

NTS

Newsletter

Non Traditional Security



CONTENTS

ENERGY SECURITY

News Analyses

National

- A tightrope walk with Iran

Global

- High Oil Prices Starting to Affect China and India

News Articles

National

- OVL-OIL to buy Videocon's 10% in Mozambique field for \$2.45 bn
- India to provide \$150 million to set up SEZ in Myanmar
- India Plans to Bid for 8 Oil, Gas Blocks in Myanmar
- Power Grid, IFC may tie up for rural electrification, distribution in Myanmar rural areas

Global

- To ease Pak energy crisis, India sends officials with pipeline offer
- Power play: Pakistan willing to import electricity, says India
- Rio Tinto Coal Assets Garner Interest From Indian, Chinese Firms
- China eyes Arctic options in energy, transport

CLIMATE SECURITY

News Analyses

National

- Change the climate for India's poor

Global

- Climate change impacting food supply in Ghana

News Articles

National

- Emission impossible: Weather's turning on climate change

Global

- Norway to work with india to mitigate climate change
- North Pole drifts east due to climate change

WATER SECURITY

News Analyses

National

- Indian firm to construct hydroelectric plants in Kano, Nigeria

Global

- Iran inaugurates new dams

News Articles

Global

- Greenpeace releases data on water usage by power plants in drought-affected areas
- Is a Lack of Water to Blame for the Conflict in Syria?
- French water companies keen on engaging with Middle East's decision makers during IWS 2014
- OECD report: Global demands for food, water to rise
- Export oil, import water – the Middle East's risky economics

FOOD SECURITY

News Analyses

National

- Why the food security Bill will not boost food grain consumption for the poor
- What we need is not a food security Bill but a hunger elimination act

Global

- Over half the world's population could rely on food imports by 2050 – study

News Articles

National

- Govt to reconsider wheat exports from FCI stocks

Global

- Research points out to \$125 billion cost of global malnutrition

EDITOR'S NOTE

A dangerous mix of global economic slowdown, corruption, rising population and striking decline in agricultural investments over the past 30 years combined with uncertainty in weather pattern and resultant production have sharply reduced food security in many developing countries.

Although the Food and Agriculture organization (FAO) was formed during the WWII, in 1943, there has not been any radical improvement in the world hunger statistics. According to FAO report, about 75 per cent of the world's poorest people live in rural areas and depend on agriculture for their livelihoods. It estimates that Africa is hardest hit by the food crisis and will need at least \$ 30 billion annually to revive its agriculture and to ensure food security for its people. Asia is not far behind. In a study published by the Economic and Social Commission for Asia and the Pacific (ESCAP), 25 countries in Asia are hotspots of food insecurity, including Afghanistan, Bangladesh, India, Indonesia, the Maldives, Mongolia, Nepal, the Philippines, Sri Lanka, Thailand and Timor Leste. The causes were identified as extreme poverty, inequality in distribution and the lack of access to land, irrigation facilities, transportation, which prevented poor people from growing their own food.

India, on the other hand, attained self sufficiency in food production after the Green Revolution of 1968. There was boom in the production of wheat and rice, so much so that from being net food importers (after the famines of 1964) it became net exporters of rice, wheat, oilseeds, sugarcane, etc. Today inspite of food surplus, every 4th child in India is malnourished.

If the current trends are to be believed, international targets to reduce world hunger and poverty by half before 2015 appear increasingly beyond reach and it seems uncertain if right to healthy food (which has now become a global right) will ever be achieved in the given time-frame.

This issue of the NTS- Newsletter focuses on the connected causes and effects of global food security challenges and the efforts underway to assure both the physical and economic access to food.

ENERGY SECURITY

News Analyses

National

A tightrope walk with Iran

India's relations with Iran have seen twists and turns in history where they have been close at times and shared common interests. India has recently given the green signal in helping Iran build the port of Chabahar and is building a highway between Zaranj and Delaram. This signals a good turn in India's Iran relations, particularly at a time when the US is taking unilateral coercive measures to corner Iran and putting pressure on India to decrease their relations with that country.

India and Iran have several common interests. Both countries have shared the common political ideal of a stronger global South and an independent West Asia. Both have compatibility in trade which runs to US\$ 14 billion. And even more via third countries. India imports about 11 per cent of its oil needs from Iran. Iran absorbs a vast amount of Indian labour. Iran is the closest and most natural route between India and Central Asia and India and West Asia for its growing energy requirement and other resources. India and Iran want a stable Afghanistan which is possible through a collective regional solution. Then what's the problem?

Iran is a major player and influences the politics of the troubled West Asia. It has contradictory and complex relations with most of the individual countries of the region. For example, Iran had a war with Iraq but the hostility was overcome after Iran assisted most factions of Iraqi leadership during the US occupation. Now the two are allies. Iran is a strong regional player and can help achieve stability in Afghanistan whom they share a border with. Earlier, like India, Iran had supported the Northern Alliance in Afghanistan in the 1980s. Iran is a strong supporter of an independent Palestine with a Hamas leadership. Iran is a rival to Turkey and Saudi Arabia in regional geopolitics.

Iran has one major geopolitical adversary and that is the US-Israel alliance. Iran's independent stance, its commitment to Palestine, military strength, nuclear ambitions, support to radical Islamic groups in the region and other such positions, have made the US-Israel axis their enemies. The US interest is to change the political system in Iran and stem its power. Iran was a US ally until popular struggles toppled the Shah of Iran's regime and the Ayatollahs came into power. Now, the US has used Iran's nuclear programme as an alibi and imposed economic sanctions against it in order to cripple its economy and cause internal rebellion. The United States have targeted the Iranian rial so that it cannot be exchanged for any other international currency. They would like all the world to follow this and want India to be part of this game plan.

The US and Israel have put massive pressure on India to distance itself from Iran, stop importing Iranian oil and vote against Iran in the International Atomic Energy Agency (IAEA) on sanctions against its civil nuclear programme. India has twice gone along with the US in the vote in the IAEA in 2005. The Indo-US nuclear deal had a conditionality that India supports the US on Iran.

India also stalled the proposed Iran-Pakistan-India pipeline project that would have delivered gas directly to India as they were wary and unsure of both security and price issues. But this must have pleased the US and Israel also.

The US has stopped its banks and international transaction agencies like the Asian Clearing Union from making any transactions with companies that deal with Iran. India decreased the oil trade by 2-3 per cent. But recently, India has made it clear to the US that it is not going to make any further cuts in oil imports and trade with Iran.

India also managed to get waivers from the US on this count.

India had announced several investments in Iran just last month. These include a railway project from Chahbahar to Bam that has a free trade industrial zone. This is potentially a big investment for India at a time Iran needs friends and is likely to reward those who stand by it. The Chinese and Russians have similarly invested in Iran. Similarly, the Zaranj-Delaram road that India is helping to build links up with Afghanistan and is important for the Indian geo-strategic perspective. At a time, when Pakistan is resisting Indian road building in Afghanistan and Indian workers have been killed, India needs such alternative linkages. Similarly, the oil that India is getting is a beneficial deal.

Of course, India has been careful in the diplomatic language it uses when explaining its relations with Iran, taking care to show that its ties are linked to stability in the region, especially concerning Afghanistan. India also continues to oppose Iran's nuclear programme. This is not a bad tactic, and certainly more sophisticated than jumping on to the bandwagon of sanctions like the Europeans have done. China and Russia on the other hand have clearly emerged as leaders because they have put pressure on Iran to stop its nuclear programme, offered Iran methods to ensure it restricts itself to just nuclear power and not enrich uranium and also stopped the US and Israel from attacking Iran's nuclear facilities, as they have threatened to do.

Thus, by pushing its agenda on oil and trade, India has retrieved its position to some extent, more so because it needs Iran, just as Iran needs India at this most critical juncture. As for the US, most of its policies in West Asia are backfiring. Its strongest ally Turkey who assisted the West in the civil war in Syria is facing the worst backlash from its own people, even though the Turkish economy grows by 5 per cent every year.

Iran and India had established stable relations, with some ups and downs. Currently, these are on the up again. To keep these important geopolitical, economic and social relations on track, India will have to ensure that it hold up its spine and not bend before big power interests.

Iran is as important a geopolitical ally as any other. The elephants in the room are the US and Israel.

<http://newindianexpress.com/opinion/A-tightrope-walk-with-Iran/2013/06/13/article1631836.ece>

Global

High Oil Prices Starting to Affect China and India

The US Energy Information Administration recently released its report showing oil consumption by country updated through 2012. Based on this report, it appears that at current high oil prices, demand in both China and India is being reduced. Thus, for those who are wondering how high oil prices need to be, to be "too high," the answer is, "We are already there. In fact, continued high oil prices are a big reason behind the recessionary forces we are now seeing around the world."

A big part of China and India’s problems is that they, like the United States and most of Europe, are oil importers. In this post, I also explain why there is a big difference in the impact of high oil prices on oil importing countries compared to oil exporting countries.

We can see from Figures 1 and 2 that at \$100 per barrel prices, there is a definite flattening in per capita consumption for both India and China. Per capita consumption is used in this analysis, because if total oil consumption is rising, but by less than population is increasing, consumption on average is falling.

