Renewable energy: Dam expert tasks FG on renewable <u>energy</u>

Renewable energy potential in Nigeria - The President, Nigeria Committee on Large Dams Mr. Imo Ekpo has called on the federal government to utilise renewable energy potential of the country to boost electricity.

Ekpo listed the renewable energy sources available in the country to include hydropower, animal residue, animal waste, crop residue and wind as well as solar radiation.

The committee president stressed the need for Nigeria to develop its hydropower potential and other renewable energy sources to address the erratic power supply in the country.

According to him, Nigeria needs to take drastic actions that will ensure reliable and sustainable power supply.

He said: "People are ready to pay for all; water, light and whatever if only the services are being provided. "Although, I am aware of some roads having light from solar, it is not good enough because the energy from solar is relatively small but most of our hospitals and schools which are not like big industrial projects, can have power through alternative sources of energy."

Ekpo that the committee had scheduled to hold some activities to advise the federal government on dams operations and management.

He also said the committee would carry out some sensitisation programmes to inform Nigerians on measures to prevent the recurrence of flood.

"We also are going to reach out to the state governments and other stakeholders that have challenges in the maintenance, planning and operation of their dams.

"Why we have planned that is because the issue of flooding and global Climate change has become so apparent that the voice of NICOLD must be heard louder than before.

"That is the actual role we are supposed to play; in guiding the government where government is supposed to be --- the issue of flooding, capacity building, maintenance of our existing dam infrastructure and the issue of letting people know that they should not block drainage.

NAN

Daily Trust/20/02/2013

World Bank not to finance proposed Rogun hydropower plant in Tajikistan (beware! Title misleading EG)

The World Bank published an interview with Saroj Kumar Jha, World Bank Regional Director for Central Asia, on its official website.

Saroj Kumar Jha describes the latest findings in the Assessment Studies for the proposed Rogun hydropower project and explains the importance of cooperative energy and water resource management in Central Asia.

What is the purpose of the sessions with government and civil society that were held last week?

The purpose of the riparian information-sharing and consultation meetings is to share emerging analysis from the assessment studies on the proposed Rogun hydropower project with interested stakeholders from the Amu Darya Basin countries. The questions and concerns expressed by participants during these meetings are vital to a robust regional dialogue on the proposed project, and to ensuring quality studies. We are committed to an open, independent, and inclusive process of information-sharing, and we will continue making efforts to get all the stakeholders at the table.

What new information was discussed during the information-sharing meetings?

We recently posted two reports on-line that contribute to understanding two of the key issues identified by stakeholders during two previous riparian consultations in May 2011 and November 2012, namely dam safety and water management. The reports document findings on water management and the geological stability of the right bank of the Vakhsh River at the dam site.

In addition to these reports, several presentations have also been shared on-line and discussed at the meetings. The presentations on seismic hazard assessment and geology assessment contributed to a rich discussion on the key issues of dam and public safety, including analysis of possible earthquakes, tectonic faults, landslides, salt wedge, and other factors on the proposed project feasibility. The interim findings from the presentations, reports and feedback from the Panels of Experts are that the dam type under consideration and stability of the slopes appear to be acceptable.

On the second key riparian issue, water management, the hydrology report considers runoff, temperature, and precipitation at the proposed Rogun site and examines the existing network of hydro-meteorological monitoring stations, probable maximum floods, and climate change impacts. The interim finding, supported by independent experts, is that hydrologic data needed for project design and risk assessment is of adequate quality, and that the estimated Probable Maximum Flood (PMF) is based on international good practice (i.e., ICOLD standards) and is appropriately conservative for the benefit of dam and public safety. The hydrology report also addressed climate change impact, with the conclusion that climate change could result in increased temperature, which would modify flood regime and river flow pattern.

The hydrology report is accompanied by an additional presentation on the planned Vakhsh River Cascade simulation modeling which will enable analysis of the impact of the proposed project on flows along the Vakhsh River and the Amu Darya. The model will reflect the Government of Tajikistan's commitment to maintain flow patterns and consistency with the Nukus declaration and Protocol 566, which they again reiterated during the third riparian meetings. This modeling and associated environmental and social impact assessment are critical to understanding the potential effects on countries throughout the Amu Darya Basin.

All of these assessments - seismic hazard, hydrology, cascade modeling, geology - will inform the assessment of various dam height options, as will differences in environmental and social impacts. These various dam height options and the approach to estimating the resettlement and social infrastructure costs have also been presented and discussed during the meetings and the presentations are also available on-line.

