for security and safety for themselves against the future disaster. In spite of all the risks and resistance as mentioned above, the government at central and state is still pushing for mega dam plan in the state. Hence, people raise the question do we really need a mega-dam?

IV. Do People of Arunachal Pradesh need a Mega Dam?

It is quite evident from various experiences that the developmental plan based on large dams quite often, overestimates the economic benefits at the environmental and social cost. According to the activists and the general public, the state and the people do need power resource and development but not at the higher cost of their daily existence. They feel that, on many grounds the construction of hundreds of mega dam in the state is illogical and unviable.

Firstly, they argue that the consumption of energy is quantitatively less in relative to other parts of the country. This is due to less population and absence of industries. They posit that the energy needs in the state can be easily fulfilled by micro, mini or small dams that are already in existence in each districts. According to Lama Lobsang Gyatso,

“There are many small and mini hydropower plants in the district which are quite enough to meet the needs of the people in the district if maintained properly. But those plants are not under proper care and that is the reason why there is scarcity of electricity in the district. Now the government argues that there is no electricity in the district and for that they are bringing mega-dam. But I urge the government that if they really think of our development and need then first of all please revive and maintain those existing small hydro-plants. There is no need of large dam if those existing plants are maintained properly. The irony is that government is just trying to destroy our environment, livelihood, cultural and spiritual belief in the name of development. This is not development, any act of government that is detrimental to the people and society cannot be named a development.”³

Secondly, they argue that mini, small or micro dam would be better for the region as the region is geologically fragile and ecologically sensitive as such small projects would have minimum alterations or modification on the river systems without affecting much to the environment.

Thirdly, the region is culturally sensitive as it is dominated by vulnerable tribal people who are at verge of cultural extinction. Small projects would be congenial for the societies due to less submergence of forest, agricultural land, thus enable tribal people to fulfill their genuine power requirements and avoid displacement and huge influx of outside workforce. They also feel that the need of the power could be met by other alternative sources of renewable energy such as solar energy along with small hydro projects.

Guha (2012) in his article “*Dams and the damned: Growth at what cost*”, warned of the dangers posed in Arunachal Pradesh due to unregulated dam building. The large dams that are being planned and under- construction across the major rivers of the state unleash risks of uncertain future which will jeopardizes the society and their sustainable livelihood. He further argues that India is following the path of development which is short-sighted, destructive and socially polarizing and therefore he advocated for smaller project as an alternative to large mega-projects because this could be more economically viable, environmentally sustainable and socially inclusive.

V. Way forward and Conclusion

What sort of development should we be aiming at then? How can risk be preempted? In order to answer these questions we need to look at what the World Commission on Dams (WCD) considers. WCD proffers,

“The end of any dam project must be the sustainable improvement of human welfare. This means a significant advance of human development, on a basis that is economically viable, socially equitable, and environmentally sustainable. If a large dam is the best way to achieve this goal it deserves our support. Where other options offer better solutions we should favors them over large dams. Thus the debate around dams challenges our view of how we develop and manage our water resources” (WCD, 2000:2).

But ironies of the Arunachal Pradesh Government is that rather than generating economic development, it had succeeded in generating greater uncertainties, threats and insecurities. Therefore, the leaders leading the movement against meg-dam project at different parts of the state has put forward different pre-emptive measures and suggestions. They posit that development goals should put the people first through decentralized and participatory decision making processes as the participation would benefit

³ Interview was held on August 14, 2014

the people in the all-round development of their lives. There should be proper liaison between state government, power developer and the people to harness development through mutual co-operation that enhances the tribal people's aspiration. According to Bijay Taram of Siang Dialogue spearheading the protest posits that,

