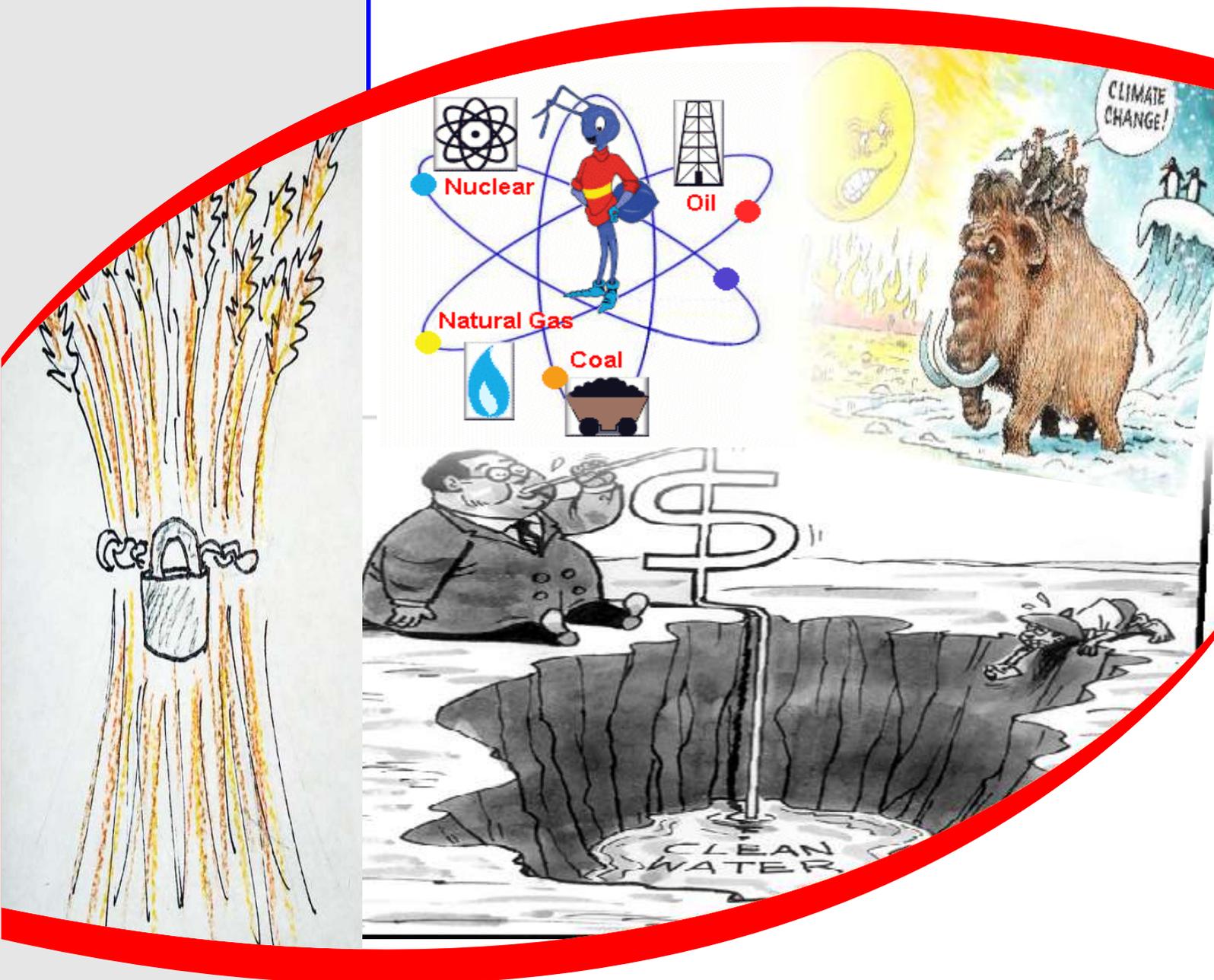


# NTS

# Newsletter

Non Traditional Security



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## EDITOR'S NOTE

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The agreement arrived at between Iran and the P5+1 group of countries in Geneva on November 24, 2013 on Iran's controversial nuclear programme, should, in essence, pave the way for a longer-term and more complete agreement in the next six months, and has correctly elicited optimism from the global oil market with oil prices dropping by \$3/barrel overnight. However, the euphoria did not last as the prices went up again within a few days. According to the agreement Iran cannot export more than one million barrels per day (mbd) – which though higher than Iran's current exports is still 60 percent less than the 2.5 mbd Iran was exporting in 2012. In other words, that is a loss of an additional \$4 billion per month.

Although India's reaction to the deal is positive, it remains to be seen whether it puts India-Iran energy relations back on track. The payment issue remains ticklish with Turkey's Halkbank stating that it will resume euro payments only after the sanctions are removed. On the other hand, Tehran, which has made no secret of its reluctance with rupee-based payments, has made it clear that bilateral trade can be enhanced if India introduced banking reforms, facilitating dollar/euro based trade. Second, the European Union is yet to take a decision on when to lift the ban on re-insurance which was the main impediment to oil shipments from Iran.

And finally, recently when Iranian oil minister Bijan Zanganeh invited oil companies to invest in Iran's energy sector after the sanctions are lifted, even promising better terms, the invitation was reserved for the western firms only. Asian companies, including Indian and Chinese ones, would have to wait their turn. Moreover, Iran has cancelled India's proposed investment in Farzad-B oil field.

Nevertheless, New Delhi is hopeful that things will improve and Iran will once again regain its position as one of India's top and favoured energy partners. Much will depend on India's decision on partnering the unfortunate Iran-Pakistan-India gas pipeline project and resolution of the payments imbroglio. The government is looking for ways to circumvent sanctions-based restrictions without inviting punitive actions from the US as well as reactions from Saudi Arabia.

This issue of the NTS Newsletter revolves around the recent Iran and P5+1 interim deal and its geopolitical impact on India.

**Shebonti Ray Dadwal**

## News Analyses

### National

#### How US-Iran N-deal will script India's oil story

Sixty-six Americans, 444 days of captivity, followed by a tale of animosity and mistrust for more than three decades. This was the summary of the bilateral relationship between the United States and Iran since the Iranian revolution of 1979 and the crisis in which revolutionaries stormed the US embassy in Tehran and took 66 hostages. Finally, burying the hatchet, the two long-standing enemies -Iran and US - struck a deal on Iran's nuclear programme raising new hopes for the world and its energy market last week.

International crude oil prices were the first to respond to the landmark deal between the two last Sunday, with Brent crude falling by 2 per cent on Sunday itself. "If the talks improve in the next four to six months, crude prices would come back to the \$100 per barrel mark. If you look at the quantity of crude oil produced, Iran may not be a major player. However, the geo-political scenario in West Asia always has a 5 per cent weightage in global crude prices, making things hopeful for the world," says a Mumbai-based analyst.

The agreement with Iran involved the US, UK, Russia, China, France and Germany, adding a feather to the cap of Iran's new moderate President Hassan Rouhani who replaced the hardliner Mahmoud Ahmadinejad. The deal tightens the noose on the nuclear capability of the West Asian power, while giving it relief from international sanctions.

Interestingly, this time the deal has the backing of Iran's supreme leader Ayatollah Khamenei, so it is likely to be sustained. Iran agreed to stop enriching uranium beyond 5 per cent, give more access to inspectors and stop the development of the Arak plutonium plant. The jewel in the deal for the sanction-hit country is economic relief worth \$7 billion in various sectors. The deal also lifts the freeze on Iran's accounts for oil payments across the world.

What does the deal mean for India? For India, which is staring at an expected under-recovery loss of Rs 1.4 lakh crore on sales of petroleum products like diesel, LPG and kerosene this year, the deal can lead to a fall in international prices. "The prices are going to come down because the Iran development will have a sentimental impact on crude oil prices, with oil supply increasing. A correction in oil prices will naturally bring down the import bill," says Debashish Mishra, senior director, Deloitte India.

According to estimates of the petroleum ministry, every one dollar decrease in crude oil prices would pull the government's oil subsidy bill down by Rs 4,000 crore. On the other hand, the deal will be a dampener for Petroleum Minister M Veerappa Moily's ambitious plan to save \$8.4 billion on the import of crude oil by importing 11 million tonne of crude on rupee terms.

Till February this year, India was routing 55 per cent of its payment for the National Iranian Oil Company through the Turkish Halk Bank and the rest through the Kolkata-based UCO Bank. But

the sanctions against Iran generated the idea of going in for 100 per cent rupee payment for the minimal imports that have taken place since then. Now, the country can go back to the earlier system, putting an end to the payment crisis.

Petroleum Secretary Vivek Rae says that the ministry is in a wait-and-watch mode. "As of now, we plan to import only 11 million tonnes from Iran as per the earlier contract. Once the problems are solved, we will have more oil and gas available in the market. If sanctions are lifted, we would be able to go back to the earlier import volumes of 21 MT," he says. India imported 18.5 MT of crude from Iran in 2010-11. This came down to 17.4 MT in 2011-12 and 14 MT in 2012-13.

The agreement will also make the Rs 2,000-crore Indian Energy Insurance Pool for covering refineries' risk in importing crude oil from Iran almost irrelevant. Earlier, Indian insurers depended on European companies to re-insure their risks. However, with sanctions being imposed on trade with Iran, these firms had refused to re-insure, necessitating an insurance pool. "This may not increase the imports immediately from that country but will ease out payment problems. Once there is clarity in the issue, we would increase imports," says P P Upadhyay, managing director, Mangalore Refinery & Petrochemicals Ltd. "We are anyways coming out with a Cabinet note in this regard, though the pool itself may become irrelevant now. There are also talks about giving just a state guarantee as re-insurance issues are sorted out," a senior petroleum ministry official told Business Standard.

The Mangalore-based subsidiary of Oil and Natural Gas Corporation and Essar Oil were planning to import 4 MT of Iran crude this financial year. A section of experts also believes that the move may revive hopes for the Iran-Pakistan-India (IPI) gas pipeline. "There is a good chance of the IPI pipeline project being revamped because a pipeline till Pakistan is already in place," says Subodh Kumar Jain, director, South Asia Gas Enterprise. However, Pakistan is not too keen on extending the project into India. The need for a pipeline with bigger width is seen as another hurdle in this project.

Meanwhile, an Indian delegation from the hydrocarbon and fertiliser sector is set to visit Tehran in the next couple of months to strengthen ties. This is expected to push plans like a long-term contract for annual supply of 5 MT of liquefied natural gas, development of the Farsi oil and gas blocks as well as of the Chabahar port and its related railway line. Iran already has stakes in Chennai Petroleum and Madras Fertilizer Company in India.

Through the sanctions imposed by US and the European Union on oil exports by Iran are to stay in place, these have been brought down from more than 2.5-3 million barrels per day to 1-1.5 million bpd. For Iran, this is a much-needed boost as its sales plummeted by 1.5 bpd, depriving Tehran of a revenue of about \$80 billion from oil sales in the last one year, according to US estimates. As of now, India is checking its balance sheet of gains and losses expected because of the deal.

The world is divided on the deal, with countries like Israel terming it a "historic mistake". For the time being, all eyes are on Rouhani and the world powers. And the question doing the rounds is: will the Iranian President be able to turn this opportunity into "his-story" of success along with Barack Obama rather than let it end up as just another piece of "history"?

[http://www.business-standard.com/article/companies/how-us-iran-n-deal-will-script-india-s-oil-story-113113000353\\_1.html](http://www.business-standard.com/article/companies/how-us-iran-n-deal-will-script-india-s-oil-story-113113000353_1.html)

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## The Iran-Pakistan-India gas pipe-dream

Proverbs be damned, let's count our chickens. It is very tempting to entertain hopes that the global deal with Iran will result in the revival of the Iran-Pakistan-India (IPI) gas pipeline project. Every news report in India about the deal with Iran mentions the sighting of the IPI on the horizon. Yet, it actually remains a mirage.

