

## Zambia: State to Start Dams Project

BY JULIUS PHIRI IN LUNDAZI, 18 MARCH 2013

[http://allafrica.com/stories/201303180920.html?aa\\_source=sptlgt-grid](http://allafrica.com/stories/201303180920.html?aa_source=sptlgt-grid)

GOVERNMENT intends to employ engineers specialised in the construction of dams across the country, Energy and Water Development Permanent Secretary George Zulu said.

Mr Zulu said his ministry had made a request to the treasury to facilitate funds to enable the project take off.

Mr Zulu was speaking shortly after carrying out an inspection of Chaboli Dam on Saturday.

The permanent secretary was accompanied by Eastern Province acting Deputy Permanent Secretary Zechariah Luhanga, Lundazi District Commissioner Janet Mvula, Water Affairs assistant director Frank Ngoma, and provincial acting water affairs officer Charles Changa.

He said some dams which were recently constructed had since collapsed or washed away due to lack of qualified personnel in the ministry to carry out proper works.

"We lack personnel at water affairs and the other thing that is causing these problems, because we have not filled these positions of engineers in most of the provinces in the country," he said.

Mr Zulu said some contractors were busy pocketing colossal sums of money once awarded the contracts by the Government.

He was, however, impressed with the works carried out at Chaboli Dam in Lundazi which gobbled KR 455,028.

He instructed the provincial water Engineer's office in the province to prepare a comprehensive report on the alleged misapplications of KR1.4 million (K1.4 billion) on Mnduwi Dam in Chipata.

Mr Zulu said Public Accounts Committee which is chaired by Chipangali Member of Parliament Vincent Mwale was concerned about the dam.

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# TAIPEI TIMES

## China's rush to start dam projects roiling relations across Asia

With the world's largest number of mega-dams, and more in the pipeline, many are concerned that China is developing a stranglehold on the continent's water

By Brahma Chellaney /

Sun, Mar 17, 2013 - Page 9

As if to highlight that Asia's biggest challenge is managing the rise of an increasingly assertive China, the Chinese government has unveiled plans to build large new dams on major rivers flowing to other countries. The decision by China's State Council to ride roughshod over downstream countries' concerns and proceed unilaterally shows that the main issue facing Asia is not readiness to accommodate China's rise, but the need to persuade China's leaders to institutionalize cooperation with neighboring countries.

China is at the geographical hub of Asia, sharing land or sea frontiers with 20 countries; so, in the absence of Chinese participation, it will be impossible to establish a rules-based regional order. How, then, can China be brought on board?

This challenge is most striking on trans-boundary rivers in Asia, where China has established a hydro-supremacy unparalleled on any continent by annexing the starting places of major international rivers — the Tibetan Plateau and Xinjiang — and working to re-engineer cross-border flows through dams, reservoirs, barrages, irrigation networks and other structures. China — the source of trans-boundary river flows to more countries than any other hydro-hegemon — has shifted the focus of its dam-building program from dam-saturated internal rivers to international rivers after having already built more large dams than the rest of the world combined.

Most of China's dams serve multiple functions, including generating electric power and meeting manufacturing, mining, irrigation, and municipal-supply water needs. By ramping up the size of its dams, China now not only boasts the world's largest number of mega-dams, but is also the biggest global producer of hydropower, with an installed generating capacity of 230 gigawatts.

The State Council, seeking to boost the country's already large hydropower capacity by 120 gigawatts, has identified 54 new dams — in addition to the ones currently under construction — as "key construction projects" in the revised energy-sector plan up to 2015.

Most of the new dams are planned for the biodiversity-rich southwest, where natural ecosystems and indigenous cultures are increasingly threatened.

## **CONSEQUENCES**

After slowing its dam-building program in response to the serious environmental consequences of completion in 2006 of the Three Gorges Dam — the world's largest — China is now rushing to build a new generation of giant dams. At a time when dam building has largely petered out in the West — and run into growing grassroots opposition in other democracies such as Japan and India — China will remain the nucleus of the world's mega-dam projects.

Such projects underscore the zero-sum mentality that seemingly characterizes China's water-policy calculations. By embarking on a series of mega-dams in its ethnic-minority-populated borderlands, China is seeking to appropriate river waters before they cross its frontiers.

Asia, the world's driest continent in terms of per-capita freshwater availability, needs a rules-based system to manage water stress, maintain rapid economic growth and ensure environmental sustainability.

Yet China remains the stumbling block, refusing to enter into a water-sharing treaty with any neighbor — much less support a regional regulatory framework — because it wants to maintain its strategic grip on trans-boundary river flows.

Among the slew of newly approved dam projects are five on the Salween, three on the Brahmaputra and two on the Mekong.