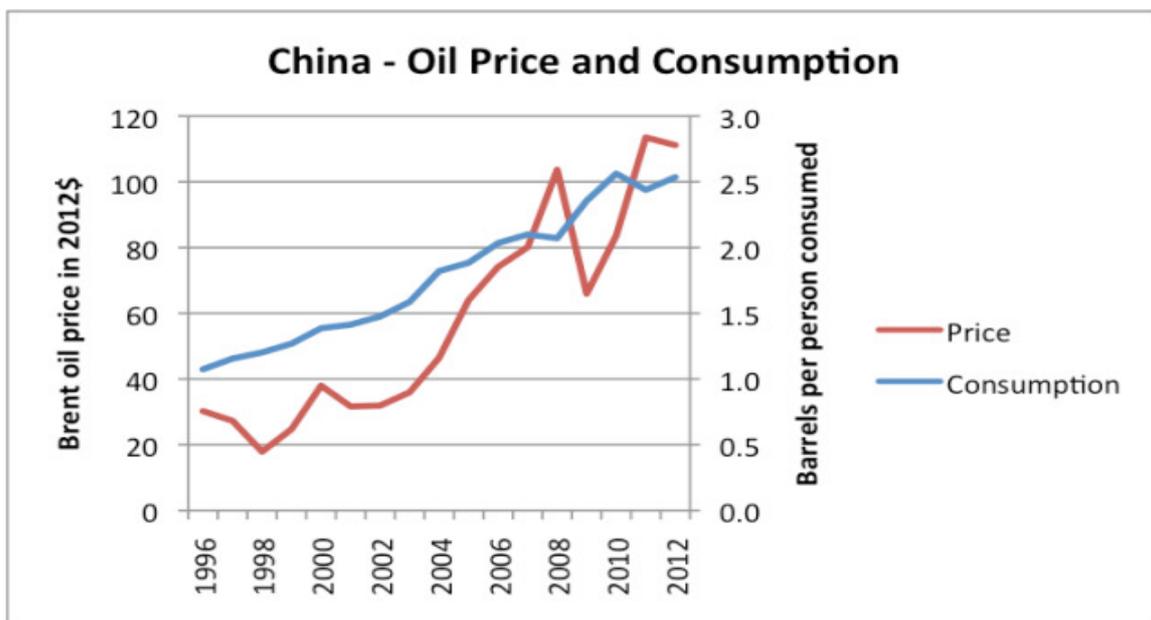


Figure 1: Liquids (including biofuel, etc) consumption for China, based on data of US EIA, together with Brent oil price in 2012 dollars, based on BP Statistical Review of World Energy updated with EIA data.

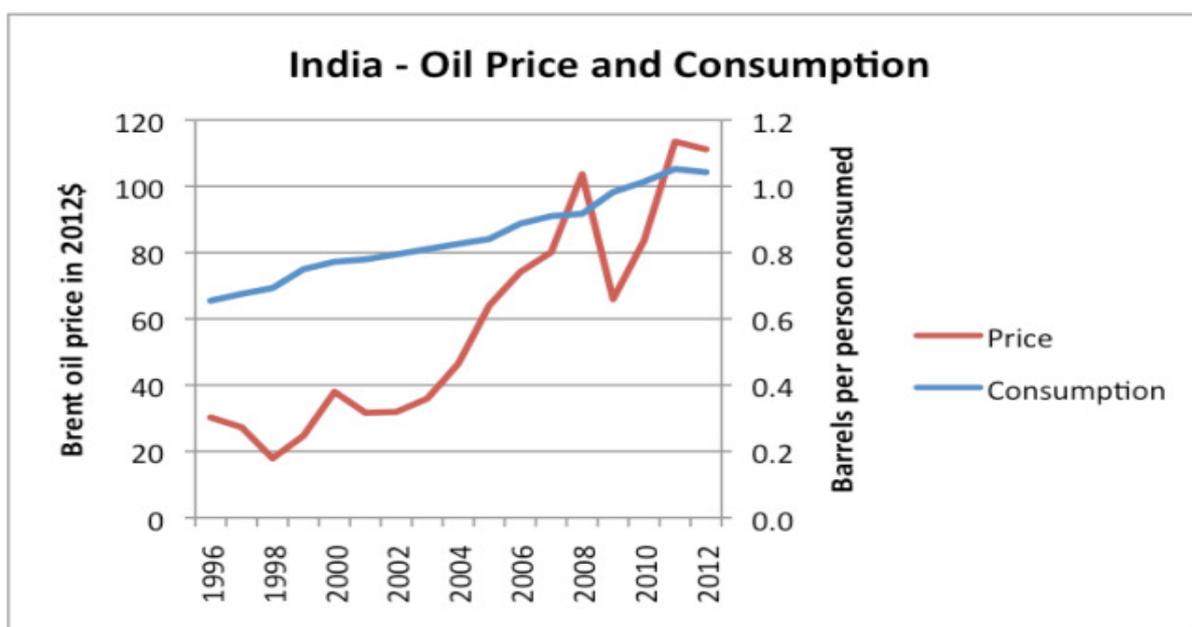


Figure 2: Liquids (including biofuel, etc) consumption for India, based on data of US EIA, together with Brent oil price in 2012 dollars, based on BP Statistical Review of World Energy updated with EIA data.

Some Other Countries with Declining Consumption

There are many other importing countries with even sharper drops in consumption than China and India. These declines started in the 2005 to 2007 period, as oil prices rose, and continued as oil prices have remained high. One example is Greece:

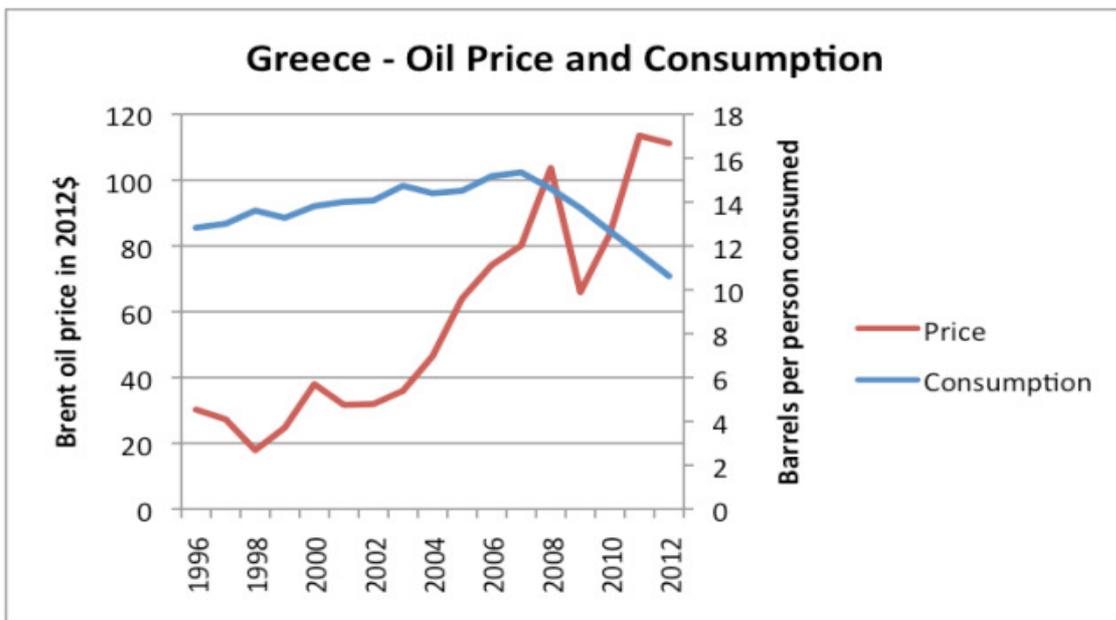


Figure 3: Liquids (including biofuel, etc) consumption of Greece, based on data of US EIA, together with Brent oil price in 2012 dollars, based on BP Statistical Review of World Energy updated with EIA data.

In fact, all of the PIIGS (Portugal, Ireland, Italy, Greece, and Spain, known for their problems with recession) have shown steep drops in oil consumption:

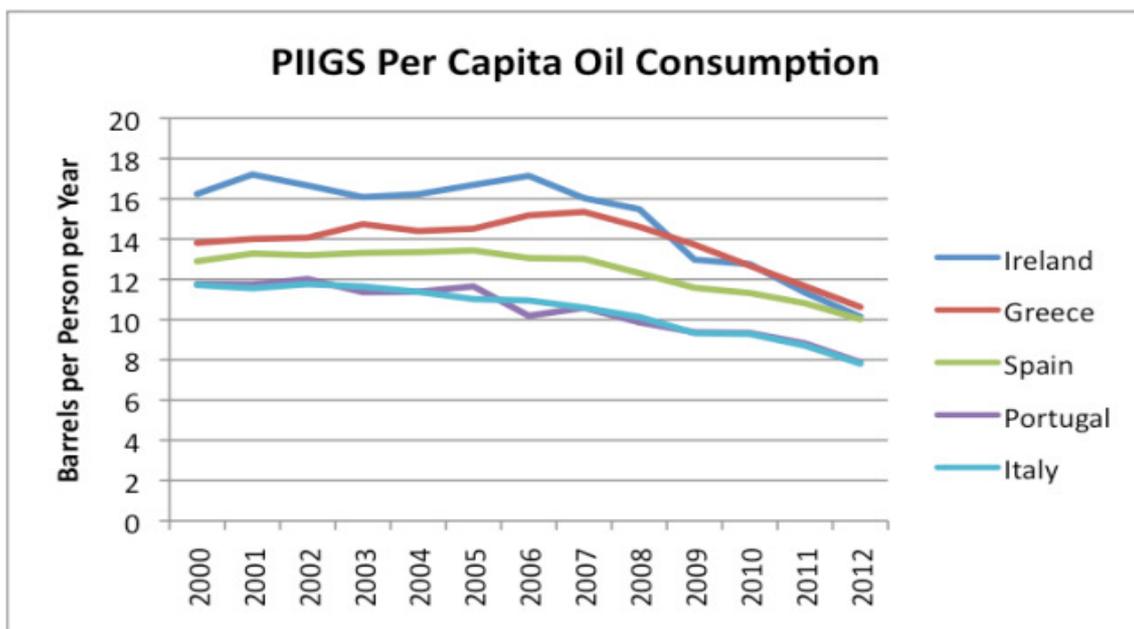


Figure 4: Per capita oil (“liquids”) consumption for countries known as PIIGS, based on EIA data.