We encourage interested stakeholders to review the two reports and the additional presentations and submit comments and questions to <u>rogunconsult@worldbank.org</u> by March 4, 2013.

Who are the experts involved in the assessment studies?

The Techno-Economic Assessment Study (TEAS) and the Environmental and Social Impact Assessment (ESIA) are being conducted by teams from Coyne & Bellier and Poyry. These international consultant firms were contracted on a competitive basis by the Government of Tajikistan and are financed through an IDA project. The World Bank has been directly involved in the selection of consultants and the Bank technical team has direct access to all studies and reports produced by the consultants. In addition, the World Bank is funding two independent Panels of Experts (PoEs): Engineering and Dam Safety Panel and an Environmental and Social Impact Assessment Panel. Representatives from these panels have attended all of the information-sharing meetings and visited the proposed Rogun site and Dushanbe many times. They are ensuring due diligence and international quality standards, as well as objectivity and credibility through independent advice and guidance.

The Panels of Experts are comprised of Roger Gill, Hydropower Policy; Ljiljana Spasic-Gril, Dam Engineering/Dam Safety/Seismic Engineering; Paul Marinos, Engineering Geology/Rock Mechanics; Ezio Todini, Hydrology; Torkil Jonch Clausen, Water Resources; Erik Helland-Hansen, Environmental planning/Hydropower; Richard Fuggle, Environment; Frederic Giovannetti, Resettlement; and Gregory Morris, Sedimentation. Another two members, one for electro-mechanical plant and works and the other for advice on seismicity are being inducted by the Bank. Each expert fully appreciates that a thorough, independent assessment of all aspects of Rogun is crucial to determining its viability in technical, financial, social and environmental terms. These experts are also helping to ensure public safety, assess potential and perceived downstream impacts, and identify areas that need further examination. We are pleased to have a world-class team on this.

What is the next step after the assessment studies are completed?

These studies are a complex process that requires detailed analysis across a range of issues, drawing linkages among the components of analysis, and ensuring adequate technical review and revision. The schedule needs to allow time for the Panels of Experts, World Bank specialists as well as riparian governments and civil society to review and comment on the study findings. This takes time. Throughout this process we are hoping to facilitate a constructive, fact-based dialogue among all stakeholders about not only the proposed Rogun Hydropower Project, but also the development benefits of international cooperation on energy and water resources in Central Asia.

It is important to clarify that these assessment studies will decide neither whether the proposed Rogun dam will be built, nor the final design, should a project proceed. They will serve as an input to decision-making. A variety of other factors such as international agreements and financing would need to be considered before the future of the proposed Rogun project is decided. The World Bank has made no financial commitment to support construction of the proposed dam. Our role is to help establish objective, independent, and comprehensive facts for all stakeholders.

What else is the Bank doing to help improve the energy situation in Tajikistan?

Our basic principle is that World Bank support should benefit the people of Tajikistan. So during the severe winters of 2009-11 we provided emergency funding to ensure supplies of gas. But this is not a sustainable solution. Hence we took a deeper analysis in our recent report titled "Tajikistan's Winter Energy Crisis: Electricity Supply and Demand Alternatives." It shows that Tajikistan's electricity situation is dire and getting worse. The Tajik people are well aware of the social toll of living with inadequate electricity - comprising 70% of the population -- particularly those in rural and vulnerable households. They also firmly believe that the Tajik electricity system can and should be financially viable and transparently operated. We agree, which is why we have been supporting measures to reduce energy losses and increase financial accountability in Barki Tojik.

So why another report? The purpose was to prompt technical discussions about what exactly can be done quickly to reduce the burden of winter electricity shortages for the Tajik people. Among the proposals are steps to improve energy efficiency, including in TALCO, which our studies show can reduce its energy use through efficiency measures by about 20%. We also proposed to revitalize regional trade, increase investments in thermal power supply, and rehabilitate aging hydropower assets.

We showed it is possible, with concerted effort, to close the gap by 2020 with these measures. But the costs are significant - \$3.4 billion over the next 8 years. Given the complexity of large storage hydropower projects and the time needed to build them, those investments were not included among the

proposed solutions to solve the near-term challenges. The report has been done in parallel with the Rogun assessment studies and does not prejudge the proposed Rogun project.

Implementing the recommendations from the winter energy report would require political will and international cooperation, and we are already working with the Government of Tajikistan and development partners to start the process.

How would you describe the energy and water situation in Central Asia?