Of the two gas pipelines — the Iran-Pakistan-India (IPI) and the Turkmenistan-Afghanistan-Pakistan-India (TAPI) — it is the latter that looked more difficult. The two are not in race as there is room (and need) for both. From the Indian perspective, the IPI passes through one 'difficult' country — Pakistan — but TAPI via two, including Afghanistan. Yet, it is the TAPI that looks closer to reality.

The reason could be that TAPI is backed by the US to keep Iran out of the oil business. According to former Petroleum Minister Mani Shankar Aiyar, the US never pressured India to drop the IPI. Yet, New Delhi decided to back-pedal on the project as it saw a stumbling block in the Iran Libya Sanctions Act, though the law has never been invoked. Due to Iran's isolation, the IPI lost its appeal.

### Ground Realities

The geopolitics has changed, yet the IPI pipeline doesn't look like it's happening. The pipeline passes through more of Pakistan than does TAPI; it runs through the troubled province of Baluchistan. (Some Baluchs feel discriminated against by the Punjabi-dominated administration in Islamabad and are even demanding an independent state.) Pakistan alleges that India covertly supports Baluch insurgents, which New Delhi denies. In a recent chat, a former Indian diplomat that a Baluch insurgent leader once gave India a friendly advice to "keep away" from the pipeline project.

Pakistan's dilemma is that the Iranian section of the pipeline (over 900 km) is mostly complete, but no work has happened on the 780-km segment on its own soil. (Incidentally, Pakistan must pay Iran a \$3-million-a-day penalty if its part of the pipeline is not completed by the December 2014 deadline.)

Pakistan's problem is fundamentally financing the project though there are other issues as well. The recent nuclear deal with Iran might just make funding a wee bit easier, but other factors are in play. For example, Saudi Arabia is not happy about any Pakistan-Iran links. Riyadh has already expressed displeasure over the West's nuclear deal with Iran. Pakistan's Prime Minister Nawaz Sharif has close links to Saudi Arabia, where he spent eight years in exile. India would for sure want a guarantee against disruption of gas supplies, with penalties for stoppage. But Pakistan will find it difficult to vouchsafe this given the troubles it faces in Baluchistan.

On the other hand, things are not as muddled on the TAPI front. The pipeline's route falls in the Taliban strongholds in Afghanistan as also parts of Baluchistan. However, there are two counterweights. One, India enjoys goodwill in Afghanistan. India has built roads, schools and power transmission lines and even the Parliament building. "India's aid programme to Afghanistan is incredible," says G. Parthasarathy, a former High Commissioner to Pakistan.

“My Pakistani friends joke that when they go to Afghanistan they introduce themselves as Indians,” he says. Second, Pakistan has tacit equations with the Taliban.

Since Pakistan needs the TAPI gas as much as India, Islamabad may be able to prevail upon the Taliban to desist from playing the spoilsport.

<http://www.thehindubusinessline.com/economy/the-iran-pakistan-india-gas-pipedream/article5405591.ece>

## Global

### Beijing faces long haul in reaping benefits of oil and gas reform

Beijing is mulling sweeping policy reforms in the state-dominated oil and gas industry that could heighten competition through greater private sector participation, but analysts say the impact will only be felt in the long term as barriers abound. Execution of some of the reforms also hinges on further progress of oil and gas price liberalisation, they say. Refined oil prices are largely liberalised but that of natural gas is still at an early stage.

According to a reform plan drafted by the State Council’s Development Research Centre made public in October, Beijing wants to relax restrictions on the import of crude oil, refined oil products and natural gas, build crude oil spot and futures markets to trade mainland product-benchmarked prices, and establish independent oil and gas pipeline operators.

The plan, published the week before the third plenum of the Communist Party’s Central Committee, is the new leadership’s broad roadmap of long-term policy reform for the industry, which analysts say will take years to realise.

The National Energy Administration last week said it would “remove policy obstacles for private capital to participate in energy development” and provide a fair competitive environment.

In particular, it would simplify approval procedures for coal-fired power generation and power distribution projects, support private investment in oil and gas exploration and development and allow refineries to import crude oil subject to criteria that it has not yet specified.

It would also accelerate rule-making on the construction and operation of gas transport and storage infrastructure, the agency said, paving the way for establishing mandatory open third-party access to gas pipelines currently mostly built and owned by state energy giants.

“With the new government, more has been accomplished in [the past] six months than was accomplished in the previous decade,” said HSBC oil and gas analysts Thomas Hilboldt and Si Tingting in a research note. “We believe reform will continue over time and in small steps. But we do not foresee drastic measures challenging PetroChina, Sinopec, CNOOC and Sinochem’s market leadership.”

Currently, the import and export of oil and gas are predominantly conducted by five state-backed firms because of administrative barriers. They are PetroChina, China Petroleum & Chemical (Sinopec), China National Offshore Oil Corp, Sinochem and Zhuhai Zhenrong.

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China is projected to import about 285 million tonnes of crude oil this year, but the official import quotas for non-state firms are just 10 per cent of the volume.

The non-state volume has been rising at 15 per cent annually between 2002 and 2010 to meet the mainland's commitments to dismantle trade barriers as part of measures to enter the World Trade Organisation, but stopped growing since 2011.

Most of the import quotas of non-state firms were not used by these companies themselves but were sold to the state-backed oil and gas giants.

This is because most of the companies that got these quotas do not have refineries and are only allowed to sell their imported crude to PetroChina and Sinopec, which together account for more than 80 per cent of oil refining volume.

Under the state giants' stranglehold, refiners controlled by local governments and entrepreneurs have to import fuel oil - a semi-processed product - to feed their refineries, and suffered from low plant utilisation and profitability. They account for about 15 per cent of the national refining volume.

Industry regulator National Development and Reform Commission issued a circular in September requesting all refineries on the mainland to report on their assets, production, operating efficiency and environmental protection performances.

This is seen by industry executives as a precursor to a policy review. However, they do not expect Beijing to make it easier for private refiners to enter the industry.

Among the about 10 non-state applicants for import quotas this year, only three to five were expected to win some for next year, reported *China Oil, Gas & Petrochemicals*, a newsletter published by *Xinhua*, quoting industry portal *chem365.net* analyst Zhang Yonghao.

Of the firms tipped as likely winners, three are subsidiaries or joint-venture partners of Beijing-backed majors.

Small private refiners are expected to face tougher restrictions under reforms in the short term because of regulations other than crude import quotas and some are not expected to survive.

The National Energy Administration last week issued a draft policy on the barriers of entry for crude oil importers and refiners. It requires them to have at least 5 million tonnes of annual processing capacity, debt-asset ratio of not higher than 70 per cent, and meet other benchmarks for operating and environmental protection.

"This makes a lot of sense since Beijing has been trying to consolidate the refining sector by allowing big and financially strong refiners to scale up," said BNP Paribas head of Asia energy research Por Yong-liang.

Beijing is also looking to set up crude oil spot and futures markets based on Chinese benchmarks. This is aimed at creating so-called "China prices" for oil that would help bolster China's influence on global pricing dominated by benchmarks in Europe and the United States.

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Gordon Kwan, the head of regional oil and gas research at Nomura Securities, said having futures trading based on Chinese benchmarks was not meaningful unless the mainland had a deregulated energy market. “Otherwise, futures trading is prone to manipulation,” he said.

A more controversial reform, with potentially the most far-reaching impact on the industry, is a proposal to set up regional independent natural gas pipeline operators by hiving off existing pipeline assets from their owners. PetroChina owns the majority of the gas pipelines.

A new regulatory system is also proposed to prevent unfair trading and market manipulation.

Robert Blohm, the Beijing-based editor of *International Petroleum Economics Monthly* and who has been an adviser to Beijing, said such restructuring aimed to separate gas production, transport and marketing.

The goal is to have independent pipeline operators that would carry gas for many producers and traders, resulting in a competitive and efficient market.

This reform was mooted in 2008 as part of the draft energy law, which in addition to stipulating that energy prices be primarily set by market forces, had a clause requiring energy transmission firms to offer “fair and non-discriminatory” access to energy users and traders.

The latter would be executed by a “specialised regulator” tasked to protect consumer rights, with those failing to comply to be fined two to five times the economic losses suffered by injured parties, said the draft law put forward for public consultation in early 2008.

Blohm said the draft did not become law because changing state-stipulated energy pricing to market-based pricing was not a priority at the time amid overheating of the economy and the surge in international crude oil prices to nearly US\$150 a barrel.

PetroChina dominates all three segments of the gas sector. Heavily regulated prices much lower than regional prices have prevented it from making huge profits in recent years as hefty losses on imports offset gains on mainland-produced gas.

But Beijing in July kicked off a long-awaited reform on gas pricing, with a target to close most of the gap between domestic and overseas prices by 2015. That in turn implies significant price rises in the next few years that would benefit PetroChina.

Analysts said gas price liberalisation should come hand-in-hand with a dismantling of PetroChina’s dominance in pipeline transmission because it would not make economic sense for its rivals to build duplicating pipelines.

“Imagine if most highways are built by General Motors and if non-GM cars are charged higher tolls or not allowed to use the highways,” Blohm said, referring to the danger that PetroChina could use privileged information about its rivals and customers’ trading to undercut them on price, or refuse to carry their gas.

Currently, there is no regulation on third-party gas pipeline transport fees and mandatory open access of pipelines.

The alternative was to create a “firewall” between PetroChina’s gas pipeline transport and marketing operations in an attempt to create independence between the two, but which could be hard to implement, Blohm said.

Por said given PetroChina was listed and some of its pipeline assets had been partially sold to other firms, a state-engineered hive-off of its pipelines needed approval by its partners and public shareholders.

“The question is how the assets should be valued and who does the audit, [governments] never nationalise anything at a premium,” he said, referring to a possible scenario that gas assets from existing operators will first be bought by state-backed entities before they are privatised.

He noted that other nations in Asia also faced a similar situation, where gas pipelines were nearly all owned by state-backed firms.

“Over the years, there have been a lot of talks about separating the pipelines from the national oil and gas firms, but it never happened,” Por said.

The US gas industry took over 60 years to evolve into a structure with independent pipeline operators, through compulsory break-up of dominant and vertically integrated firms, he said.

Blohm said given the challenges to break PetroChina’s dominance, the reform might take a “bottom up” approach.

This is despite some market watchers’ belief that recent probes into alleged corruption by some top PetroChina officials could serve to wear down PetroChina’s resistance to reform.

Blohm pointed out that Guangdong a few years ago became the first province to have an “open access” regional gas pipeline network. It is owned by 30 players, including distributors and major users such as power plants. He said this model might be copied by other provincial networks and then interconnect with neighbouring networks and offer reciprocity on access by each other’s owners.

## News Articles

### National

#### India in the lowest quartile for energy security: WEF report

A report comparing the energy architecture of 124 countries has ranked India 98th in terms of providing energy security and access to its citizens.

Low electrification rates and high import dependence put India in the lowest quartile globally, the report released on Wednesday said.

The Planning Commission said in its 12th Plan document many states make do without even the minimum of six to eight hours of electricity supply. Some villages “connected” under the remote rural electrification programme, called the Rajiv Gandhi Grameen Vidyutikaran Yojana, have not been “energized” or supplied electricity.

China and India are the most import-dependent of all economies in the Brazil, Russia, India, China and South Africa, or BRICS, grouping, said the World Economic Forum’s *Global Energy Architecture Performance Index* report for 2014.

The report seeks to measure levels of energy intensity of income, energy sustainability, security of energy and access.

While India’s overall ranking was 69, China stood 85th among the 124 countries in building a strong and sustainable energy architecture.

“That said, China ranks in first place globally for the diversification of its import counterparts, up from its 4th place ranking in 2008. This underscores China’s success in establishing strategic partnerships with, and investing in, major oil and gas producers such as Iraq, Russia and more recently Canada,” the report said.

<http://www.livemint.com/Politics/Bf6jo85DidYuFuueRh6FkM/India-in-the-lowest-quartile-for-energy-security-WEF-report.html>

## **India to import 11 mt crude oil from Iran this fiscal**

NEW DELHI, NOV 27:

India would import 11 million tonnes of crude oil from Iran in the current fiscal, according to Petroleum Secretary, Vivek Rae.

