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News Summary: China's dams

By The Associated Press on December 19, 2012

THE WORLD'S DAM BUILDER: China's giant state enterprises and banks have completed, are working on or are proposing some 300 dams from Algeria to Myanmar.

GIVE AND TAKE: Poor countries contend the dams are crucial to bringing electricity to tens of millions who live without it and boosting living standards. Environmental activists and other opponents counter that China is willing and able to go where most Western companies, the World Bank and others won't tread anymore because of environmental, social, political or financing concerns.

DIFFERENT DIRECTION: The rise of China as a dam-building power began in the early 2000s as its companies beat out then dominant Western competitors and just as anti-dam lobbyists were celebrating victories over the World Bank, until then the leading international dam financier. In the United States, where the golden era of dams peaked in the 1960s, scores are being decommissioned.

China Is Top Dam Builder, Going Where Others Won't

12/19/2012

Associated Press/AP Online

By DENIS D. GRAY and ELAINE KURTENBACH

TATAY RIVER, Cambodia - Up a sweeping jungle valley in a remote corner of Cambodia, Chinese engineers and workers are raising a 100-meter- (330-foot-) high dam over the protests of villagers and activists. Only Chinese companies are willing to tame the Tatay and other rivers of Koh Kong province, one of Southeast Asia's last great wilderness areas.

It's a scenario that is hardly unique. China's giant state enterprises and banks have completed, are working on or are proposing some 300 dams from Algeria to Myanmar.

Poor countries contend the dams are crucial to bringing electricity to tens of millions who live without it and boosting living standards. Environmental activists and other opponents counter that China, the world's No. 1 dam builder, is willing and able to go where most Western companies, the World Bank and others won't tread anymore because of environmental, social, political or financing concerns.

EDITOR'S NOTE - This story is part of "China's Reach," a project tracking China's influence on its trading partners over three decades and exploring how that is changing business, politics and daily life. Keep up with AP's reporting on China's Reach, and join the conversation about it, using (hashtag)APChinaReach on Twitter.

"China is the one financier able to provide money for projects that don't meet international standards," said Ian Baird, an assistant professor of geography at the University of Wisconsin who has worked in Southeast Asia for decades. "You go to China if you want to have them financed."

The consequence, critics say, is a rollback to an era of ill-conceived, destructive mega-dams that many thought had passed. The most recent trend is to dam entire rivers with a cascade of barriers, as China's state-owned Sinohydro has proposed on Colombia's Magdalene River and the Nam Ou in Laos, where contracts for seven dams have been signed.

Viewed by some in the developing world as essential icons of progress, dams in countries as far apart as Ecuador, Myanmar and Zambia have spearheaded or reinforced China's rising economic might around the world. They are tied to or put up in tandem with other infrastructure projects and businesses, and power generation equipment ranks as China's second-largest export earner after electrical machinery and equipment.

In energy-starved Cambodia, trade with China has risen to 19 percent of GDP from 10 percent five years ago, according to an Associated Press analysis of International Monetary Fund data.

The year-old $280 million Kamchay Dam in Cambodia's Kampot province was the largest ever foreign investment when approved as well as a political flag-carrier for Beijing. It has been hailed by both governments as a "symbol of close Chinese-Cambodian ties."

Cambodia's electricity demand grew more than 16 percent a year from 2002 to 2011, with shortfalls largely met through costly oil imports, said Bun Narith, a deputy director general in the Ministry of Industry, Mines and Energy. Only 14 percent of rural homes have electricity, one of the lowest levels in Southeast Asia.

"We have no choice," Bun Narith said. "Hydropower is the priority, and the Chinese have the initiative and capability, both financial and technical."

The 20 hydro dams built, being constructed or under study in Cambodia, the bulk of them by the Chinese, would lift Cambodia out of literal darkness and make it energy self-sufficient, he said. "We should have a win-win policy, a balance between environment and energy. After all, electricity is also a basic human need."

Electric rates have fallen in Kampot town since the opening of the nearby Kamchay Dam, but they remain high.

"Everybody believed that after the dam is completed, there will be extra power to use in Kampot and the price will be much cheaper, but in fact there is not much change," taxi driver Prum Virak said.