China has already built six mega-dams on the Mekong — the lifeblood for continental Southeast Asia — with its latest addition being the 254m-high Nuozhadu Dam, whose gargantuan reservoir is designed to hold nearly 22 billion cubic meters of water.

The current dam-building plans threaten the Salween River's Grand Canyon — a UNESCO World Heritage site — and the pristine, environmentally sensitive areas through which the Brahmaputra and the Mekong rivers flow.

These three international rivers originate on the Tibetan Plateau, whose bounteous water resources have become a magnet for Chinese planners. The Salween, which runs from Tibet through Yunnan Province into Burma and Thailand, will cease to be Asia's last largely free-flowing river, with work on the first project — the giant, 4,200-megawatt Songta Dam in Tibet — to begin shortly.

## **ABOUT-FACE**

The State Council's decision reverses the suspension of dam building on the Salween announced by the then-Chinese premier Wen Jiabao (溫家寶) in 2004, after an international uproar over the start of multiple mega-projects in the National Nature Reserves, adjacent to the world heritage area — a stunning canyon region through which the Salween, the Mekong and the Jinsha flow in parallel.

This reversal is consistent with the pattern established elsewhere, including on the Yangtze: China temporarily suspends a controversial plan after major protests in order to buy time while public passions cool, before resurrecting the same plan.

Meanwhile, China's announcement of three new dam projects on the Brahmaputra, the main river running through northeastern India and Bangladesh, has prompted the Indian government to advise China to “ensure that the interests of downstream states are not harmed” by the upstream works.

Water has emerged as a new divide in Sino-Indian relations.

China's new focus on building dams in the southwest of the country also carries larger safety concerns. Indeed, Chinese scientists blamed the massive 2008 earthquake that struck the Tibetan Plateau's eastern rim, killing 87,000 people, on the newly constructed Zipingpu Dam, located next to a seismic fault.

The weight of the water impounded in the dam's massive reservoir was said to have triggered severe tectonic stresses, or what scientists call reservoir-triggered seismicity.

China's rush to build more dams promises to roil relations across Asia, fostering greater competition for water and impeding the already slow progress toward institutionalizing regional cooperation and integration. If China continues on its current, heedless course, prospects for a rules-based order in Asia could perish forever.

*Brahma Chellaney, professor of Strategic Studies at the New Delhi-based Center for Policy Research, is the author of the forthcoming Water, Peace, and War: Confronting the Global Water Crisis.*

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## **Long-neglected locks and dams could get boost in 2013 water project bills**

*RFD Radio's Washington correspondent Matt Kaye says the convergence of water project bills in Congress this year could finally produce funding for locks modernization -- a key for farm exports*

Interview to be listened online at :

<http://farmweeknow.com/story-long-neglected-locks-dams-boost-2013-water-project-bills-1-96274>

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### **Metro dams have combined level of 89% capacity**

07:16 (GMT+2), Wed, 20 March 2013

The five major dams serving the Nelson Mandela Bay Metro are now at a combined level of 89% of capacity, according to the latest readings from the municipality.

Last week, the dams were at a combined level of 90.4% and a warning was issued that the level was dropping by 1.5% a week.

The drop to below 90% comes as both the municipality and the Department of Water Affairs expressed concern that they're entering a dry cycle.

They say the situation is being exacerbated by an increase in consumption.

Source: Metro Minute to subscribe mail [metminutes@iafrica.com](mailto:metminutes@iafrica.com))

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## **Activists: Shut down Maine river turbines**

**Two environmental groups seek a court order they say would help Kennebec and Androscoggin salmon.**

By Dennis Hoey [dhoey@mainetoday.com](mailto:dhoey@mainetoday.com)

<http://www.pressherald.com/news/Environmental-groups-seek-permission--to-shut-down-turbines-at-four-hydro-dams.html>

**PORTLAND** — Two Maine-based environmental organizations are seeking a federal court order to shut down turbines at four hydroelectric dams on the Androscoggin and Kennebec rivers this spring.

Shutting down the turbines, which are in Brunswick, Waterville, Skowhegan and Fairfield, will have a minimal effect on energy production and go a long way toward protecting this spring's Atlantic salmon run, the groups argue.

The shutdown would last for about seven weeks, from April 15 to June 5, the period when young salmon migrate from freshwater to saltwater habitats.

Friends of Merrymeeting Bay and Environment Maine filed the motion for a preliminary injunction last week in U.S. District Court in Portland.

"The Atlantic salmon in the Kennebec and Androscoggin rivers are on the verge of extinction, yet the dam owners and government agencies continue to stall," said Ed Friedman, spokesman for Friends of Merrymeeting Bay, in a statement issued Tuesday. "This is a situation in which a federal judge, and only a federal judge, can take immediate action to help save this species."