“We were importing 21 mt of oil from Iran... If the sanctions get resolved, we can go back to 21 mt,” Rae told media persons on the sidelines of Energy Security Conference 2013 organised by CII in New Delhi.

### **Iran nuclear deal**

Talking about the benefits to India after the recent agreement between world powers and Iran on the Islamic nation’s nuclear programme, Rae said: “Iran is a great source of oil and gas. Once the problem being faced by Iran is solved, there would be more oil and gas available in the market and there would be liquidity and prices tend to soften. As an importing country, this would certainly benefit us. We welcome any decision in the world that enhances the supply of oil and gas.”

A delegation from India is going to Iran shortly to discuss several issues.

The Secretary further added that the sanctions will be worked out in the next six months and India will have to see how the policy regime changes. “And we will calibrate our decisions for next year based on that.”

## **Insurance fund**

Rae also said that if the issues get resolved, India may not need the insurance fund. The country is trying to put in place an insurance fund to cover crude oil shipments from Iran.

“We are not giving it (insurance fund) a pause. The inter-ministerial consultations are going on. After the consultations are over, then we will take a call,” Rae said.

## **Crude oil payment**

Currently, India is paying only 45 per cent of payments for crude oil in rupees. The payment mechanism is based on a MoU between India’s Finance Ministry and Iran.

“Right now, 45 per cent payment is made in rupee and 55 per cent is stuck. Because, we were hoping it to be in rupee, while Iranian Government is saying it should be in foreign exchange. We probably imported \$5 billion worth of crude oil from Iran. Of this, we may have to pay \$2-2.5 billion to the Iranian oil companies,” he said.

*<http://www.thehindubusinessline.com/industry-and-economy/india-to-import-11-mt-crude-oil-from-iran-this-fiscal/article5396850.ece>*

## **Private oil & gas companies may get nod to explore shale resources soon**

NEW DELHI: The oil ministry may soon move a Cabinet note allowing exploration of shale resources by private firms in blocks held by them, a move that comes at a time when it is also preparing the ground for launching the fifth round of bidding for coal bed methane blocks after a gap of more than three years.

The government also plans to extend, albeit with a few stringent conditions, the recently approved shale exploration policy which allows only state-run ONGC and Oil India to explore shale resources in their existing oil and gas blocks, officials said.

The ministry has proposed automatic extension of lease period in blocks held by private companies if they are interested in exploring shale oil and gas. But only such blocks will get extension where the lease will expire after two years, officials said.

Energy explorers have slammed this condition for extension. “If two years, why not two days? What is the purpose of the government? Is it to encourage exploration or restrict it? India has no proven shale oil and gas and the restriction will discourage private investments,” said a member of Association of Oil and Gas Operators (AOGO), requesting anonymity.

About two dozen energy firms, including Cairn India, ONGC, Reliance Industries, BP and BG, are members of AOGO.

Oil ministry officials, however, justified the cut-off date to avoid the misuse of shale exploration policy. “Cut-off date is a must so that private operators do not give the excuse of shale exploration to

extend their lease periods,” an official said, adding, “Blocks where the lease period will expire in less than two years will be re-auctioned after the expiry of the licence under the unified exploration policy.”

The proposed unified exploration policy will allow energy firms to explore all kinds of oil and gas resources, including shale gas and coal bed methane (CBM) in a block. Currently, operators get separate licences for exploring conventional oil and gas and CBM.

The oil ministry is also considering launch of the fifth round of CBM auction, for which it has already identified five-six blocks. “We plan to offer about 10 CBM blocks in the round,” another official said. The auction was frozen after the fourth round in 2010 because of Coal India’s (CIL’s) claim over most of the coal blocks. After initial reluctance, the oil ministry accepted the right over CBM trapped in the coal blocks held by the state-run monopoly miner’s. “A formal order to allow CBM exploration by CIL in coal blocks held by them will be announced after the Cabinet’s approval,” the official said.

The oil ministry initially wanted to auction all blocks for CBM exploration, but after discussion with the coal ministry it realised that multiple operatorship would not only be inefficient but also risky as coal mines are susceptible to collapse. “It is better if CIL also explores CBM because it knows the topography of each coal mines,” the official said. There was protracted turf war between the coal and oil ministries because the former holds rights over coal mining and the latter controls oil and gas resources, including CBM.

*Read more at: [http://economictimes.indiatimes.com/articleshow/26708010.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://economictimes.indiatimes.com/articleshow/26708010.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)*

## **Reliance, OVL bid for oil blocks in Myanmar**

NEW DELHI: Reliance Industries has bid for three oil and gas blocks and ONGC Videsh Ltd for two in Myanmar’s maiden offshore licensing round.

Besides RIL and OVL, state-owned explorer Oil India Ltd and gas utility GAIL India have bid for three exploration blocks each in separate joint venture with local companies, according to the Myanmar ministry of energy.

Cairn India, which was among the 61 firms pre-qualified to bid for 11 shallow water and 19 deep water blocks on offer in an international tender, however, did not bid.

Bids for the licensing round closed last week. The ministry declared the companies bidding but did not reveal which company has bid for which block.

Bidders were allowed to submit a maximum of three bids each. They had to necessarily team up with at least one Myanmarese company to bid for shallow water blocks while they could do so independently for the deepwater blocks.

GAIL bid for three blocks with Kris Energy while OIL teamed up with Mercator Petroleum and Oil Max Energy Pte Ltd to bid for three blocks.

The bidding pattern indicates that RIL and OVL may have bid for deepwater blocks while OIL and GAIL may have opted for shallow water areas.

According to the Ministry, global energy giant Shell bid for three blocks in partnership with Japan's Mitsui Oil Exploration Company while Chevron, ExxonMobil, Total of France and Malaysia's Petronas bid for two blocks each.

Norway's Statoil in partnership with ConocoPhillips has bid for two blocks while BG Group and Woodside Energy have together submitted bids for four blocks via two partnerships.

Spain's Repsol bid for three blocks while Eni of Italy and Thailand's state-owned PTT Exploration and Production put in quotes for one block each.

The 11 shallow water blocks offered in the round comprise three blocks in the Rakhine Offshore Area, three in the Moattama Offshore Area and five in the Tanintharyi Offshore Area. Of the 19 deepwater blocks, 12 are in the Rakhine area, three in Moattama and five in Tanintharyi.

None of the other Asian national oil companies - China National Petroleum Corp, Korea National Oil Corp, Korea Gas Corp and Japan's JX Nippon Oil & Gas Exploration Corp who had been shortlisted, bid for any of the block.

Myanmar is also offering 18 blocks in its second onshore licensing round, for which OVL, Cairn, OIL, and HPCL-owned Prize Petroleum are among the 59 companies pre-qualified.

OVL and GAIL already have stakes in A-1 and A-3 blocks in Myanmar, which started production last month, and they are looking at consolidating their position in the energy-rich nation.

<http://timesofindia.indiatimes.com/business/india-business/Reliance-OVL-bid-for-oil-blocks-in-Myanmar/articleshow/26683729.cms>

## Global

### US energy independence tempered by oil-price volatility

Soaring output of unconventional oil and gas has transformed the US into an energy producing powerhouse. This year, the US is expected to overtake Russia and Saudi Arabia as the world's largest petroleum and natural gas producer, says the Energy Information Administration (EIA). Talk of energy independence has gripped Washington DC. The EIA forecasts total US crude production will reach 13.1 million barrels per day (b/d) by 2019, largely on the back of a ramp up in unconventional oil production. This would mark a 25% rise from 10.4 million b/d in 2011. US tight oil production was 2.4 million b/d in March, according to the EIA, up 46% year-on-year. By 2020 the EIA expects domestic shale oil production will reach 4.3 million b/d, around 4.5% of total global output.

US shale gas production is expected to account for half of total US gas output by 2040. By 2020 US shale gas production is expected to reach 12.6 trillion cubic feet, around 9.5% of the global total. At

the same time production is rising, demand has fallen. In the first half of 2013, the US consumed 18.7 million b/d of oil, down from 20.8 million b/d in 2005. A combination of the US's sluggish economy, fuel-efficiency measures and a shift to gas-fired power generation and gas as a transport fuel have contributed to the fall in demand.

*US energy independence tempered by oil-price volatility | Petroleum Economist Page 1 of 1*

<http://www.petroleum-economist.com/IssueArticle/3264318/Archive/US-energy-indepe>

## Reality bites Asian LNG buyers

**Damon Evans, SINGAPORE:** Buyers of liquefied natural gas (LNG) in Asia are slowly waking up to the fact that new supplies from North America will not be

cheap – and nor will they flood the market anytime soon. Over the past two years, the debate among buyers in Asia has shifted from an assumption that access to

North American gas is cheap to a realisation that it's a means of developing a portfolio of pricing exposure, Dr Anthony Barker, BG Group's general

manager in Singapore, told *Petroleum Economist*. "Rather than search for lower prices, it's now an informed approach to diversify exposure to particular indices, which we think is healthy," says Barker.

Buyers in Asia have been overwhelmed with projections for US exports based on relatively low Henry Hub gas prices. The latest numbers suggest potential exports of 300 million tonnes per year (t/y). But in reality only 18 million t/y is actually being built now. Even if the market factors in the estimated 50 million to 60 million t/y predicted to be exported from the US by 2025, new projects in Canada and East Africa still need approval to help

narrow the supply-demand gap, but they will not eliminate it, adds Barker.

Energy research firm Wood Mackenzie says high spot prices and tight LNG supplies could persist in Asia-Pacific beyond 2020. Producers, including BG, expect the market to remain tight until 2025.

Beyond 2025, there is the possibility that the successful development of China shale will influence a major portion of the supply/demand balance. But while Barker does not expect to see large-scale Chinese shale-gas development before 2025, it still remains a wild card.

Roger Bounds, global head of LNG at Shell told the CWC Asia Pacific LNG summit that "to avoid a tight market we need more confidence in long-term pricing behavior to enable investment".

Another challenge is that buyers perceive the market will be over-supplied. The general consensus is that prices and supplies will ease around 2018 as new production comes online.

But the industry's track record at delivering projects on time is notoriously bad. And with the highly capital intensive nature of LNG developments, particularly those mooted in Canada and East Africa, a high degree of off-take needs to be committed before they can push forward.

“Ultimately it’s the pace at which buyers contract that will dictate the flows coming in,” says Barker. However, policy and regulatory uncertainty in Japan and South Korea – the world’s biggest importers of LNG – could delay buying decisions, says Wood Mackenzie. With capital-intensive projects predominantly requiring oil-based pricing structures to proceed, BG expects oil indexation to prevail within the Asian market.

*<http://www.petroleum-economist.com/IssueArticle/3261769/Archive/Reality-bites-Asia>*

## **Iran expects \$70 bn investment in oil and gas sector**

TEHRAN: Iran plans to attract \$70 billion for investments in its oil and gas industry, the country’s media reported Sunday.

The oil ministry has prepared a roadmap for investment in the oil and gas industry for the next eight years, reported Xinhua citing Iranian Oil Minister Bijan Namdar Zanganeh in Tehran Times.

The main priority will be placed on completing the projects in joint oil and gas fields, especially the development of the South Pars gas field which is shared with Qatar, he said.

Expansion of petrochemical units and refineries will be the second priority, he added.

Earlier this week, Zanganeh said Iran has begun talks with the potential investors in its energy industry, which may help western oil giants move back into the country.

Iran and six world powers reached a deal Nov 24 to curb Tehran’s nuclear programme, in exchange for limited sanctions relief. However, strict US and European Union bans on investments in its creaking energy sector remain in place.

*Read more at: [http://economictimes.indiatimes.com/articleshow/26704858.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://economictimes.indiatimes.com/articleshow/26704858.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)*

## News Analyses

### National

#### India to establish climate change research station in Himalayas

India will soon establish a research station to carry out cryosphere studies in the Himalayas. Cryosphere is a term for the regions, which are covered in ice and snow either seasonally or all year round.