Europe in total shows a somewhat less steep drop in oil consumption than the PIIGS:

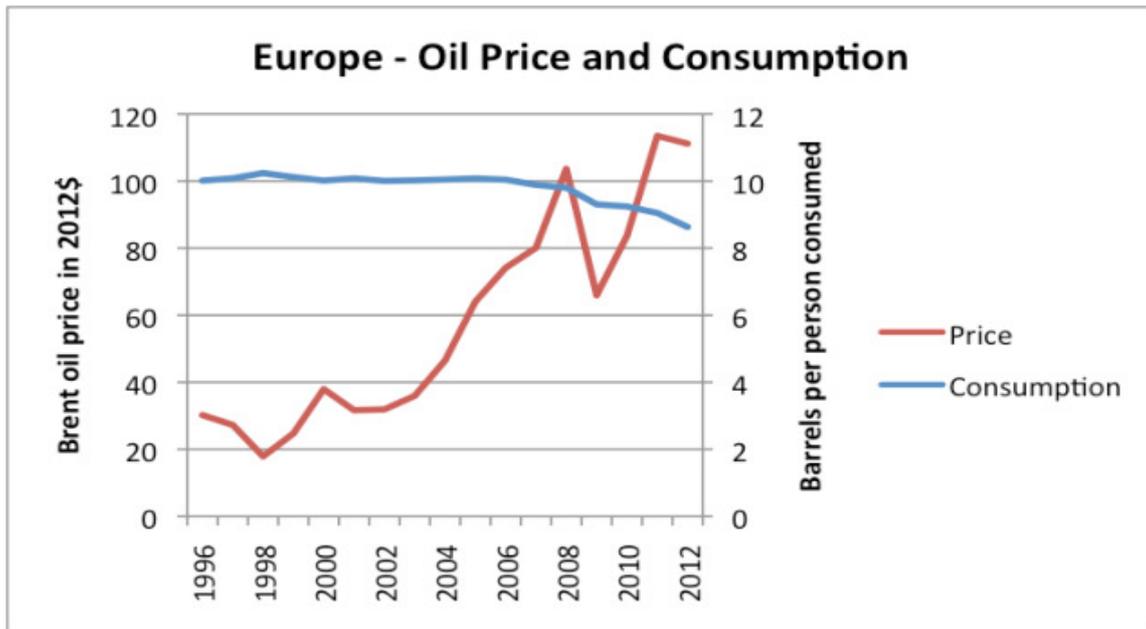


Figure 5: Liquids (oil including biofuel, etc) consumption for Europe, based on data of US EIA, together with Brent oil price in 2012 dollars, based on BP Statistical Review of World Energy updated with EIA data.

The US shows a similar drop in consumption to Europe:

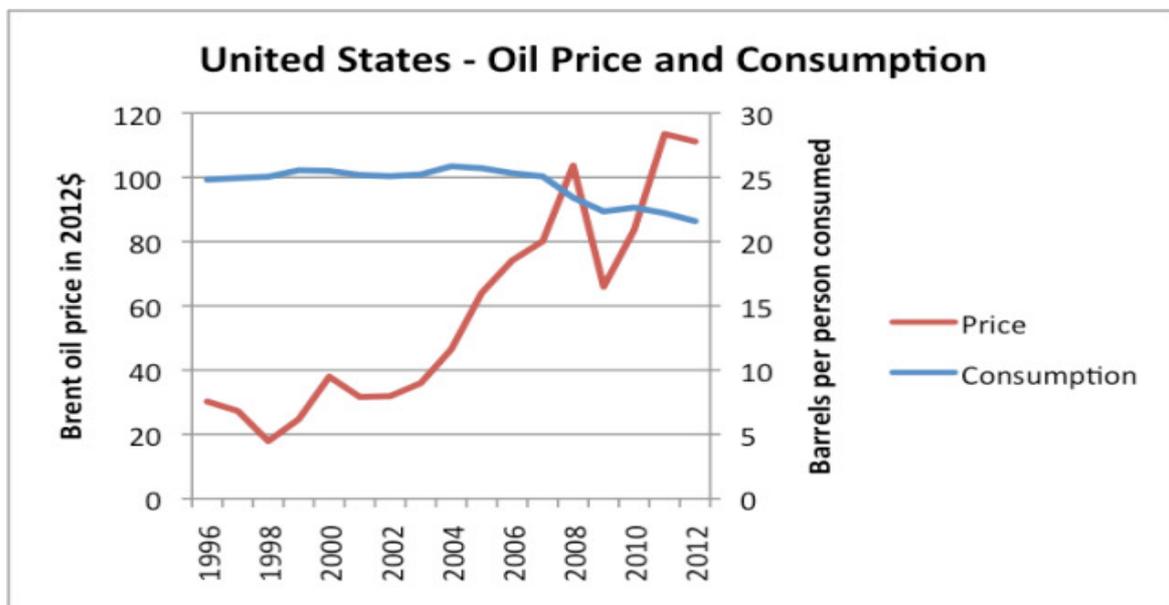


Figure 6: Liquids (oil including biofuel, etc) consumption for United States, based on data of US EIA, together with Brent oil price in 2012 dollars, based on BP Statistical Review of World Energy updated with EIA data.

Where is per capita oil consumption rising?

Oil consumption is rising faster than population in many oil exporting countries. If we look at OPEC in total, we see a big upward jump in per capita oil consumption in 2011 and 2012.

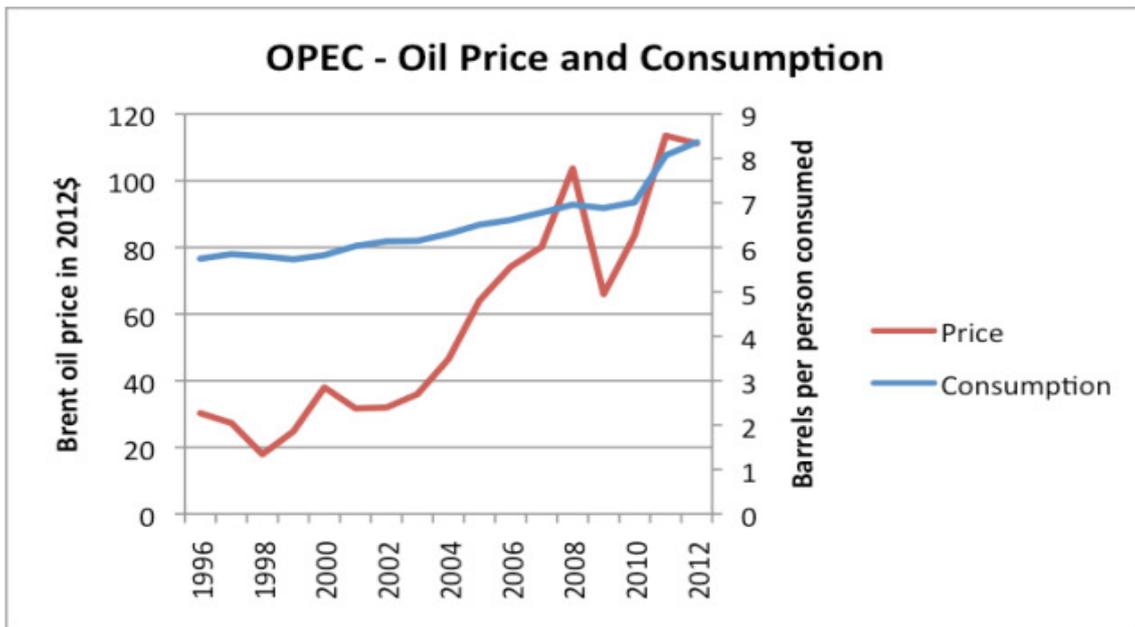


Figure 7: Liquids (oil including biofuel, etc) consumption for OPEC, based on data of US EIA, together with Brent oil price in 2012 dollars, based on BP Statistical Review of World Energy updated with EIA data.

In fact, this pattern occurs both in Saudi Arabia, and for OPEC outside Saudi Arabia:

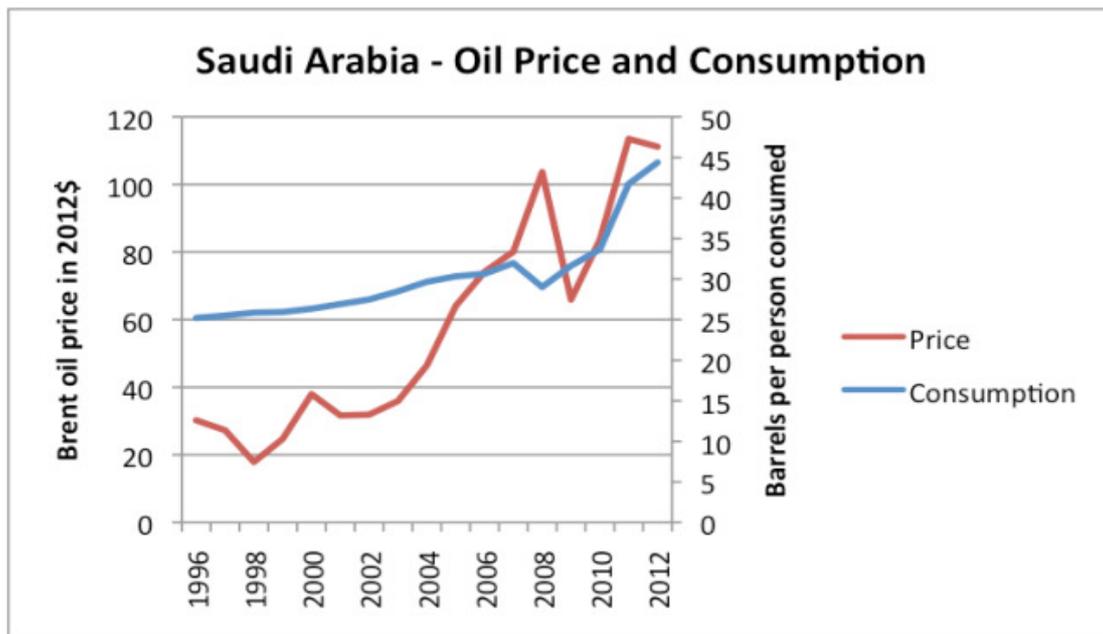


Figure 8: Liquids (oil including biofuel, etc) consumption for Saudi Arabia, based on data of US EIA, together with Brent oil price in 2012 dollars, based on BP Statistical Review of World Energy updated with EIA data.

For Saudi Arabia, 2012 oil consumption per capita is more than five times as much as that of Europe. Outside Saudi Arabia, there is a definite upward bump in consumption, both during the 2008 price run-up and corresponding to the higher price in 2011 and 2012.