He said his house is without power three to four hours every day. The price of electricity has dropped to 920 riel (23 cents) per kilowatt-hour from 1,100 riel six months earlier when power was being imported from Vietnam.

In Myanmar, where China may build as many as 50 dams, one re-ignited an ethnic insurgency in 2011 and fanned a wider, smoldering anti-Chinese backlash. Mega-dams in Africa and Latin America have also sparked sometimes violent protests.

The Myitsone dam in Myanmar would have displaced thousands and flooded the spiritual heartland of the Kachin ethnic minority, which cited the project as one reason for again taking up arms.

The government abruptly cancelled it earlier this year, a warning shot that China must clean up its image, if not its act, to avoid both political and economic fallout, analysts say.

The rise of China as a dam-building power began in the early 2000s as its companies beat out then dominant Western competitors and just as anti-dam lobbyists were celebrating victories over the World Bank, until then the leading international dam financier. In the United States, where the golden era of dams peaked in the 1960s, scores are being decommissioned.

The industry, shepherded by the World Commission on Dams, was moving toward setting higher, mandatory standards to mitigate the negative impacts of large dams - environmental degradation, uprooting of communities, depletion of aquatic life - and maximize their positives: flood prevention, irrigation of farmlands, relatively clean energy for homes and industry.

"The Chinese are now definitely diluting the standards debate. We're back to talking about basics," said Grace Mang, who monitors China's dam industry for the U.S. -based environmental group International Rivers. "There is a pattern of projects that would have been delayed, maybe for decades, or dropped, coming back on line with the assistance of Chinese companies and banks."

Among such projects:

- Nepal's West Seti dam, which would force some 10,000 poor villagers from their homes in a biodiversity-rich area. It hung in limbo after Australia's Snowy Mountain Engineering Corp. failed to attract international funders, and the Asian Development Bank pulled out because the dam didn't meet its standards. Six months after the cancellation, the Chinese took over the project.

- A number of dams being built inside or adjacent to nature reserves, including Ghana's Bui Dam and two proposed on the Patuca River in Honduras, where a U.S. developer earlier pulled out for environmental reasons.

- The 1,500-megawatt Coca Codo Sinclair Dam, Ecuador's largest ever infrastructure project, which would encroach on a vast rainforest between the Andes and the Amazon and possibly dry up the country's highest waterfall, located in a UNESCO reserve.

- Ethiopia's Gibe III dam, Africa's largest. Protesters gathered at the Chinese Embassy in neighboring Kenya last year to denounce Chinese companies involved in the project, which they said would endanger the livelihoods of hundreds of thousands of downstream farmers. Ethiopian officials defend it, saying less than 2 percent of the rural population has access to electricity.

The Chinese are taking some steps to improve their image. Sinohydro Corp., which says it controls half the global market for hydropower projects, is expected to release an environmental policy soon and dispatch public relations teams to its offices worldwide. An expert from China's Institute for International Economic Research recently toured Southeast Asia to investigate problems caused by Chinese dams.

The Export-Import Bank of China, the major dam financier, has made some efforts to improve implementation of projects it backs. In a pattern found in other African countries, the Belinga dam planned within Gabon's Ivindo National Park was to power other Chinese enterprises including a mine for iron ore to be shipped to China via a Chinese-built railway and seaport. However, the Exim Bank suspended funding for the dam, citing the national park as one reason.

"The Chinese are seeking a Chinese way of operating at international environmental standards rather than have international standards imposed on them," Mang said.

The Chinese are virtually silent on even such seemingly positive developments, reflecting a persistent lack of transparency on the issue.

The Associated Press sought comment for more than six months from major dam contractors, including Sinohydro, Guodian, China Three Gorges and China Southern Power, calling and submitting written interview requests. The companies provided Internet links to background information or reports about projects in some cases. But most companies didn't respond at all, and those that did rejected requests for answers to specific questions.

Requests for comment on allegations of corruption associated with dam projects were either rejected or failed to draw a response from the Commerce Ministry, Foreign Ministry and the National Development and Reform Commission.

China, the world's largest producer of hydropower, has honed its dam building skills at home, but experts say that its companies build to varying levels of quality abroad depending on what the clients demand.

"My sense is that when the Chinese build a dam overseas, they give you the standards (the local officials) insist on," said Kenneth Pomeranz, an expert on water issues at the University of Chicago. "When governments say, `We want it done right,' they know how to do that too."