Rasik Ravindra, Panikkar professor at the ministry of earth sciences, New Delhi and former director of Goa-based National Centre for Antarctica and Ocean Research, informed this here on Wednesday.

The professor currently working in the Earth System Science Organization was in the city as chief guest at the 26th annual Indian Institute of Geomorphologists (IGI) national conference organized jointly by M S University's Department of Geography and Department of Geology. The veteran, who had led India's maiden expedition to the South Pole, said glaciers in the Himalayan region are presently being monitored.

"In Himalaya, two prominent north facing glaciers - Batal and Sutri Dhaka - have been adopted for long term integrated studies," said Ravindra.

The majestic Himalayas with its snow clad peaks and over 9,000 glaciers is a major source of fresh water for the Himalayan rivers and one of the largest reserves of snow and ice outside the Polar regions.

Glaciers in Himalayas are yet to be substantially studied for their resource and hazard potentials. "But few glaciers in the Himalayan region have been monitored for more than 10 years. Chhota Shigri glacier in the Chandra river basin of Pir Panjal range in the Lahaul-Spiti Valley of Himachal Pradesh is one of the glaciers that have been studied for a longer period," Ravindra, who last visited the region in September, said.

Presently, 10 scientists are involved in the project titled 'Cryosphere Studies in Himalayas' initiated by the ministry of earth sciences. According to Ravindra more scientists from across the country will be involved with the initiative to start the research station for which sufficient funds are being allocated by the Union government.

He added that the Indian polar program which commenced in 1981 has resulted in establishment of three research stations in Antarctica, one in Arctic while active research has started in the third Pole (Himalaya) apart from launching regular expeditions to Southern Ocean.

There have been 30 Indian expeditions to Antarctica since the first one in 1981.

Recalling his Antarctic experiences, Ravindra said the terrains make it difficult to travel despite special vehicles.

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“The base station is almost at sea level and the South Pole is at an elevation of nearly 2,500 metres. And on the way, one has to cross a plateau that is 3,600 metres above mean sea level. It is not the terrain alone that makes the journey or staying in the continent difficult.

Temperatures can dip to a minimum of 55 degrees Celsius in summer and to 89 degrees in winter. Add to this the wind factor. If normal wind speed is 22-30 kilometres per hour, it can go beyond 200 kmph as well,” he said.

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[http://articles.timesofindia.indiatimes.com/2013-11-21/vadodara/44325873\\_1\\_research-station-few-glaciers-rasik-ravindra](http://articles.timesofindia.indiatimes.com/2013-11-21/vadodara/44325873_1_research-station-few-glaciers-rasik-ravindra)

## Global

### For global cooperation on climate change

*Against the backdrop of the U.N. climate change negotiations in Warsaw, the United States Ambassador to India, Nancy Powell, says the U.S. was helping developing countries address climate change by amplifying the impact of public funds by leveraging private investment*

Climate change caused by humans is real and it is happening now. Only a high degree of international cooperation can adequately address this global problem. The recently released report of the Intergovernmental Panel on Climate Change has reconfirmed the basic facts: Greenhouse gases, primarily carbon dioxide emitted from burning fossil fuels like coal and oil, as well as other gases emitted as a result of human activity, such as methane, black carbon (a major component of soot), and hydrofluorocarbons, or “HFCs,” are responsible for an unprecedented rate of warming of the planet. This warming is already causing severe disruptions and harm to communities. Left unabated, climate change will cause increased droughts, rising seas, and a host of other problems.

### Collaboration With India

India is the United States’ biggest partner in the developing world on cooperative ventures to address climate change. The U.S. and India are collaborating on a wide range of climate change issues. For example, our National Oceanic and Atmospheric Administration and the Indian Ministry of Earth Sciences are working together to enhance capacity for monsoon prediction on a monthly basis for different States in India. This programme delivers quantifiable improvements in forecasting extreme events, therefore improving India’s resilience to extreme and variable events wrought by climate change, such as flood and drought years, and active and dry spells of monsoons. We are also working jointly to protect India’s forests, which store carbon dioxide while providing great value to local populations and ecosystems.

Beyond the critically important goal of improving our understanding of how the climate works, and putting in place preparedness systems to minimise harm, the United States and India are drawing on the creativity and forward thinking of our best scientists, engineers and policymakers to reduce carbon pollution while building a low-carbon future that promotes economic growth. In the United

States we have already greatly reduced our emissions from transportation, and, as part of President Obama's Climate Action Plan, we will reduce carbon pollution from power plants and further reduce energy waste in appliances and buildings. India is also taking important steps such as ambitious measures to improve energy efficiency and expand renewable energy, including one of the world's largest national targets for solar power.

There is no doubt that the transition away from fossil fuels and other greenhouse gases requires upfront investment and hard work. The United States is committed to this effort domestically and to partnering with countries with more urgent development needs make this transition.

### **Funding**

The United States together with other developed countries has met and exceeded a pledge to provide \$30 billion in financing from 2010 to 2012 for developing countries both to reduce greenhouse gases and to adapt to climate changes. The U.S. government alone provided \$7.4 billion during this period, including almost \$1 billion that benefits India.

In many cases, the United States amplifies the impact of public funds by leveraging a significant amount of private investment, an approach that is already creating new economic opportunities. We see this as the surest way to scale up funds to the levels needed for another commitment we made in 2009, to work with other countries to mobilise \$100 billion annually by 2020, from both public and private sources, to help developing countries address climate change.

Private investment in India has leveraged the impact of our public funds and yielded significant results. Using our national development finance institution and export credit agency, we have channelled hundreds of millions of dollars to strengthen India's ability to build technical capacity, reduce financial risk, and lower the cost of capital for low-carbon investments. These funds unlocked more than \$700 million in additional private capital that would not have otherwise been invested in India, over and above the nearly \$1 billion we have already.

U.S.-Indian joint initiatives promote clean energy development, a sector in which countries around the world are making strides on economic growth, poverty alleviation, and climate change simultaneously. In 2009, Prime Minister Manmohan Singh and President Obama created the Partnership to Advance Clean Energy to improve energy access and promote low-carbon growth through a focus on clean and renewable energy projects. One initiative under this programme — the \$125 million Joint Clean Energy Research and Development Center — is helping develop cutting-edge technologies in solar energy, energy efficiency in buildings, and new biofuels, enriching the technology base of both countries.

The cooperation between the U.S and India on climate change is strong, but it could be improved further. The United States is committed to working with India to make our work together a model for the global cooperation we so desperately need.

*<http://www.thehindu.com/opinion/op-ed/for-global-cooperation-on-climate-change/article5386955.ece>*

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## News Articles

### National

#### **U.S. to oppose mechanism to fund climate change adaptation in poor nations**

In an internal briefing paper, accessed by “The Hindu”, U.S. tells negotiators to delay emission cut commitments and not to agree on any time line for funds

In an internal briefing paper prepared for its diplomats across the world ahead of the Warsaw climate negotiations, which The Hindu has accessed, the U.S. has opposed the setting up of a separate process on ‘loss and damage’, pushed primarily for the role of private investments and finance in providing the promised money to the poor countries to adapt to climate change and have a 2015 climate agreement where no country is forced to take higher emission reduction pledges than the ones they initially volunteer. It also informed its diplomats to keep pushing the line with other countries that the U.S. was doing enough domestically on the climate change front and these were priorities for President Barack Obama and John Kerry.

The cabled message drafted by senior State Department of officials sets not only the content for what is to be done internally by the U.S. delegation at the U.N. Framework Convention on Climate Change but also how the diplomats should posture publicly to help the delegation that would negotiate at Warsaw.

On setting the emission targets under the new agreement to be signed in 2015, the note informs, “In Warsaw we seek to establish an expectation that parties will submit their commitments by early 2015 so as to finalise an agreement in Paris (in 2015 itself)”.

Under the 2015 agreement which is to become operational in 2020 the U.S. government has been pushing that all countries volunteer to pledge their commitments. The note says, “Specifically we’re advocating an approach under which countries — both developed and developing — will put forth nationally determined mitigation commitments, followed by a transparent consultative process that will give other countries and civil society the opportunity to analyse and comment upon such commitments.”

In a revealing line it adds, “The idea is that sunshine will provide an incentive for countries to put forth ambitious commitments in the first instance and, even if not, there will be an opportunity for countries to decide to enhance their commitments before they are finalised.”

The U.S. stance differs radically from the demand of groups such as those of the small island states, the E.U. and others which require that the volunteered targets be increased after a review to see if they add up to the effort required to keep global temperatures under control.

#### **Investments Not Funds For Climate**

That the U.S. sees climate change as an opportunity to also leverage and open economies of developing countries to clean-tech investments is also revealed in the paper. “The work we have undertaken in

2013 has begun to lay the groundwork for an ambitious and wide ranging efforts aimed at catalysing low-emission, climate resilient investment in developing countries, though of course we recognise that much work remains to develop the tools necessary to shift the global economy in this direction.”

The poor countries have consistently warned that public investments can neither be adequate nor predictable and can work merely as complementary source of finance. They also warn that private investment does not move towards the priority of adaptation activities where the returns are negligible but the monies important to save lives. The U.N. climate convention imposes the obligation on the developed world to provide funds and technologies to the poor countries to “enable” the latter to undertake climate action but the U.S. position in the briefing paper talks of pushing in investments instead.

The U.S. has in public domain too said that it sees public funding in the climate change arena more as a tool to leverage private investments. The entire set of developing countries have demanded that the U.S. and other developed countries put forth a clear timeline for when and how they shall conjure up the \$100 billion annual fund by 2020 they had earlier promised. But the briefing paper remains silent on the U.S. committing to any such time line in Warsaw. It instead says, “The U.S. is doing all we can to make climate finance work on the ground.” The talk of any scaling up funds between now and 2020, as the developing countries have collectively demanded is ignored.

It instead says, “We’re also working to intensify our coordination in the context of the Green Climate Fund board to shape an institution that could leverage private investment more effectively than any other multilateral climate fund.”

The U.S. acknowledges in the cabled briefing to its diplomats that “finance is another contentious issue, with many developing countries feeling that there is lack of clarity on climate finance between now and 2020”. But the U.S. strategy is to work outside the UNFCCC to leverage private funds and it plans to talk of this through the Warsaw talks too.

### **Loss And Damage**

On the controversial issue of loss and damage, which has united the developing countries since last two years in demanding that developed countries pay compensation for the damage to life and property that cannot be avoided despite the best of adaptation and emission reduction efforts, the U.S. plans to not let the idea become a full fledged separate mechanism at Warsaw. The U.S. has previously very strongly opposed any separate mechanism on loss and damage that sets up a process of charging “compensation or reparation” on the developed world for their historic emissions. But it had to give in last year at the talks to permit the talks on such a mechanism start off. At Warsaw, the briefing paper shows, it plans to ensure that while the issue is called “Loss and Damage” it does not get a life of its own but is swallowed by the existing track which would ensure the issues of ‘liability’ and ‘compensation’ are thrown out.

The document says, “It’s our sense that the longer countries look at issues like compensation and liability, the more they will realise this isn’t productive avenue for the UNFCCC to go down.”

“We are strongly in favour of creating an institutional arrangement on loss and damage that is under the Convention’s adaptation track, rather than creating a third stream of action that’s separate from mitigation and adaptation,” it adds.

“The U.S. supports pragmatic approaches to address the substantive issues raised in loss and damage discussions and supports the establishment in Warsaw of a loss and damage ‘task force’ under the Adaptation committee of the UNFCCC. A central issue will be whether loss and damage continues to fall within adaptation or whether it becomes a separate, third pillar (alongside adaptation and mitigation), which we believe would lead the UNFCCC to focus increasingly on blame and liability, which in turn would be counterproductive from the standpoint of public support for the convention,” it further reads.

<http://www.thehindu.com/sci-tech/energy-and-environment/us-to-oppose-mechanism-to-fund-climate-change-adaptation-in-poor-nations/article5351162.ece>

## **India tells rich nations not to treat climate issues for providing market to domestic companies**

WARSAW: Hitting out at developed countries for backtracking on their commitments to fight climate change, India on Thursday used the UN climate talks platform to tell the rich nations not to treat global warming issues with a “business perspective of providing markets to domestic companies”.