Central Asia is endowed with water and rich and varied energy resources. Water resources, which are increasingly under stress, have an important geographic and economic dimension, with downstream countries highly dependent on upstream countries for essential water for irrigation. Water and energy in Central Asia are central for poverty alleviation, food security, community livelihoods, and job creation. For example, two million households experience winter heat and power shortages. The energy-water linkages become inseparable from interests of national security, regional stability and economic growth, and need to be urgently addressed in a cooperative manner. The Bank's approach to water and energy issues in Central Asia is based on both regional and country level programs which aim to deliver benefits to each country in the region. We also closely work with our development partners to help ensure coordinated assistance.

As part of its regional approach, the Bank - in partnership with DfID, SECO, and the European Commission - has initiated a comprehensive Central Asia Energy-Water Development Program (CAEWDP), which covers both the water and energy sectors, aims to improve analysis to support the countries of the region in well-informed decision-making, strengthen regional institutions, and stimulate investments. Among other activities, CAEWDP supports the multi-country Amu Darya Basin riparian dialogue, as well as analytical work for the proposed Central Asia - South Asia transmission line called CASA-1000. CAEWDP is also examining the economic value of increased energy trade within Central Asia and is guiding, with direction from all five countries, investments in the knowledge base (encompassing data, modeling and information sharing), new investments in hydrometeorology, and identification of adaptation measures for climate change. The Bank is currently undertaking a comprehensive review of factors enabling and constraining water-related growth in the region.

To complement the regional work and dialogue, the Bank is supporting 32 country-specific investments in energy and water projects and a similar number of studies and advisory services in Central Asia. Many have regional significance and benefits while others deliver more localized country level benefits. Let me give you some examples of our projects in energy and water sectors in individual countries of the region.

In Kazakhstan, the Bank has funded a long-term program to improve water-based economic and environmental conditions in the northern portions of the Syr Darya River and Aral Sea. The recently completed Nura River Project helped clean up mercury pollution in this important river. In the energy sector, the Bank has helped establish a state-of-the-art power system management and dispatch center, and upgrade the transmission network throughout the country.

In Uzbekistan, the Bank has supported water management in the Fergana Valley. An energy efficiency credit-line through Uzbek commercial banks helps achieve energy efficiency in the industrial enterprises. In the power sector, the Bank is supporting transmission system upgrades to increase supply reliability and reduce technical and commercial losses. Three quarters of our portfolio in Uzbekistan focuses on water and energy.

In the Kyrgyz Republic, the Bank has funded a project to improve irrigation service delivery through Water User Associations. The energy component of the ongoing Emergency Recovery Project is helping with essential repairs, rehabilitation, and fuel to keep the system running. In Kyrgyzstan and also in Tajikistan, the Bank is supporting a project to improve hydrometeorology services and data, with a focus on these two countries but with a component for regional coordination.

In Tajikistan, in partnership with its private sector affiliate (IFC) and the Government of Switzerland, the Bank financed the Pamir Energy Project, a public-private partnership to deliver electricity to a highly remote mountainous area in the eastern part of the country. Together with the Swiss Government, we are also financing and implementing a successful energy loss reduction program. And, as I mentioned

before, our recent winter energy study identifies measures to help Tajikistan resolve its acute winter energy deficit in the near term.

Scientist group sceptical about benefits of more dams

By Caitlyn Gribbin

Monday, 18/02/2013

http://www.abc.net.au/rural/news/content/201302/s3692555.htm

A group of scientists says a proposal to build more dams in Australia is impractical.

A draft discussion paper leaked last week revealed the Coalition would consider building as many as 100 dams across the country if elected in September.

Tim Stubbs, from the Wentworth Group of Concerned Scientists, says the dams would have already been built if they were viable.

"I don't think there are a huge number of opportunities to build big new dams where we will get massive economic return," he said.

"If any dams were to be built, it really needs to be through a robust process that looks at the science that says 'how do we get involved in this river system, but keep it in a way that will function long-term and what are the economics of doing it?'."

More Hydroelectric Dams For Amazon Basin

http://www.simplygreen.co.za/international-news/science-and-technology/34-more-hydroe lectric-dams-for-amazon-basin.html Brazil is planning to build 34 additional hydroelectric facilities in the Amazon by 2021 in an effort to increase Brazil's national energy output by 50% or more.

Total cost for their construction is over \$150 billion. Over 6,000 square kilometers of land will be flooded when the dams are finished. Rivers will be diverted, canals built, and roads constructed to accommodate the new development and re-arranging of the many natural water flows for human purposes.