Brian Richter, of the U.S.-based Nature Conservancy, said the Chinese believe it is not their role to set environmental and social regulations, but many countries in which they operate don't have the capacity to enforce proper ones "so you end up with nobody paying attention." And there's corruption.

Cambodia seems an apt example, and in particular Koh Kong province, dubbed the "battery of Cambodia." It is remote, populated mostly by poorly educated ethnic minorities and dominated by the government's business cronies, who resort to brutal tactics with scant scrutiny by activist groups.

"They can basically do what they want down there. It's just the Wild West," said Marcus Hardtke, a German forestry expert with detailed knowledge of the area. He said even international environmental groups have remained largely quiet to avoid clashing with the autocratic government of Prime Minister Hun Sen.

One dam has been built in Koh Kong, three more are under construction and another - the Cheay Areng - was recently approved despite heavy opposition.

The Areng was rejected for funding in a 2007 Japanese government study as having a very low rate of economic return, and a Chinese company, China Southern Power Grid, pulled out of the project on technical and possibly environmental grounds. Company engineers reportedly cited the need to build a sloping, 24-kilometer-long tunnel to the first turbine because the valley below the dam was too flat.

Additionally, the Areng Valley - regarded as a "biodiversity jewel" with great ecotourism potential - would be ravaged not only by the reservoir but by access roads and transmission lines. The area contains perhaps Cambodia's most profuse wildlife including the world's largest population of almost extinct Siamese crocodiles. Some 1,000 villagers are facing eviction.

Opponents believe the seemingly illogical trade-offs can be explained by kickbacks, profit-sharing from highly lucrative illegal logging in the area and a general Chinese push into Koh Kong that includes clearing an area seven times larger than Manhattan for a Chinese-leased seaside pleasure city, having displaced more than 1,000 families from their homes.

Son Chhay, one of the few opposition members in Parliament, said that Chinese-Cambodian dam contracts are simply geared to making profits for the parties involved rather than generating low-cost electricity for the country.

"The Chinese have a funny way of doing deals in Cambodia. Construction costs are inflated by some 300 percent, and the profits shared," Son Chhay said. The Cambodian government declined to comment on his claims.

The government's belief in the necessity of the projects is echoed by Lu Shi Long, the chief engineer at Tatay dam, set for completion in 2014 by the China National Heavy Machinery Corporation.

"The construction of this hydropower station is beneficial for the development of Cambodia's economy and the improvement of Cambodian living standards. It's also a great opportunity for Chinese companies," he said. "As an engineer, I am proud of this project."

As he speaks, some of the 2,000 workers, 800 of them Chinese, swarm over the vast dam wall, smoothing the rocky surface before a concrete facing will be applied. Relays of trucks ferry stones from a quarry gouged out of a hillside. The site is surrounded by a sea of tropical green.

Illegal loggers ring the site, having all but wiped out stands of rosewood, the highly prized hardwood smuggled to China's furniture makers.

Improvements won't come, said the Nature Conservancy's Richter, until sustainable standards can be verified by an independent body.

"The industry as a whole recognizes that there's a need, but the playing field has shifted and the Chinese companies are by far the dominant players," he said. "The future depends on them, for better or worse."

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Reservoirs can make local flooding worse, says study

By Matt McGrath Environment correspondent, BBC News

Researchers used measurements from several reservoirs, including this one at Puclaro, northern Chile

Researchers say that large man-made reservoirs can increase the intensity of rainfall and could affect flood defences.

The scientists found that rain patterns around bodies of water in Chile were much higher than in similar areas without them.

This "lake effect" could overwhelm flood defences which are often built without taking it into account.

The study has been accepted for publication in the journal Hydrology.

Stormy edge

Previous research in this field has focused on the impact of dams on local climates. There is evidence that standing bodies like reservoirs and lakes can alter rain patterns by increasing the amount of water that evaporates.

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“Start Quote

"The bigger the water body, the greater the effect”

End Quote Dr Pablo Garcia-Chevesich University of Arizona

Some experts believe that you also get circulating air patterns in the atmosphere above the boundary between the water and the land and this can initiate thunderstorms and showers.