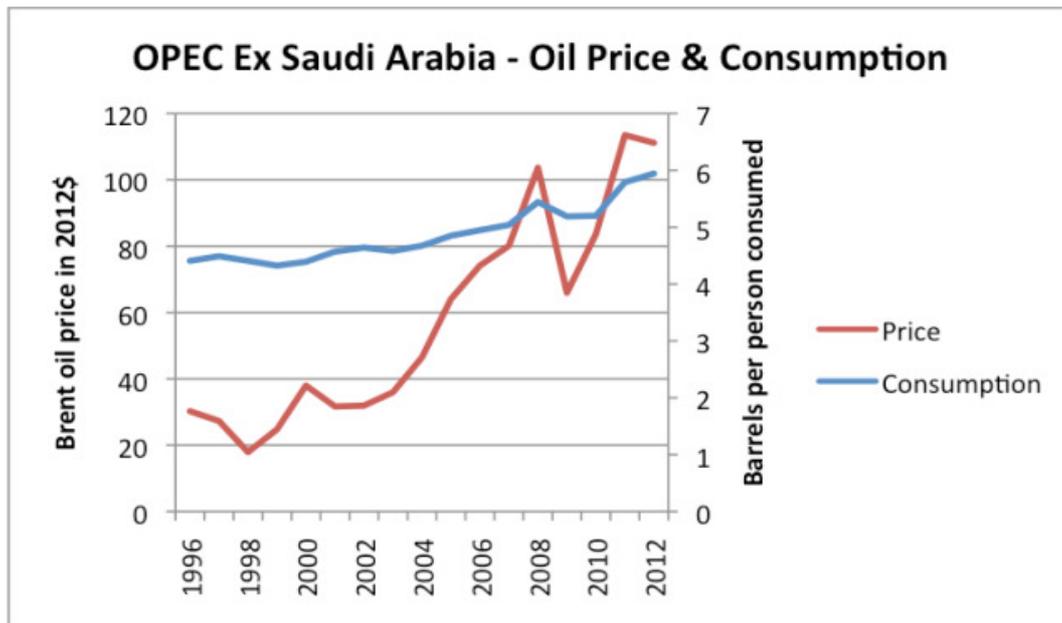


Figure 9: Liquids (oil including biofuel, etc) consumption for OPEC ex Saudi Arabia, based on data of US EIA, together with Brent oil price in 2012 dollars, based on BP Statistical Review of World Energy updated with EIA data.

One reason why oil exporters show higher growth in oil consumption than other countries is because oil is becoming more difficult to extract, and because the easiest to extract oil was extracted first. There are often indirect needs for oil as well, such as desalinization to have sufficient water for a growing population, or a new refinery for difficult-to-refine oil. I talk about these issues in my post, Our Investment Sinkhole Problem.

A second reason why oil exporters often show higher growth in oil consumption is because exporters often provide subsidized prices on oil products, so their citizens do not have to pay the full cost of the product. Thus, their citizens do not really experience the high oil prices that most importers do.

A third reason why oil exporters show higher growth when oil high prices are high has to do with all of the money these exporters receive when they sell high-priced oil. The Economist this week has an article "Saudi Arabia risk: Alert – The next property bubble?" It talks about the huge number of office buildings, schools, low-priced homes, and other building projects underway, thanks to a combination of easy credit availability and lots of oil money. The article indicates that citizens rarely put their new-found wealth into paper investments. Instead, a significant part of their wealth ends up in building projects that require oil use.

Norway is an exporter that does not subsidize oil prices (in fact, it has quite a high tax on oil use in private vehicles). It shows higher per capita oil consumption in the past two years, despite higher world oil prices.

Australia is showing growing per capita oil consumption, perhaps because of oil's use in resource extraction and transport.

Why would a drop in per capita oil consumption for oil importers matter?

A drop in per capita oil consumption is a likely sign that oil is becoming increasingly unaffordable. We know that oil is used to make and transport goods. If less oil is used, or if oil use is growing less rapidly than in the past, there is a real chance that an economy is slowing.

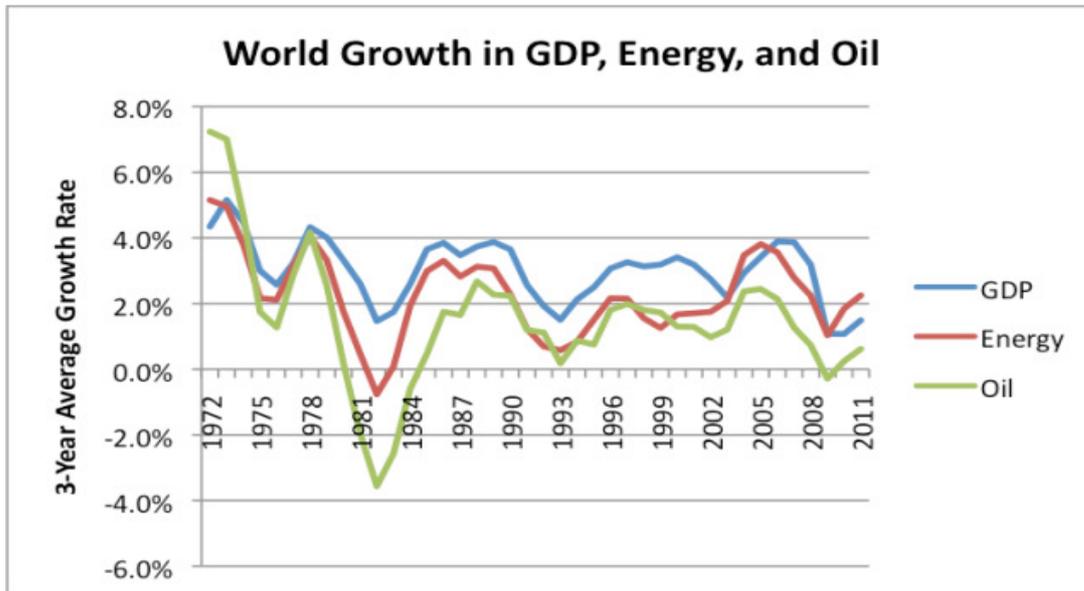


Figure 10: World growth in energy use, oil use, and GDP (three-year averages). Oil and energy use based on BP's 2012 Statistical Review of World Energy. GDP growth based on USDA Economic Research data.

There are a number of reasons oil consumption may be down. Fewer goods for sale may be being transported, perhaps because European demand is down. Citizens may be driving less in their free time. Or many young people may be unemployed, and be unable to afford to buy a car or motor scooter. Any of these changes could mean a slowing economy.

Obviously, there are situations in which reduced oil consumption doesn't mean a slowing economy. A shift from manufacturing to a service economy could lead to lower oil consumption; a shift toward more fuel-efficient cars and trucks could lead to lower oil consumption. But these changes tend to take place slowly over time, not all at once, when oil prices rise.

Another way oil consumption can be reduced is if a country has in the past generated electricity using oil, and such generation is shifted to another fuel, such as natural gas. This type of change is being made in Greece, but seems unlikely in China and India. Similarly, if homes are heated with oil, sometimes an alternate fuel can be used, reducing oil consumption. China and India aren't areas where oil has traditionally been used to heat homes, though.

In general, though, sharp reductions in oil consumption in a growing economies, such as China and India, are cause for concern, if one was expecting growth. Are high oil prices stressing the economy?

<http://theenergycollective.com/gail-tverberg/235156/high-oil-prices-are-starting-affect-china-and-india>

News Articles

National

OVL-OIL to buy Videocon's 10% in Mozambique field for \$2.45 bn

KOLKATA: ONGC Videsh (OVL) and Oil India (OIL) have signed a definitive agreement with Videocon Mauritius Energy to acquire 100% of shares in Videocon Mozambique Rovuma 1 Limited for US\$ 2475 million — the company holding a 10% participating interest in the Rovuma Area 1 Offshore Block in Mozambique.

The acquisition is expected to be implemented via a newly incorporated entity, in which OVL and OIL are expected to hold a 60% stake and a 40% stake respectively. The acquisition is subject to the approvals of the governments of Mozambique and India, relevant regulatory approvals, pre-emption rights and other customary conditions. The transaction is expected to close in the fourth quarter of 2013.

http://articles.economictimes.indiatimes.com/2013-06-10/news/39872684_1_oil-india-offshore-block-energy-security

India to provide \$150 million to set up SEZ in Myanmar

NEW DELHI: India has offered \$150 million of credit for project exports to set up a SEZ in Myanmar and has expressed hope that the neighbouring country would permit Indian banks to set up branches there.

The issues came up for discussion during the three-day visit of commerce and industry minister Anand Sharma to Nay Pyi Taw and Yangon.

For the SEZ project, Myanmar government will provide suitable land for the purpose.

“India has offered \$150 million of credit for project exports for establishing a SEZ at Sittwe in Myanmar,” an official statement said.

“Sharma called for greater cooperation in banking sector and appreciated the Myanmar government’s approval to allow Indian banks like United Bank of India to set up a representative office in the neighbouring country. He expressed hope that the two public sector banks viz., Bank of India and State Bank of India, who have also expressed interest, would also be permitted to operate in Myanmar,” it said adding the commerce minister stressed the need for permission to open full-fledged banking services.

Even setting up a joint venture state-owned bank with India and Myanmar sharing equity would strengthen ties in banking and commerce between the countries, it said.

Besides, the minister discussed ways to increase cooperation in energy sector.

<http://timesofindia.indiatimes.com/business/india-business/India-to-provide-150-million-to-set-up-SEZ-in-Myanmar/articleshow/20508759.cms>

India Plans to Bid for 8 Oil, Gas Blocks in Myanmar

Three state-run Indian companies – ONGC Videsh Ltd., Indian Oil Corp. and GAIL (India) Ltd. – will bid for eight oil and gas blocks in Myanmar, Oil Minister M. Veerappa Moily said Friday. The move is part of India's plans to acquire oil and gas assets overseas to meet the energy-hungry nation's growing demand, the minister told reporters. The country meets about three-fourths of its energy requirements through imports and it wants to reduce its dependence on overseas suppliers to half in the next seven years. The three companies could bid jointly or separately, Mr. Moily said. They will be competing with Chinese and other overseas firms in Myanmar, he added.