The Jirau hydroelectric dam will feature the largest number of huge turbines in the world and is scheduled to be finished by 2015. Each of its 50 turbines could house a locomotive. The dam will span five miles of the Madeira River, the largest tributary of the Amazon.

About 18,000 workers are currently toiling away trying to finish the behemoth on schedule. This enormous dam is located in the Western jungle about 2,250 kilometres (1,400 miles) from Sao Paulo where the electricity will be received and used. Areas flooded by the project will no longer be accessible to locals.

Not all the dam projects are of such a colossal scale. Most are much smaller and will function as power sources for industrial sites, or silos. Some will simply help regulate water flows.

Brazil's population growth rate has been slowing due to a number of factors, but their society is becoming more economically developed and power consumption has been increasing steadily. A recent analysis indicated energy demand is growing in parallel with GDP. One of Jirau's directors said two enormous dams must be built each year in Brazil to keep up with energy demand.

Environmentalists are unhappy, however, given the massive swath of industrialised development taking place within the Amazon. They want Brazil to focus on developing solar and wind alternatives, rather than imposing human restrictions on natural resources like the Amazon Basin.

"This is a sort of 1950s development mentality that often proceeds in a very authoritarian way, in terms of not respecting human rights, not respecting environmental law, not really looking at the alternatives," said Brent Millikan, the Brazil Program Director for the International Rivers Network.

Already residents are being forced to leave their homes and communities. Telma Santos Pinto, aged 53, said she had to leave her home of 36 years, receiving \$18,000 as compensation from the companies building Jirau.

"The compensation was very, very low," she said. "And we were obligated to accept that."

Her town of Mutum Parana is now under water, one of many subsistence communities left to rot.

SOURCE: GO Media - written by Jake Richardson - Image Credit: NASA, Public Domain

Three new dams mooted for south-west Queensland

<u>Lyndon Keane</u>
17th Feb 2013 1:08 PM

THREE new water storages in south-west Queensland are part of the Coalition's mooted vision of 100 new dams for Australia, according to Nationals senator Barnaby Joyce.

A draft policy discussion paper outlining the plan for the new dams - which would cost about \$30 billion - was leaked last week, sparking fierce debate between water storage advocates and environmental groups.

The outspoken Queensland senator said he believed increasing the country's water storage capacity was "very critical" and outlined the theoretical locations of three new dams near St George, Roma and Mitchell.

"We have immense water resources but we fail to utilise them," Senator Joyce told the Balonne Beacon.

"A greater population means greater storage needs (and) it used to be that we had enough water (nationally) for five years, but now it's back to enough for three or four years.

"By 2015, we'll only be able to store enough for two years."

At a local level, Senator Joyce said he believed a 300,000 megalitre dam north of Mitchell would be able to meet the additional needs of the agriculture and mining industries, while a new Balonne River dam at the Barrackdale Choke, north of St George, would provide "flood mitigation and temporary storage for agriculture".

"A dam at Barrackdale Choke would provide very ineffective low-level storage but it would hold about one million megalitres," he said.

E.J. Beardmore Dam, which is about 20 kilometres north-east of St George, has a maximum capacity of just 81,700ML.

Unlike much of the Surat Basin, the Balonne Shire does not currently reap the financial rewards of coal seam gas mining, relying instead on primary production.

"In a good year...the agricultural economy of our shire is about three-quarters to a billion dollars a year," Senator Joyce said.

"The core of it - not all of it - is irrigation...water is wealth."

While Labor sources have suggested the party is not strictly opposed to the construction of new dams, Greens senator Sarah Hanson-Young slammed Senator Joyce.

"It is another kooky idea by Barnaby Joyce," she said.

"This is an idea from the 19th century."

Senator Joyce said he accepted there were environmental factors to be aware of in regard to the construction of dams, but added that doing so was critical to ensuring the long-term viability of Australia's agricultural sector.

"Once you get the triumph of the frogs over the people, the environmentalists win," he said.

"We have environmental requirement that must be fulfilled, I don't deny that.

"We have to be cognisant of downstream requirements of people on the floodplains but when we have floods (and) the water is more effectively stored, it will secure our wealth stream into the future."

Ire over dams not 'worth the fight'

16th Feb 2013 11:25 AM

http://www.northernstar.com.au/news/ire-over-dams-not-worth-the-fight/1758480/

NATIONALS Senator Barnaby Joyce says the Coalition has no intention of building dams in areas where there is fierce opposition.

