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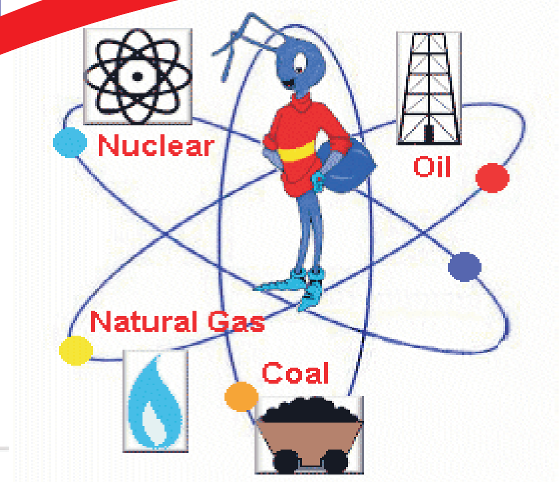
NTS Newsletter

Non Traditional Security



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INSTITUTE FOR DEFENCE STUDIES & ANALYSES

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Editor's Note

With the changing global dynamics, the understanding of security has become panoramic, taking into consideration the emergence of new threats. With the advent of industrialization the demand for fossil fuels has (energy) increased, which has had a ripple effect causing global warming and climate to change which in turn impacts water and food security.

Hence, Security now encompasses concerns that transcend traditional concepts and consequently has widened to include energy security, climate change and its impact on water and food, which is now described as the nexus.

The combined effects of climate change and adverse weather patterns are expected to lead into a set of interconnected challenges that cut across political boundaries. This in turn has implications for the economies of nations, patterns of migration, threats caused by pernicious diseases that cut across political boundaries, regional and global financial crises.

These have been recognized as critical issues, which have, repercussions on national, regional and global security and direct impact on the development and stability of countries.

Given the growing evidence on the interlinkages between energy, food, water and climate change and how it is defining the geo-political landscape as well as national policies, a need was felt to bring out a NTS newsletter that would periodically disseminate information on these issues.

National

Government to unveil shale gas policy within two weeks: Veerappa Moily

NEW DELHI: Government plans to unveil its shale gaspolicy as it seeks to exploit unconventional resources to fuel its expanding economy and cut subsidies, oil minister Veerappa Moily said.

India, the world's fourth biggest oil consumer, wants to quickly tap resources to cut its import bill and rein in a widening current account deficit.

"This (shale gas) will be a game changer," Moily said, adding the cabinet would consider the policy within the next two weeks.

India lags China in tapping its shale resources. China recently announced winners for its second shale gas blocks' auction and has set ambitious target to unlock potentially huge unconventional gas resources trapped in its rocks.

China aims to pump 6.5 billion cubic metres of shale gas in 2015 to cut dependence on polluting coal and imported gas.

A lack of a policy framework and resource estimates at home have led to Indian companies like Reliance Industries, GAIL (India) and Oil India turning their focus to shale gas assets overseas.

Instead of auctioning blocks under the new policy, India may ask contractors of the existing 254 blocks, awarded under various licensing rounds, to consider shale gas exploration, oil secretary Vivek Rae said.

"We can not offer existing blocks for shale gas exploration to other companies. However, in future we may have a single round and companies will be allowed to commercially exploit whatever they think is more profitable," Rae added.

To spur investment in its gas sector, and to make many mature producing fields profitable, India will consider suggestions from a government panel on gas pricing in a couple of days, Moily said.

Falling local gas output, mainly by the Reliance Industries-operated deepwater D6 block in India's east coast, has affected gas-based power plants in a country where peak power shortages at times run over 15 percent.

Local gas could cost as much as $8-$8.50 per million British thermal units (mBtu) if the panel's suggestions are accepted, Rae said, almost double the current $4.2 per mBtu.

Higher gas prices may stoke inflation and hit power and fertiliser companies which buy the bulk of the gas sold at government-fixed rates.

http://articles.economictimes.indiatimes.com/2013-03-24/news/37981312_1_shale-gas-gas-sector-higher-gas-prices

Cairn India plans $2 bn investment, shares rise

MUMBAI: Shares of oil producer Cairn India rose nearly three percent Monday after the explorer said it plans toinvest $2 billion to raise output by more than 70 percent at its oilfields in the country's northwest.

Shares of Cairn India, part of Britain-based resources giant Vedanta, controlled by tycoon Anil Agarwal, climbed 2.9 percent to a high of 285.6 rupees in trading on the Bombay Stock Exchange.

"In the next couple of years we are looking at around $2 billion investment. In the next five years, we are looking to drill at least 500 wells a year," Cairn India board member P. Elango told reporters at the weekend.

Cairn said it is aiming to use the $2 billion to raise output by 71 percent over the next few years.

The company is now producing 175,000 barrels of oil per day from its blocks in Rajasthan state and its fields have the potential to support production of 300,000 barrels a day, Elango said.

Greater domestic energy supplies for India, which imports some 80 percent of its crude oil needs, has become especially vital to reduce a high current account deficit, of which fuel purchases from abroad account for the largest chunk.

"I see import dependence coming down by 50 per cent by 2020 and by 75 percent in 2025. By 2030, we should be self-reliant," Oil Minister M. Veerappa Moily said on the weekend.

Cairn sold its 40 percent controlling stake in Cairn India in December 2011 to India-focused Vedanta Resources for $6.5 billion, after a long battle to win Indian government approval for the sale.

Cairn India said it has already invested 180 billion rupees ($3.31 billion) to boost production at oil fields and plans to spend another 60 billion rupees in the financial year that begins April 1.

The explorer at the weekend launched production at Aishwariya, the third-largest field in Rajasthan. Other fields operated by the Vedanta group company include the Mangala, Bhagyam and Saraswati fields.

Cairn India holds a 70 percent stake in the Rajasthan block, while state-run Oil & Natural Gas holds the rest.

India's crude-oil output declined four percent in February from a year ago while natural gas production tumbled by 20 percent, highlighting the challenge for the country to raise domestic fuel supplies.

India plans to announce a shale gas exploration policy in coming weeks to exploit unconventional hydrocarbon resources to meet its growing energy needs.

Shale gas or natural gas trapped in sedimentary rocks below the earth's surface, is the new focus area in the United States, Canada and China as an alternative to conventional oil and gas for meeting growing energy needs.

The Indian government will launch its first auction of shale gas blocks by 2013-end based on the policy.

"In the US, the advent of shale gas has transformed the energy landscape over the past six years. It has made the US a gas surplus nation from a gas-importing country," Moily said.

http://articles.economictimes.indiatimes.com/2013-03-25/news/38010480_1_shale-gas-cairn-india-bhagyam

Tapping massive deposits of 'fire ice' methane hydrate can change India's energy landscape

Massive imports of oil and natural gas have exacerbated India's big trade deficit, which is a hurdle to the acceleration of economic growth. Light at the end of the tunnel comes from a technological breakthrough last week by JOGMEC (Japan Oil Gas and Metals National Corporation). It succeeded in extracting natural gas from sea-bed deposits of methane hydrate, popularly called " fire ice" because it is a white crystalline solid that burns. India has some of the biggest methane hydrate reserves in the world. It will reap a bonanza if technological progress allows gas to be extracted from hydrates economically and safely.

JOGMEC says it is contemplating commercial gas production maybe as early as 2016. Meanwhile China and the US have major programmes for exploration and experimental extraction. India, alas, is nowhere in the picture.

Estimates of global reserves are sketchy, but range from 2,800 trillion to 8 billion trillion cu.metres of natural gas. This is several times higher than global reserves of 440 trillion cu. metres of conventional gas. However, only a small fraction of hydrate reserves will be exploitable.

Methane hydrate is a mixture of natural gas and water that becomes a solid in cold, high-pressure conditions in deep sea-beds (where the temperature falls to 2 degrees centigrade). It is also found in onshore deposits in the permafrost of northern Canada and Russia. Heating the deposits or lowering the pressure (the technique used by JOGMEC) will release gas from the solid. One litre of solid hydrate releases around 165 litres of gas.

India has long been known to have massive deposits of methane hydrate. These are tentatively estimated at 1,890 trillion cu.m. An Indo-US scientific joint venture in 2006 explored four areas: the Kerala-Konkan basin, the Krishna-Godavari basin, the Mahanadi basin and the seas off the Andaman Islands. The deposits in the Krishna Godavari basin turned out to be among the richest and biggest in the world. The Andamans yielded the thickest-ever deposits 600 metres below the seabed in volcanic ash sediments. Hydrates were also found in the Mahanadi basin.

Formidable economic and environmental challenges lie ahead. Nobody has yet found an economic way of extracting gas from hydrates. Industry guesstimates suggest the initial cost may be about $30/ mmBTU, double the spot rate in Asia and nine times higher than the US domestic price. JOGMEC is optimistic that the cost can be cut with new technology and scale economies.

The environmental challenges may be greater. Hydrates have to be heated or depressurised (or both) to extract gas, and in the process a lot of gas may leak into the atmosphere. That will have climate repercussions : natural gas traps 15-20 times more heat than carbon dioxide does. Fears of gas leakage have blocked the development of shale gas in many countries , and environmentalists will strongly resist gas extraction from hydrates too. Controlling leaks from shale gas is not difficult. It remains to be seen whether the same holds true of gas from hydrates.

Way back in 2006 Mukesh Ambani asked for a national policy on gas hydrates. No policy is in place yet. Much research is in progress in the US, Japan and China, but very little in India. The first National Gas Hydrate Programme marine expedition to explore deposits, with US collaboration, took place as long ago as 2006. A second expedition has long been talked about, but has yet to happen.

Hoping that India can simply buy hydrate extraction technology after it is developed in Japan and the US will not do. Some of the biggest Indian deposits, notably those in the K-G basin, have been found in fractured shales, whereas deposits in Japan and the USA are found mostly in sandstone. So, the exploratory techniques being developed in the US and Japan may not be usable in India without modification. We must develop our own technical capabilities.

The Directorate General of Hydrocarbons has long pleaded for the establishment of a National Gas Hydrate R&D Centre. This must not be a purely government outfit: private sector must be involved too. Simultaneously, joint ventures must be established with Japan and the US to further explore and establish hydrate deposits in Indian waters.

http://articles.economictimes.indiatimes.com/2013-03-17/news/37787191_1_hydrate-reserves-methane-hydrate-japan-oil-gas

Mixed impact of Budget 2013 on oil & gas sector

The changes in the international crude oil prices make a significant impact on the economy, which in turn, leads to a rise in prices for many essential commodities - increasing inflation. India's oil and gas sector typically contributes over 15% to the GDP. Given the lengthy gestation period and investment risk involved in this sector, industry was looking forward to policy reforms and various fiscal incentives. The Finance Minister has strived to allay the concerns of the oil and gas sector which has been pending for a while viz. natural gas pricing and exploration policy.

Given the increased domestic demand for natural gas, it is imperative to develop unconventional sources of energy like shale gas. The Finance Minister has appreciated this aspect and announced for a policy to encourage exploration and production of shale gas.

The Finance Minister has proposed a review of oil and gas exploration policy for movement from profit-sharing to revenue-sharing contracts. Current Production Sharing Contracts (PSCs) provide for explorers to first recover all of their capital and operating expenditure from oil and gas revenues before sharing profits with the government under a specific formula. However, there were disputes between the Government and the exploration license holders regarding the cost recovery.

This move is expected to resolve these issues as the Government would now be sharing the revenue earned under the PSCs. On the flip side, the exploration license holders may not be able to recover their investment and expense outlays before sharing the revenue with the Government. However, the impact of the same would depend on the methodology for sharing revenue to be introduced under this scheme.

The natural gas pricing policy also is proposed to be reviewed and uncertainties regarding pricing are expected to be removed. The bottlenecks preventing the development of oil and gas blocks awarded under NELP also proposed to be eliminated.