New Delhi also expressed dismay at decision of some of the rich nations — including Japan, Canada and Australia — to scale down ambition and lowering of targets of emissions.

Articulating country’s stand over the entire issue of climate change, Indian environment minister Jayanthi Natarajan appealed the rich nations to take lead in fighting climate change, specifically when nothing concrete has emerged so far from the on-going climate talks.

Incidentally, her remarks came merely an hour before most of the NGOs including from India walked out from the Conference citing the rich nations’ failure to deliver on the promises made by them.

“Warsaw (on-going UN conference on climate change) must act ... we must act and deliver here and now”, said Natarajan, going a bit beyond her written speech while addressing a gathering of ministers/representatives from 195 countries here at National Stadium.

Though her speech stuck to what has been New Delhi’s stated position for long, she chose the platform to raise the controversial issue of climate damaging HFC gases and let the gathering know what India thinks about it and put it out as part of her formal written speech.

In a remark which may not go down well with the US, specifically on HFCs issue, Natarajan said, “The issue should not be seen from a business perspective of providing markets to domestic companies”.

Though she did not take names of countries or companies, her remarks articulated the concerns raised back home about reported attempts of US to push the issue of phasing down HFCs merely to benefit couple of American private companies who are manufacturing refrigerants using technology\substitute whose cost is quite higher than existing ones used in India.

Putting across India's stand quite emphatically, Natarajan said, "The issue of HFC has to be addressed by us under this convention (UNFCCC). In the meeting of Montreal Protocol in Bangkok last month, many countries, including some from G20, have opposed amendments to bring it under MP".

She made it clear that the developing countries including India would not move on it without complete clarity on the issue. She said, "Developing countries need clarity on identified substitutes, their costs, safety and economic feasibility.

*<http://timesofindia.indiatimes.com/home/environment/global-warming/India-tells-rich-nations-not-to-treat-climate-issues-for-providing-market-to-domestic-companies/articleshow/26111507.cms>*

## Global

### Warsaw Climate Talks End with Foundation for a Global Agreement

After two weeks of negotiations, replete with dramatic high-level huddles and multiple all-night sessions, the U.N. climate talks ended with a modest set of decisions to keep countries on the path toward an international climate agreement by 2015.

Delegates from nearly 200 countries convened in Warsaw, Poland, for the annual Conference of the Parties to the U.N. Framework Convention on Climate Change, or UNFCCC, to craft an effective global strategy to reduce global warming pollution and adapt to the impacts of climate change.

More than 24 hours after the negotiations were scheduled to end, countries reached agreement on the following issues, which collectively signal the continued global commitment to addressing climate change:

- **A pathway to an international agreement.** Such an agreement would address climate mitigation, adaptation, and finance. Countries agreed to introduce their national climate mitigation contributions by early 2015, which would provide time to assess whether their actions are sufficient to address severe climate change. The 2015 U.N. climate agreement would apply to all countries.
- **A call for developed countries to continue mobilizing climate finance "at increasing levels" through 2020.** This funding would build resilience and reduce emissions in developing countries. The decision requests developed countries to submit strategies for scaling up climate finance through 2020, including information on pathways for mobilizing funds commensurate with a \$100 billion annual commitment by 2020. It also says that parties will convene workshops to scale up climate finance that will inform a biennial high-level ministerial dialogue on climate finance—starting in 2014 and ending in 2020.

- **An entity to address loss and damage.** Countries agreed to establish an entity to address the adverse impacts of climate change in developing countries. Its functions include enhancing risk management and financial support.

This issue brief further explains the outcomes of the Warsaw meeting and what work lies ahead for the international community to address global warming.

### **Advancing a global agreement on climate change**

During the 2011 U.N. climate talks in Durban, South Africa, countries decided to create a global climate agreement applicable to all parties by 2015—known as the Durban Platform—with the goal of keeping average global temperature rise to 2 degrees Celsius, the level scientists say is necessary to avoid the worst impacts of global warming. A main task for the parties in Warsaw was to establish a process and timetable for creating the agreement in order to stay on track for finalizing the agreement by 2015.

There is broad international agreement for nationally determined mitigation targets, as well as a period of consultation and review among parties to measure the collective level of ambition—the sum of all countries' greenhouse gas emissions targets—against the 2 degree target. Todd Stern, the U.S. special envoy on climate change, presented the U.S. vision for the 2015 agreement in an October speech, calling for nationally determined commitments to be announced by early 2015, followed by a period of review and consultation. The European Union similarly proposed a multistage process for commitments to be put forward in the fall of 2014, followed by a period of assessment. The Least Developed Countries Group, comprised of 49 developing countries particularly vulnerable to climate change, urged for the Warsaw meeting to adopt “a clear roadmap for negotiating the planning, scope, structure and design of the new 2015 agreement” and for a draft agreement by 2014, followed by consultations ahead of adoption in 2015.

In the time leading up to the talks and throughout the two-week-long negotiations, some developing countries pushed back on taking on commitments and establishing a timeline or process for the 2015 agreement. Parties' entrenched positions on how responsibility should be allocated between developed and developing countries based on historical emissions underlay their positions. During the talks, the Like-Minded Developing Countries on Climate Change, or LMDC, group argued that developed countries would need to specify their emissions-reductions commitments before developing countries presented their own.

The bulk of the projected increase in greenhouse gas emissions will be from developing countries, particularly major emerging economies such as China and India. Therefore, broad participation in a new agreement is necessary to keep global temperature rise to 2 degrees Celsius.

### **REDD+ developments at Warsaw**

A positive development from the talks was progress on the U.N. program called Reducing Emissions from Deforestation and Degradation, or REDD+, to address deforestation. Steps to combat deforestation are important, since the loss of forests represents approximately 20 percent of

worldwide greenhouse gas emissions. The United States, the United Kingdom, and Norway announced renewed commitments to finance REDD+, totaling more than \$280 million. Negotiators also defined new rules for distributing finance through the Green Climate Fund to developing countries, and agreed to rules for measuring and verifying deforestation emissions through a new REDD+ information hub.

*<http://www.americanprogress.org/issues/green/report/2013/12/04/80378/warsaw-climate-talks-end-with-foundation-for-a-global-agreement/>*

### **Climate change shifting Arctic landscape: Hagel**

WASHINGTON: Climate change is shifting the landscape in the Arctic more rapidly than anywhere else in the world, US defence secretary Chuck Hagel has said.

“Climate change is shifting the landscape in the Arctic more rapidly than anywhere else in the world,” Hagel said in his address at Halifax International Security Forum in Nova Scotia, Canada yesterday.

“While the Arctic temperature rise is relatively small in absolute terms, its effect are significant, transforming what is a frozen desert into an evolving, navigable ocean, given rise to an unprecedented level of human activity,” he said.

“Traffic in the northern sea route is reportedly expected to increase tenfold this year compared to the last year efforts,” Hagel said.

“To fully appreciate what’s happening in the Arctic and the world, we should take a step back and consider the many dynamic shifts occurring in the region and in the world,” he said.

“Among them are the growing economic and geopolitical importance — dynamics of the Asia-Pacific, conflict and instability across the Middle East and North Africa, the unprecedented diffusion of global economic power, new sources of and demand for energy, the rise of China, India, Brazil and other nations, environmental degradation and devastating natural disasters, and the role of technology in closely linking the world’s people, their aspirations and their grievances,” Hagel said.

The defence secretary said climate change does not directly cause conflict, but it can significantly add to the challenges of global instability, hunger, poverty and conflict.

“Food and water shortages, pandemic disease, disputes over refugees and resources, more severe natural disasters all place additional burdens on economies, societies and institutions around the world,” he said.

Hagel said planning for climate change in smarter energy investments not only makes US a stronger military, they have many additional benefits: saving money, reducing demand and helping protect the environment.

“These initiatives all support President Obama’s climate action plan, which outlines how the United States will work with the international community in addressing these serious global challenges,” he said.

Hagel said over the long term, as global warming accelerates, Arctic ice melt will lead to a sea level rise that will likely threaten coastal populations around the world, but it also could open up a transpolar sea route, a possibility that has been discussed since the USS Nautilus made its historic submerged crossing of the North Pole many years ago.

<http://timesofindia.indiatimes.com/home/environment/global-warming/Climate-change-shifting-Arctic-landscape-Hagel/articleshow/26239658.cms>

### **Pacific faces big economic losses from climate change: ADB**

SYDNEY: The Pacific region faces serious economic losses due to climate change and it is critical that nations causing the problem step in to help, the Asian Development Bank said on Tuesday.

A new report by the bank released in Sydney, “Economics of Climate Change in the Pacific”, showed that losses would range between 2.9 percent and 15.2 percent of annual gross domestic product by 2100.

The Pacific contains some of the smallest nations on Earth and there are growing fears that global warming and rising seas threaten their very existence, with some of them atolls barely a metre (three feet) above sea level.

The report assessed the potential impacts of climate change on agriculture, fisheries, tourism, coral reefs, and human health, with the ADB’s Pacific director general Xianbin Yao warning of dire consequences.

“It is critical that countries contributing to the problem of climate change step up to assist Pacific friends and neighbours in the fight to protect their countries against natural disasters, crop losses, and forced migration,” Yao said.

“Our findings show that if not adequately addressed, climate change could overturn the region’s development achievements.”

Yao did not say which countries were being referred to but the United States, China, India, Australia and the EU are among the world’s major polluters.

According to the report, the most significant economic losses would be felt in Papua New Guinea, where climate change impacts could trigger a loss of up to 15.2 percent of GDP by 2100.

East Timor’s GDP is predicted to drop by up to 10 percent, followed by Vanuatu (6.2 percent), Solomon Islands (4.7 percent), Fiji (4.0 percent), and Samoa (3.8 percent).

Under a medium emissions scenario, Fiji, PNG, Samoa, Solomon Islands, East Timor and Vanuatu could see temperatures rise by 2-3 Celsius (3.6-5.4 degrees Fahrenheit) by 2070, the report said, which could lead to significant decreases in rain-fed agriculture, reduced fish catches, widespread coral bleaching, and falling tourism numbers.

The report noted that the negative effect on agriculture contributed to most of the total economic cost of climate change in the Pacific.

It recommended policy leaders take urgent action to mainstream climate change mitigation into development planning and develop forward-looking strategies.

Pacific countries will also need dramatically improved access to global and regional climate change funds, it added.

*<http://timesofindia.indiatimes.com/home/environment/global-warming/Pacific-faces-big-economic-losses-from-climate-change-ADB/articleshow/26420233.cms>*

## News Analyses

### National

#### India firms up its strategy on Brahmaputra water diversion

**New Delhi:** *India and China have been engaged in a dispute over the diversion of the Brahmaputra river, which originates in Tibet. Even while India is still exploring a diplomatic option, it has initiated an action plan that would give it user rights. In the first of a three-part series, Mint chronicles the government efforts to accelerate hydroelectric projects in Arunachal Pradesh, a key element of the multi-pronged strategy.*

Even as India seems to be playing down the potential problems associated with China's plans to divert river waters that flow into the Brahmaputra, it is simultaneously working on a detailed strategy involving several key government departments—racing to pre-empt Chinese threats.

According to documents reviewed by *Mint*, a technical expert group (TEG) entrusted with devising India's game plan has made a slew of recommendations, including expeditiously allotting at least one major hydropower project each in strategically located Subansiri, Lohit and Siang basins in Arunachal Pradesh as close to the international border as possible in order to establish 'existing user rights'.

The TEG was set up by a committee of secretaries (CoS) on the Brahmaputra water diversion issue to address the concerns emerging from the actions of the Chinese. In addition, signalling the government's growing concern, an inter-ministerial expert group (IMEG) was simultaneously set up to monitor and collate information on the sensitive issue that has major strategic ramifications for India.

India and China have sparred intermittently over hydropower projects in Arunachal Pradesh, which borders China and has the highest potential for hydropower generation in India.