A leaked Coalition draft discussion paper containing proposals for up to 100 dams reignited debate this week.

But Senator Joyce said a Coalition government would not dam the Clarence River because it was "not worth the political fight".

"The message that we get back loud and clear from that area is that they don't want it," Senator Joyce said.

"We quite obviously are vastly more inclined to go to areas where they want it."

Senator Joyce said people in places such as the Gulf, were "climbing over each other" to get dams built.

He was deputy chairman of the Coalition taskforce that spent the past two years visiting potential dam sites.

The commitment not to dam the Clarence came after Nationals Leader Warren Truss and the party's Page candidate Kevin Hogan gave the same assurance on Thursday.

They were forced to do so after it was revealed dam proposals for the Clarence and Mann rivers were in the discussion paper.

Chinese dams worry Arunachal

Saturday, February 16, 2013 (21:29:52)

Tura (Meghalaya), Feb 16: Arunachal Pradesh Chief Minister Nabam Tuki said Saturday he would ask the central government to look into China constructing three hydropower projects on the Brahmaputra river in Tibet.

"China building the three dams will affect the interest of people in the downstream areas. We will soon move New Delhi to take up this issue with China in the interest of the people," Tuki told.

He added: "It is a cause of concern for us but we are not certain how big these dams are..."

The 2,906-km-long Brahmaputra - called Tsangpo in Tibet - is one of Asia's longest rivers that traverses 1,625 km through Tibet, 918 km in India and 363 km in Bangladesh before flowing into the Bay of Bengal.

China's plan to build the dams over the Brahmaputra river and diverting water into its arid provinces has been opposed by state governments in India's northeast.

Assam Chief Minister Tarun Gogoi had written to Prime Minister Manmohan Singh requesting him to take up the matter regarding the construction of the three dams on the Brahmaputra with Beijing.

"We can't do anything if China is building dams. Our concern is that the lives of the people in the downstream should not be affected by the dams," Tuki said.

China announced plans to build three dams - Dagu, Jiacha and Jiexu - on the river last month as part of its aggressive plan to provide energy and water needs for its 1.3 billion people.

The Chinese government said that the hydropower dams would not impact flood control efforts or the ecological environment in downstream regions.

Experts said that if the projects were carried out, they would have devastating consequences on the lives of millions of people in India and Bangladesh.

Agriculture forms the backbone of the economy in both Assam and Arunachal Pradesh with nearly 80 percent of the 27 million people in the two states eking out a living through farming, an agriculture scientist said.

India and China do not have a water-sharing agreement. However, both countries have instituted a working group mechanism to exchange data, including measurement of water flow from rivers.(IANS)

Enough stock in dams, no fresh water cuts likely in city

Nisha Nambiar Posted online: Fri Feb 22 2013, 03:51 hrs

Several parts of the state, which is grappling with the worst drought in decades, are facing acute water scarcity but Pune city is sitting comfortable with enough water in its dams to last until monsoon, if it's not delayed.

With summer already setting in, the city is yet to face any water crisis, and the irrigation department has not issued any directive for water cuts over an above the existing 10%.

The four dams that supply water to the city, Khadakwasla, Temghar, Varasgaon and Panshet, have 13.56 TMC, about 46% storage as against 12.34 TMC at this time of last year (42%).

"In the present situation we are comfortable and have not instructed PMC to introduce any water cut," said BB Lohar, executive engineer of Khadakwasla irrigation division.

Deputy Chief Minister and Pune Guardian Minister Ajit Pawar had asked all concerned to exercise caution while using water in the city and take measures to meet the water needs in rural areas of the district, but there has been no announcement of a fresh water cut. Irrigation officials maintain Khadakwasla division had sufficient water to last until July 15.

The final call will be taken at a review meeting, at the end of the month of the beginning of next month. Officials stated that as of now there would be no further cuts.

PMC Commissioner Mahesh Pathak said they have no directions regarding water cut so far. "We are continuing with the existing water cut in the city as there has been no directions from the irrigation department," said Pathak.

Irrigation officials maintain that 1.25 TMC is consumed every month and this has been about the same in the last few months and there should be water to last until July 15. "We have not given any fresh instructions for water cuts as the yearly usage allotted to them (PMC) is 11.5 TMC (thousand million cubic feet) and they should be able to manage with it and not exceed it," added the official.