The impact can be significant. One study showed that extreme precipitation increased by 4% per year after dams were built.

In this latest work, researchers from the University of Talca, Chile, examined data from 50 rain gauges near reservoirs in different parts of the country.

Chile has a large variety of climates ranging from areas that get 0mm of annual rainfall to places that get more that 4,500mm. The scientists found that the most intense rainfall was measured at weather stations located near water bodies, especially in drier climates.

One of the authors, Dr Pablo Garcia-Chevesich from the University of Arizona told BBC News that the work had important implications for flood defences.

"If you install a water reservoir that will change things totally and that will lead to flooding," he said.

"Engineers get fired when there's flooding because they didn't do a good design, but in reality they did good work but someone else installed a water reservoir and the climate changed."

"The bigger the water body, the greater the effect."

Dr Garcia-Chevesich said this area of research was controversial because changing the design of flood defences was very expensive.

Dam boosters

Other scientists took a more measured view of the study.

Dr Faisal Hossain, from Tennessee Technological University, said the Chilean study was purely observational and that while the lake effect changed rainfall patterns, the jury was still out on whether it increased or decreased the amounts.

However, he said that he was hoping to bring the research to the attention of dam builders around the world.

"We have modified the weather patterns in such a way that we didn't anticipate before building these reservoirs, and yes in the global context it might have serious ramifications," he said.

Prof Richard Harding from the UK Centre for Ecology and Hydrology (CEH) said several studies had now pointed to the impact of reservoirs particularly in dry areas.

"The physics says that it will happen, but I'm struggling a little to know how big an impact it is, and quite whether it is strong enough to change the design of flood defences," he said.

Dr Harding suggested that the new study might provide ammunition for those who oppose the building of large-scale new reservoirs.

The authors argue that they want engineers and designers to take this new work into account in planning new flood barriers.

"In the US, they are very rigorous about taking climate change into account when talking about storm water management design," said Dr Garcia-Chevesich, "but this is new and should be taken into account too."

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http://www.telegraphindia.com/1121221/jsp/northeast/story_16341414.jsp

Scientists can ease dam issues: NEC

A STAFF REPORTER

Jorhat, Dec. 20: North Eastern Council (NEC) member P.P. Shrivastava has called for scientific intervention at the appropriate time in issues like big dams before it gets politicised.

Addressing the inaugural session of a symposium on “Scientific Intervention for Societal Development’ at the CSIR North East Institute of Science and Technology auditorium here today, Shrivastava said the Northeast could lead the country in production of hydroelectric power.

“With over 70 per cent hills, which range from 500 to 5,000 metres, the region can become a national powerhouse and provide the cleanest power,” he said.

Referring to the issue of big dams like the Lower Subansiri project, Shrivastava said despite everything being ready for generation, work had stopped as the issue had “become political in nature.”

“Scientists can intervene and spread the message that a huge body of water can be released in ways so as not to cause damage and there are ways to build a large dam without the threat of it breaking down,” he said.

The NEC member said scientists should make the people aware that burning hydrocarbons was damaging the environment and led to global warming and increase in the ozone hole.

Citing the example of shallow coal mining in Meghalaya, which caused widespread pollution, Shrivastava said there was a need for alternate, eco-friendly sources of energy.

The symposium also began an exercise to chalk out future project plans to be submitted in the 13th financial plan period with the focus on societal development of the Northeast.

“The vision and project proposals should be formed taking into cognisance not only the requirements of society but also the survival of children in this bio-diversity hotspot and ways to preserve and plan for contingency,” Shrivastava said.

He praised the director of the institute, P.G. Rao, for leading it with a vision for the last 10 years, which had placed it in the forefront of research in India. Rao will retire on December 31.

Upper Assam commissioner S.I. Hussain said there should be more people linkages while formulating the projects. Referring to the large amount of arsenic content in drinking water in Titabar, Hussain said these were some areas where the scientists should work for a viable solution to the problem. He added that the government would draw surface water from a river in the neighbouring district of Golaghat in order to provide safe water.

Hussain also called for the marketing of research processes so they reach the common man and said scientists should work with the government in this regard.

Rao said the institute had worked towards societal development for the past 50 years, with a case in point being the water filter, which had then been looked down upon as unworthy of being a scientific invention of such an institute.