<http://www.energytribune.com/77714/india-plans-to-bid-for-8-oil-gas-blocks-in-myanmar#sthash.zlQ7j6WO.dpbs>

Power Grid, IFC may tie up for rural electrification, distribution in Myanmar rural areas

State-owned Power Grid Corp. of India Ltd is in talks with the International Finance Corporation (IFC) for participating in rural electrification and power distribution projects in Myanmar, said Khin San Yee, deputy minister for planning and economic development.

IFC, which has been in talks with the government of Myanmar, wants Power Grid to work with it on the projects in a country where electricity demand has been growing at a rate of 12%.

<http://www.myanmar-business.org/2013/06/power-grid-ifc-may-tie-up-for.html>

Global

To ease Pak energy crisis, India sends officials with pipeline offer

Responding to the friendly overtures from Pakistan's new ruling party, a delegation of Indian officials is headed to Lahore on June 9 to offer natural gas supply through a pipeline to help ease the neighbour's energy crisis.

The decision, sources said, was taken at the top level on Monday, two days before Nawaz Sharif was sworn in as prime minister. India will offer to extend its gas pipeline to the Wagah border, after which Pakistan can take it to its users. The gas, amounting to 1.5 million tonnes per annum, would be sourced by India from Qatar and offered without charging a marketing premium.

“This is a test case before we enter into an agreement with Pakistan for the TAPI pipeline,” a GAIL official said, referring to the Turkmenistan-Afghanistan-Pakistan-India pipeline. “This is a small step to win its confidence.”

The official said the existing pipeline up to Jalandhar had surplus capacity because of a drop in domestic gas availability and its extension to Amritsar and into Pakistan would ensure better capacity utilisation.

<http://www.indianexpress.com/news/to-ease-pak-energy-crisis-india-sends-officials-with-pipeline-offer/1125775/>

Power play: Pakistan willing to import electricity, says India

If the Pakistani government has the political will to make a decision, electricity from India could start flowing into Pakistan in a matter of months, say top sources in India’s energy ministry.

Confirming that Pakistan has shown willingness to buy power from India, sources say that setting up the cross-border transmission line is a simple task, provided the two countries decide to facilitate the project.

Pakistan has reportedly sought 500 megawatt electricity from India through transmission lines from Indian Punjab into Lahore, but the details and modalities of the purchase and the techno-commercial and sovereign arrangements still have to be worked out.

<http://tribune.com.pk/story/563480/power-play-pakistan-willing-to-import-electricity-says-india/>

Rio Tinto Coal Assets Garner Interest From Indian, Chinese Firms

Rio Tinto RIO.AU -0.32% moved closer to selling about \$3 billion in coal assets, receiving expressions of interest from three potential bidders, a person familiar with the matter said.

Coal India Ltd., 533278.BY -2.69% China’s Shenhua Group Corp. and India’s Aditya Birla Group have indicated that they would bid for the Australian properties, the person said. First-round bids are due this week.

Rio Tinto in April hired Deutsche Bank AG to sell stakes in several mines that produce thermal coal, which is used for producing energy. The stakes include up to 29% in the New South Wales Coal & Allied unit, which Rio owns with Japan’s Mitsubishi Corp. 8058.TO -1.55% The Anglo-Australian company also is selling interests in its Clermont and Blair Athol thermal-coal mines in neighboring Queensland state.

Global mining companies are responding to weak demand for commodities such as coal by selling smaller or less-profitable assets. BHP Billiton BHP.AU -0.39% and Mitsubishi are trying to sell the Gregory Crinum metallurgical-coal complex in Queensland. And Brazil’s Vale SA VALE5.BR -1.66% is seeking to sell minority stakes in two undeveloped coal deposits in Queensland.

Coal India, the world's biggest coal company by output, has said it wanted to secure offshore coal supplies to satisfy increasing demand from consumers such as Indian power producers. Coal India has set aside about \$1 billion for foreign acquisitions for the fiscal year through next March. Currently, its only assets outside India are two coal blocks in Mozambique.

Aditya Birla explored the purchase of Australia-listed coal miner New Hope Corp. NHC.AU -0.77% in 2011 but didn't follow through. The company's copper-focused Aditya Birla Minerals Ltd. ABY.AU +1.25% is listed in Australia and has a market value of about \$120 million.

<http://www.energytribune.com/77632/rio-tinto-coal-assets-garner-interest-from-indian-chinese-firms#sthash.Q8UmCuDq.dpbs>

China eyes Arctic options in energy, transport

(CNN) — The decision to grant permanent observer status to China and five other nations by the Arctic Council meeting in Sweden reflects the heightened interest by some of the world's most powerful economies in an area rich in oil, gas, minerals, fish and new transport possibilities.

For new observer nations China, Japan and South Korea, shorter shipping routes to Europe through Arctic waters could open up prospects of new energy supply options later this decade, such as liquefied natural gas (LNG) from Russia's Yamal Peninsula in northwest Siberia.

It could also lessen China's dependence on oil and gas shipped from the Middle East, which must pass through the Southeast Asian chokepoint of the Strait of Malacca. Allied to China's interest of getting oil and gas delivered from new pipelines across Myanmar and Central Asia, the potential of the Arctic trade routes loom large in China's strategic thinking.

Five years ago, the U.S. Geological Survey (USGS) described the vast Arctic continental shelf as potentially the "largest unexplored prospective area for petroleum remaining on Earth." A new U.S. Arctic policy unveiled by the Obama administration last week cites that 2008 study, which estimated that about 13% of the world's undiscovered oil and 30% of its undiscovered gas lies north of the Arctic Circle.

<http://edition.cnn.com/2013/05/16/business/china-arctic/index.html>

News Analyses

National

Change the climate for India's poor

New Delhi should stop its flip-flops and adopt a coherent policy in its negotiations on greenhouse gas emissions

If the great Scott Fitzgerald were to have walked into the grand plenary hall of the Durban climate conference in 2011 to announce once again, “show me a hero and I will write you a tragedy,” all fingers would have pointed to the tiny Indian contingent in the room. There, Fitzgerald would have caught a glimpse of the feisty Jayanthi Natarajan, Union Minister for Environment and Forests, holding the fort against attempts by developed countries to impose binding emission cuts on the global South. The “greatest tragedy of all time,” Ms Natarajan would herself acknowledge, would be for negotiators to abandon the principles of equity and Common But Differentiated Responsibilities (CBDR). Two years later, this tragedy is imminent — only India's heroism remains.

The first signs of this tragic denouement were visible a few minutes after the Durban plenary closed. Negotiators from the European Union, the United States and the BASIC (Brazil, South Africa, India and China) countries simply huddled together and struck a deal to negotiate an international agreement with legal force on, *inter alia*, emission cuts by 2015. In this arrangement, known now as the ‘Durban Platform,’ equity and CBDR principles struggled to find relevance. India somehow claimed victory in helping resuscitate the Kyoto Protocol — a treaty rendered worthless without its engagement with the world's largest carbon emitters, China and the U.S. Throw in a vacuous institution like the Green Climate Fund to save face, and India's message was clear: we will live to fight another day.

That day is nowhere near the horizon. What is, though, is a perfect storm of international and domestic politics that threatens not only to produce an agreement which fails the imperative to tackle climate change, but also derail India's core concerns in the process.

‘U. S. Intransigence’

The news from Bonn, where U.N. climate negotiators met last month to flesh out details of the 2015 agreement, is not reassuring. The U.S. has proposed a mechanism by which countries define their own “contribution” to emission cuts. Once such contributions have been agreed upon nationally, a peer review mechanism could be put in place for monitoring and compliance. The U.S. submission, which Washington claims is driven by ‘realistic’ expectations, is nothing new. In fact, the narrative of “contributions” takes two steps backward from the language of “commitments” that the Durban platform recognises. Even within this minimalist framework, the U.S. has audaciously called for an agreement that lends “flexibility” to countries to “update their contributions.”

What is worrisome, however, is the international community's surprisingly warm reaction to the U.S. proposal this time round. To some extent, this was inevitable. Negotiators in Bonn were well aware that the atmospheric concentration of carbon dioxide had neared a staggering 400 parts per million (ppm); a week after their meeting, this threshold was crossed. If the Association of Small Island States (AOSIS), whose very existence hinges on the outcome of these negotiations, had already thrown in the towel for the sake of an(y) agreement, the Least Developed Countries (LDCs) too have joined the chorus. As Sebastian Duyck, an analyst and blogger at the 'Adopt a Negotiator Project', observes: "negotiators of many countries have begun to consider how to accommodate U.S. intransigence." The U.S.'s "bottom-up" proposal, which emphasises national autonomy over multilaterally negotiated commitments, comes too little and too late to achieve any measurable progress in setting the climate clock backwards.

The jury is still out on the fate of equity and CBDR principles — what India refers to as 'non-negotiables.' Over the next two weeks, as negotiators who have returned to Bonn discuss contentious issues relating to reduction targets and technology transfer, differences between the BASIC group and developed countries will be thrown into sharp relief. That said, the European Union's position, which takes off from the Durban consensus, has evolved to be more accommodative. In its submission to the United Nations Framework Convention on Climate Change's Ad Hoc Working Group, the EU calls for a 'spectrum of commitments' that is fair and equitable to countries at different levels of growth. Its bottom line is, however, clear: commitments should be comprehensive and legally binding.

New Delhi would do well to reassess its notion of equity, as other developing nations have rightfully done. When, in 2011, Ethiopia announced its intentions to be 'carbon neutral' by 2025, it effectively abandoned the premise that low emitters can forever point fingers at industrialised countries. Just as developed nations bear responsibility to assume more ambitious commitments, India should treat its differentially positioned population in equitable terms. The pernicious effects of climate change will be most acute among India's vulnerable sections. If the West owes a historic obligation to the rest in confronting climate change, so too does India towards its impoverished.