On the existing 10% water cut, the civic body said it would continue it because the PMC had already used 3.75 TMC of the 11.5 TMC allotted to it, and that the irrigation department had itself asked it to deduct the 3.75 TMC from the overall quota used since June.

"In the present scenario, we would have to continue the existing water cut, unless more water is provided for supply," said Pathak.

With the city lifting about 1,050 MLD every day, the daily consumption is around 1.25 TMC. The Khadakwasla canal committee, which met recently, had instructed the civic body to prepare a revised plan on improving water supply and asked it to lift less water. At present, the annual quota of 11.5 TMC water is approved for the city but the PMC actually lifts about 14.5 to 15 TMC.

Soubré / Pose de la première pierre du barrage hydroélectrique : Alassane Ouattara : « L'aboutissement de ce projet est le résultat d'une Côte d'Ivoire au travail »

Publié le mardi 26 fevrier 2013 | L'Inter

http://news.abidjan.net/h/452743.html

Les retombées pour les populations

Le président de la République, Alassane Ouattara, a procédé hier lundi 25 février 2013, à la pose de la première pierre du barrage hydroélectrique de Soubré. Un projet qui intervient après l'étude sommaire réalisée en 1962. C'est à juste titre que le chef de l'Etat a, dans son adresse à la population de la Nawa, souligné que la mise à exécution de ce vœu, qui lui est cher, constitue un des volets essentiels du développement économique et social de la Côte d'Ivoire. Surtout qu'il en avait fait la promesse dans son programme de campagne, en donnant une place de choix à ce sujet. Visiblement heureux, de ce que ce projet devienne une réalité concrète et tangible après tant d'années, le président Ouattara a promis relancer

de grands chantiers visant à réduire la pauvreté. « L'aboutissement heureux du lancement de ce projet est révélateur de la Côte d'Ivoire nouvelle, une Côte d'Ivoire au travail et résolument engagée vers l'émergence. Dans la quête de ce renouveau, le secteur des mines, du pétrole et de l'énergie constitue l'un des piliers de l'action gouvernementale. C'est pourquoi, je me félicite des récentes recommandations du séminaire national sur l'énergie qui ambitionnent de tracer les sillons et de faire de la Côte d'Ivoire, un havre énergétique au sud du Sahara à l'orée 2020 », a fait remarquer le numéro un ivoirien. Non sans avoir salué et remercié l'excellent niveau de coopération entre son pays et la République populaire de Chine dont résulte la construction du barrage, du plus grand barrage hydroélectrique de Côte d'Ivoire. Prévu pour une durée de 56 mois, les retombées locales du projet seront perceptibles dans divers domaines comme l'urbanisation, l'éducation, la santé, la pêche, l'emploi des jeunes. Une aubaine pour les populations, car comme l'a souligné le chef de l'Etat, ce projet contribuera à la réduction de la pauvreté et une meilleure intégration socio économique. A commencé par la prise en compte de l'électrification des villages riverains du barrage, la construction d'infrastructures telles des marchés, des logements, des écoles, un centre de santé, un complexe sportif..., la création de 3000 emplois directs et 5.000 autres indirects sur une période d'au moins 5 ans. La création d'une zone de pêche, le développement de l'agriculture, du tourisme et l'utilisation des entreprises locales et la formations de cadres ivoiriens aux métiers en rapport avec la construction de barrages hydroélectriques. Pour sa part, le ministre des Mines, du Pétrole et de l'Energie, Adama Toungara en sont d'autres rétombés, a techniquement précisé que la construction du barrage de Soubré d'une puissance de 275 MW sera alliée à la réalisation du réseau d'évacuation d'énergie comprenant une ligne haute tension de 225 KV, longue de 365 Km entre Soubré et le poste de Yopougon 2, la réalisation des aménagements et extensions dans les postes sources de Soubré et de Yopougon 2. Puis la construction de deux cités, l'une pour le personnel affecté au chantier proprement dit et l'autre pour le personnel chargé de l'exploitation du barrage. « Le défi est de taille mais avec le président Alassane Ouattara, grand bâtisseur, avec le peuple de Côte d'Ivoire rassemblé, réconcilié et au travail, avec l'appui de nos partenaires techniques et financiers, confiants et rassurés, la Côte d'Ivoire fera des miracles surtout en matière d'énergie débordante, de qualité et accessible à nos populations et nos industries. » a-t-il indiqué. Le projet d'aménagement hydroélectrique de Soubré est fruit d'un financement global estimé à 331 milliards de F CFA dont 281 pour la construction du barrage et des cités et 50 milliards pour les mesures environnementales et sociales. Sur les 331 milliards de FCA, Eximbank China contribue à hauteur de 239 milliards et la Côte d'Ivoire pour 92 milliards. Chose qui a amené l'ambassadeur de la république populaire de Chine, Zhang Guoquing à se réjouir de la participation de son pays aux côtés de la Côte d'Ivoire. Auparavant, le député Dally Jules, qui s'est fait l'écho des populations de la Nawa, remercié le chef de l'Etat qui en deux ans d'exercice du pouvoir d'Etat, a nommé l'un des illustres fils de la région, en la personne de Zady Marcel Kessi, à la présidence du conseil économique et social, puis a érigé Soubré en chef lieu de région et bénéficie d'un barrage, le plus grand du pays