On the tax front, exemption from excise duty has been provided to sulphur recovered as a by-product in refining of crude oil and which is used in manufacture of bentonite sulphur. Further, excise duty and additional customs duty (commonly known as CVD) has been exempted on manufacture and import of dredgers. One-time amnesty by way of waiver of interest and penalty and immunity from prosecution to tax payers who have been non compliant towards filing of returns and payment of service tax dues has been introduced and will be effective on enactment of Finance Bill. As an important amendment, the advance ruling provisions have been extended to cover resident public limited companies.

On the Income-tax front, in addition to normal depreciation, the manufactures will be able to avail additional investment allowance of 15% on purchase of new assets exceeding INR 100cr. This proposed step would attract further investments. Another benefit that would be available is from abolition of the cascading effect on distribution of dividends received by the Indian companies from its foreign subsidiary.

On an adverse side, the exemption from service tax on domestic transportation of petroleum and specified petroleum products by rail or vessel has been withdrawn. The same would increase the input service tax costs.

A major set back which will lead to increase in the tax cost of the oil and gas industry is the increase in Income-tax rates on royalty and FTS from 10.506% to 27.038% for the foreign companies from non-treaty jurisdiction. With the price of oil being regulated, it would be difficult for companies to absorb such a drastic increase in the tax cost. The increase in the Income-tax and surcharge rate of 1.24% will also add to the total tax cost. Another barrier for foreign companies is that the repatriation of profits by way of buy back of shares by Indian companies would be taxable at 20%.

The Union Budget has focused towards introducing policy reforms to provide the much needed impetus to the oil and gas sector. It needs to be seen as to how the policies are implemented. However, the glaring omission in the Union Budget particularly with the extension of the tax holiday period and in providing any substantial tax relaxation and fiscal benefits has left the industry to battle with the economic and financial challenges.

(*Author is Tax Partner, Ernst & Young. Views expressed are his personal) *http://articles.economictimes.indiatimes.com/2013-02-28/news/37352981_1_shale-gas-oil-and-gas-nelp*

Chinese firm puts millions into US natural gas stations

LOS ANGELES: ENN Group Co Ltd, one of China's largest private companies, is quietly rolling out plans to establish a network of natural gas fueling stations for trucks along U.S. highways.

With plans to build 50 stations this year alone, ENN joins a small but formidable group of players — including Clean Energy Fuels Corp and Royal Dutch Shell Plc — in an aggressive push to develop an infrastructure for heavy-duty trucks fueled by cheap and abundant natural gas. Clean Energy is backed by T. Boone Pickens and Chesapeake Energy Corp.

The move is yet another example of China's ambition to grab a piece of the U.S. shale gas boom. Just last month, Sinopec Group said it would pay $1 billion for some of Chesapeake's oil and gas properties in the Mississippi Lime shale. The natural gas bounty is also expected to help wean the U.S. transport industry off its dependence on diesel fuel made from imported crude oil, and the trucking industry is in a big push to use more of the domestically produced fuel.

The potential savings are huge: shippers can save around $2 a gallon by switching to natural gas from diesel. Nearly half of the garbage trucks sold in the United States last year run on natural gas. They are able to refuel at dedicated stations at their home bases. To convince the far larger market for long-haul trucking to run on natural gas, truckers need to know they can refuel along their highway routes.

Enter ENN, led by billionaire energy tycoon Wang Yusuo. The company has already built natural gas stations in China, which is farther along in its adoption of natural gas trucks.

http://articles.economictimes.indiatimes.com/2013-03-14/news/37713529_1_natural-gas-cng-shale-gas-boom

Global

News Analyses

Life After Oil and Gas

As renewable energy gets cheaper and machines and buildings become more energy efficient, a number of countries that two decades ago ran on a fuel mix much like America's are successfully dialing down their fossil fuel habits. Thirteen countries got more than 30 percent of their electricity from renewable energy in 2011, according to the Paris-based International Energy Agency, and many are aiming still higher.

A National Research Council report released last week concluded that the United States could halve by 2030 the oil used in cars and trucks compared with 2005 levels by improving the efficiency of gasoline-powered vehicles and by relying more on cars that use alternative power sources, like electric batteries and biofuels.

Just days earlier a team of Stanford engineers published a proposal showing how New York State — not windy like the Great Plains, nor sunny like Arizona — could easily produce the power it needs from wind, solar and water power by 2030. In fact there was so much potential power, the researchers found, that renewable power could also fuel our cars.

"It's absolutely not true that we need natural gas, coal or oil — we think it's a myth," said Mark Z. Jacobson, a professor of civil and environmental engineering and the main author of the study, published in the journal Energy Policy. "You could power America with renewables from a technical and economic standpoint. The biggest obstacles are social and political — what you need is the will to do it."

Other countries have made far more concerted efforts to reduce fossil fuel use than the United States and have some impressive numbers to show for it. Of the countries that rely most heavily on renewable electricity, some, like Norway, rely on that old renewable,hydroelectric power. But others, like Denmark, Portugal and Germany, have created financial incentives to promote newer technologies like wind and solar energy.

People convinced that America "needs" the oil that would flow south from Canada through the Keystone XL pipeline might be surprised to learn that Canada produced 63.4 percent of its electricity from renewable sources in 2011, largely from hydropower and a bit of wind. (Maybe that is why Canada has all that oil to sell.) The United States got only 12.3 percent of its electricity from renewables in 2011. Still, many experts say that aggressively rebalancing the United States' mix of fossil fuel and renewable energy to reduce its carbon footprint may well be impractical and unwise for now.

Fatih Birol, chief economist at the 28-nation International Energy Agency, which includes the United States, said that reducing fossil fuel use was crucial to curbing global temperature rise, but added that improving the energy efficiency of homes, vehicles and industry was an easier short-term strategy. He noted that the 19.5 million residents of New York State consume as much energy as the 800 million in sub-Saharan Africa (excluding South Africa) and that, even with President Obama's automotive fuel standards, European vehicles were on average more than 30 percent more fuel efficient than American ones.

He cautioned that a rapid expansion of renewable power would be complicated and costly. Using large amounts of renewable energy often requires modifying national power grids, and renewable energy is still generally more expensive than using fossil fuels. That is particularly true in the United States, where natural gas is plentiful and, therefore, a cheap way to generate electricity (while producing half the carbon dioxide emissions of other fossil fuels, like coal). Promoting wind and solar would mean higher electricity costs for consumers and industry.

Indeed, many of the European countries that have led the way in adopting renewables had little fossil fuel of their own, so electricity costs were already high. Others had strong environmental movements that made it politically acceptable to endure higher prices in order to reduce emissions.

But Dr. Birol predicted that the price of wind power would continue to drop, while the price of natural gas would rise in coming years, with the two potentially reaching parity by 2020. He noted, too, that countries could often get 25 percent of their electricity from renewable sources like wind and solar without much modification to their grids. A few states, like Iowa and South Dakota, get nearly that much of their electricity from renewable power (in both states, wind), while others use little at all. So as Europeans have grown accustomed to wind turbines dotting the landscape, much of America continues to regard renewable power as a boutique product, cool but otherworldly.

MAPPING studies by Dr. Jacobson and colleagues have concluded that America is rich in renewable resources and (unlike Europe) has the empty space to create wind and solar plants. New York State has plenty of wind and sun to do the job, they found. Their blueprint for powering the state with clean energy calls for 10 percent land-based wind, 40 percent offshore wind, 20 percent solar power plants and 18 percent solar panels on rooftops — as well as a small amount of geothermal and hydroelectric power.

Dr. Jacobson said that careful grid design and coordination of power sources would ensure a stable power supply, although a smidgen of natural gas would be needed for the 0.2 percent of the time that renewables failed to generate sufficient electricity. The report claims that the plan would create 58,000 jobs in New York State (which now imports much of its power), create energy security and ultimately stabilize electricity prices.

The authors say the substantial costs of enacting the scheme could be recouped in under two decades, particularly if the societal cost of pollution and carbon emissions were factored in. The team is currently working on an all-renewable blueprint for California.

Sounds good on paper, but even Europe is struggling a bit with its renewable ambitions at the moment.

Germany, which got 20.7 percent of its electricity from renewable energy in 2011, is re-evaluating the incentives it provides to increase that share to 35 percent by 2020, because of worries that its current approach will drive up power prices inordinately at a time of economic uncertainty. It has had trouble ramping up transmission capacity to carry the wind power generated in the blustery North to the industrial South, where it is needed.

Dr. Birol said that natural gas and renewable energy could ultimately be "a good couple" for powering New York State, and elsewhere. But in what mix? If, in 20 years, cars are 50 percent more efficient and New York State could get much of its electricity from wind and solar, should we be more measured in making fossil fuel investments? As Gov. Andrew M. Cuomo considers the boundaries of hydraulic fracturing in New York State and as Secretary of State John Kerry decides the fate of the Keystone XL pipeline, how much we really "need" fossil fuels is worth pondering.

http://www.nytimes.com/2013/03/24/sunday-review/life-after-oil-and-gas.html?pagewanted=2&_r=0&ref=solarenergy

Oil Giants Invest Heavily in Exploration Near Shetlands

LONDON — BP and three other oil giants said that they would begin a new round of drilling in a remote area about 75 kilometers west of the Shetland Islands, an archipelago north of Scotland.

The partners plan to drill at least five new wells over two years at a cost of about $100 million each on a project they are calling Greater Clair. Depending on the results, another seven wells could be added, pushing the cost of what they are calling an "appraisal program" to more than $1 billion.

Trevor Garlick, BP's regional president for the North Sea area, said that if successful, the operations could develop into another major investment. BP is shedding small fields off Britain and elsewhere in order to raise cash and free management to focus on major projects.

Analysts think the area west of the Shetlands is among the most promising sites in Britain."It is among the least drilled areas in the U.K. in terms of exploration," says Lindsay Wexelstein, an analyst at the consultancy Wood Mackenzie in Edinburgh.

The companies and the British government hope that development off the Shetlands can help offset the rapid fall of production in the North Sea, where nearly all of Britain's fields are located — or even lead to an increase in Britain's output. BP and various partners are planning to invest more than $12 billion over the next few years in the area, which is environmentally sensitive and where oil installations have to be built to withstand waves of up to 20 meters, or more than 60 feet.

What is attracting the companies are larger fields than are generally available in other waters to the east and south in the North Sea. New technology, as well as high oil prices, are making it feasible to extract oil that was previously undiscovered or economically unfeasible.

The Clair field, for instance, is a vast area 40 kilometers, or nearly 25 miles, long that holds an estimated eight billion barrels — a very large amount of oil by any standard.

BP and its partners, Shell, Chevron, and ConocoPhillips, are already producing oil from one platform and are building larger ones at a cost of $7 billion to tap more oil to the northwest at a location known as Clair Ridge, which is scheduled to begin production in 2016. These two sections hold about half of the Clair field's oil, the company says, but it thinks it will only extract about a billion barrels from the sections at this stage.

BP thinks that it will be able to extract about 25 percent of the oil from the first two phases of Clair. If it can repeat this performance in a third phase, Greater Clair, the oil recovered could be worth about $100 billion at current prices.

http://www.nytimes.com/2013/03/29/business/global/oil-giants-invest-heavily-in-exploration-near-shetlands.html?ref=energy-environment

News Articles

Israel Taps an Offshore Natural Gas Field

JERUSALEM — Israel moved closer to its goal of energy independence on Sunday as natural gas from a large offshore field began flowing into the country, a harbinger of important change that will benefit the country strategically and economically, officials said. “We are taking an important step toward energy independence,” Prime Minister Benjamin Netanyahu said in a statement after the natural gas started flowing from the Tamar reservoir in the Mediterranean Sea to a terminal in the Israeli port of Ashdod, a journey that officials said would take 24 hours.