With China planning to divert waters from rivers that flow into the Brahmaputra to the arid zones of Xinjiang and Gansu, India is worried about the slow pace of work on hydropower projects awarded in Arunachal Pradesh.

Any delay in executing these projects, particularly on rivers originating in China, will affect India's strategy of establishing a prior-use claim. Under international law, a country's right over natural resources it shares with other nations becomes stronger if it is already putting these resources to use.

This comes in the backdrop of recent agreements over sharing flood data, signed during Prime Minister Manmohan Singh's visit to China last month.

Apart from the CoS, the government created a ministerial group headed by finance minister P. Chidambaram on developing the north-eastern region of the country.

The CoS comprises the secretaries and chiefs in the ministries and departments of home, power, cabinet secretariat, intelligence bureau, National Technical Research Organization, defence, foreign affairs, economic affairs, space, water resources, Planning Commission, environment and forests, chairman of joint intelligence committee and chief secretaries of Arunachal Pradesh and Assam.

“Regular meetings are now being held and we are working to implement the recommendations. The seriousness of the issue has been grasped and we are on the job. However, a lot of time has been lost,” said a senior Indian government official aware of the government’s strategy, requesting anonymity.

The three major rivers of Arunachal Pradesh that originate in China are Siang, Subansiri and Lohit. Of the Brahmaputra’s 2,880km-length, 1,625km is in Tibet, 918km in India, and 337km in Bangladesh. To speed up work on these projects, the TEG has recommended declaring them ‘National Projects’, hastening technical concurrence—including approvals from the ministries of defence and home affairs—and development of the road infrastructure in the region.

Another move involves the possible re-allocation of the 1,800 megawatts (MW) Subansiri Upper project, currently with **KSK Energy Ventures Ltd**, to a state-owned firm—which would give the government greater control over its execution.

Measures are also planned to speed up a study of the strategic river basins of Siang, Subansiri and Lohit and the construction of transmission links for the evacuation of power to other parts of India.

India’s anxiety stems from the fact that out of Arunachal Pradesh’s estimated potential of unleashing 50,064MW of power, less than 1%, or 405MW, has been harnessed so far. This is in spite of the fact that 94 projects with a combined capacity of 41,502.5MW have been allotted across eight river basins—all in Arunachal Pradesh—of Kameng, Subansiri, Tawang, Siang, Dibang, Lohit, Dikrong and Tirap.

[http://www.businessweek.com/articles/2013-11-27/pollution-threatens-china-s-ambitious-water-transfer-project?utm\\_source=Circle+of+Blue+WaterNews+%26+Alerts&utm\\_campaign=3d82a21d67-RSS\\_EMAIL\\_CAMPAIGN&utm\\_medium=email&utm\\_term=0\\_c1265b6ed7-3d82a21d67-250657169](http://www.businessweek.com/articles/2013-11-27/pollution-threatens-china-s-ambitious-water-transfer-project?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=3d82a21d67-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_c1265b6ed7-3d82a21d67-250657169)

## Global

### **Shale and water industries pledge to “work together” to minimise the effect of fracking on water supplies**

The memorandum of understanding between the two groups was published alongside a policy statement from Water UK (4-page / 109KB PDF) setting out the trade body’s belief that the impact of hydraulic fracturing, or ‘fracking’, on water supplies could be minimised as long as regulatory requirements are properly enforced. Together with the UK Onshore Operators Group (UKOOG), it has agreed to a number of actions to reassure members of the public that the effect of shale gas exploration on water supplies will be limited.

Energy and environmental law expert David Ross of Pinsent Masons, the law firm behind Out-Law.com, said that the agreement was good news for both the fledgling shale industry and for local communities.

“It is also good news for the communities surrounding shale gas sites, as this commitment on shale gas developers to cooperate with Water UK adds an extra layer of water protection on top of the already extensive regulations affecting shale gas extraction. This protection may be extended further should Water UK prove successful in its lobbying to include water firms as statutory consultees on planning applications for shale gas extraction,” he said.

“DECC estimated recently that each well may require 10-30 million litres to hydraulically fracture,” he said. “Along with the perceived risks of groundwater contamination, the importance of water in the shale gas extraction process cannot be understated. On that basis, the Memorandum of Understanding can only be positive news for the industry; particularly as Water UK has now stated it believes that the risks to water can be mitigated.”

Shale gas is natural gas trapped within shale formations at significant depths below ground. It has become an increasingly important source of natural gas in the US, particularly over the past decade, where a combination of drilling and ‘fracking’ has facilitated access to large volumes of shale gas that were previously uneconomical to exploit. Fracking involves pumping water at high pressure into shale rock to create narrow fractures, through which trapped gas can flow out and be captured.

Under the terms of their agreement, Water UK and the UKOOG will draw up plans for monitoring fracking sites and preventing water shortages. These will include general monitoring of local water quality and quantity; site-specific water management plans, with a particular focus on water reuse; development plans, including the likely short- and long-term impacts on water supplies of expanding exploration and development within a local area; and monitoring the volume and composition of waste water for disposal.

“This agreement with Water UK should give reassurance to local communities that the development of shale gas in the UK can proceed with minimal impact upon the local water and waste services,” said UKOOG chief executive Ken Cronin.

“The environmental regulation covering the onshore oil and gas industry in the UK is among the most stringent in the world and, in addition, the industry has agreed to tough and transparent guidelines on how we operate and interact with local communities,” he said.

*<http://www.out-law.com/en/articles/2013/december/shale-and-water-industries-pledge-to-work-together-to-minimise-the-effect-of-fracking-on-water-supplies/>*

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## News Articles

### National

#### **Pak cites water crisis, asks India to withdraw Siachen troops**

Pakistan on Wednesday asked India to withdraw its troops from Siachen, claiming their presence on the glacier in Kashmir was damaging the environment and polluting one of its main sources of water supplies. Sartaj Aziz, Pakistan's advisor to the prime minister on national security and foreign affairs, claimed Indian forces on Siachen posed a "serious threat" to the country's environment.

His remarks come against the backdrop of the Dawn daily quoting Pakistan Prime Minister Nawaz Sharif on Tuesday as saying Kashmir was a flashpoint in the relations between the two neighbours and can trigger another war. However, a statement from Sharif's office later clarified, "Prime Minister of Pakistan never uttered these words."

Pakistan is facing a water shortage and Indian troops are damaging the "virgin snow" of Siachen—one of the largest sources of water in Pakistan, Aziz said.

He added that items of daily use disposed of by Indian soldiers were threatening the glacier's existence. Describing the presence of Indian forces on the glacier as a "big issue", he urged India to resolve the Siachen matter "on priority basis by pulling out its troops".

Pakistan's 'Free Siachen' cry comes close on the heels of its prime minister saying India has forced the country to join an arms race.

Indian and Pakistani troops have been locked in an eyeball-to-eyeball confrontation on Siachen, the world's highest and coldest battlefield, since 1984.

Aziz said Pakistan and India are engaged to resolve outstanding water issues through multiple channels, including the composite dialogue and Indus Waters Commission. He said the implications of water scarcity were grave in view of climate change.

The guns have been largely silent along the Actual Ground Position Line since the two sides put in place a ceasefire in 2003, but adverse weather conditions on the glacier have claimed many lives on both sides.

India has insisted that the demilitarisation of Siachen must be preceded by recording the existing troop positions, but this has been rejected by Pakistan.

According to environmentalists, glacial retreat in the Himalaya and Karakoram ranges has accelerated in recent years because of human presence on glaciers.

Aziz stressed the need to make proper use of water in Pakistan as well as its conservation and the building of new reservoirs. He said parliament had formed a committee to discuss water-related issues and to make recommendations.

<http://www.hindustantimes.com/world-news/pakistan-asks-india-to-withdraw-siachen-troops/article1-1158965.aspx#sthash.xB2MGLJG.dpuf>

## Global

### Iran facing water crisis: energy minister

**TEHRAN** – Energy Minister Hamid Chitchian says the water shortage in Iran has turned into crisis and it is showing itself across the country, the Mehr news agency reported on Friday.

“Today, the problem of water resources is not just limited to one province and generally it is showing itself as a crisis in the country,” the energy minister said in a meeting with the MPs representing Fars Province, which is known as the breadbasket of Iran.

The minister said “old methods” such as building dams will not help to “get out” of this crisis and the focus must chiefly be on “water management”.

Over the past 25 years Iran has succeeded to occupy the third place in the world in terms of dam building but now most countries in the world, including Iran, are facing serious water shortages, the minister explained.

He said 92 percent of the country’s water resources are used in agricultural sector.

While the water reservoirs in rivers in Iran are just only about 46 billion cubic meters the dams in the country have an empty space of 68 billion cubic meters, the minister lamented.

<http://www.tehrantimes.com/economy-and-business/112605-iran-facing-water-crisis-energy-minister->

### UNDP issues report titled ‘Water Governance in the Arab Region’

The Middle East is an arid/semi-arid zone. The region receives only 2.1 percent of the world’s average annual precipitation and contains 1.2 percent of annual renewable water resources. As can be seen from these figures, the quantity of renewable water resources is limited, and 65 percent of the region’s surface water resources originate from external areas. The overexploitation and unsustainable use of renewable and non-renewable water resources increases the risk of water scarcity. In this sense, the Middle East is usually the first region mentioned in the scenario of future water wars or conflicts.

The United Nations Development Programme (UNDP) on Nov. 30, 2013 issued a report on managing water scarcity and securing the future for Arab countries: Mauritania, Iraq, Comoros, Sudan and South Sudan, Somalia, Lebanon, Morocco, Syria, Egypt, Oman, Tunisia, Djibouti, Algeria, Palestine, Jordan, Libya, Bahrain, Saudi Arabia, Yemen, Qatar, the United Arab Emirates and Kuwait. According to the report, the Arab region contains 23 major watersheds. These include the Nile, Euphrates-Tigris, Jordan, Orontes, Nahr Al Kebir and Senegal basins. Furthermore, the report states that the estimated total dam capacity of the Arab region is 363.27 cubic kilometers. There are four leading countries in terms of dam capacity, which are as follows: Egypt (168.2 cubic kilometers), Iraq (151.8 cubic kilometers), Syria (19.7 cubic kilometers) and Morocco (16.9 cubic kilometers).

Another major water resource of the region is groundwater. Fifty percent of total water need is met by groundwater, corresponding to 84 percent in the Arabian Peninsula. The 15,000 to 25,000-year-

old fossil aquifers are not included in the hydrological cycle. Namely, they are not renewed by precipitation or by rivers, unlike other groundwater resources. Therefore, they are exhaustible resources and should be used on a sustainable basis. The quality of groundwater resources, which are in danger of depletion due to overexploitation, is threatened by agricultural, industrial and domestic use.

On the other hand, groundwater resources in the region are largely non-renewable, and the majority of water need in the Arabian Peninsula and the Maghreb region is met by groundwater resources. The quality of groundwater resources, which are under risk due to overuse, is threatened by pollution from agricultural, industrial and domestic activities.

Another significant water resource in the Arab countries is desalination. The Arab region leads the world in desalination, with more than half of the world's desalination capacity. In the Arab countries 24 million cubic meters of water are desalinated every day. The highest desalination capacity is in the Gulf countries. Of the water supplied to cities in the Gulf countries, 55 percent comes from desalinated water. However, the desalination process requires a large amount of energy and capital. The cost of one delivered cubic meter of desalinated water, ranging from \$1.50 to \$4, has dropped to an average \$0.50–\$0.80 per cubic meter due to new technologies, especially the reverse osmosis technique.

<http://www.todayszaman.com/news-333384-undp-issues-report-titled-water-governance-in-the-arab-region.html>

## **Vietnam asks Laos to consult Mekong countries before building dam**

Vietnam has called on Laos to honor its pledge to consult with its neighbors before moving forward with the potentially risky Don Sahong hydropower project.

The Vietnam National Mekong Committee has sent a letter demanding Laos honor regional cooperation pledged by the countries in the 1995 Mekong Agreement. According to some sources, Cambodian and Thai committees also sent separate letters to Laos.