Scientists from Thailand and China besides scientists and vice-chancellors from institutes from across India took part in the event.

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http://www.techniques-ingenieur.fr/actualite/environnement-securite-energie-thematique_191/le-maroc-va-devenir-le-champion-du-monde-de-la-synergie-hydro-eolienne-article_79585/

18 déc. 2012

Le Maroc va devenir le champion du monde de la synergie hydro-éolienne

Et si, avant de vouloir transférer l’électricité verte du Maroc vers l’Europe, on pensait d’abord à répondre aux besoins des populations locales qui n’ont pas encore accès à l’électricité ? C’est le choix effectué par le Royaume du Maroc avec son «Programme Intégré Eolien / Hydro et Electrification Rurale ». Un modèle pour le monde entier.

L’éolien est une énergie renouvelable fluctuante, mais associé à l'hydro modulable, il peut fournir de l’électricité à la demande, notamment pendant les périodes de pointe où les prix de l’électricité sont plus élevés. Avec une STEP (Station de Transfert d'Energie par Pompage), quand la production éolienne dépasse la demande, l’eau d’un bassin bas est pompée et stockée

dans un bassin haut. L'énergie potentielle ainsi obtenue permet de produire à nouveau de l'électricité quand la production éolienne est inférieure à la demande. Le rendement d'un cycle de pompage-turbinage (plus de 80%) est particulièrement élevé comparativement aux autres solutions de stockage tel que l'hydrogène (36%), et la durée de vie d'une STEP est supérieure au siècle, soit bien davantage que les piles à combustible ou que les batteries électrochimiques.

Le mariage de l'eau et du vent pour tous

L'île d'El Hierro a retenu cette approche éco-intelligente. Mais c'est un projet hydro-éolien 80 fois plus puissant que celui de l'île Canarienne qu'a concocté le Royaume du Maroc. Il consiste en quatre parcs éoliens, localisés sur différents sites du Royaume afin d'optimiser l'effet de lissage et cumulant une puissance de 850 MW, couplés à une STEP sur le site d'Abdelmoumen, dans l'arrière-pays d'Agadir, où un lac de barrage est déjà en place. La puissance éolienne installée du pays passera ainsi à environ 1000 MW.

Avec un facteur de capacité moyen d'environ 35%, le parc éolien de 1000 MW délivrera une puissance moyenne d'environ 350 MW. La STEP de 350 MW permettra, en fonction de la demande électrique marocaine, de temporiser les variations de la production éolienne entre 0 et 700 MW (soit le double de la puissance moyenne). Le projet hydro-éolien comprend également des lacs de barrages sur le site de M'Dez et El Menzel (170 MW) à environ 60 kilomètres au sud-est de la ville de Fès.

Mais c'est surtout la construction d'un réseau électrique pour que les villages isolés puissent avoir accès à l'électricité qui donne tout son sens au projet et lui donne un visage Humain. Selon l'Office national de l'électricité et de l'eau potable (ONEE): « Le programme, à travers son volet production, vise à participer à la satisfaction d'une demande sans cesse croissante d'électricité tout en améliorant l'accès à l'électricité d'une partie de la population marocaine, notamment celle résidant dans les zones reculées du Royaume. Ceci devrait contribuer à réduire progressivement les déséquilibres de développement régionaux, et à favoriser l'inclusion sociale. » La composante «Distribution Electrification rurale» du programme porte sur la construction de lignes Moyenne Tension et Basse Tension et de postes de distribution MT/BT « en vue du raccordement de 86000 ménages dans 25 provinces du Royaume, pour y porter le taux d'accès à l'électricité à environ 99%. Cette composante contribuera à la réalisation des objectifs du Programme National d'Electrification Rurale Globale (PERG).»

L'hydro-éolien meilleur marché que le nucléaire nouvelle génération et que le thermosolaire

Le coût d'investissement global du projet (1000 MW éolien + 520 MW hydro + réseau électrique moyenne et basse tension pour alimenter 86 000 foyers isolés) s'élève à 1 600 millions d'euros. Pour avoir un ordre d'idée, une centrale thermosolaire de 1000 MW, technologie qui était très mise en avant par la Fondation Desertec avant le retrait de Siemens et de Bosch, cela coûte aujourd'hui 4500 millions d'euros.