“We have advanced the natural gas sector in Israel over the last decade, which will be good for the Israeli economy and for all Israelis,” Mr. Netanyahu added.

A partnership of Noble Energy, based in Houston, and two Israeli companies, Delek Group and Dor Gas Explorations, carried out drilling operations at the Tamar site, about 56 miles west of the northern port city of Haifa, and discovered large gas reserves there in 2009.

Israel’s Ministry of Energy and Water Resources says that the Tamar field will supply 50 to 80 percent of Israel’s natural gas needs over the next 10 years. About 40 percent of electricity in Israel has been generated from natural gas in recent years, and the rate of natural gas consumption is expected to rise to 50 percent by 2015, the ministry said.

The Tamar field went into production as a smaller natural gas reserve, known as Yam Thetis, at a site farther south, began to run out.But the subsequent discovery in 2010 of another major natural gas field off Israel’s northern coast, known as Leviathan, has even positioned Israel as a future energy exporter. Leviathan, discovered through the work of a partnership between Noble Energy and local companies, was said to have been one of the world’s largest offshore gas finds in a decade.

The development of Israel’s natural gas sector in recent years has lessened the country’s dependence on foreign energy imports in an unstable and largely hostile region. The vulnerability of Israel’s supplies was underscored in the months after the 2011 ouster of President Hosni Mubarak of Egypt, when unidentified attackers bombed a gas pipeline in the Egyptian Sinai more than a dozen times, apparently to disrupt the flow to Israel.

Under a deal signed in 2005, Egypt had been supplying Israel’s Electric Corporation, a mostly state-owned utility, with up to 40 percent of the natural gas it needs.

Offshore exploration efforts have also underscored the need for clear maritime borders. Israel and Lebanon have been locked in a dispute over an area of the Mediterranean Sea that is potentially rich with energy resources.

http://www.nytimes.com/2013/04/01/world/middleeast/israel-turns-on-natural-gas-flow-at-offshore-site.html?ref=energy-environment

GAIL, EDF Trading sign MoU to acquire energy assets in North America

NEW DELHI: State-owned gas utility GAIL India Ltd today said it has signed a preliminary agreement with French energy trader EDF Trading for jointly acquiring oil and gas assets in North America and trading of US gas/LNG.

The memorandum of understanding (MoU) may lead to the two firms jointly acquiring shale gas assets in North America as well as the French firm investing in downstream trading and marketing venture in India.

The MOU was signed during the visit of Oil Minister M Veerappa Moily's ongoing visit to the US, GAIL said in a press statement here.

"The advent of shale gas in the US bodes very well for the global hydrocarbon landscape and this partnership is expected to look for business opportunities in this exciting space in order to enhance the oil and gas sourcing prospects for India," it quoted Moily as saying.

GAIL already has a 20 per cent stake in Carrizo Oil's Eagle Shale gas assets in Texas, US and has also signed to import 3.5 million tons of liquid gas, called LNG, from Cheniere Energy's Sabine Pass shale gas project in Louisiana.

The company is looking at tying up more liquefied natural gas (LNG) from the US.

The venture with EDF would not just be for sourcing and trading of gas from US but also outside North America as well.

GAIL is eyeing relaxation in LNG export policy of US before tying up more gas for meeting growing energy demand back home.

Sabine Pass is the only one among the seven shale gas projects coming up in the US that has permission to export to nation with which Washington does not have Free Trade Agreement (FTA).

GAIL Chairman and Managing Director B C Tripathi described the MoU as strategic and said the state-owned firm has extensive infrastructure in the midstream and downstream gas value chain and we are well positioned to meet the growing domestic demand in India.

"There are significant opportunities in the North American gas markets and we are pleased to be partnering with GAIL, one of the world's leading gas companies, in jointly developing this business," said John Rittenhouse, Chief Executive of EDF Trading.

EDF Trading is one of the world's leading participants in the LNG market and offers a complete range of services including supply and delivery, terminal operations, re-gasification and nominations into networks.

http://articles.economictimes.indiatimes.com/2013-02-07/news/36972612_1_shale-gas-gas-assets-cheniere-energy

India, China battle it out in Mozambique gas fields to secure energy assets

MUMBAI: The great game between India and China to secure energy assets around the world is now all set to play out in the deep waters of Mozambique - home to the world's biggest gas discovery in a decade

Just hours before the deadline for non-binding bids for Videocon's 10% stake in Rovuma offshore block in Mozambique were to be submitted, China's largest oil producer, China National Petroleum Corporation (CNPC), picked up a strategic 20% stake in ENI SpA's Mozambique asset for $4.2 billion on Thursday. With this acquisition, CNPC will get access to 75 trillion cubic feet of in-place resources, or more than Norway's existing reserves.

Incidentally, the block in question — Rovuma Offshore Area 4 — is adjoining to Rovuma Area 1, whereVideocon and consortium partner Anadarko are both selling 10% each.

With the Chinese stepping in, a bidding war for the adjoining acreage is therefore also anticipated by most. With expected recoverable gas reserves of close to 60 trillion cubic feet (tcf), Rovuma-1 is among the most sought global gas asset today. Even at a 50 per probability of recovery success -"P2 or proven plus probable reserves" in industry parlance - the expectation is of 42 tcf of natural gas. To put it in context, this is twenty times India's current annual gas consumption.

Mozambique may have 250 trillion cubic feet of reserves, according to Empresa Nacional de Hidrocarbonetos, the country's state-backed energy company.

"If things go well in Mozambique, it may well end up being the second largest LNG exporter in the world after Qatar and overtaking Australia. Large consumers of gas are already present there - like India - or seeking a toehold like the Thais and now even the Chinese. Shell, the largest LNG player globally is keen to step in. From an energy security point of view, Indian companies like OVL and OIL will look at the opportunity but at the end of the day, it will be an economic decision," said Niraj Mansingka, an oil and gas analyst at Edelweiss.

State owned ONGC Videsh (OVL) and Oil India are expected to compete with Asian peers like Sinopec along with some of the biggest global names Shell, BP, for a strategic toehold in Mozambique as the bids for Rovuma 1 are due this week. Thailand's PTT Exploration and Production Public Company Limited (PTTEP) which already owns 8.5% stake in the field is also expected to put in an aggressive bid for upping its economic interest. Last year, PTTEP trumped Shell and 20 other suitors like BP, Exxon Mobil and Chinese operators in a $1.91 billion deal with Cove Energy, a small UK explorer.

http://articles.economictimes.indiatimes.com/2013-03-15/news/37744479_1_rovuma-offshore-area-cove-energy-tcf-of-natural-gas

Bill in US Senate to export natural gas to non FTA-nations

WASHINGTON: Increasing the prospects of export of shale gas to India, a bi-partisan group of four top American Senators has introduced a legislation in the Senate to export natural gas, including liquefied natural gas, to countries that do not have free-trade deals with the US.

The legislation 'Expedited LNG for American Allies Act of 2013', specifically mentions NATO allies and Japan for export to natural gas to countries that do not have free trade agreement (FTA) with the US. It also says natural gas could be exported to non-FTA countries if the Secretary of State and Defense Secretary feels so in the national security interest.

The then External Affairs Minister S M Krishna discussed the issue of shale gas with Secretary of State Hillary Clinton in New York last October. India wants its companies should be able to import shale gas in liquefied form through containerised vessels, as it does with LNG from Qatar.

Under current law, the Secretary of Energy must approve applications to export natural gas to countries with which the United States has a free trade agreement if that agreement requires national treatment for trade in natural gas.

The Act would require the Secretary of Energy to approve exports of natural gas to any other country if the Secretary of State, in consultation with the Secretary of Defense, finds that exports of natural gas to that country would promote the national security interests of the United States.

The significant legislation was introduced in the Senate yesterday by Senators John Barrasso, Jim Inhofe,Mark Begich and John Cornyn, who is co-chair of the Senate India Caucus.

"I am proud to work with my colleagues on this legislation that seeks to expedite the process for companies wishing to export liquefied natural gas to our friends and allies. Improving this process will yield important strategic opportunities to enhance our national security interests while continuing to grow our economy at home," Cornyn said.

Supporting LNG exports to countries whether or not they have a free trade agreement with the United States,Senator Barrasso said increased LNG exports will create good paying jobs and open markets for Wyoming's natural gas.

"This will expand economic opportunities across America and help lower our nation's trade deficit. Our bill will also promote the energy security of key US allies by helping reduce their dependence on oil and gas from countries, such as Russia and Iran," he said.

http://articles.economictimes.indiatimes.com/2013-02-01/news/36684571_1_natural-gas-lng-exports-shale-gas

National

News Articles

Climate change initiatives yet to take off in Gujarat

GANDHINAGAR: Chief Minister Narendra Modi's interest in addressing the climate change issues facing the state appear to be on the wane as Gujarat has failed to meet the four yearly deadline for submitting state's climate change action plan. It was to be submitted for prime minister's national climate change action plan. While 24 states have submitted their plans and ten have received a go ahead sanction from the centre, Gujarat is yet to file even a primary action plan. Ironically, it was the state that claimed to have set up Asia's first climate change department in February 2009.

Sources in the state government said, "The Energy and Resources Institute (TERI) submitted a state climate change action plan more than eight months back but it is yet to be approved by the chief minister and the cabinet."

A senior official of the climate change department said, "The department has failed to start any of its new projects like climate change trust fund, climate change impact assessment and project trust fund along with state climate change institute despite huge funds being allocated to it. Climate change trust fund has been allocated around Rs.100 crores in the last few years but its actual usage has yet not even begun. Of the funds granted in 2010-11 budget, 23.65 per cent remained unused. In 2012-13 budget, the state government had allocated Rs110.26 crores out of which 30 per cent funds remained unutilized." For 2013-14 also, the state government has made provision of Rs110.42 crore for this department.

The state government has transferred some agencies like Gujarat Energy Development Agency and other projects being run by energy and petrochemical department along with forest and environment department under the climate change department. Technically the department has not started any programme of its own. The department is yet to start its own web portal despite having been in existence for four years.

http://articles.timesofindia.indiatimes.com/2013-03-25/ahmedabad/38009666_1_climate-change-action-plan-trust-fund

Carbon dioxide levels show biggest spike in 15 years

NEW DELHI: As governments dilly-dally in climate change negotiations, carbon dioxide levels continue to rise in the atmosphere pushing the world towards an environmental catastrophe. Latest data released by the National Oceanic Atmospheric Administration of US reveals that CO2 levels showed the second highest ever increase in 2012 since records started being kept in 1959.

Carbon dioxide levels jumped by 2.67 parts per million since 2011 to total just under 395 parts per million, says Pieter Tans, who leads the greenhouse gas measurement team for the National Oceanic and Atmospheric Administration, according to AP.

By comparison, global carbon levels averaged a yearly rise of just under 2 parts per million from 2000 to 2010, and increased by less than 1 part per million in the 1960s.

In 2009, the world's nations agreed on a voluntary goal of limiting global warming to 3.6 degrees Fahrenheit over pre-industrial temperature levels. Since the mid-1800s temperatures haven already risen about 1.5 degrees. Current pollution trends translate to another 2.5 to 4.5 degrees of warming within the next several decades, says John Reilly, co-director of Joint Program on the Science and Policy of Global Change, AP reported.

More coal-burning power plants, especially in the developing world, are the main reason emissions keep going up - even as they have declined in the U.S. and other places, in part through conservation and cleaner energy. At the same time, plants and the world's oceans which normally absorb some carbon dioxide, last year took in less than they do on average, says Reilly. Plant and ocean absorption of carbon varies naturally year to year.

With this kind of rise, it is unlikely that global warming can be limited to 2 degree Celsius limit which most scientists agree is the minimum to prevent catastrophic climate change.