The court filing names NextEra Energy Resources LLC of Florida and FPL Energy Maine Hydro LLC as the defendants. Those companies, which operate the dams, have three weeks to respond.

A spokesperson for those companies could not be reached Tuesday.

According to the Maine Department of Inland Fisheries and Wildlife, Atlantic salmon migrate from the ocean to fresh water to reproduce in the rivers where they're born.

When the young salmon, called smolts, grow to 6 inches long, they change physiologically to adapt to life in salt water.

This year's Atlantic salmon run -- when juvenile fish swim from fresh water to salt water -- is expected to be significant because of increased stocking by the state and evidence that a huge number of adults returned to Maine rivers to spawn two years ago, said Josh Kratka, an attorney for the National Environmental Law Center in Boston, which filed the court action on behalf of the Maine groups.

Environment Maine and Friends of Merrymeeting Bay estimate that 20,000 smolts are expected to migrate down the Kennebec and about 1,000 are expected to migrate down the Androscoggin.

If the turbines are running, the groups contend, one-third to one-half of the smolts will be killed or injured trying to pass through turbine blades at the Weston Dam in Skowhegan, the Shawmut Dam in Fairfield, the Lockwood Dam in Waterville and the dam next to Fort Andross in Brunswick.

"Our position is that nothing has been done by these companies to keep the salmon from swimming through the turbines," Kratka said. "And this run would appear to offer the greatest amount of genetic diversity that we have seen in decades."

Emily Figdor, director of Environment Maine, said in a news release, "It has been nearly four years since Atlantic salmon were listed as endangered, and NextEra still has failed to take action to save these iconic fish."

"Time is running out to save the Atlantic salmon, and we simply can't delay another season," she said.

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## India : More water in dams this year

The writer has posted comments on this article [Sarang Dastane](#) Sarang Dastane, TNN | Mar 22, 2013, 05.32 AM IST

PUNE: Water storage in four dams that supply drinking water to the city is better than last year. As on Thursday, the four dams collectively held 11.30 TMC water, about 2 TMC more than last year's storage of 9.30 TMC on the same date.

The irrigation department said that it would continue to release 1.25 TMC water from the dams every month till July. A meeting will be called before end of March to chalk out a detailed plan regarding release of dam water till the monsoon arrives.

An [irrigation department official](#) said, "We are closely monitoring water in the dams. Water was released in two rotations for Rabi crops. The last rotation was stopped last month. We were able to save about 1.50 TMC water during two rotations, which can be used in a crisis situation."

The official said, "Now, water is being released only to meet daily requirement of Pune city. The city would require another six TMC water till July. A decision on release of water for summer crops will be taken in the meeting which is scheduled to be held soon."

The official said that dams were holding about 38% water of the total live storage capacity as against last year's storage level of 31%. Though dams in Khadakwasla circle are holding more water than last year, the [Pune Municipal Corporation](#) should use water judiciously and restrict wastage, said the official.

The irrigation department has said that though dams in Khadakwasla circle hold enough water to meet Pune's water requirements, the water level in Ujani dam which supplies water to Solapur district has reached a critical stage, the level dropping below zero and water being supplied through the dead stock.

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## Dams for prosperity

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**SOME opponents of dams say that Sindh was prosperous before the Tarbela Dam was built, and add that now some people want to build more dams in order to further stop water from flowing down the Indus.**

<http://dawn.com/2013/03/25/dams-for-prosperity/>

The record needs to set straight in this regard. The Tarbela Dam by storing surplus floodwaters has increased the overall canal supplies by 25 per cent. Sindh got an additional seven million acre feet of irrigation water with which it was able to cultivate an additional 2.7 million acres (this can be verified from the Sindh Irrigation Department).

According to verifiable record, the total cultivated area in the country increased by about 13 per cent from 19.5 million hectares before the Tarbela Dam was built to 22 million hectares at present. This could not have happened if the Tarbela Dam had stopped the flow in the Indus.

The fact of the matter is that the population which was 80 million when the Tarbela Dam was commissioned has increased to over 190 million. There has been a corresponding increase in the withdrawals in the irrigation canals, including in the 14 big canals on Guddu, Sukkur and Kotri barrages, leaving very little to flow below Kotri.

The flow in the rivers over the years does not increase by itself, but the population does, it is only dams which can increase supplies by storing surplus floodwaters which go to waste otherwise. Fifty million acre feet of precious water was lost during the 2010 and 2011 floods. We should speak on the basis of verifiable data and not on hearsay. Otherwise hunger, thirst and poverty await us as surely as I write this.