Etant donné la richesse des vents au Maroc (et sur l'ensemble du Sahara), le prix de revient du kWh éolien n'est que de 3 à 5 centimes. Le surcoût du stockage STEP, permettant de délivrer de l'électricité à n'importe quel moment de la journée, est de moins de 2 centimes par kWh éolien selon l'Agence Internationale de l'Energie. Le prix de revient du kWh éolien hydro-assisté est donc inférieur à 5 + 2 = 7 centimes. Soit beaucoup moins que les 10,5 centimes du kWh nucléaire nouvelle génération (EPR) ou que les 16 centimes du kWh thermosolaire.

L'hydro-éolien permet à tous d'accèder à une électricité à la fois vraiment durable et bon marché.

Le projet hydro-éolien marocain est financé en partie par la Banque Africaine de Développement avec un prêt, accordé en juin 2012, de 359 millions d'euros (auxquels s'ajoutent 125 millions de dollars provenant du Clean Technology Fund) le reste provenant notamment de la Banque Mondiale et de la Banque Européenne d'Investissement (BEI). L'appel d'offres pour la construction de la STEP a été lancé fin novembre 2012. Le Français Alstom, qui a déjà construit au Maroc la STEP d'Afourer (460 MW), pourrait y trouver un nouveau marché. Le groupe français est aussi impliqué, avec EDF SEI, dans un projet de STEP en bordure de mer (50 MW) en Guadeloupe. L'appel d'offres pour les parcs éoliens a également été lancé en novembre, et 6 soumissionnaires sont retenus pour y participer :

- EDF Energies Nouvelles (France)/Mitsui & Co (Japon)/Alstom (France);
- Nareva Holding (Maroc)/Taqa (Emirats Arabes Unis)/Enel Green Power (Italie)/Siemens (Allemagne);
- International Power (GDF Suez, France)/Vestas (Danemark);
- Acwa Power (Arabie Saoudite)/Gamesa Eolica (Espagne)/Gamesa Energia (Espagne);
- General Electric (Etats-Unis);
- Acciona Wind Power (Espagne)/Acciona Energia (Espagne)/Al Ajial Funds (Maroc).

Selon Massolia.com, portail sur les énergies vertes au Maroc, "le projet sera développé dans le cadre d'un partenariat public-privé où l'ONEE, le Fonds Hassan II et la Société d'Investissements Energétiques (SIE) s'associeront au partenaire stratégique de référence retenu à l'issue du processus d'Appel d'Offres y afférent."

En 2020, le Royaume du Maroc produira plus de 15% de son électricité avec l'éolien, une filière qui ne consomme pas une seule goutte d'eau douce. Soit deux fois plus que la France si cette dernière parvient à modifier son cadre réglementaire pour tenir les engagement du Grenelle de l'environnement. Et 42% avec l'ensemble des filières renouvelables selon la Loi sur les énergies renouvelables adoptée à l'unanimité par la Chambre des Conseillers du Roi Mohammed VI. Une autre STEP (de 400 MW), en plus de celle d'Abdelmoumem, est prévue avant 2020. A ce rythme le Royaume pourraît atteindre le 100% renouvelable dès 2040 !

Un concurrent se lève déjà pour le Maroc à l'autre extrémité du continent: le Lesotho, avec des partenaires chinois, a annoncé un projet hydro-éolien de 6000 MW, complexe qui délivrera deux fois plus d'électricité qu'un EPR. Décidément, l'Afrique montre vraiment la voie de la croissance verte.

Par Olivier Daniélo

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http://articles.timesofindia.indiatimes.com/2012-12-26/india/36007268_1_tawang-monastery-lobsang-gyatso-power-projects

Monk injured as stir against dams heats up in Tawang

TNN Dec 26, 2012, 01.31AM IST

ITANAGAR: The situation is tense in Tawang after hundreds of people, mostly monks and villagers led by the Save Mon Region Federation (SMRF), took out a rally from Tawang Monastery in protest against the construction of dams in the district.

Security personnel resorted to lathi charge and teargas to disperse anti-dam activists which led to a clash. Many protesters and a few security personnel were injured. A monk was severely injured and had to be shifted to a hospital later, sources said.