Scientists have calculated that to stay under the 2 degree limit, 565 gigatons of CO_2 can be allowed into the atmosphere by 2050. Even then there is 75 percent chance that temperatures will not rise beyond 2 degrees. As things are going, this carbon budget will be exhausted in just 16 years from now. After that, to rescue the world, mankind will have to keep most of the fossil fuel in the ground.

If temperatures increase by 2 degrees or more, the world faces sea level rise, disruption of water supplies, global crop declines, a rise in ocean acidification threatening marine ecosystems, and several other types of long term damages.

http://articles.timesofindia.indiatimes.com/2013-03-07/pollution/37530609_1_carbon-dioxide-levels-pieter-tans-sea-level-rise

Global

News Analyses

Climate Change and Rising Food Prices Heightened Arab Spring

In a report published last week, researchers from the Center for American Progress, the Center for Climate and Security and the Stimson Center examined the role of climate change in the Middle East's upheaval during 2010 and 2011. Looking at long-term trends in rain, crops, food prices and migration, they were able to determine how these factors contributed to social instability in the region.

"The Arab Spring would likely have come one way or another, but the context in which it did is not inconsequential. Global warming may not have caused the Arab Spring, but it may have made it come earlier," the report says.

The Middle East and North Africa region is extremely vulnerable to fluctuations in food supplies and prices. According to the report, with little arable land and scarcewater supplies, the region is one of the top food importers in the world.

In 2010, droughts in Russia, Ukraine, China and Argentina and torrential storms in Canada, Australia and Brazil — all major wheat and grain producers — considerably diminished global crops, driving commodity prices up. The region was already dealing with internal sociopolitical, economic and climatic tensions, and the 2010 global food crisis helped drive it over the edge.

But the issue here is much bigger. Because of globalization, regional climate events can have a global extent, the report says. What's more, scenarios where weather events unfold economic and political shifts are likely to be repeated as climate volatility, expanding populations and competition for resources disturb national stability, the report says.

National collapse becomes a security threat

According to Michael Werz, senior fellow at the Center for American Progress and one of the authors of the report, the argument here is that there are a number of symptoms — such as food scarcity, water rationing, crops failure, migration and rapid urbanization — squeezing the margins of what a society can deal with before exploding.

"This is pushing many societies, especially those with a weak state, to their limits," Werz said.

At the launch of the Arab Spring and climate change report, Werz and other foreign affairs experts discussed the challenges of climate change in global stability — particularly in terms of food and water security and migration — and how the United States needs to rethink its foreign policy to incorporate these borderless challenges.

"We've gone from a connected world to an interconnected world, and from an interconnected world to an interdependent world," said *New York Times* foreign affairs columnist Tom Friedman. "When the world is this interdependent, your rivals failing is much more dangerous than your rivals rising," he said.

According to Friedman, U.S. foreign policy is so caught up in the Cold War model — of strategic competition between superpowers — that it's missing the real security issue of the current world.

"We are not worried that Egypt is going to become an ally of the Soviet Union; we are worried that Egypt is going to collapse, which in an interdependent world is a threat," Friedman said.

In a 2011 article in *The Atlantic*, former Department of State Director of Policy Planning Anne-Marie Slaughter explained how the international environment had changed in the last century.

"The Cold War world was like chess. The 21st century world is more like tennis, where the wind, heat, possible rain delay and your opponent's relative health and form on any given day all affect the speed, trajectory and spin on the ball coming at you," she wrote.

Food shortage, drought, migration and human security are issues in a society that can later unfold to big issues between states, Slaughter said at the event. But unlike popular topics like Iran or Afghanistan, food security lacks two important qualities to be taken seriously in Washington, D.C., she added: “It’s not immediate, and it’s not sexy.”

Security linkages often are often overlooked

Creating long-term, sustainable and stable countries in the world is much more beneficial for U.S. and global security than anything else, Werz said.

A new study by British think tank E3G warns that the spread in democracy that followed the Arab Spring could be reversed due to failure to address the threat of food and energy price shocks. According to the report, climate models consistently estimate that warming will occur faster in the Middle East-North Africa region, accentuating the growing scarcity of water. Yet existing government investment is more focused on providing incentives for continued democratic reforms than addressing other vital areas for stability.

“There’s definitely been a shift,” said Taylor Dimsdale, senior research associate with E3G, about the understanding of linkages between social strife, food prices and climate change. “We’re sort of recognizing that there’s a lack of a full appreciation and full recognition for that need.”

Moreover, as climate change drives extreme weather events in producer countries, food price increases could become another ticking bomb in the region. “We see it as an ongoing risk,” Dimsdale said.

Because of globalization and interdependence, the relationship between climate change, migration and security should become the “new normal” in international policy conversations, the panel said. “In climate sciences, the axiom I live by is ‘We have to manage what’s unavoidable and avoid what’s unmanageable,’” Friedman noted.

In that sense, according to Friedman, it all comes down to building resilience. One way to do this would be to stimulate market-based solutions through regulations and prices to drive clean energy, clean water and clean power in America or anywhere else in the world, he said.

“We need to come up with long-term, sustainable solutions that current foreign policy doesn’t allow us to even think about,” Slaughter said.

But first, she said, the United States needs to rethink the way it engages with the world. “The normal way the State Department is organized is by region, and then by issue area,” Slaughter said. But with this format, it’s hard to figure out how things are interconnected and even harder to address things bottom-up, she added.

Reporter Tiffany Stecker contributed. Reprinted from Climatewire with permission from Environment & Energy Publishing, LLC. www.eenews.net, 202-628-6500

http://www.scientificamerican.com/article.cfm?id=climate-change-and-rising-food-prices-heightened-arab-spring

Obama fiscal plans strive for breakthrough energy research and low-carbon transportation

Clean energy research and low-carbon transportation are priorities in President Obama's $3.7 trillion budget request. But the document unveiled yesterday offers only a modest stab at reducing greenhouse gas emissions and adapting to climate change.

Its release was met with a yawn in some climate circles, as advocates look for bolder action by the administration in other areas, like regulation. The budget strengthens breakthrough energy research, maintains high-speed rail investments and offers nearly $1 billion in foreign climate aid, while making another attempt to slash some $4 billion in fossil fuel subsidies.

"To make America a magnet for good jobs, this budget invests in new manufacturing hubs to help turn regions left behind by globalization into global centers of high-tech jobs," Obama said yesterday in the Rose Garden. "We'll continue our march towards energy independence and address the threat of climate change."

Advocates applauded those potential infusions, but some say there are no game changers in a proposal stocked with ideas that have already battered against Republican opposition and tightening budget belts.

"It's less a question of spending on big-ticket [climate] items right now than it is on using regulatory action," said Manik Roy, a vice president with the Center for Climate and Energy Solutions. He points to the administration's forthcoming carbon dioxide standards on new power plants, potential standards on existing plants and efforts to reduce "climate forcers" like methane as having a much bigger impact on rising temperatures. "They wouldn't show up in a budget request," Roy said.

The same goes for global climate assistance, where the international community has been expecting big things from newly minted Secretary of State John Kerry. If they were looking for signs of change in his first budget plan, though, they didn't find it.

About $909 million will go toward "strategic investments" to fight climate change, with $481 million coming from the State Department and the U.S. Agency for International Development to promote "low-emission, climate-resilient development." It remains unclear, though, what specific renewable energy and disaster resilience programs are included in that figure. Meanwhile, a few buckets of funding for World Bank climate change assistance saw moderate bumps, prompting some praise from environmentalists.

"They're headed back in the right direction," said David Waskow, international climate policy director for Oxfam America. The Clean Technology Fund overseen by the World Bank saw a proposed bump of $216 million over the 2013 congressional allocation of $186 million. A related pot of money called the Strategic Climate Fund is slated for $68 million, compared to the $50 million it received this year.

"It's going to require us to see some of the numbers in more details, but it seems good that they want to put something out that sends a stronger, positive signal than they did last year," Waskow said.

While no blockbuster climate change funding announcements came from Kerry's first budget, most said they didn't expect any.

"We saw good, healthy but modest increases across the board, but at least it's pointing in the right direction," said Andrew Light, a senior fellow at the Center for American Progress think tank. "It's premature to use this as a litmus test of where Kerry's commitments are, because I think he would not have had a chance to really put his imprint on this budget."

The budget release comes as the State Department under Special Envoy for Climate Change Todd Stern hosts a high-level meeting on mobilizing private climate change financing to fulfill a pledge wealthy countries made to deliver $100 billion annually by 2020 for global warming assistance. Representatives from Australia, Canada, Denmark, the European Commission, France, Germany, Italy, Japan, New Zealand, Norway, Poland, Switzerland and the United Kingdom are expected to attend.

Michael Wolosin, director of research and policy at the consulting group Climate Advisers, said that in the international realm, like the domestic one, the budget process is not where the major new trends will be found.

"The money is not where we need to look for leadership. It's not recognizing the new reality to expect that we will see a significant ramp-up in public finance right now. I think what we need to be looking for are other policy measures," he said.

Obama's budget does include one major new proposal that he first unveiled earlier this year: the Energy Security Trust. It would apply $2 billion over a decade into transportation research to reduce oil use — for example, research on batteries — and would be funded through oil and gas royalties. Another spending item would apply $200 million into resiliency programs along the coastlines.

Paul Bledsoe, an energy consultant and former Democratic aide, said the budget reflects Obama's commitment to addressing climate change. But he notes that it's a small contribution compared to the revenue that a price on carbon could generate.

"A central reason for a market-based climate approach is so the government doesn't have to carry the load in investment in the technology development," Bledsoe said.

Climate programs survive EPA cuts

Meanwhile, the president's overall budget for U.S. EPA — $8.15 billion — dipped 3.5 percent from what Congress allocated for fiscal 2012, but climate programs did not fall on the chopping block.

Programs designed to study, adapt to and mitigate climate change and improve air quality would receive $176.5 million under Obama's budget request, $8.1 million — or 5 percent — over fiscal 2012. The funds apply to mandatory activities like greenhouse gas reporting and vehicle standards, but also voluntary programs like the Global Methane Initiative and Energy Star.

"This request reflects our ongoing efforts to change the way EPA does business," said acting Administrator Bob Perciasepe. "This will allow us to deal with the budget realities of today, while also thinking about the challenges that the future may hold."

EPA is expected to finalize the first-ever greenhouse gas standards for future power plants this spring, and could propose standards for existing plants later this year. Under the terms of a legal settlement, EPA must also regulate climate-warming gases from oil refineries. Environmental groups have recently pushed EPA to address methane leaks, which contribute to climate change, from the nation's booming oil and gas sector.

Obama's budget asks that Congress allocate $257.3 million for state grant funding for air programs, an increase of $21.5 million — 9 percent — over what was enacted in 2012. Last year, the president asked for slightly more — $302 million, a 28 percent increase from what had been enacted in the previous year.

The administration's effort to boost state-level resources is appreciated but falls short, said Bill Becker, executive director of the National Association of Clean Air Agencies.

"We are several hundred million dollars short of what is needed to run on a national level," he said, referring to the core permitting programs like the one for greenhouse gases. "There's one thing we've understood from industry over the years: It's that certainty trumps everything else." The cost to industry from a lack of certainty is even greater than that from a lack of funding, he said.

Boost to solar, cuts to fossil fuels

At the Department of Energy, Obama asked for an 8 percent funding increase above 2012 enacted levels to $28.4 billion. That includes a proposed increase to basic research funding of 5.7 percent to more than $5 billion.

The Energy Department also wants a $104 million budget increase to $379 million for the Advanced Research Projects Agency-Energy, a program that funds high-risk, high-payoff energy innovations. In applied energy, the administration allocated $615 million to promote and lower costs for wind, solar, geothermal and water power generation.