<http://www.thehindu.com/opinion/lead/change-the-climate-for-indias-poor/article4788457.ece>

Global

Climate change impacting food supply in Ghana

ACCRA: Nearly 700,000 people in Ghana are staring at hunger as climate change has started taking a toll on food security in this West African nation of 25 million people, a survey shows. The phenomenon, according to an agricultural expert, will further aggravate the frequency of droughts and storms which will affect food production.

"Severe warming, floods and drought may reduce crop yields. Livestock may be at risk, both directly from heat stress and indirectly from reduced quality of their food supply, while fisheries would be affected by changes in water temperature," Hans Adu-Dapaah, director of the Crop Research Institute (CRI), told IANS.

He said evidence of climate change in Ghana was that the mean annual temperature had increased by one degree celsius since 1960, on an average rate of 0.21 degree Ccelsius per decade.

Adu-Dapaah said total annual rainfall in Ghana has shown a decreasing trend between 1960 and 2006, with an average of 2.3 mm per month per decade, adding that the long term trends were difficult to identify because annual rainfall in Ghana was highly variable on inter-annual and inter-decadal timescales.

Adu-Dapaah said the impact of climate change was increasingly becoming severe and that long-term projections indicated crop yields could fall by up to 50 per cent by 2020 and net revenues from crops could drop by as much as 90 per cent by 2100.

The official suggested the development and promotion of more disease and pest tolerant crop varieties, development of Phosphorous efficient and Nitrogen fixing crop varieties (cowpea, soybean), participatory varietal selection, improved farming systems, crop residue management and mulching.

A comprehensive food security and vulnerability analysis (CFSVA) survey conducted by the World Food Programme (WFP) in the country's three regions in the north showed that more than 680,000 people, representing 16 per cent of all households, are either severely or moderately food insecure.

In addition, the survey conducted last May in the North, Upper West and Upper East Regions showed about 140,000 people were severely food insecure, with the Upper East being the worst affected.

The WFP said 8,399 households were randomly sampled in 38 districts and it was found that 28 percent of the households in the Upper East were food insecure compared to 10 percent in the Northern and 16 per cent in the Upper West regions.

It attributed the food insecurity to poverty, which limited the purchasing power of the people and added: "Climatic events, food prices, the death of a household member and lower education were also responsible for food insecurity."

Based on its findings, the WFP recommended that weather-related shocks should be controlled to stabilize food prices and production to ensure that the maximum households had access to food.

http://articles.timesofindia.indiatimes.com/2013-06-09/global-warming/39849351_1_food-supply-food-security-wfp

News Articles

National

Emission impossible: Weather's turning on climate change

NEW DELHI: On May 10 the planet marked a milestone of sorts. Scientists recorded that for every million molecules of air, 400 were of carbon dioxide - the key gas that accumulates over decades in

the air and leads to global warming. The figure sent alarm bells ringing. A large section of scientists has long predicted that if the accumulated CO₂ rose above 350 parts per million (about 200 years ago the concentration was 280ppm) it'd trigger catastrophic, perhaps irreversible changes. When the 400ppm mark was reached, global media went into a spin. Scientists and civil society called for swift action to reduce global greenhouse gas (GHG) emissions.

Meantime, another debate rages. For the past decade, even as CO₂ concentration and GHG emissions rose dramatically, earth's surface temperatures seem to be stabilizing. Although GHG emissions were rising, global temperatures weren't going up as many predictive models showed. Real surface temperatures between 2000 and 2010 stayed at the lowest end of the range that scientific models predicted. That meant global temperatures weren't responding to the rise in emissions at the high level as was predicted. This suggested that the climate change juggernaut wasn't hurtling towards humanity at the speed predicted earlier.

Climate deniers went to town flaunting the new data that the globe wasn't warming at the predicted rate. The messages ranged from 'Apocalypse postponed to Apocalypse: a mirage'. Then came May 10, the 400ppm limit was breached. Climate activists demanded leaders act fast to cut emissions. Somewhere, both the deniers and the activists got it wrong.

Not scientific facts, but the fact that the world's leadership engaged in negotiations to draw a global regime by 2015 (starts 2020) is climateinsensitive. Negotiations under the UN Framework Convention on Climate Change never hinged on what science told nations, nor did leaders react as urgently as science urged them to. Had that been so, the 2009 Copenhagen meeting on the back of a calamitous IPCC report would've got the US to agree to urgent emission cuts. It would've forced EU to do more and forced China, Brazil, India and South Africa to greater responsibility.

fade away. Predictably, developing nations peaked or are nearpeaking emission levels.

Some rich nations have stitched a coalition of the willing, riding the necessity of least-developed countries that thrive through off-shore economies, but are ready to dispense with concerns about justice to quickly cut emissions. That could ensure that if a global agreement in 2015 forces a strong emission-cut regime, the burden-sharing needn't be proportionate to nations' responsibilities. Emerging science may be uncertain of how nature responds to increasing emissions, but there's little doubt temperatures have risen over the last century. Developed nations have stayed from acting climate responsible, building instead resilience to the challenge of economic competitiveness.

http://articles.timesofindia.indiatimes.com/2013-06-05/global-warming/39763714_1_climate-change-un-framework-convention-global-greenhouse-gas

Global

Norway to work with india to mitigate climate change

Norway today said it was committed to a close cooperation with India to combat and mitigate climate change in the Arctic as also globally.

It said understanding climate change in the Arctic will help understand changes also in India.

External Affairs Minister Salman Khurshid, on an official visit to Norway, had yesterday visited the energy-rich Arctic and is the first cabinet minister from a new observer country to visit the Arctic since the club of observers was expanded last month.

“The Arctic is the Norwegian government’s number one foreign policy priority. Our goal is to ensure peaceful, sustainable and prosperous development in this region,” the country’s Embassy today quoted its Foreign Minister Espen Barth Eide as saying.

http://www.business-standard.com/article/pti-stories/norway-to-work-with-india-to-mitigate-climate-change-113061200886_1.html

North Pole drifts east due to climate change

Atmospheric and terrestrial water storage changes have made only a “minor” contribution

Around 2005, accelerated melting of polar ice sheet and mountain glaciers, together with rising sea level, caused the North Pole to drift towards east, marking an “abrupt departure” from the direction recorded over the past century. Accelerated rates of ice melting in Greenland and Antarctica have been observed since 2005-2006 and thus coincide with the abrupt change in polar shift.

“When mass is lost in one part of a spinning sphere, its spin axis will tilt directly towards the position of the loss,” Erik Ivins, a geophysicist at NASA’s Jet Propulsion Laboratory in Pasadena, California was quoted as saying in Nature.

The melting ice has also increased the rate of drift from about two milliarcseconds (MAS) per year during the period 1982-2005 to about nine MAS per year post 2005, a study published recently in the Geophysical Research Letters journal states.

The changes were recorded by satellite gravity measurements by the Gravity Recovery and Climate Experiment (GRACE) mission, jointly sponsored by U.S. and Germany.

GRACE provides monthly gravity field data that correlates with mass changes for the entire Earth, and from this, it is possible to extract the precise contributions from individual sources. This information helped the scientists in pinning down the cause of abrupt pole drift in 2005 to “variations in climate system”.

Atmospheric and terrestrial water storage changes have made only a “minor” contribution to the shift in Pole direction and rate. The researchers from the University of Texas at Austin consider this study as a reaffirmation of the increased ice melting at poles and mountain glaciers in recent years. This is borne from the fact that mass movement in solid earth takes place over long time scales.

Since earth monitoring using satellites has begun only during the last few years, there is no way of knowing the rate and amount of ice-sheet melting in the past. However, data on polar motion is available, thus making it possible to extrapolate the polar ice-sheet melting in the past.

<http://www.thehindu.com/sci-tech/science/north-pole-drifts-east-due-to-climate-change/article4718975.ece>

News Analyses

National

Indian firm to construct hydroelectric plants in Kano, Nigeria

Kano (Nigeria), June 8 — The Nigerian state of Kano has signed a memorandum of understanding with the Skipper Group of India for the construction of hydroelectricity plants at Tiga and Challawa dams in the state, Indian High Commissioner in Abuja, Mahesh Sachdev has said. The total value of the project was not disclosed. Sachdev said: “When completed, in two years, these two projects would not only contribute 35 MW of power to Kano state, they would also play the intended role in water management and irrigation.”

Once complete, the two dams would become the largest-capacity hydropower project in northern Nigeria, he said. “We would soon see substantive movement in other sectors, such as urban light railway, solid waste management, education and healthcare,” the high commissioner said.

Sachdev added that India’s ties with Kano dated to at least the 17th century, when Baba Gaur of Kano settled in Rattanpur in western India, where he is still revered and venerated. “Kano is the Nigerian state physically as well as emotionally the closest to India,” he said. He recalled Kano state governor Rabiw Kwankwaso’s “consistent and constructive engagement” with

India which included a visit there in February 2013. “This visit led to the identification of specific Indian partners in such priority sectors as power, urban renewal, vocational training, education, film, healthcare, textiles and garments,” he added. The project is dear to Governor Kwankwaso because, as a young engineer, he started his career at the Tiga dam and ended at Challawa, before entering politics. Sachdev said the project has been assigned to the Skipper Group to take the governor’s two noble initiatives to their respective logical

conclusions.” “We wish to assure you that it will be our privilege to connect the young builder’s dream with a senior statesman’s vision. As Your Excellency is aware, I do hope that by engaging in this productive

work in his first home, we would be able to pay back some of historic debt we Indians owe to Kano and her illustrious son.” Skipper Group operates in other African countries including South Africa, Kenya, Egypt, Ghana, Congo, Tanzania, Uganda and Burkina Faso.