“We ... suggest that the proposed project needs to be considered under the prior consultation process,” states Vietnam’s letter, the only one of the three to be released publicly.

Under the agreement, regulated by the Mekong River Commission, a dam developer must notify or consult with member countries before building.

Le Duc Trung, chief of staff of the Vietnam National Mekong Committee, said its officers recently paid a field trip to the Don Sahong dam.

After the trip, they concluded that the four countries should discuss further undefined impacts of the project, especially in terms of fish migration.

Last September, Laos notified the Mekong River Commission (MRC), a consultative body that works with lower basin countries - Thailand, Vietnam, Laos and Cambodia - of its intent to build the 260-

megawatt Don Sahong dam, despite calls from foreign donors to consult neighbors that face a risk of depleted fish stocks and damaged livelihoods.

The dam, to be developed by Malaysia's Mega First Corporation Bhd, is the second of 11 dams planned by Laos along its stretch of the 4,900 km (3,044 mile) Mekong.

Activists believe the dam could cause flooding and threaten food security in Cambodia and Vietnam, *Reuters* reported.

Vietnam, Cambodia and Thailand have repeatedly voiced concern about Laos failing to honor a consultation agreement on a bigger project, the US\$3.5 billion, 1,260 megawatt Xayaburi dam, for which it held a groundbreaking ceremony late last year.

<http://www.thanhniennews.com/index/pages/20131203-vietnam-asks-laos-to-consult-mekong-countries-before-building-dam.aspx>

## **Nations unite against dam**

Cambodia, Vietnam and Thailand have all called on Laos to submit its planned Don Sahong hydropower dam to an intergovernmental assessment.

According to the dam's opponents, the Laos National Mekong Committee has acted unilaterally in the planning of its second Mekong dam, a project they fear could irreparably damage the region's food security and biodiversity.

The Cambodia, Vietnam and Thailand National Mekong Committees have each sent separate letters demanding Laos honour regional cooperation pledged by the countries in the 1995 Mekong Agreement.

"We ... suggest that the proposed project needs to be considered under the prior consultation process," states Vietnam's letter, the only one of the three to be released publicly.

Under the agreement, regulated by the Mekong River Commission, a dam developer must notify or consult with member countries before building.

"Compared with the notification process, which is just the timely submission of materials with no further discussion, consultation requires notification plus a six-month time frame for each country to conduct studies and share concerns," said Te Navuth, Cambodian National Mekong Committee secretary-general.

Less than two kilometres north of the Cambodia-Laos border, the 260-megawatt dam would potentially have too high an impact on mainstream fish migration in the dry season to bypass consultation with other affected countries, the downstream officials allege in letters sent to the MRC.

"We need the Don Sahong dam to go through a prior consultation process to ensure the people and affected communities can express their concerns and the environmental issues will be addressed," said Chhith Sam Ath, director of NGO Forum, a member of the Save the Mekong Coalition.

But even with prior consultation, NGOs and activists worry that the dam will follow in the footsteps of Laos' 1,285 megawatt Xayaburi dam.

Despite the fact that the Xayaburi prior consultation process concluded with a consensus that more assessment was needed, construction began in November last year.

"Prior consultation is prior – it should be self-explanatory that it means concerns are shared and resolved before any work starts," Navuth said.

<http://www.phnompenhpost.com/national/nations-unite-against-dam>

### **Mekong dam threatens to drain lifeblood of region**

Laos is ignoring growing concern that its Don Sahong project will bring an ecological calamity that endangers the livelihoods and food security of millions

The 4,000 Island region in southern Laos, named after the myriad islets that poke from the Mekong's murky waters, boasts idyllic, undeveloped villages surrounded by small rice fields and forest swathes. The lack of hustle and bustle is precisely what draws foreign tourists. An estimated 113,684 visited Champasak Province in 2006.

The southernmost tip of the islands offer a refuge for the critically endangered Irrawaddy dolphin, numbered at just 10 in Laos, as well as some famous waterfalls. Yet this area, just two kilometres from Cambodia, is also home to the Hoo Sahong channel, where the controversial Don Sahong Dam will be built starting this month, according to the Laos government. It sees the 260-megawatt structure as a way for this developing country to capitalise on its hydrological energy for export. However, environmental experts warn the region could lose not only its dolphins and tourists, but also the massive fish migrations that feed its people.

The Hoo Sahong is said to be the only viable transit point for large numbers of fish during the low-river phase of the dry season, impacting not just Laos but countries downstream like Cambodia.

Boun Sayavong, a tourism operator on Don Det, a popular island just west of the site, said he is not concerned about losing dolphins or fish. He said the government is preparing for dam construction by banning the use of wooden fish traps known as Ly, which are placed along the numerous channels between the islands to catch fish as they migrate.

When asked how fishermen will survive without their traps, he said they have other ways to catch fish. "Only those people without jobs are unhappy about the dam."

"The government asked people by survey and 60 per cent said [the dam] is a good idea. Only 40 per cent said they didn't like the idea. It is not like Cambodia, where the government decides without asking the people," said Boun.

However, Ian Baird, a US-based Mekong fisheries expert who lived in Laos for several years and is fluent in the language, said he was not aware of any government survey. "Nobody would dare say

they don't support the project. I know the villages there well. Of course they can't say anything as they have been warned" by government officials not to.

Ame Trandem of the non-governmental organisation International Rivers agrees. "Most people are careful to say only positive things about the dam in public but once we spend time with them, away from other villagers and once they trust us, they pass their concerns when we tell them won't use their names."

Villagers told Trandem that preliminary work began this summer. A nearby channel has been blasted and villagers' fish traps have been confiscated to create an alternative migration route for fish.

Mega First Corporation, the Malaysian company building the dam, alleges the fish passes it plans to install with the dam will be sufficient to maintain stocks.

Baird, who reviewed the previous Environmental Impact Assessment (EIA) said: "In the EIA, they only ask fishermen the number of kilos they caught, not which species. They are comparing fish in this region, which has 200 species, to migrating salmon in North America. I worked in this region for 15 years and published several academic articles. I can tell they don't have a clue. They are consultants, guessing."

The Diplomat requested comment from Mega First, but got no reply.

Fish migrate up the Mekong from Tonle Sap Lake once the dry season begins in November, which also heralds the beginning of the fishing season. Both Baird and Trandem warn the insufficient fish-channels would not allow for large-scale migrations and threaten food security for the millions of Laotians and Cambodians who rely on fish as their main protein source.

Baird said the sharp reduction of wildlife in the region helps explain why both countries have rates as high as 40 per cent for child malnutrition.

While people in Laos may hold their tongues, in Cambodia they are speaking out. Around the Sesan, Srepok and Sesong tributaries of the Mekong in remote northeast Cambodia, a rights group formed by locals has been protesting against Vietnam's dams since 2001. When Vietnam dammed the Yali Falls upstream of the Sesan River in 1996, initial releases of excess water from the dam without warning caused numerous deaths downstream. The region suffered severely and without compensation from violent and irregular floods that wiped out crops and livestock. Residents along the Sesan River told the Diplomat that there are now hardly any fish in the river. Meach Mean, a local resident and member of the 3SRivers Protection Network, said rivers are the livelihoods of the Khmer, Laotian, Chinese and indigenous tribes living in the watershed. "We need the rivers for farming too," explained Meach. Rivers expand during the wet season, bringing agricultural land to life through irrigation to grow rice, another staple of both Cambodia and Laos.

<http://www.nationmultimedia.com/opinion/Mekong-dam-threatens-to-drain-lifeflood-of-region-30220899.html>

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## **Pollution Threatens China's Ambitious Water-Transfer Project**

China's ambitious South-North Water Transfer Project is in danger of becoming, in effect, a massive sewage transfer project. The vast water diversion scheme—which has been under construction since 2002 and will cost at least \$62 billion—is designed to channel water from southern China to the arid north through three vast canal systems. But the central reservoir is badly polluted.

Danjiangkou Reservoir is located in central China's Hubei province. Construction was completed last year, after 345,000 people living nearby were moved—the largest forced relocation in China since the completion of Three Gorges Dam. The reservoir has a capacity of 1.7 trillion cubic meters, and in 2014, water from Danjiangkou is scheduled to start flowing to Beijing and nearby Tianjin, northern megacities already facing dire water shortages.

Engineering alone won't solve China's water-scarcity challenges. On Tuesday, China's Ministry of Environmental Protection acknowledged that the five rivers flowing into the Danjiangkou reservoir are all routinely used as dumping grounds for untreated sewage by local industries. According to state-run Xinhua newswire, the government recently closed some suspected businesses and construction sites near the reservoir.

*[http://www.businessweek.com/articles/2013-11-27/pollution-threatens-china-s-ambitious-water-transfer-project?utm\\_source=Circle+of+Blue+WaterNews+%26+Alerts&utm\\_campaign=3d82a21d67-RSS\\_EMAIL\\_CAMPAIGN&utm\\_medium=email&utm\\_term=0\\_c1265b6ed7-3d82a21d67-250657169](http://www.businessweek.com/articles/2013-11-27/pollution-threatens-china-s-ambitious-water-transfer-project?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=3d82a21d67-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_c1265b6ed7-3d82a21d67-250657169)*

# FOOD SECURITY

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## News Analyses

### National

#### **Food security non-negotiable: Anand Sharma**

In a development that has increased the risk of collapse of Bali talks, India on Wednesday in a strongly-worded message to the WTO members said the food security issue is “non-negotiable” for New Delhi.

Addressing the plenary session of the 9th Ministerial Conference of the WTO, Commerce and Industry Minister Anand Sharma said the Bali package must be substantive, and historical imbalances in trade rules must be corrected to ensure a rule-based, fair and equitable order.

“Agriculture sustains millions of subsistence farmers. Their interests must be secured. Food security is essential for over four billion people of the world. For India, food security is non-negotiable. Need of public stock-holding of foodgrains to ensure food security must be respected. Dated WTO rules need to be corrected,” he said.

The G-33, grouping of 46-member developing nations including India, China and Indonesia, has proposed to amend the WTO Agreement on Agriculture in order to procure foodgrains from poor farmers at minimum support price and sell to poor people at cheap rates through public distribution system.

India’s Food Security Act entitles 82 crore people to 5 kg of foodgrains per person a month at Rs 1-3 per kg. The country needs 62 million tonnes foodgrains a year to implement the law.

“A trade agreement must be in harmony with our shared commitments of eliminating hunger and ensuring the right to food. These are an integral part of the Millennium Development Goals,” he added.

He said the due restraint provision in its current form cannot be accepted and it must remain in force till “we reach a negotiated permanent solution”.

The G-33 proposal on food security aimed at addressing the problems faced by developing countries due to outdated WTO rules which base agriculture subsidy calculation on external reference prices of 1986-88, even as global food prices have increased manifold during this period.

India is pinning hopes on wide support from the grouping of G-33 which includes China and Indonesia. However, given the political compulsions back home in an election year, sources said, India would prefer a “no deal to bad deal”, especially with regard to farmers.

On the trade facilitation agreement (TFA), Mr. Sharma has clearly said that although India has remained constructively engaged, “yet, a few contentious issues remain” and “we consider it premature to lend support to an inconclusive TFA”.

Further, he added that for over 12 years, WTO members have struggled to bring the complex negotiations of the Doha round to conclusion.

“The continuing stalemate has led to frustration and cynicism when this was the only round dedicated to development agenda,” he added.

India’s stand could be seen as a major blow to the Bali meeting as several WTO members are pitching for a positive outcome.

Speaking at the occasion, Brazil Trade Minister Luiz Alberto Figueiredo Machado too said that food security is an important element for developing countries.

“We had hoped for more...since agriculture is where we find maximum distortions. I must emphasise the central importance of agriculture,” Mr. Machado said.

On TFA, he said that for its implementation, LDCs should be given financial and technical assistance.

Mexico also talked about the importance of food security.

Mexico and Brazil are important members of the G33.

Chinese Trade Minister Huchang Gao said the multilateral system is facing challenges. “Confidence, commitment and changes are important for the deal,” he said.