Deputy Energy Secretary Daniel Poneman, speaking yesterday at the department's budget briefing, reaffirmed Obama's commitment to an "all of the above" energy policy. "This is a winning strategy for national security, energy and the environment," he said.

Cuts will come from "unwarranted and unnecessary" fossil fuel subsidies, where the department estimates it can save $4 billion annually, as well as cuts in energy consumption in federal buildings. Fossil fuel groups blasted the proposed cuts, while environmentalists praised them.

"President Obama's 2014 budget demonstrates a fundamental misunderstanding of the American oil and natural gas industry and its tax treatment," Virginia Lazenby, chairman of the Independent Petroleum Association of America, said in a statement. "What the President calls 'subsidies' are neither loopholes nor subsidies but business deductions, congruent with those received by many U.S. industries from accounting to manufacturing."

Countered Daniel Weiss, a senior fellow and director of climate strategy at the Center for American Progress, “By eliminating nearly $40 billion in unnecessary special tax breaks for Big Oil over the next 10 years, President Obama’s proposed budget makes the tax code more fair while investing additional revenue to support the middle class.”

DOT works on climate change resilience

Over at the Department of Transportation, President Obama proposes to spend $200 million on infrastructure projects to improve climate change resilience at the community level. The money would come from a $50 billion pot of immediate stimulus-style spending to spur economic growth and job creation through infrastructure development.

“I think the lesson from Hurricane Sandy is that we have to put more money into making our transportation system more resilient to extreme weather, and this is a sign that the administration agrees with that,” said Nick Nigro, senior manager of transportation initiatives at the Center for Climate and Energy Solutions.

The president previously proposed this type of immediate innovation spending as part of the fiscal cliff negotiations and the American Jobs Act, but the initiative failed to take hold in Congress and could stall again.

Also included in the budget plan:

- $757 million for the Integrated Resource Restoration program within the U.S. Forest Service to help the nation’s forests adapt to climate change, a fivefold increase from its current $146.4 levels. The increase would allow the project to move from the pilot phase to full-scale across the Forest Service’s nine regions.
- $100 million strategic investment for the Interior Department’s renewable energy efforts, a $26 million increase over the enacted amount for fiscal 2012.
- $71 million for Interior’s climate change science budget, a $13 million increase. Much of those funds would go to the U.S. Geological Survey’s science centers.
- $40 billion at DOT for passenger rail systems, including high-speed rail, consistent with the president’s goal to provide 80 percent of Americans with convenient access to rail transport in less than 25 years.
- $1 billion for DOT’s Next Generation Air Transportation System, level with the previous year. NextGen will establish more accurate aircraft navigation and communication systems, which will allow for more direct flight routes, less fuel burn and less emissions.
- $282 million for next-generation advanced biofuels research within the DOE budget, and a $575 million investment in cutting-edge vehicle technologies — a 75 percent increase over 2012 enacted levels.

"That's a big sign that the administration wants to get the auto industry ready for the next generation of advanced vehicles," said Nigro. "We have some pretty good cars on the road now ... that plug in, but if they're going to reach the mass market, they need to be more affordable."

http://www.eenews.net/climatewire/2013/04/11/1

News Articles

Pakistan to be hardest hit by climate change: Dawn

ISLAMABAD: Pakistan will be amongst the countries hardest hit by climate change, said a leading daily, warning that a disaster of enormous proportions is silently evolving in the mountains up north.

An editorial in the Dawn on Tuesday said that away from the din of politics and the immediacy of militant strife, a disaster of enormous proportions is silently evolving in the Hindu Kush-Himalayan mountains up north, one that could in time impact the length and breadth of Pakistan.

"The peaks are home to some 15,000 glaciers which, as a result of rising temperatures, are retreating at an alarming rate of almost 40 to 60 metres a decade, leaving behind glacial lakes in their wake," it said.

The daily warned that 52 such lakes, an inherently unstable phenomenon that can trigger devastating flash floods, have been classified as dangerous to human settlements.

Parts of Gilgit-Baltistan and Chitral have already suffered floods on this count in 2010.

"The melting of the glaciers will also ultimately lead to a rise in sea levels, threatening coastal areas and cities such as Karachi," it said, while referring to a meeting to review the progress of a four-year project between the government and international organizations to deal with the fallout of climate change in Pakistan.

It stressed that by most estimates, "Pakistan will be one of the countries hardest hit by climate change".

"It is therefore encouraging that the government is taking steps such as setting up meteorological observatories at sites vulnerable to glacial lake outburst floods and the planned establishment of automated weather stations in the area which should lead to improved data collection, an essential requirement for a well-calibrated response."

http://articles.timesofindia.indiatimes.com/2013-04-09/global-warming/38402822_1_climate-change-glacial-lake-outburst-floods-chitral

Cost of Environmental Damage in China Growing Rapidly Amid Industrialization

BEIJING — The cost of environmental degradation in China was about $230 billion in 2010, or 3.5 percent of the nation's gross domestic product — three times that in 2004, in local currency terms, an official Chinese news report said this week.

The statistic came from a study by the Chinese Academy of Environmental Planning, which is part of the Ministry of Environmental Protection.

The figure of $230 billion, or 1.54 trillion renminbi, is based on costs arising from pollution and damage to the ecosystem, the price that China is paying for its rapid industrialization.

The costs could be even higher than the ministry's estimate, he said. The $230 billion figure is incomplete because the researchers did not have a full set of data. Making such calculations is "notoriously difficult," Mr. Thornton said.

The 2010 figure was reported on Monday by a newspaper associated with the ministry, and so far only partial results of the study are available. In 2006, the ministry began releasing an estimate of the cost of environmental degradation. The ministry has issued statistics only intermittently, though its original goal was to do the calculation — what it called "green G.D.P." — annually.

The rapidly eroding environment across the country has become an issue of paramount concern to many Chinese. In January, outrage boiled over as air pollution in north China reached record levels, well beyond what Western environmental agencies consider hazardous. The public fury forced propaganda officials to allow official Chinese news organizations to report more candidly on the pollution.

Chinese state-owned enterprises in the oil and power industries have consistently blocked efforts by pro-environment government officials to impose policies that would alleviate the pollution.

There have also been constant concerns over water and soil pollution. The discovery of at least 16,000 dead pigs in rivers that supply drinking water to Shanghai has ignited alarm there. This week, China Central Television reported that farmers in a village in Henan Province were using wastewater from a paper mill to grow wheat. But one farmer said they would not dare to eat the wheat themselves. It is sold outside the village, perhaps ending up in cities, while the farmers grow their own wheat with well water.

The Beijing government released details of a three-year plan that is aimed at curbing various forms of pollution, according to a report on Friday in China Daily, an official English-language newspaper. The report quoted Wang Anshun, Beijing's mayor, as saying that sewage treatment, garbage incineration and forestry development would cost at least $16 billion.

http://www.nytimes.com/2013/03/30/world/asia/cost-of-environmental-degradation-in-china-is-growing.html?ref=energy-environment

Developed world goes stingy on climate fund

NEW DELHI: More than 190 countries decided it would build up to a $100 billion kitty by 2020 to fight climate change globally but the Green Climate Fund looks set to remain an empty pot as the US and other developed countries have refused to commit the needed money or even set timelines for their contributions.

In a meeting of the UN fund held in Berlin recently, the US and other developed countries refused to discuss a burden-sharing formula for contributions or set any calendar to schedule the initial funding. By December 2012, only $5.7 million was committed by the rich world to the fund.

Dipak Dasgupta, principle economic advisor to the finance ministry said there was a need to talk about the scale of the resources required upfront which are predictable and significant in size. He noted that the fund was not a donor programme or a charity but a commitment made under the UN climate change convention. He warned that there could not be a voluntary approach to contributions.

But the developed countries preferred to not be bound by a time-table or a target, suggesting that at present the fund should depend upon only ad hoc pledges. They demanded that the business model of the fund be developed before monies are committed.

Sources at the meeting said the US even questioned the value of having the fund with its representative on the GCF board claiming it was hard to make a compelling case that the GCF was an entity worth putting money into.

Third World Network, an NGO with a southern perspective on climate change negotiations, attending the meeting cautioned against the proposals by some board members for the GCF to provide loan guarantees and other instruments that would put the GCF at risk and said that it was immoral for developed countries to continue to delay making their commitments to the GCF.

http://articles.timesofindia.indiatimes.com/2013-04-01/developmental-issues/38188489_1_green-climate-fund-climate-change-gcf

Research round-up: Arctic link

When we talk about the Arctic World, we think of snow and polar bears. Not of the Indian monsoon, certainly. But, interestingly , there may be a closer connection between the two. While the Arctic sea-ice melts due to accelerated warming in this region, it may have an impact on India's annual monsoons , affecting the agricultural output and, thus, the economy.

Louis Fortier, scientific director, Arctic Net, points out that while there is no scientific proof, we know that a warming of the Arctic tends to slow down the jet stream, which is a narrow current of fast-flowing air in the upper levels of the atmosphere (7-12 km above the Earth's surface) that meanders as it flows from West to East and is an important factor in defining the major air masses that influence weather systems. "Specialists fear that this slowing down may result in periods of rainfall or drought that would last for much longer than normal," he says.

While Canada is building new research infrastructure in the Arctic region, due in 2017, the country is looking for partnership in research areas with India. Though specific technical areas are yet to be defined, potential fields are likely to include glaciology, microbiology in the Arctic Ocean, and everything related to climate change.

According to David J Scott, executive director, Canadian Polar Commission, a more complete understanding of how citizens around the world will be impacted by the changes requires more detailed information about the observed changes in the polar regions, as well as improvements to the computational models of the global climate systems that will allow experts to better predict the regional consequences of the changes that are occurring.

The Arctic scientific community in Canada is small relative to the four million square kilometres that is Canada's Arctic, and it needs additional expertise from other countries as well as young scholars from India, who can work in a range of projects, says Fortier, adding that scopes are in areas like climate modelling and ecosystem modelling. To be able to work in these areas, one needs to be strong in mathematics , with good computer skills and a science background.

With the Arctic environment being affected by events taking place far outside the Arctic, but having a significant impact on the region's unique and fragile environment, Canada is pursuing action internationally in terms of promoting an ecosystem-based management approach with its Arctic neighbours and others; contributing to and supporting international efforts to address issues of climate change in the Arctic and strengthening Arctic science, among others.

http://articles.timesofindia.indiatimes.com/2013-04-01/news/38188608_1_arctic-council-arctic-ocean-canadian-arctic

National

Bihar opposed to Centre's water policy

Water resources department minister Vijay Kumar Choudhary on Friday informed the state assembly about the harmful implications of the Centre's move to control the water resources of the state through its National Water Law Framework (NWLF) that is under preparation as part of the already adopted National Water Policy (NWP), 2012. He said NWLF would adversely impact the per capita availability of water per year in the state.

Choudhary said a grim scenario has been developing in the state, as the availability of surface and underground water had started bordering around the "water scarcity" category. An area is categorized as "water scarcity" zone if its per capita availability of water per year is less than 1,000 cubic metre per person, he added.

The purpose of NWLF is to vest the Centre with power to "control" water resources of Bihar and other states for "equity" in implementation of schemes and for "distribution" of water resources as it deems suitable, even as water falls exclusively in the state list as per the provisions of the Constitution, he added.

"The state government is strongly opposed both to the policy prescriptions in NWP-2012 and to devising of the NWLF because the Centre's move not only amounts to interference with the rights of Bihar to control its water resources, but also militates against the federal structure with regard to state's ownership of water resources as well as with its right to free use and distribution," Choudhary said.

He said this while giving the government's reply to the House debate on his department's budgetary demand worth Rs 3,319 crore for 2013-14. Though a cut motion had been moved by Independent MLA Jyoti Rashmi. the House passed the budget by voice vote.