<http://india.nydailynews.com/business/649ad87c50a61ce796688018a5b65c60/indian-firm-to-construct-hydroelectricplants-in-kano-nigeria>

Global

Iran inaugurates new dams

TEHRAN (ISNA)- Iran inaugurated two dams in Golestan Province, northeastern Iran, on Monday in a ceremony attended by Iranian President Mahmoud Ahmadinejad. ‘Kaboudwal’ Dam and

'Zaringol' Diversion Dam as well as a water transfer tunnel carrying Zaringol's water to the main dam were opened in the ceremony. The projects cost \$12,500,000. Kaboudwal Dam provides water for industrial purposes and irrigation of agricultural lands for about 10,000 hectares. It can be used for flood control, establishing recreation and tourism facilities near the dam and making job opportunities. Kaboudwal with the capability of storing 17 mcm of water can arrange for 50 mcm of water annually. Iran is a leading country in dam construction and many countries, including Sri Lanka, Syria, and Tajikistan as well as several African states, have entered either dam construction or consultation projects with Tehran. In July 2012, Iran inaugurated its highest roller-compact concrete (RCC) dam in the Southwestern province of Khuzestan in a ceremony attended by President Mahmoud Ahmadinejad.

President Ahmadinejad inaugurated the Upper Gatvand Dam, which is located five kilometers from the city of Gatvand and has the country's second largest reservoir after the Karkheh Dam. Earlier this year, Managing-Director of Iran's Water Management Company Mohammad Haj-Rasouli praised Iran's eye-catching progress in area of dam construction in recent decades, saying Iran is now among the world's top dam-builders and enjoys the most advanced technology in the field. Iran is among five major dam-constructor countries in the world, Haj-Rasouli said in Southern city of Bandar Abbas in February, and added that the country has currently 145 operational dams with the total capacity of 50 billion cubic meters. Referring to the fact that dry and semi-dry climate has dominated some 75 percent of Iran's soil, he said that during the past decade, the country has faced severe climate situation and lack of rainfalls.

However, he added that the crisis was successfully overcome to some extent through appropriate management and planning. Iran is now viewed as a leading country in dam building. Iranian specialists now provide consultation services for the design and construction of various dams in different sizes.

<http://isna.ir/en/news/92030603303/Iran-inaugurates-new-dams>

News Articles

Global

Greenpeace releases data on water usage by power plants in drought-affected areas

Greenpeace India has called upon the Maharashtra government to review the water utilisation by coal-fired thermal power plants owned by the state-run Maharashtra Power Generation Company (Mahagenco) especially in the drought hit areas.

Four state owned power plants, Bhusawal in Jalgaon, Parli in Beed, Paras in Akola and Nasik with an installed capacity of 3,680 MW are located in the drought affected parts of Maharashtra. Parli project has been closed since February for want of water while others are still in operation.

Greenpeace in its report released today estimated that the total water consumed by these power plants till March this year is about 17,000 million litres and are expected to consume another 15,000 million litres till June 2013.

This is equivalent to the water required for more than 6 lakh people a year at a requirement of 135 litres per person per day.

http://www.business-standard.com/article/economy-policy/greenpeace-releases-data-on-water-usage-by-power-plants-in-drought-affected-regions-113053000733_1.html

Is a Lack of Water to Blame for the Conflict in Syria?

The world's earliest documented water war happened 4,500 years ago, when the armies of Lagash and Umma, city-states near the junction of the Tigris and Euphrates rivers, battled with spears and chariots after Umma's king drained an irrigation canal leading from the Tigris. "Enannatum, ruler of Lagash, went into battle," reads an account carved into an ancient stone cylinder, and "left behind 60 soldiers [dead] on the bank of the canal."

Water loss documented by the Gravity Recovery and Climate Experiment (GRACE), a pair of satellites operated by NASA and Germany's aerospace center, suggests water-related conflict could be brewing on the riverbank again. GRACE measured groundwater usage between 2003 and 2009 and found that the Tigris-Euphrates Basin—comprising Turkey, Syria, Iraq and western Iran—is losing water faster than any other place in the world except northern India . During those six years, 117 million acre-feet of stored freshwater vanished from the region as a result of dwindling rainfall and poor water management policies. That's equal to all the water in the Dead Sea. GRACE's director, Jay Famiglietti, a hydrologist at the University of California, Irvine, calls the data "alarming."

While the scientists captured dropping water levels, political experts have observed rising tensions. In Iraq, the absence of a strong government since 2003, drought and shrinking aquifers have led to a recent spate of assassinations of irrigation department officials and clashes between rural clans. Some experts say that these local feuds could escalate into full-scale armed conflicts .

In Syria, a devastating drought beginning in 2006 forced many farmers to abandon their fields and migrate to urban centers. There's some evidence that the migration fueled the civil war there, in which 80,000 people have died. "You had a lot of angry, unemployed men helping to trigger a revolution," says Aaron Wolf, a water management expert at Oregon State University, who frequently visits the Middle East.

Tensions between nations are also high. Since 1975, Turkey's dam and hydro-power construction has cut water flow to Iraq by 80 percent and to Syria by 40 percent. Syria and Iraq have accused Turkey of hoarding water.

History might suggest a way: The world's first international water treaty, a cuneiform tablet now hanging in the Louvre, ended the war between Lagash and Umma.

<http://www.smithsonianmag.com/science-nature/Is-a-Lack-of-Water-to-Blame-for-the-Conflict-in-Syria-208345431.html>

French water companies keen on engaging with Middle East's decision makers during IWS 2014

In light of the rising water demand of arid regions including the Middle East, the IWS road show seeks global collaboration to promote sustainable water resource management solutions to tackle water scarcity problems in the region.

The second stop of the road show was held at the headquarters of UBIFRANCE, the French Agency for international business development. It was well-attended by representatives of 14 top French companies and officials from the French embassy in the UAE, who came together to explore opportunities for developing the water-scare region's water infrastructure.

Keen on engaging with the Middle East region's decision makers, French water technology providers also expressed interest in strengthening its market-hold in the UAE through IWS 2014.

International Water Summit 2014 will be held in Abu Dhabi from 20-22 January, co-located with World Future Energy Summit, hosted by Masdar, as a part of Abu Dhabi Sustainability Week (ADSW), a global platform that addresses the interconnected challenges that affect the widespread acceleration and adoption of sustainable development and renewable energy.

The largest gathering on sustainability in the history of the Middle East, ADSW encourages actionable outcomes to carve a pathway toward sustainability worldwide.

<http://www.ameinfo.com/french-water-companies-keen-engaging-middle-344140>

OECD report: Global demands for food, water to rise

Integrating green growth strategies into their economic policies will be critical to developing countries going forward as they work to secure a more prosperous and comfortable quality of life for their citizens, a new OECD report has determined.

The report, called "Putting Green Growth at the Heart of Development," was released on Wednesday by the OECD in honor of the United Nations World Environment Day occurring that day. Although only 7 billion people inhabit the world today, by 2050, this number will jump to about 9 billion, instigating soaring demands for resources like food, water and energy, OECD Secretary-General Angel Gurría wrote in the report's introduction. Only economic growth policies that take such resources under consideration can ensure that the world's citizens will be able to continue to thrive within a healthy environment, the report says.

Ultimately, the authors propose a "twin-track approach to guide national and international action to help achieve green growth in developing countries," the report authors explain. While embracing green strategies is also crucial to the governance of developed nations, far fewer developing nations have yet to embark on this path, which galvanize prosperity among their people, according to the report.

“The pursuit of green growth by developing countries is vital for their future and can lead to large economic and social benefits over time, including for the poorest citizens,” Gurria wrote.

Green taxes, which the report says are a concept “largely untapped in developing countries,” can be a great source of economic growth, as can be reforms of fossil fuel subsidies, Gurria explained. Funds created and freed up by these steps cannot only encourage the development of clean energy sources but can also finance other public priorities like education and health care, the report says. As the global population continues to expand rapidly, however, Gurria warned that countries must “waste not time” in adopting green growth economic policies.

Many companies have their sights set on China where, despite spending 700 billion yuan (\$114 billion) on water infrastructure over the five years to 2010, much of the water remains undrinkable, a situation that has led to mounting discontent across the country.

China’s environment ministry said 43 percent of the locations it was monitoring in 2011 contained water not fit even for human contact.

United Envirotech said stricter discharge limits imposed by the Chinese government and water shortages in various parts of the country are pushing up demand for water treatment services.

Chinese players like China Everbright International Ltd <0257.HK> and Beijing Enterprises Water Group Ltd <0371.HK> may put up a tough fight, especially for the lower-end water treatment projects, due to their ability to keep costs down and their local network, said DBS Vickers analyst Tan Ai Teng.

Scinor Water Ltd recently received financing from CLSA Capital Partners’ Clean Resources Asia Growth Fund and venture capital firm Kleiner Perkins Caufield & Byers to expand the Chinese company’s membrane manufacturing capacity and products.

“There are going to be huge fortunes made in China on water because China has a staggering water problem and they know it. They are spending a lot of money to solve it,” said Rogers.

(\$1 = 1.2663 Singapore dollars)

(\$1 = 6.1267 Chinese yuan)

http://www.guardian.co.uk/business/feedarticle/10820775?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=041e6026ab-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_c1265b6ed7-041e6026ab-250657169

Export oil, import water – the Middle East’s risky economics

The world’s driest region, the Middle East and North Africa (MENA), is getting drier at an alarming rate.

And yet, despite massive population growth (the Middle East’s population grew 61 percent from 1990 to 2010 to 205 million people)* predictions of so-called “water wars” have failed to materialize.

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

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

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

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

But while such resilience may “miraculously” solve extreme water scarcity and make life that exists today possible in the Middle East, it can create its own vulnerabilities; countries need economies that can generate enough foreign currency to pay for imports.

<http://www.english.globalarabnetwork.com/2013060213146/Economics/export-oil-import-water-the-middle-east-s-risky-economics.html>

FOOD SECURITY

News Analyses

National

Why the food security Bill will not boost food grain consumption for the poor

The Bill proposes to give 810 million citizens 5 kg of cereals (rice, wheat, bajara or other grain) per person per month at the subsidised price of Rs 3 per kg or less. Commentators have already reminded that this will have minimal or no effect in Chhattisgarh and Tamil Nadu since these states already provide households more grain at even lower prices. Surprisingly, there are good reasons to believe that the same is also likely to turn out true in other states.