Venance KOKORA, envoyé spécial dans la Nawa

How Beijing is Shaping the Future of the Amazon

Source: <u>Climate Central</u> Country: <u>BRAZIL</u> State: <u>Mato Grosso</u> City: Date: 2/26/2013

Summary

By Jan Rocha, Climate News Network China has now replaced the U.S. and Europe as Brazil's main trading partner, a position that gives it significant influence over what happens in the Amazon forest – and over attempts to protect it. Climate News Network's Brazil correspondent, Jan Rocha, filed this report: SAO

PAULO — When I arrived in the Amazon in the 60s, there were no roads. The rivers were the highways, crowded with boats of all shapes and sizes. You travelled on what was available, be it a trading boat, stopping at riverside villages for fishermen to carry aboard giant pirarucu (one of the world's largest freshwater fish, reaching up to two meters in length), or a precarious canoe powered by an outboard motor, getting soaked in sudden downpours. I slung my hammock in passenger boats and slept to the sound of the thump-thump of the engines, or in cattle boats, kept awake by the restless shuffle of cows on the way to the slaughterhouse. Once I got a lift on a missionary boat which stopped at a lonely shack for a nervous young priest to give the last rites to a dying man. China's voracious demand for iron ore and timber, as well as soy and beef, is not only fuelling deforestation but negatively influencing Brazil's environmental protection laws, in the view of researchers. Credit: NASA Occasionally we would be rocked in the wake of the big Booth Line steamers chugging their way a thousand miles upriver to Manaus after crossing the Atlantic from Liverpool. In the 70s the military, who had taken power, decided that the vast Amazon region must be "integrated" with the rest of the country, which had developed along the coast, to stop foreign powers occupying it to exploit its natural resources. They began building roads and moving in Brazilians from other regions to populate what they called an "empty" region, ignoring the existing population of indigenous peoples and descendants of the tappers who had migrated there during the turn of the century rubber boom. Huge forest loss Roads now link the Amazon region to the rest of the country, but ironically they have facilitated the penetration of foreign companies into every corner of the rainforest, as well as cattle ranchers, soy farmers, loggers and mineral companies from the more developed parts of Brazil. Almost 20 percent of the rainforest has been destroyed since the roads came. The Amazon basin is now China's No.1 supplier of natural resources, replacing its Asian neighbors as their resources have become depleted. In a relatively short time, China has become Brazil's major trading partner, overtaking the U.S. and Europe. But China's voracious demand for iron ore and timber, as well as soy and beef, is not only fuelling deforestation but negatively influencing Brazil's environmental protection laws, in the view of researchers. In a 2012 paper entitled Amazonian forest loss and the long reach of China's Influence, the authors found that "the rapid rise in exports of soy and beef products to China are two of the major drivers of Amazonian deforestation in Brazil." The paper further argues that Chinese purchases of agricultural and forest land and Chinese imports of commodities such as timber and aluminum also cause environmental impacts in the Amazon. Chinese financing and investment in Amazonian infrastructure such as railways and mineral processing facilities have additional impacts. The authors say the "direct impact of commodity exports is only the tip of the iceberg of Chinese influence on Amazonia." In a 2012 paper entitled Amazonian forest loss and the long reach of China's Influence, the authors found that "the rapid rise in exports of soy and beef products to China are two of the major drivers of Amazonian deforestation in Brazil." Credit: Robert Middleton "Money earned from this trade is strengthening Brazilian agribusiness interests, with profound effects on domestic politics that are reflected in legislative and administrative changes, weakening environmental protection". This refers to the recent successful attempt by the agribusiness lobby in the Brazilian Congress to weaken the existing Forest Code, which, although often flouted, has still played an important role in conserving rainforest, rivers and biodiversity. "Impacts can also be expected from Chinese financing under negotiation for infrastructure such as a railway linking the state of Mato Grosso to a port on the Amazon river", the authors write. "Mato Grosso, an Amazonian state twice the size of the U.S. state of California, is a major focus of expansion of soy, cotton and intensified cattle production. Chinese purchases of land for agriculture and timber imply an increasing direct role in commodity production. "Other impacts come from exports from mining and from the processing of minerals, especially the demands for charcoal for pig-iron smelters and for electricity from hydroelectric dams for aluminum smelters". They say Chinese demand for aluminum, an electricity-intensive industry, "contributes to Brazil's push for a massive increase in building hydroelectric dams in Amazonia over the next decade." "Brazil's 2011-2020 10-year energy-expansion plan (Ministry of Mines and Energy, 2011) calls for 30 large dams to be built in the Legal Amazon [the greater Amazon basin] by 2020, a rate of one dam every four months. "The Chinese-Brazilian alumina plant will be an important beneficiary of the Belo Monte dam, now under construction on the Xingu River, with transmission lines planned to connect Barcarena (where the plant is located) directly to the dam near Altamira, Para." Belo Monte has environmental and social impacts that extend far beyond the areas that will be directly flooded, and the dam is likely to justify much larger upstream reservoirs to regulate the river's flow, according to an earlier study by Fearnside in 2006. He also concluded from other studies that "the dam has functioned as a 'spearhead' in creating precedents that weaken Brazil's environmental licensing system and prepare the way for the many dams proposed under the energy-expansion plan" and that "the influence of both Brazil and China in expanding carbon credit for hydroelectric projects under the Kyoto Protocol's Clean Development Mechanism has further increased the profitability of dams". "It should therefore not come as a surprise that China exerts multiple influences on events in Brazil, often to the detriment of the Amazon forest", concludes the 2012 paper. Exploit a cow, save a tree It notes that Brazil's boom in agricultural