According to Choudhary, Bihar is faced with fast depletion of water resources. The per capita availability of water per person per year in Bihar was 1,200 cubic metre against the national average of 1,545 cubic metre in 2011. An area is categorized as "water stressed" if the per capita per year availability of water is in the range of 1,700-1,000 cubic metres, Choudhary added.

http://articles.timesofindia.indiatimes.com/2013-03-02/patna/37389380_1_water-resources-water-scarcity-capita-availability

Israel to assist Rajasthan in water management

Jaipur: Israel has agreed to share technological know-hows with Rajasthan in fields of agriculture and water management.

Israeli Ambassador Alon Ushpiz met Chief Minister Ashok Gehlot on Thursday to discuss ways to enhance tie-ups and collaboration.

The Ambassador of Israel to India, who was on a two-day visit here, also laid the foundation stone for an Indo-Israel Centre of Excellence (CoE) for Pomegranates along with the state Agriculture minister Harjiram Burdak in Bassi town near here.

He informed that three Indo-Israel CoEs are in various stages of development in Rajasthan for transfer and adaptation of Israeli technologies and know-how to farmers in the state.

In addition to Bassi, a centre dedicated for citrus is in the works in Kota and in Jaislamer.

“Israeli experts are working together with local counterparts on prototypes of palm trees, in an aim to develop a date growing industry in the state.

In addition to these Government initiatives, a private sector venture of Israeli olive plantations has started to bear fruit in various sites across the state,” a release said.

http://daily.bhaskar.com/article/RAJ-JPR-israel-to-assist-rajasthan-in-water-management-4201327-NOR.html

Global

News Analyses

Dam construction raising regional tensions

In Asia, Africa and the Middle East, nations are aggressively building new hydroelectric dams, seemingly heedless of the potentially disastrous effects on the countries downstream.

As examples, Laos broke ground on a new Mekong River dam that’s causing concern bordering on fury in Cambodia and Vietnam. India is enraged about a new Chinese dam going up on the Brahmaputra River. And Ethiopia’s new dam on the Nile is angering Sudan, while Egypt has threatened war.

What’s behind all this consternation — and worse? The concerns are multifaceted. In a broad sense, though, the rivers have provided sustenance for millions of people for millennia, and dams threaten that. Because of this, in some places multinational commissions were set up decades ago to arbitrate disputes like these. One is the Mekong River Commission, which pledges to “place regional cooperation and basin-wide planning at the heart of our operation.” Well, that’s not working.

The larger problem is, as climate change advances and growing populations demand more water and power, many upstream nations are ignoring their responsibilities to their downstream neighbors — and the guidelines of commissions they helped establish.

Perhaps the most egregious example is Laos, which broke ground on a new hydroelectric dam on the Mekong late last year — ignoring the howls of complaint from downstream. Just south in Cambodia, for example, the Mekong provides the livelihood for much of the population because of an unusual natural phenomenon.

Cambodia's Tonle Sap River is a Mekong tributary that flows southeast from a lake of the same name. Each spring, the Mekong swells, and its current grows so strong that it forces the Tonle Sap River to reverse course, carrying tons of rich, fertile mud and millions of young fish back up to the lake. The lake floods, depositing new, rich soil on thousands of acres around its perimeter. The fish provide meals for Cambodians through the year. By potentially restricting the river's flow, the Laotian dam threatens all of that.

But it gets even worse. Breaking ground, Laotian officials said they hoped the new dam would help vault their nation from its status as one of the world's poorest. Many Lao have never even seen a light bulb. But in fact, a short time later the government signed a contract to sell most, if not all, of the electricity to Thailand. And Laos' unaccountable, corrupt leaders will almost certainly pocket the proceeds.

Still, Laos is subject to a perverse form of dam justice. Now, all of a sudden, those same leaders are quite angry about still another dam China is building on the Mekong just north of the Laotian border.

Just recently, China made public its plans to build more than 60 new hydroelectric dams in the next few years, potentially setting off multiple disputes. One is already under construction on the Yarlung Tsangpo River, which originates in Tibet and flows south to Bangladesh and India, where it's called the Brahmaputra.

China's dam "will prove disastrous to the downstream regions of the northeast," declared Rajnath Singh, a prominent Indian politician. But China is unrepentant.

In the Middle East, Egypt has asserted full control over the Nile River since 1929, when the British colonial government prepared a "treaty" reserving 80 percent of the Nile's water for Egypt and Sudan. Ever since, Egypt has insisted that the treaty's provisions are still relevant and threatened to attack neighbors who dared breach it. After all, for all of time Egyptians have lived off the river, catching fish and using river silt as crop nutrients.

Right now, however, Egypt is locked in foment over the Muslim Brotherhood's faltering attempts at governance, and its upstream neighbors don't seem to fear it any longer. So Ethiopia is now building what it calls the Grand Renaissance Dam, a $4.8 billion hydroelectric behemoth.

Ethiopia plans to create a vast reservoir behind the dam to assure a constant flow of water. But hydrologists say it could take five years to fill, "drastically affecting agriculture, electricity and water supply downstream," Haydar Yousif, a Sudanese hydrologist, told Middle East Magazine last month. What's more, he added, 3 billion cubic meters of water will evaporate from the dam's reservoir each year.

Late last year, WikiLeaks made public a memo in which the Egyptian government threatened to deploy fighter-bombers to destroy Ethiopia's dam. The government protested that the memo was written in 2010, before the revolution, and was not relevant now.

But if the Nile begins drying up because of that dastardly dam, Egypt may change its mind.

% http://staugustine.com/opinions/2013-03-08/joel-brinkley-dam-construction-raising-regional-tensions#.UTtC_9bwmz4

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News Articles

China's new strategy to develop relations with Africa: dam construction

Even though relations between China and Africa date back more than 2,000 years, a visit by Ibn Battuta, known as one of the greatest travelers of all time, in the 14th century is considered the start of relations.

Battuta was followed to Africa by an expedition by a Chinese fleet admiral and diplomat, Zheng He. He voyaged to Africa during the period of the Ming dynasty, which ruled China for 276 years from 1368 to 1644.

China first established modern diplomatic relations in Africa once Mao Zedong came to power. This was with Egypt in 1956, which can be considered a diplomatic maneuver of Egyptian leader Gamal Abdel Nasser who was anti-West. Egypt nationalized the Suez Canal due to a lack of Western support for the Aswan High Dam and in return encountered a conspiracy devised by France and the UK that led to an Israeli attack on Egypt. Having problems in its relations with the West, Egypt established diplomatic relations with China, which was not yet recognized by "free world" governments. Egypt and the People's Republic of China (PRC) signed an agreement in which China gave 20 million Swiss francs as a financial grant to Egypt for the rehabilitation of the Suez Canal and engaged in cotton trade with Egypt to break an embargo by Western countries.

Sinohydro, established as a public company in 1950, is the top Chinese construction company and one of the biggest construction companies in the world.

The overseas activities of Chinese companies aren't just concentrated in Southeast Asia, but also in Africa. In 2012, Chinese companies took part in construction of 308 dams and hydroelectric plants in 70 countries in the world, with 85 dams constructed in Africa. Western public opinion has certain doubts concerning dams constructed by China due to its companies' low levels of social and environmental concerns. Dam projects that carry high environmental and social risks for Western companies do not present any obstacles to Chinese companies, and the countries in which these companies construct dams are alleged to have records of corruption. Thus, it seems as though Western companies look like they act with environmental, social and political concerns while Chinese companies are more amoral. But the reality is slightly different. Recent history is full of bribery scandals involving Western companies. The most recent example was revealed after a Norwegian company admitted they bribed Uganda's energy minister during the construction of the Bujagali Hydroelectric Power Station in Uganda. In addition, it is also known that people who were displaced due to the construction did not receive sufficient compensation.

The Merowe Dam on the Nile River in Sudan, one of the biggest hydroelectric projects in Africa, and the Gibe III Dam in Ethiopia are the top dams built by China in Africa. Merowe doubled energy generation in Sudan but caused major social problems. During the 1990s, Sudanese authorities tried to find support for the project from Canada and European countries but failed. Arab capital and Eximbank provided financing for the project — 240 million euros of the project — of which the total cost was 1.2 billion euros, was financed by China, and it became the biggest foreign investment finance fund of China during that period.

The Chinese Industrial and Commercial Bank of China (ICBC) financed the controversial Gibe III dam to a large extent. During the dam's financing process, the World Bank refused to provide financial support on the grounds that the required social and environmental impact assessments had not been carried out and that the extent of damage that could be done to lower riparian Kenya was ambiguous. Thus, China and the state bank provided a loan of $500 million.

Some of the important projects in Africa in which Chinese banks and companies have taken part are the Felou Hydroelectric Power Plant in Mali on the Senegal River by Sinohydro, the Bui Dam in Ghana on the Black Volta River and the Mekin Hydroelectric Power Plant Project in Cameroon by Sinohydro and Eximbank.

Sinohydro, which is the world's largest Chinese hydropower company operating abroad, adopted a policy on environmental and social impacts in 2011 and announced that World Bank standards would constitute minimum standards. However, the main problem concerns the implementation of this kind of regulation. The low-level environmental standards of the countries in which investments are made and the problems encountered in the implementation of current regulations increasingly lead African countries towards Chinese investments. The fact that Western companies are increasingly under the pressure of environmentalist groups keeps them from taking part in this type of controversial project. The result? Chinese companies do not have any more obstacles before them. Besides this, the rising interdependence between African countries and China also increases these kinds of investment opportunities. Rising interdependence and closer ties makes it possible for China to become influential across almost the whole African continent. The reaction of the "free world" to the rising Chinese influence will determine the future of the African continent.

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http://www.todayszaman.com/news-309257-chinas-new-strategy-to-develop-relations-with-africa-dam-construction.html

About 60,000 could lose homes for controversial China dams

BEIJING (Reuters) - China expects 60,000 people to lose their homes in the remote southwest if a series of four dams along the country's last free-flowing river gets the go-ahead, a local official said on Thursday in the first government estimate for relocations.

Outgoing Premier Wen Jiabao, a geologist by trade and populist by instinct, vetoed the dams in Yunnan province on the UNESCO-protected Nu River, known outside China as the Salween, in 2005, after an outcry from environmentalists.

But in late January, the government unexpectedly announced that dam building would resume, with the Nu River high on the list for development.

Qin Guangrong, Yunnan's Communist Party chief, told reporters on the sidelines of China's annual meeting of parliament that work had not yet begun.

But Li Siming, head of the prefecture along the Myanmar border where the dams would be built, said the prefecture had already begun looking at how to relocate people.

“The initial estimate is that 60,000 people will have to be relocated,” Li told Reuters. Most are from the ethnic Lisu minority.

“We’ve not yet got to the stage of working out where they will be relocated to. There are no details yet on whether the projects will even happen,” he added. “There are limited amounts of land.”

China relocated 1.3 million people during the 17 years it took to complete the massive, $59 billion Three Gorges Dam, built in a much more heavily populated area in central China.

Li, an ethnic Lisu himself, said the environmental impact assessment had not been completed and he did not know when construction might start.

“The whole process, from the central government to the provincial government to the prefectural government, will be open to the public - it’s part of the policy of ‘letting the light shine on the government’,” he said.

Environmentalists have long complained about the lack of transparency about the dam project.

“The problem is that for a matter that has provoked concern from the international community, they have never held a hearing before,” Wang Yongchen, an environmentalist who has long campaigned for the Nu River, told Reuters recently.

Li said that most residents supported the dam project, but added that “a minority” did not.

“If we see that development of hydropower resources on the Nu River will not benefit the local people, then we will not do it,” he said.

Li sounded uncertain, however, when asked if he personally supported the project.