The situation turned ugly when the mob started pelting stones at the security personnel, demanding immediate release of seven detained activists, including SMRF general secretary Lobsang Gyatso, sources added.

The protesters expressed resentment over the signing of 140 MoUs on hydroelectric projects with power developers in the region. They alleged that the state government had signed MoUs for 15 projects with private power developers in Tawang district without proper consent from the villagers.

The protesters said hydroelectric power projects in Tawang will pose a serious threat to the ecological balance of the region. Tawang is home to many endangered species like the red panda and macau and construction of mega power projects will bring these rare animals on the verge of extinction, they said.

Arunachal town under curfew

Tension prevailed in Miao town under Changlang district of Arunachal Pradesh for the third consecutive day on Tuesday following a clash between Chakma refugees and indigenous Singpho residents over a plot of land. Violence erupted in town after a group of Chakma refugees burnt down several houses of Singpho community after they were asked to vacate a plot of land.

The local administration on Monday initiated talks between leaders of both the parties to maintain peace in the area but when efforts failed, the administration clamped prohibitory orders under section 144 of the CrPC. Chief minister Nabam Tuki expressed serious concerns on the violence and convened a high level meeting to deal with the situation. TNN

Review: University of Utah professor believes river dams are not obsolete

By Jonathan Farrell.

In his new book "River Republic - The Rise and Fall of America's Rivers" Daniel McCool talks about the "politics" of rivers and water management. On page 96 to 98 he mentions the "old guard" and its approach to tending to the waterways.

This reporter contacted the University of Utah professor to ask some questions and to foster dialog. Previously, this reporter has written about water issues, such as the "Restore Hetch Hetchy Project. This past November San Francisco voters got to decide whether or not the idea of demolishing the dam and empty out the reservoir was in the best interest of the people. The voters turned it down. Yet the non-profit group wants to continue to push the idea.

When this reporter spotted McCool's book in the library a few weeks ago, immediately the wheels of thought were turning. "What would the group at Restore Hetch Hetchy have to say? Or what about the Tuolumne River Trust?" This reporter was rather disappointed when neither of those two environmental groups responded. One representative politely declined. Then that spurred this reporter on to the obvious questions.

Even with more awareness of environmental issues and green-friendly techniques, I asked McCool, does a clique still exist among water management authorities? Cliques to this reporter was the only word fitting to the question, based upon the lack of response I got from the other groups.

"Yes, absolutely," said McCool. "In fact, traditional uses (barging, flood "control," beach erosion control for the Corps, irrigation for the Bureau, hydro-power and flat-water recreation for both) are still the dominant priorities in both agencies. "The new priorities that I discuss in the book are still secondary to these agencies."

And, so this reporter had to ask, does this new generation "clique" become short-sighted on some issues about water use, water conservation and water rights?

To that McCool responded with another question. "Do you mean the people within the agencies that prefer the "new" uses of rivers?" If so, he said, then yes, they form a devoted minority in each agency, attempting to change the agency from within."

McCool mentioned an interview he had and how Serge Birk of the Central Valley Project Water Association had been in his work. Birk had been some one with some power when he was in charge. Yet when he was with McCool at his old job, Birk was treated as an outsider, by the young and new "yahoos," as he referred to them. And, yet it was clear in McCool's account of this visit with Birk that Birk was short sighted about what he considered "his" during his tenure. And, interestingly, Birk had been hired by the

CVPWA's Board of Directors working as a fisheries biologist. McCool also pointed out that Birk purchased items for his pet project with "taxpayer" money.

So, this reporter asked McCool, did or does this type of system still go on? But only in a different way?

"Yes, it does," said McCool. He continued, "agency people often develop a strong sense of devotion and ownership of their projects." "This can be a good thing, but it also blinds them to the costs and liabilities of those projects," he said.

McCool then said for me to read the section in the book on the Upper Mississippi River--where the Corps truly lost sight of its mission and became a lobbying organization for the barge industry (with disastrous results). What is really sad about much of the environmental activism is the lobbying that goes on. This reporter points to the Restore Hetch Hetchy Project, here in California. Why is this idea of demolishing a working dam and draining a reservoir that serves millions of people still being tossed around? Based upon what McCool is saying there must be a lobbyist out there.