commodities, which earned \$85 billion in 2011, has contributed hugely to the country's recent economic growth and has reduced its vulnerability to external economic crises. Meanwhile a recent study produced by Imazon (Amazon Institute of People and The Environment), a well-respected research institute based in Belem, has shown that deforestation could be drastically reduced by increasing productivity. A recent study produced by the Amazon Institute of People and The Environment has shown that deforestation could be drastically reduced by increasing productivity. Credit: flickr/Center for International Forestry Research Traditionally, Amazon cattle farmers have never bothered about productivity, because it has been so easy just to clear more forest. The Imazon study shows that future projected demand could be entirely met without the need to cut down a single tree, if productivity was increased from the present average of 80 kilos of beef per hectare to 300 kilos. To help farmers learn the new techniques, Imazon suggests that an annual investment of about \$500 million would be enough to pay for technical assistance, reference centers for each region, and model farms to demonstrate good practice. Credit could then be linked to performance. Imazon points out that if nothing is done to increase productivity a further area of almost 13 million hectares will be cleared to meet demand, leading to an annual deforestation rate three to four times greater than the Government's target of no more than 380,000 hectares a year until 2020. Traditionally the government has relied on applying hefty fines for illegal clearing. This has two big disadvantages: the deforestation is detected only when it has already happened, and because of Brazil's complex and lengthy judicial process, the fines are almost never paid. In addition, the powerful farmers `lobby in Congress is adept at voting through "amnesties" at regular intervals to pardon unpaid fines. Now a more intelligent way to inhibit deforestation has been found, this time by the Central Bank. A bank resolution, passed in 2008, compels farmers to prove they are in compliance with environmental laws before they can obtain credit from any official bank. A study by the Nucleus for the Evaluation of Climate Policies of Rio de Janeiro's Catholic University, PUC, found that, as a result, between 2008 and 2011 a total of 2,700 sq kms was saved from deforestation, because the farmers, deprived of capital, lacked the funding to extend their activities. The study found the correlation between credit and deforestation was stronger in cattle raising. The government recently celebrated new statistics showing a reduction in deforestation, but as these various studies show, there are many variables involved. If China maintains or increases its demand for the natural resources of the Amazon and for the commodities produced in surrounding areas, the threat to the rainforest will continue. Jan Rocha is a Brazil correspondent for Climate News Network. Climate News Network is a news service led by four veteran British environmental reporters and broadcasters. It delivers news and commentary about climate change for free to media outlets worldwide.