“I grew up along the Nu River. How to protect it, how to develop it, how to use it, I have my own opinions on that,” he said. “I’m a local boy: we’ve always relied on the land, and the water.

“As head of the prefecture, I’m always thinking about how to protect the land but also how to use it. This is always on my mind... It’s not about whether I personally support it or not.”

(Reporting by Ben Blanchard; Editing by Nick Macfie)

http://www.reuters.com/article/2013/03/07/us-china-parliament-dam-idUSBRE92608M20130307?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=f015ed3849-RSS_EMAIL_CAMPAIGN&utm_medium=email

Feeding the Middle East

This week's *Economist* contains an alarming account of the big decline in the waters in and below the Tigris and Euphrates rivers. These flow from eastern Turkey to the Gulf and form part of the so-called "fertile crescent", the birthplace of agriculture. See here. The data, collected by NASA satellites and available here, suggests that the Tigris-Euphrates is experiencing the second fastest rate of water depletion in the world, after northern India.

That is obviously disturbing in its own right and, as the article points out, will put considerable pressure on the existing (minimal) system of water management in the basin. But it is also a sign of another, potentially more explosive problem: the increasing difficulty of feeding the Middle East.

Middle Easterners eat more wheat than anyone else in the world. Egyptians and Syrians eat over 150 kilogrammes a year; Tunisians over 200kg. That compares with 100kg in Britain and France and 90kg in America.

Some of this wheat is grown in the region – mainly along rivers like the Tigris, Euphrates and Nile. The Middle East is arid; its farmers depend almost entirely on the fertile rivers and underground aquifers. If these sources run dry, that will have significant implications for the rest of the world.

Over the past 45 years, the Middle East's huge demand for wheat has been met increasingly by imports. In 1965, the Middle east and Africa were importing only small amounts of food. By 2010, according to Cargill, a big firm of grain traders, they were importing over 150m tonnes, the largest amount in the world. See here.

If the water table of the fertile crescent sinks further and there is less water in the life-giving rivers, Arab demand for wheat from food exporters in the rest of the world will grow considerably – and that demand is hard enough to meet even now.

http://www.economist.com/blogs/feastandfamine/2013/03/feeding-middle-east

Water challenges increasing for countries in Middle East

And yet, despite massive population growth (the Middle East's population grew 61% from 1990 to 2010 to 205mn people)* predictions of so-called "water wars" have failed to materialise.

So how has a region that water experts say ceased to have enough water for its strategic needs in 1970 proved so resilient to water scarcity?

"Trade is the first means of being resilient; it's the process that enables an economy to be resilient. The ability to trade effectively depends on the strength and diversity of the economy," Anthony Allan from King's College London and the School of Oriental and African Studies told IRIN.

That does not literally mean that countries import water directly; it is rather that because so much water is used, not for drinking, but for agriculture (around 90%), by importing food staples like wheat you are in effect importing water, something Allan calls "virtual water".

As a result, the region's growing population imports around a third of its food - a figure that shoots up in the Gulf states where arable land is negligible.

A recent study of Nasa satellite data published found that parts of Turkey, Syria, Iraq and Iran along the Tigris and Euphrates river basins had lost 144 cubic kilometres of water from 2003 to 2009 - roughly equivalent to the volume of the Dead Sea.

An analysis of the data published in the *Water Resources Research* journal attributes about 60% of the loss to the pumping of groundwater from underground reservoirs - reserves people fall back on when rivers dry up.

Underground reserves can only last so long, and importing ever increasing amounts of food to feed a growing population is not an option for poorer countries.

With scientist predicting an increase in extreme weather events, adaptability has become increasingly important. It is also true that there remains a degree of unpredictability in the system, particularly in Egypt where it is not clear if future rainfall will increase or decrease.

Resilience is about being strong in the face of whatever happens. And in any situation, strong water systems make the most of what they have - including through treating and reusing waste water like at the Al Gabal Asfar water treatment plant in Egypt.

One old technique is rainwater harvesting. "In Jordan there are indications of early water harvesting structures believed to have been constructed over 9,000 years ago," Rida al-Adamat, director of the Water, Environment and Arid Regions Research Centre at Jordan's al-Bayt University, told IRIN.

A key aspect of efficient water use is data collection - important for sound water management at the country level.

"As the saying goes: what you cannot measure you cannot manage," Heba Yaken, water and sanitation operation analyst at the World Bank office in Cairo, told IRIN. "It is important to know how much you are consuming in order to manage it in a good way."

Jordan, which some say has one of the most monitored water scarcity situations in the world, has gained widespread recognition for its data collection.

"Jordan's data is relatively well organised, especially when it comes to agriculture. The volume of water consumption is precisely known in every area. They have installed measuring tools in every area so they know what kinds of crops are being cultivated and the amount of water they consume," Hiba Hariri from the Arab Water Council told IRIN.

Data-sharing in the region is limited, according to Yaken. "Countries are not as transparent as they should be," she said.

While trade provides substitutes for much agricultural water use, the remaining 10% of water needs are increasingly being met by desalination, half of which globally is carried out in the Middle East.

Recent years have seen a large increase in desalination, clearly useful in a region without any landlocked countries, but it is an energy-intensive phenomenon almost entirely powered by fossil fuel power, which raises other environmental concerns.

Saudi Arabia uses 1.5mn barrels of oil a day to power its desalination plants, although it is looking to develop solar-powered plants.

Solar is a largely unexplored option for desalination, but also for increasing the efficiency of water systems, through technologies like solar-powered water pumps.

But although desalination may become an increasingly affordable, and renewable, solution, water experts say it can only be used as part of wider reforms.

A more resilient water system will also need adaptions on the demand side, including more efficient consumption of water, as well as co-operation between countries on the sustainable use of current resources.

“The problem is that we have short-term plans that change with the change of personnel or ministers,” said Hariri from the Arab Water Council.

As climate change and population growth increase pressure on water systems, the Mena region will need to be increasingly efficient in its use of water - and may have lessons for other parts of the world.

http://www.gulf-times.com/opinion/189/details/345046/water-challenges-increasing-for-countries-in-middle-east

National

News Analyses

Is India ill-prepared to deal with consequences of Food Security Bill?

Despite being the world's second-largest producer of agricultural goods, including rice and wheat, India has long been the sleeping giant of global agriculture.India tends to curb exports to safeguard domestic supplies.

That has changed. India has overtaken Thailand to become the world's biggest rice exporter, with shipments accounting for 25 percent of global exports. Wheat exports also have risen sharply, with India's share reaching 5 percent. The country also has overtaken Brazil to become the world's biggest exporter of buffalo, capturing 24 percent of the global beef market.

India's newfound position as a leading food exporter will be short-lived, however. Government policies that prioritize the production of rice and wheat, along with a new right-to-food law that's now before the parliament, will not increase food security. Instead such policies will drive food inflation, accelerate India's transformation into a net grain importer and increase its dependency on global markets for non-cereal foods. India will be forced into the global food marketplace, and not on its own terms.

The main driver of India's unusually large grain exports last year, and of its coming shift to being a major food importer, is the government's food-procurement and food-distribution system, set up to provide subsidized rice and wheat to the poor.

In reality the system leads to a series of dysfunctional outcomes, including food inflation, overproduction of rice and wheat relative to non-cereal commodities, accumulation of excess grain stocks and rapid erosion of the country's agricultural productive capacity.

Seeking to shore up its popularity, the government has rapidly increased the Minimum Support Prices(MSPs) of rice and wheat in recent years. The result: MSPs tend to exceed market prices during the procurement season. Selling to the government is the first, rather than the last, resort for farmers.

The government's commitment to open-ended purchases of wheat and rice at ever-higher MSPs has led to a cycle of ever-increasing procurement.High levels of procurement have resulted in rapid accumulation of grain stocks - now 66 million tons, more than double the required buffer.

The level of stocks far exceeds the government's storage capacity and results in significant waste. The government has estimated preventable post-harvest losses of food grain at about 20 million tons per year, equivalent to 10 percent of total production. Faced with excess stocks and need to make room for the next harvest, the government is forced to resort to exports.

Those exports, and the entire cycle of events making them necessary, are unsustainable. India's breadbasket states are reaching the limits of their productive capacity. The overproduction of grains due to ever-rising MSPs has rapidly depleted underground aquifers and sharply reduced soil fertility.

With the government concentrating procurement activities and agricultural investment in terms of capital, fertilizers and infrastructure in northern and western states, in the country's eastern states, primarily rain-fed, productivity has stagnated despite attempts to raise yields. The government will have no alternative but to increasingly depend on international markets when output in the major grain-producing states starts to lag demand.

Perversely, the government's planned National Food Security Bill will only accelerate this process. The bill creates a right to food for two-thirds of India's 1.2 billion people and requires the government to distribute heavily subsidized food grain on a massive scale.

Almost 40 percent of the grain in the public system, which distributed 24 million tons of wheat and 32 million tons of rice in 2011-2012, does not reach intended recipients and is diverted to open markets.

The end result of these policies will be India's forced integration into global agricultural markets, not only as a grain importer, but also as a leading buyer of non-cereal commodities. This will benefit grain exporters in the Americas, pulse producers such as Australia, Canada and Myanmar, and palm-oil exporters in Indonesia and Malaysia.

Indians will lose out. Food inflation, primarily driven by protein-rich foods such as pulses, dairy, meat and eggs, in addition to post-harvest shortages of grains in the open market, will continue to weigh on incomes. Price volatility will increase as the country's import dependency increases its exposure to the vicissitudes of global markets.

The sleeping giant of global agriculture may be waking to a nightmare..

http://articles.economictimes.indiatimes.com/2013-04-05/news/38306859_1_wheat-exports-central-pool-biggest-rice-exporter

News Articles

National Food Security Bill to lead to massive PDS reforms, says KV Thomas

KOLKATA: India aims to provide food security to 75% of the rural and 50% of the urban population along with a special focus on nutritional needs of children, pregnant and lactating women, the National Food Security Bill will lead to massive PDS reforms including doorstep delivery of food grains, end-to-end computerisation, leveraging "aadhaar", etc.

According to the other speakers small land holdings, poor marketing infrastructure and late introduction of technology were the main roadblocks, which according to them were not allowing farmers to grow economically. The speakers supported more effective public private partnership to address the current challenges and scale operations in agriculture

http://articles.economictimes.indiatimes.com/2013-04-03/news/38248410_1_food-grains-national-food-security-bill-doorstep-delivery

Chidambaram flags cash transfer, food security as major achievements

NEW DELHI: Finance minister P Chidambaram said 'direct benefits transfer' and food security were strong achievements of the government that could be good election issues.

When asked about the features of the budget that could be electoral issues, Chidambaram said direct benefits transfer — that would give citizens easy access to government scholarships and pensions without any interface with officials that resulted in bribes — was a positive move.

Chidambaram added that forthcoming food security law would have a strong appeal with the voters. The budget has made a "small" allocation of Rs 10,000 crore for the food law but the minister assured party MPs that funds will not be a constraint in implementing the ambitious scheme.

He also ruled out any rollback of the proposal to introduce a law which will empower officials to arrest service tax evaders even as some party MPs said there was a need for a relook.

Gujarat chief minister Narendra Modi's name cropped up during the discussion and MPs questioned some of his claims.

Chidambaram said that despite the economic slowdown, the government had not compromised on flagship welfare schemes.

http://articles.timesofindia.indiatimes.com/2013-03-09/india-business/37580673_1_food-security-p-chidambaram-direct-benefits-transfer

UPA exports wheat at Rs 1,700 crore loss to exchequer

NEW DELHI: At a time when the government is facing trouble maintaining its fiscal health and is set to add over Rs 1.25 lakh crore to its subsidy bill for providing food security to its poor, the UPA has burdened the exchequer further by exporting wheat at lower than its cost price â•" incurring an estimated loss of over Rs 1,700 crore.