EU Trade Commissioner Karl De Gucht said, “...faith of the entire WTO is a stake...we have come to far to fail.”

US Trade Representative Michael Froman said the Bali deal is close and no country has received all its demands.

“US has negotiated hard but we have shown flexibility...this (the current text) is not we have expected...let us not sugarcoat the failure; if it happens, the loss will be felt by those who could least afford it. We can not take success for granted this time,” he said.

*World Trade Organisation conference, WTO conference, Anand Sharma, Food Security Bill, Food security, trade facilitation agreement, Bali package, G-33 countries*

## News Articles

### National

#### Farmers’ support vital in achieving food security’

Eminent agricultural scientist M.S. Swaminathan on Sunday said the recently enacted National Food Security Act was a laudable initiative.

It gave the legal right to food to about 70 per cent of the population, but its success largely depended on economical viability of farming and ecological sustainability.

He urged the government to address grievances and concerns of farmers across the country as their cooperation remains vital in achieving food security and self-sufficiency.

He was interacting with *The Hindu* on the sidelines of a national seminar on 'Relevance and Challenges of the Food Security Act' organised by Kochi Open Forum. Mr. Swaminathan said the Act could be smoothly implemented this year or next year as the country had sufficient grain stock, but it would be difficult in the subsequent years. He said environmental and ecological factors, and demographic challenges were adversely affecting the production of important crops.

He said the country needed to work out steps to attract the younger generation into farming. Farming must be technologically upgraded and made challenging and interesting to woo more youngsters.

"The role of the youth is an important factor in maintaining food safety in the long run," he said.

The population of India was just 30 crore when the Bengal famine took place, but now the country had to feed 120 crore people. "The Act is significant as it marks a transition from the days in 60s when the country waited for ships carrying grains from other countries to legally empowering people with the right to food. Hitherto, we were dependent on the public distribution system for ensuring nutrients, but it covered only wheat and rice. The Food Security Act enlarges the food basket by adding pulses and millets," he said.

It has a 'life-cycle approach' which is appreciable considering the degree of malnutrition in the country, he said.

Quoting from different surveys, Mr. Swaminathan said 40 per cent of children below the age of five in India faced malnutrition while 21 percent of newborn babies were underweight.

"In the global hunger index, India stands at 65 position among the listed 75 countries. In India, hungry millions coexist with grain mountains, which will not ensure food security. We must not allow food products to rot," he said. The Act was revolutionary as it now covered 80 crore people in 75 per cent of villages and 50 per cent of towns, he said.

<http://www.thehindu.com/news/cities/Kochi/farmers-support-vital-in-achieving-food-security/article5463357.ece>

## **After Bali, India braces for lonely battle on food security**

**New Delhi:** After key members of the G-33 group of developing countries deserted India on the issue of food security at the Bali meet of the World Trade Organization (WTO), making it difficult for it to negotiate a favourable deal, there is greater realization among Indian policymakers that they may now have to fight a lonely battle.

The G-33, a grouping of nations that coordinates on trade and economic issues at the WTO, has 46 countries from Asia, Africa and Latin America as members.

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While developed countries put forth trade facilitation with an intention to streamline global customs rules for easier transit of goods in the agenda for Bali meeting which concluded earlier this month, the G-33 group wanted protection of their food security programmes from violating WTO rules on food subsidy limits.

However, as negotiations kicked off at Bali and trade minister Anand Sharma declared that food security was a non-negotiable issue, India found itself isolated, with most G-33 countries, including China, Brazil, Pakistan and host Indonesia, drifting away on the issue to secure a deal at Bali.

India's position, in view of its extreme poverty, is not comparable with many other nations, which is why it will find itself increasingly isolated on many issues, said a commerce ministry official speaking on condition of anonymity.

"In our agriculture activity, there are a lot of small and marginal farmers. But in countries like in Latin America, there is no concept of small and marginal farmers. There are huge mechanized farming communities," he said. "So there, even if they make a slight concession, it does not affect their future as much as it will affect millions of farmers in India. In many of these countries, it is also no more a livelihood issue."

China will fight with India as a developing country only when it suits its interest, according to the official. "China's poverty levels are not same as ours. They have a huge landmass. So even though they may be 1.35 billion people, their density is not as high as ours and their landholding is not as critical as ours. Look at climate change," he said. "We will soon lose China in the debate. They are moving away from the developing countries' stand."

While developed countries were ready to give India a four-year leeway, during which it will not be sued under WTO rules if it breaches the 10% subsidy limit of the total value of agricultural production based on 1986-88 prices, India insisted the interim measure put in place should continue until a permanent solution to the issue is arrived at.

After several rounds of negotiations between Sharma and US trade representative Michael Froman, often mediated by WTO director general Roberto Azevedo, a breakthrough was achieved, with India getting its way on its demand. However, India has to adopt tough disclosure norms in its food security programme and ensure that it does not sell government-procured food grain in overseas markets, which could distort international trade.

In the forthcoming Doha work programme, which is to be finalized in the next 12 months, it is absolutely necessary that cohesion among the G-33 member countries is maintained to protect their interest, according to Abhijit Das, director of the Centre for WTO Studies at the Indian Institute of Foreign Trade. "Developing countries should learn the lesson from the Uruguay round of negotiations, where they got an asymmetric agreement because of a lack of coordination," Das said.

One of the key reasons of the divergence of opinion among developing countries was because Indonesia, being the coordinator of the G-33 group, could not take a strident position on the food security matter as it wanted to seal a deal at Bali as the host nation, said Biswajit Dhar, director-general at Research and Information System for Developing Countries, a think tank.

“India should really up the ante and put its diplomatic act in place to establish consensus on major issues among the developing countries,” Dhar said. “We have to play our card very smartly.”

<http://www.livemint.com/Politics/pLoaWTXvK1k41pwNVwm5gO/After-Bali-India-braces-for-lonely-battle-on-food-security.html>

### **Food security law: Centre to share more costs with states**

The central government has decided to widen the acceptability of its biggest social security initiative, the National Food Security Act, by agreeing to equally share the financial burden of transportation of grain and commission for ration-shop owners with state governments.

Officials said the food ministry planned to move a note on the issue, for early discussion at the Cabinet.

Now, state governments bear the expenses of transportation of foodgrain from Food Corporation of India's godowns to ration shops and also pay commission to the shop owners. The rates vary. For example, common rice to Above Poverty Line families is sold by the Centre at Rs 7.95 a kg, while it costs Rs 10 a kg in Assam and Rs 11.50 in Chhattisgarh, after adding the transportation cost and commission.

Sharing of expenses was one of the main demands of some state governments, mainly the non-Congress ones, many of which have yet not started the process of implementing the law. “The total burden of transportation expenses and commission for ration-shop owners will be around Rs 7,500 crore a year, of which Rs 3,750 crore will be borne by the central government,” an official said.

This will further inflate the Centre's subsidy calculation on account of the new law, once it is implemented.

The government is to provide provide cheap foodgrain to about 800 million Indians under the Act. Items such as edible oils and pulses will be added once leakages in the Public Distribution System (PDS) are checked.

“By the end of February, almost 40 per cent of the states will get ready to implement the Food Act. Recently, Punjab has informed us that it will implement the programme from December, while Kerala will start from February and Karnataka by the end of this month,” Food Minister K V Thomas told Business Standard.

Officials said a basic problem in smooth operation of the NFSA was PDS leakage. Once the Centre starts sharing the burden with states, they will be encouraged to increase the incentive given to ration shop owners to sell PDS foodgrain, stopping them from diverting it to the open market, is the hope.

[http://www.business-standard.com/article/economy-policy/food-security-law-centre-to-share-more-costs-with-states-113121100876\\_1.html](http://www.business-standard.com/article/economy-policy/food-security-law-centre-to-share-more-costs-with-states-113121100876_1.html)

## Global

### China to safeguard national food security

The Central Economic Work Conference reviewed the country's economic work in 2013 and mapped out plans for 2014

China will safeguard national food security while continuing to pursue the sustainable development of agriculture, an official statement said Friday.

The statement, issued after a four-day central economic work conference, said a national food security strategy based on domestic supply and moderate imports would be followed to ensure production capacity and endorse science and technology, Xinhua reported.

The Central Economic Work Conference reviewed the country's economic work in 2013 and mapped out plans for 2014.

The country will focus on both quality and quantity of agricultural products, food safety, supervision of the production source and the whole sales process, it said, adding China will continue to follow a sustainable development path of agriculture and develop water-saving agriculture.

China will build its capabilities to safeguard food security, improve the construction of agricultural infrastructure and speed up the development of agricultural science, it further added.

[http://www.business-standard.com/article/international/china-to-safeguard-national-food-security-113121400065\\_1.html](http://www.business-standard.com/article/international/china-to-safeguard-national-food-security-113121400065_1.html)

### Bad credit worsens Zimbabwe's food woes

THE drying-up of credit lines to the government, apparent donor fatigue and a determined stand against GM foods are pushing up maize prices by nearly a third in some drought-hit areas compared to a year ago, according to humanitarian organisations and economists.

The September 2013 Vulnerability Assessment Committee (VAC) estimated that 2.2 million people would require food assistance before the March 2014 harvest.

Zimbabwe food shortages are attributed to several factors by the US-based Famine Early Warning System (FEWSNET), including the late arrival of the rains, flooding, poor rainfall distribution and an army worm infestation.

"Communities, particularly rural ones, are facing a twin evil: food is scarce, and that tends to push prices up," Innocent Makwiramiti, an economist and former chief executive officer of the Zimbabwe National Chamber of Commerce, told IRIN.

"The government has no money to import enough grain so that people can buy it at subsidized levels. The hungry are therefore forced to buy from private sellers, who charge high prices."

FEWSNET said in its Zimbabwe food security outlook covering October 2013 to March 2014 that “prices for both maize meal and maize grain have been increasing”, with higher costs in monitored areas ranging between seven percent and 30 percent.

This was caused by “increased demand by many households as cereal stocks from own production finished earlier than in normal years”.

“National average maize grain and meal are approximately 20 percent higher than last year [2012], and 30 percent higher than the four-year average. Prices are ranging from 10 to 20 percent above the national average in deficit areas,” the report said.

Economist Eric Bloch told IRIN: “Prices could have been higher were the humanitarian community not helping with food hand-outs, but who does not know that they are also affected by donor fatigue and their contributions are thus limited? The private sector sells at exorbitant prices.”

According to the UN World Food Programme (WFP) market monitor for October 2013, there is increasing demand for food due to shortages, as only 11 percent of rural households are able to meet their own food requirements.

“As a matter of fact, most markets in the maize production areas have reached abnormally high price levels during the quarter July-September, with prices high in areas that had poor yields,” the WFP monitor noted.

<http://www.newzimbabwe.com/news-13454-Bad+credit+worsens+Zim%E2%80%99s+food+woes/news.aspx>

## **Korea to contribute USD 9 million to Afghan food security**

ISLAMABAD, Dec 14 (KUNA) — The Government of the Republic of Korea has announced a contribution of USD nine million to the World Food Program (WFP) to support projects to boost food security in Afghanistan.

Korea announced the donation during a signing ceremony in Rome on Saturday, attended by high officials of Korea and the WFP.

The WFP’s representative and Country Director for Afghanistan said in a press statement “I would like to thank the government of the Republic of Korea for this generous contribution, which comes at a timely moment as WFP plans to begin its new three-year program in January 2014.” This contribution would enable WFP to better assist Afghans in food insecure areas by building community resilience to prevent and lessen the impact of natural disasters.

The Republic of Korea has recently committed another USD 13 million to support soybean production in Afghanistan through WFP’s Purchase for Progress (P4P) initiative.

The donation will be used over the next three years to restore community assets such as irrigation channels, floodwalls and feeder roads.

WFP has provided more than 97 million people in 80 countries with food assistance, and had been working in Afghanistan for 50 years to build a hunger free future for the people.

According to WFP officials, the program will assist 3.6 million people over 3 years with a budget of USD 500 million.

*<http://www.kuna.net.kw/ArticleDetails.aspx?id=2350343&Language=en>*

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