“Large dams should not be constructed where there is exclusion of participatory planning process and threatening of cultures and resulting of huge resettlement of thousands of people. Large dams should not be built where opportunities do not exist for improving the lifestyles of affected people. Increasing attention should be paid to opportunities whereby affected people become partners with project authorities and also where other options exist to meet energy. In fact, the declaration on the rights to development of 1986⁴ should be followed in the execution of any developmental plan. If large dams remain a necessary option for development and for providing energy to populations then it can be constructed only after a best assessment process is made that gives sufficient emphasis to environmental and social issues and where adequate preempted policy is done. Those requirements do not exist at present. We are not against the dam but we are against mega-dam.”⁵

The government should evolved eco-sensitive and human-centered patterns of development; otherwise the iniquitous distribution of benefits could not achieve. According to Lama Lobsang Gyatso, spearheading the Anti-Nyamjang Chu Project,

“Development is absolutely a need for the people but development that ruins people shall not be welcomed. We need to redefine the concept and content of development not only opposing the dam but by doing something constructive, because those risks are potential risk which can be prevented or mitigated within proper risk governance. The short term commercial gain should be done away with. We should adopt a development strategy that combines human development, economic growth, equity and sustainable livelihood with a wiser and more creative use of local resources and local knowledge.”⁶

After analyzing the views of the leaders and activist, the question that arises is not what the impacts of dams are but rather how we should think about dam based development plan? It is critical question, because our action depends on our thinking. Our present thinking and action would prevent adverse and detrimental impacts before it happen, rather than mitigating after it happen. We know that the risks raised by the people are set of potential risks, not yet actual and not yet materialized but may become actual if adequate preempted counter-risk measures are taken before hand. That is, we can either avoid the risk completely or reduce its intensity. So, rather than only trying *ex-post* to mitigate adverse social impacts after it happen, it is much more effective to *predict* the risks in advance and do *ex-ante* preemptive social-economic planning (Cernea, 2004). Secondly, it is imperative for the government to adopt sound approach of which is transparent, participatory as well as sustainable while determining the policy and plan.

In this process, first preemptive action would be identification of potential risks, as it would prevent or reduce adverse possible impacts. If potential risks are identified, then mitigation measures can be adopted easily. In fact, the identification of risks and risk analysis must logically be part of the dam projects. It must be discuss openly by project authorities so that counter risk remedies can be formulated. But in reality, there is always denial of risk in project appraisal report and avoidance of responsibility for risk management. This is one of the worrisome that is often found in the dam based developmental project. The advocates of dam building attempt to belittle the magnitude of risks and pretend to be “positive and optimistic.” Such risk denial and manipulation of risk information creates failure to preempt or overcome intrinsic risks. Therefore, the risk should be identified because if preemptive measures are not formulated, than these potential hazards will convert into actual risk.

After careful analysis of potential risks, the government must adopt ecological and sustainable development that is oriented at promoting a better quality of life and preservation of nature rather than orienting towards production of energy, generation of revenue. Rivers are all connected and no communities living on the bank of the river is exempted and secured from change in river ecology. If we persist on to go for unviable and unsustainable developmental plans then by the end of this century our children and grandchildren will face a hostile climate, deflected resources, food insecurity, and destruction of habitats, mass migration and conflicts. So, the life of our future generation rest in the hands of present generation. Therefore, all efforts should be made to avoid future disaster through conscious public policy. Otherwise, in future we will witness disasters like Chernobyl Fukukima accident, where in order to replace thermal power with nuclear energy the society experienced more disastrous consequences.

Thus, the discontents among the tribal communities of Arunachal Pradesh are not against the development and progress rather they claim for sustainable human development, ecological preservation and participatory democracy. The Indigenous traditions and tribal people's interest constituted the core issue. They posed an ideological challenge to the meaning of development put forwarded by the government and also raised an important question of distributive justice and livelihood sustainability. So along as a gap exists between the state plan of consumerism and materialism on one side and tribal interest on the other, there will always be a space for growth of strong discontent and resistance.

⁴According to Declaration on the rights of development 1986 , ‘Every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development’ (DRD,1986). <http://www.un.org/en/events/righttodevelopment/>

⁵ Telephonic Interview held on October 20, 2014

⁶ Interview held on August 14, 2014.

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