*ENGR KHURSHID ANWER*

*Lahore*

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<http://business.mega.mu/2013/03/27/water-3-new-dams-will-be-built/>

## Water: 3 New Dams Will Be Built (Mauritius)

**A master plan for the development of water resources has been completed. It not only acts as a roadmap for the integration and management of water resources in Mauritius, but also as an investment plan for the establishment of infrastructure for water supply.**

The Master Plan was prepared by consultants Niras A / S of Denmark and their partner Mauritian Mega Design Consultants Ltd, to meet the national demand for water and to expand the availability of this resource over the long term. In parallel, the plan avoids fragmented decision-making by providing a comprehensive approach to the future development of water resources in the country.

The plan offers opportunities for water extraction across the country where a large share of production could be generated by the development of three new dams, Constance, and Calebasses My Vallon. These dams will be added to the other two projects Bagatelle and Rivière-des-eels which mobilized some 50 million m<sup>3</sup> per year.

### **Rs 14 billion to improve our water resources**

The master plan for the development of our water resources offers various possibilities for the country has sufficient resources to meet growing demand. Thus, the plan calls for the expansion of existing dams, water extraction from rivers, construction of 52 additional drilling and reuse of wastewater for irrigation. After implementation, these projects mobilize an additional volume of 232 million m<sup>3</sup> at a cost of Rs 14 billion.

In the Master Plan 2025-2050, the focus was on maintaining environmental integrity and sustainability of the country's assets such as aquatic ecosystems, and coastal flora and fauna. The terms of reference of the Master Plan for the development of water resources in four areas: (1) an analysis of water demand and availability of this resource, (2) options for mobilizing water resources and plan investment, (3) legal analysis and Water Rights Reform Programme, and (4) the institutional structure and capacity enhancement.

In addition, a part of the Master Plan was devoted to a program of reform of water rights. In this context, the legal framework governing the water sector should be reviewed and new legislation has been recommended.

In developing this plan, the consultants conducted a hydrological analysis and assessment of groundwater to determine the availability of water resources to meet expected demand. They also identified infrastructure options for increased mobilization of water resources in the short, medium and long term.

Text by Le Matinal

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# Remplissage des barrages en Algérie: taux record de 81% (ANBT)

24 mars 2013

**Le Temps**

## Hydraulique

Remplissage des barrages en Algérie: taux record de 81% (ANBT)

Le taux de remplissage des 65 barrages en exploitation en Algérie a atteint 81%, un record jamais atteint en Algérie depuis plusieurs décennies, a-t-on appris dimanche auprès du ministère des Ressources en eau.

Ce taux représente une quantité d'eau de 5,55 milliards de mètres cubes (m<sup>3</sup>) emmagasinée au 21 mars, en hausse de 8,46% par rapport à la même période de 2012, selon un bilan fourni par l'Agence nationale des barrages et transferts (ANBT) relevant du ministère. Au total, 17 barrages à travers le pays sont totalement remplis dont celui de Beni Haroun (Mila), le plus grand barrage en Algérie avec une capacité d'un milliard de m<sup>3</sup>.

A l'est du pays, qui a connu le taux de remplissage le plus élevé avec une moyenne de 87%, huit barrages sont déjà remplis à 100%, indique la même source. Il s'agit principalement des barrages de Mexa à Tarf (30 millions m<sup>3</sup>), de Boussiaba et Kissir à Jijel avec respectivement 120 millions et 68 millions de m<sup>3</sup>.

La région centre (12 barrages) a enregistré un taux de remplissage de 79,60% dont deux barrages remplis à 100%: celui de Taksebt à Tizi-Ouzou (181 millions de m<sup>3</sup>) et de Tilesdit à Bouira (164,5 millions de m<sup>3</sup>). Le barrage de Keddara (Boumerdes), qui alimente en grande partie la capitale, emmagasine plus de 100 millions de m<sup>3</sup>, soit plus de 71% de ses capacités.

La moyenne de remplissage des 13 barrages de la région ouest est par ailleurs de 78,35%, selon le bilan de l'ANBT qui relève que les barrages de Hammam Boughara et de Sikkak (Tlemcen) sont pleins. Le barrage de Djerf-Torba (Bechar), le plus grand barrage de cette région, avec une capacité de 260 millions de m<sup>3</sup>, a enregistré une moyenne de remplissage de 65,27%, ajoute la même source.

Quant à la région de Cheliff (17 barrages), elle a connu un taux de remplissage de 75% avec 5 barrages remplis à 100%: celui de Sidi M'hamed Bentaiba dans la wilaya de Ain Defla, de la Prise Chélif pour le transfert d'eau de Mostaganem-Arzew-Oran (MAO), de Bakhadda et Dahmouni à Tiaret, et du Colonel Bougara à Tissemsilt. L'Algérie compte disposer de 84 barrages à la fin de 2014 pour atteindre une capacité globale de 8,9 milliards de m<sup>3</sup>, contre près de 6,8 milliards de m<sup>3</sup> actuellement.