The Cabinet had cleared export of wheat with subsidy, as the international prices were lower than the government's cost that includes procurement, storage and transportation.

In the first tranche, the Cabinet had allowed export of 45 lakh tonnes of wheat. In the second tranche, it has been earmarked at 55 lakh tonnes. Sources said the total subsidy burden on export of the first tranche of 45 lakh tonnes was more than Rs 1,300 crore. The loss has been minimized in the second tranche as the government has now decided to export by inviting tenders from private companies.

To lower the subsidy bill, the government later decided to allow private sector companies to export its wheat, picking the consignment directly from FCI godowns. This has, however, brought down the subsidy by nearly a thousand crore for almost a similar quantity of export.

Last year, the government spent Rs 85,000 crore on subsidy of foodgrains. This was just a shade lower than the subsidy government provides on oil and gas which was Rs 96,000 crore in 2012-13 as per the revised estimates.

http://articles.timesofindia.indiatimes.com/2013-03-25/india/38008807_1_lakh-tonnes-wheat-subsidy-bill

States to check food security bill execution

NEW DELHI: The proposed Food Security Act seeks a robust grievance redressal mechanism at the state level to ensure availability and distribution of food grains to every eligible citizen. It proposes to set up a food commission in every state for the monitoring and review of the implementation of the proposed Act.

According to the proposed Act, all state governments will have to set up an internal grievance redressal mechanism including call centres, help lines and nodal officers for effective resolution of grievances related to the distribution of food grains. "Appointment and salary will have to be taken care by state governments," said a senior food ministry official. The proposed Act also seeks to constitute a food commission in every state for the monitoring and review of the implementation of this Act.

"It would be a seven-member committee consisting of at least two women members and one each from the scheduled tribe and schedule cast categories. It may empower the weaker section of the society," he said.

Apart from monitoring, the commission would be empowered to give advice to the state government on effective implementation and hear appeals against orders of the District Grievance Redressal officer.

"Two or more states may have a joint state food commission with the approval of the central government. This will keep a check on the state government's distribution machinery," he said.

If enacted, the Bill will need Rs 1.30 lakh crore for the implementation across the country. The government has budgeted Rs 90,000 crore to meet food subsidy besides allocating additional Rs 10,000 crore for theFood Security Bill.

http://articles.economictimes.indiatimes.com/2013-03-25/news/38010384_1_food-security-bill-food-subsidy-grievance-redressal-mechanism

Global

News Analyses

Brics and Africa: a winning partnership against hunger? (Analysis)

The Brics summit in South Africa that began in Durban this week is the fifth time that the unlikely club of Brazil, Russia, India, China and South Africa have met to discuss international development – completing the first cycle of these meetings. The agenda under the banner 'Brics and Africa – Partnership for Development, Integration and Industrialisation', includes the creation of a Brics Development Bank, the international monetary and financial system, opportunities for business and scientific collaboration, and south-south cooperation, particularly in Africa.

The questions of how Africa can feed itself, and how the agricultural sector can be a more effective engine for growth and development, have long been a target of international development efforts from western donors, and regained momentum following the 2007/08 food price crisis. But the emergence of the Brics as major players has raised hopes that innovative agricultural models and experiments from Brazil or China can be transferred or adapted to African countries. New development practices, as well as new partnerships, are on the scene.

It is tempting to talk of a revolution in international development: from north-south assistance to south-south co-operation. True, the Brics make a diverse group: each has its own particular political journey, socio-economic profile, regional dynamics, and cultural identities. Yet they seem united, albeit not yet fully coherently, in an insurgency against the international establishment. With the gradual demise of the 'Global North', the Brics appear increasingly confident to challenge the market-led economic paradigm, and push forward forms of capitalism led by the state. By 2020 the Brics will, combined, account for nearly half of global GDP growth. There is little doubt that they are well-placed to change the global, and local, dynamics of international development assistance.

Are we, then, on the verge of a global revolution? What will be the impact on poverty and hunger in Africa? Answering these questions requires looking in more detail at what the Brics are actually delivering on the ground.

One example of so-called south-south development co-operation is Brazil's efforts to support agricultural development and food security in Africa. Brazil, a world-leading trader of a range of agricultural commodities (including beef, poultry, ethanol and soybean), has become known as a model of agricultural development. This model is characterised by strong state support, high levels of mechanisation and strong vertical integrationof industry and exports.

But the country home to the 'miracle of the Cerrado', a region previously thought to be unproductive, is also home to a complex and often turbulent agricultural history. Beyond the better-known image of the Cerrado's expansive and highly-mechanised soya and maize fields, there are other stories: family farms that produce the bulk of Brazil's basic foodstuffs (including 87% of cassava and 70% of beans); landless farmers and minority communities struggling for land rights; agro-ecological alternatives to transgenic crops; the advancement of the agricultural frontier into Amazonia; and interactions and confrontations between government and society, which at times have opened up space for reform.

Those acquainted with the diversity of Brazil's agricultural development within its territory may feel excited by the prospect of a Brazil-Africa dialogue for agricultural development and food security. But much of what has developed so far through the diplomacy-mediated channel of south-south co-operation does little justice to the country's wealth of (positive and less positive) agricultural experiments, as recent studies suggest.

How is Brazil interacting with African agriculture? So far, primarily through the transfer of research and technology, weighted towards a particular model of development focused on high-value export crops – such as cotton in Sudan and soya in Mozambique – and linked to global value chains. Meanwhile, Brazilian large farmers and agro-industrial corporations have been flirting with the prospect of accessing cheap land in the African savannahs for agribusiness development. A private fund has already been established to attract capital from Brazil and Japan for large-scale investments in soya and other cash crops in the Nacala corridor in northern Mozambique, a region with similar geographical features to the Brazilian Cerrado.

Yes, Brazil also has a strong narrative of family farming and food security, which, at the international level, is being discussed at the UN organisations in Rome, where Brazil presents itself as a southern alternative. At the level of co-operation with developing countries, however, this narrative is taking longer to filter through.

What is holding back the Brazilian ministry of agrarian development's (MDA) promised support to Zimbabwean and Ghanaian smallholder farmers? And what version of Brazil's nuanced family sector will be carried forward by the MDA? As the Brazilian academic Arilson Favareto remarked at a recent conference on politics and African agricultural development, Brazil's family farming sector includes not only modernised and state-supported small farmers, but also poorer farmers who remain at the margins of Brazil's current public policy framework. Which of these categories would be the most relevant benchmark for Africa's average smallholder and severely resource constrained farmer?

Besides the MDA, there are other actors too. Brazil's rural social movements have already started exchanging traditional seed management practices with peasant farmers in Mozambique and South Africa. Yet, to date, the use of such alternative perspectives in development co-operation remains an isolated case.

Is the hype, then, justified? There is no doubt that the Brics could offer alternative development solutions to help Africa feed itself. With the support they offer, the Brics are also expanding African governments' room for manoeuvre in negotiating the terms of co-operation partnerships.

The question remains, however, whether those in power will opt for the recipes most suited to the needs of the many. So far, it seems that, for the many, the Brics remain little more than an image of a promised revolution.

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http://www.guardian.co.uk/global-development-professionals-network/transforming-institutions-hub

News Articles

Africa seeks Indian help in food processing, farming

NEW DELHI, Indian investments and know how are crucially important for boosting farm sector growth and ensuring food sufficiency in Africa region, senior ministers of several African countries said on Monday.

Mozambique's minister of agriculture Jose Pacheco said a huge arable land in African countries was left unutilized due to lack of financing and skill.

Giving an example of his own country, Pacheco said only 15 percent of the 36 million hectares of arable land in Mozambique were utilized for farming.

"We need technical support and also finance. India has both and we request Indian entrepreneurs and firms to come and help us," said Cameroon's minister of agriculture and rural development Essimi Menye.

Malima urged Indian entrepreneurs to invest in Tanzania through joint ventures and partnership with local firms.

Duncan said Ivorian government was taking key steps to enhance the country's peace and security, national reconciliation and economic recovery, creating a highly favourable destination for global investors, especially from India.

http://articles.timesofindia.indiatimes.com/2013-03-18/india-business/37813983_1_indian-entrepreneurs-african-countries-india-africa-project-partnership

Doha trade talks critical to stop food price spikes, says WTO hopeful

The World Trade Organisation's Doha round of trade talks can help to prevent a recurrence of severe food crises, Mari Pangestu of Indonesia, a leading candidate for the post of WTO director general, said in an interview in London last week.

"The urgency has reduced" since the dramatic spike in food prices that hit developing countries in 2007 and 2008, says Pangestu, Indonesia's trade minister from 2004 to 2011, "but that doesn't mean you have addressed the fundamental distortions" that created the crisis.

Agriculture is one of the pillars of the Doha round, the WTO's wide-ranging free-trade negotiations that have been progressing in fits and starts since 2001. The agriculture talks, which aim to impose controls on sensitive topics such as farm subsidies and export restrictions, have proven to be one of the most controversial aspects of the negotiations. Disagreements over agriculture led to the collapse of a high-level effort to conclude the Doha round in Geneva in 2008.

But concluding the agriculture talks is critical to preventing future spikes in food prices, says Pangestu, who remembers waiting in line with her mother to pick up food rations during Indonesia's economic crisis in the 1960s.

Western farm subsidies have artificially depressed world food prices, triggering a decline in production and a fall in global food stocks, Pangestu says. Meanwhile, developing countries' panic-driven restrictions on food exports have exacerbated incipient food crises. New disciplines on both issues need to be negotiated at global level, she says.

But whether negotiators at the WTO will be able to agree on anything – agriculture or otherwise – remains an open question. The round is already more than 11 years old, and there is still no end in sight to the negotiations. Trade delegates are working to finalise a handful of issues, including some provisions on agriculture, in time for a high-level meeting in Bali at the end of this year.

After the first round of consultations, which begins on 2 April, the field of nine candidates will be narrowed to five. A second round will eliminate three further candidates, leaving two to vie for the top spot in the final round in May.

http://www.guardian.co.uk/global-development/2013/mar/25/doha-trade-talks-food-price-wto

Hamas urges UN to resume food distribution for Gaza people

Gaza City: The United Nations said it has suspended food distribution to about 25,000 Palestinian refugees in the Gaza Strip, after demonstrators angry at aid cuts stormed a UN depot.

Dozens of Gazans forced their way into the field office of the UN Relief and Works Agency (UNRWA) on Thursday, demanding reinstatement of a monthly cash allowance to poor families which was halted from April 1 due to UNRWA budget cuts. The protesters were removed by UN security when they tried to break into a building, staff said. "We fully understand the impact the decision to suspend cash assistance had on some of our beneficiaries," the agency said in a statement.

Meanwhile, Gaza's Hamas rulers urged the United Nations to reconsider its suspension of food aid for Palestinian refugees.

"We fully understand the impact of the decision to suspend cash assistance had on some of our beneficiaries," UNRWA said in a statement. "Demonstrations during the past week had already forced UNRWA to close many of its facilities," said the UN Palestinian refugee agency.

"With the situation further compounded by today's actions, all relief and distribution centres will consequently remain closed until guarantees are given by all relevant groups that UNRWA operations can continue unhindered.

"This is a very regrettable situation for us to be in, as food distributions right now are taking place for some 25,000 refugees every day. But we cannot tolerate these ongoing threats to our staff," it said.

Abu Zuhri said that UNRWA staff were in no danger, as Hamas security forces had been posted to ensure their safety and the smooth running of their operations. "We in Hamas and the government are preventing entry (of protesters) to UNRWA headquarters in Gaza," he said. "We are providing appropriate conditions for UNRWA's work."

http://post.jagran.com/Hamas-urges-UN-to-resume-food-distribution-for-Gaza-people-1365172345#sthash.QGLUBZ1F.dpuf

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