I then asked McCool, with all the conservation groups out there, with the "new way" of thinking about the environment, do conservation groups often clash with one another over certain issues? And, if so, how do they resolve their issues?

"Yes, he said, there are conflicts between American Indian tribes and environmental groups; hunters vs. animal preservationists; commercial fishermen vs. recreational fishermen; motorized recreation vs. non-motorized recreation." And, as water becomes more scarce, this competition and conflict will intensify," he said. "We'll see, he noted, for example, river runners who want to augment flows or clear obstructions vs. endangered species protection." There are many concerns that weigh heavy upon the nation's riviers as this reporter has learned with an article about the work of the Tuolumne River Trust.

McCool pointed out that with regards to augment flows, "this is not necessarily a bad thing," he said. "It means we all want more from our rivers, so, we need more healthy, intact rivers to provide what the people want."

Which is related to the following question I had, "who really owns our water ways?"

"First of all, there is a big difference between who owns the water, and who owns the rivers," said McCool. "For both, he noted, it is a complex mix of federal, state, local, water districts, and private." There is no simple answer to this complex legal question,"

he said. "Your best bet is to read David Getches' book, 'Water Law in a Nutshell." Well, with all do respect to Professor McCool, that will be another article with lots of detailed investigation, no doubt. And, unfortunately, Getches passed away in 2011.

McCool also talked about how much of our water is fed to agriculture and yet agriculture is actually managed by large farm corporations, taking advantage of subsidies handed out by the government. This caught this reporter's attention since California, my home state has been a leader in agriculture for many decades. Yet, McCool pointed out that government intervention since the Great Depression in the 1930's changed much of the basic ideals, the American public perceives about a farmer society. As the nation moves further along into the 21st Century, mechanization and corporate-like conglomeration of farms is becoming the norm. The days of the citizen farmer and his family or a pastoral farming community are gone. Food in all its forms is big business. Water and food production are intrinsically intertwined.

America is a major food producer and distributor. With all this production of food and products related to food such as fabric, (cotton, wool) etc.I then asked McCool, why is hunger still a problem in the USA? Oops! maybe that was a bit too broad of a question!

McCool agreed, "that is a huge question, and somewhat outside my area of expertise. "I will merely want to point out that 1/3 of Americans is overweight, and another 1/3 is medically obese," he said. "These rates are even higher among the poor," he said "To a great extent, it's not the lack of food that is afflicting the poor, it's access to affordable healthy food," said McCool. He noted as he does in his book the ongoing government involvement that changed farming beginning during The Great Depression."This problem is exacerbated by government subsidies for the least healthy foods such as grains, animal products," he said.

Yet back to government. lobbyists, special interest groups and conservationist, this reporter wanted to know from McCool's perspective as a political science professor, how, with all the politics can anything get done for the sake of the river or the natural environment? Who really wins? And regardless of who wins, is the environment actually served and restored?

"Yes, (the environment) is served," said McCool. "That is the whole point of River Republic." Just look at what is happening on the Elwha River; he said, the good guys won!" "The environment won, the salmon won, the tribe won, and even the tourists won," he said. "I'd call that a victory!"

This reporter noted to McCool that from the several articles I have written on the topic of water resources, water is vital to survival. So are concepts like dams (such as Hoover Dam) now considered outdated? This is what groups like "Restore Hetch Hetchy would like to see, the removal of dams.

I asked McCool, "what do you think will take the place of dams like Hoover Dam and such as we move further into the 21st Century?

"The concept of building dams is not obsolete," said McCool. "Indeed, there are hundreds of proposals to build new dams. And as I say in my book, most dams still serve society admirably and must be preserved." "I'm not against dams, said McCool. "I'm against dumb dams."

Which then lead to my last questions for McCool, how will urbanization confine itself to respect its real dependency upon water? Is the future all about legislation or about a change in attitude? Or is it a bit of both?

"It is both, he said, they are mutually dependent." Also, he noted, keep in mind that in the most arid states in the United States, principally the inter-mountain West, only about 10 percent of the water is actually used for people." (Again, he referred to agricultural endeavors). "Unfortunately, there is enough water for many additional millions of people in this fragile environment," he said.

For more information about Daniel McCool and his new book, "River Republic - The Fall and Rise of America's Rivers," visit the Columbia University Press web site.