To see why, consider first the urban households. Based on the large-scale expenditure survey of 2004-05, the poorest 30% of the urban households nationwide consume 10 kg of cereals per person per month. The quantity rises to 10.1 kg for the middle 40% households and drops to 9.6 kg for the top 30%.

We can reasonably assume that the top 30% urban households are not income constrained and therefore not opting for what the proponents of the Bill call “low” consumption quantity for reasons of deprivation. Indeed, the argument substantially extends to the bottom and middle groups as well once we recognise that over the past two decades, even their consumption of cereals has been declining despite rising purchasing power. Given this pattern of change over time and little variation in cereal consumption across different income groups currently, the proposition that the Bill will boost cereal consumption of the bottom 810 million citizens is a very long leap of faith.

What is far more likely, indeed near certain, is that the households will substitute kg-for-kg subsidized grain from the public distribution system (PDS) for their open-market purchases. That is to say, they will simply cut their purchases of grains in the open market by 5 kg. Assuming the difference between the market and PDS price is Rs 15 per kg of cereal, this will release Rs 75 per person per month in expenditure in each beneficiary household. It is as if the government transferred Rs 75 per person per month in cash to each beneficiary household.

The million-dollar question then is: On what will the households spend these extra Rs 75 per person per month? If the opponents of direct cash transfers were consistent, they would rhetorically answer: liquor. But they will be wrong. To rise above rhetoric and search for what is likely to be a more accurate answer, we must once again look at the consumption patterns of different income classes.

It turns out that after cereals, the next major item in the consumption basket is milk. The bottom 30% of the urban households consume just 2.3 kg of milk per person per month compared with 4.8 kg and 8.3 kg for the middle and top groups, respectively. It is in milk consumption that deprivation is hitting the poorer households the hardest. So the extra Rs 75 will dominantly fuel the demand for milk and if our government continues to be hostage to the milk lobby and refuses to allow duty-free milk imports, given low domestic-supply response in the short run, you can count on another bout of spiralling milk prices.

How different is the consumption pattern in rural areas? Not much. In 2004-05, the bottom 30% of the households consumed 11.1 kg of cereal compared with the 12.3 kg and 12.9 kg consumed by the middle and top groups, respectively. So perhaps there is a small margin of 2 kg per person per month for higher consumption by the bottom group. Beyond this, the data suggest that the rural households too will predominantly spend the cash released by subsidised grain on milk. Milk consumption in rural areas averages 1.2 kg, 3.4 kg and 7.2 kg per person per month among the bottom, middle and top income groups.

This analysis has convinced me that if PDS had not been subject to massive leakages and inefficiencies, the food security Bill would work just like cash transfers. Unfortunately, this is a very big if since giving Rs 75 per person per month to 810 million individuals would cost only Rs 729 billion per year compared with the grossly underestimated official cost of the Bill at Rs 1,245 billion. Cash transfers would also reach the beneficiaries with greater certainty and empower them rather than leak out along the massive PDS chain and empower the shopkeepers.

If our best medical experts are convinced that citizens will benefit from increased cereal consumption, giving them subsidised grain will not do the trick. Instead, the government needs a massive campaign to inform and persuade the people of those benefits. A recent paper by economist Nisha Malhotra shows that lack of knowledge on nutrition and not just access to food plays a vital role in keeping children malnourished. The same also applies to adult malnutrition.

http://articles.timesofindia.indiatimes.com/2013-06-01/edit-page/39674597_1_cereal-consumption-food-security-bill-households

What we need is not a food security Bill but a hunger elimination act

In the decade or so that I was at the Planning Commission, I always had advisory responsibility for the food ministry/public distribution system, among other issues of development policy. It did not take very long to find out that the fundamental problem with the system was about so-called “leakages” abetted by corruption: One soon learnt that the Food Corporation of India (FCI) was one of the most inefficient and corrupt organisations in government.

At that time, available estimates of leakage plus administrative costs ranged between 40% and 55%. The other problem was of exclusion - some poor people did not have access to ration cards or subsidised food, from which arose horrifying reports of starvation in remote and tribal areas of the country. This led me to propose the introduction of a food credit/debit card using smart card technology, which could be integrated with the food-for-work programme and also have the inbuilt flexibility to change over to an income transfer system if desired.

Instead of dealing with the very difficult political and bureaucratic problems that have stymied genuine reform of the food system, the food security Bill proposes to deal with these problems with “a stroke of the pen”. Unfortunately, very little will change, besides providing lucrative new opportunities for bureaucratic and political corruption.

What are the real problems that are still awaiting serious government and NGO attention ?

In 2004-05, 2% of households suffered from hunger at some point during the year and about 25% of the people were below the poverty line, but as many as 45% of children below the age of three years were malnourished. If we leave philosophy and politics aside, these facts suggest that, first, as hunger affects only 8% of the poor, the food security Bill and anti-poverty programmes are not the best way to reach the hungry, who are dispersed across the country and in tribal and remote areas.

The hungry have to be individually and geographically identified and/or located. Once that is done, it would not cost much to eliminate hunger through direct cash or food transfers, depending on whether there are or are not competitive food markets in the area where they live. Thus, in remote or hilly areas it is probably necessary to supply food. Secondly, malnutrition is a much bigger problem than poverty and the causes are unlikely to be the same, even though there may be some overlap. Anti-poverty measures /programmes are unlikely to solve the malnutrition problem.

Analysis of the state-wise 2004-05 National Sample Survey and the 2005-06 National Family Health Survey data led to the conclusion that the most important cause of malnutrition in India was the abysmal state of 'public health' in terms of sanitation, pure drinking water and public knowledge about the importance of cleanliness (a la germs in dirty water, dirt and grime) and nutrition (basic food groups etc).

If this appears surprising, think about the simple act of eating and digesting food and absorbing energy and nutrition from it. A child or an adult sick with diarrhoea or dysentery can eat as much as she wants but will not be able to absorb it effectively. Recent medical research goes further to show that even those children who are living in unsanitary conditions, but do not show any symptoms of gastrointestinal disease, are infected with germs in their intestines that do not allow them to absorb nutrients from the food they eat.

Cross-country analysis of malnutrition data confirms the conclusions of the India analysis . The quality of public health, as measured by variables such as access to better sanitation and improved water sources, explains much of the cross-country variations in the prevalence of malnutrition and high malnutrition in India relative to other countries with similar levels of per capita income and poverty.

Improvements in environmental sanitation are the clearest and most effective policy programme tool for the central government to reduce, if not eliminate, the excessively high levels of malnutrition in India. The cross-country data complements the interstate study by showing that female primary education is an important factor in reducing child malnutrition , by helping spread information and knowledge about personal hygiene, sanitation and nutrition.

The food security Bill will have little or no effect on malnutrition , poverty and hunger. Hunger can be eliminated if and only if the government and/or NGOs identify the 40 lakh affected households and ensure that cash or food reaches the principal female (mother) of the household. An 'Elimination of Hunger Act' with severe penalties for officials in whose area a hungry family is found, could do this at a small fraction of the cost.

Child malnutrition can be dramatically reduced, if not eliminated, within a decade through a massive “public health” campaign: This would ensure a modern sewerage and sanitation system in every urban, semi-urban and semirural area and pure drinking water, septic tanks and lavatories in rural areas.

http://articles.economictimes.indiatimes.com/2013-06-07/news/39815346_1_food-security-malnutrition-problem-hunger

Global

Over half the world’s population could rely on food imports by 2050 – study

Potsdam Institute projection suggests population growth would increase imported food, even without climate change

Tomatoes from Spain, olive oil from Italy, plums from Chile, salmon from Alaska and green beans from Kenya – how often might some of these ingredients end up in your basket? In the UK most people’s shopping trolleys contain a significant proportion of imported foods. But could these foods be grown and produced at home? Which countries are capable of food self-sufficiency? A new series of maps shows which countries could feed their entire population, and which countries are limited by lack of land or water.

Marianela Fader from the Potsdam Institute for Climate Impact Research, Germany, and colleagues, calculated the growing capacity of every country in the world, and compared it with food requirements, both now and projected forward to 2050. Their model employed climate data, soil type and land-use patterns for each country, in order to simulate yields for a variety of types of crop. Using current data on population, and food and water consumption in each nation, they were able to assess what proportion of its food a country could produce.

Although many countries choose to import food right now, the model showed that there are surprisingly few that could not maintain the same diet and still be food self-sufficient. “Today, 66 countries are not able to be self-sufficient due to water and/or land constraints,” said Fader. This equates to 16% of the world’s population depending on food imported from other countries.

The countries with the most reliance on imports were found in North Africa, the Middle East and Central America, with over half the population depending on imported food in many of these locations. Outside those locations many countries could become food self-sufficient if they chose to.

But roll the clock forward to 2050 and population pressure paints a very different picture. Vast swathes of the global map are coloured red and orange, highlighting those countries that would have to maximize food production – by improving agricultural productivity, and expanding cropland, for example – in order to feed their population. The figures suggest that over half the world’s population could depend on imported food by 2050.

“Assuming that all low-income economies achieve full potential productivity by 2050 in addition to full cropland expansion – which would be a huge societal and technological challenge and thus a very optimistic assumption – the food self-sufficiency gap will still be equivalent to about 55–123 million people, with over 20 million in Niger and Somalia alone,” explained Fader, whose findings are published in *Environmental Research Letters*. Add on the impact of climate change – not included in this study – and the problem could be even more severe.

A number of developed countries, including the UK, the Netherlands and Japan, are already unable to meet the food requirements of their populations. This reliance on imports looks set to become worse as population levels rise. However, unlike the developing countries, these nations will probably be able to buy their way out of the problem.

Food security is going to be a big issue over the coming decades. The study indicates that improving agricultural productivity can play a key role in maintaining food security. Meanwhile, a change in diet, such as towards more seasonal and vegetarian food, could also have a significant impact, although this is not explored in the current work.

<http://www.guardian.co.uk/environment/2013/may/07/half-population-food-imports-2050>

News Articles

National

Govt to reconsider wheat exports from FCI stocks

Decline in supply induces govt to rethink allowing excess food grain exports

Following a sharp drop in the quantity of daily wheat arrival at mandis across Punjab, Haryana and Madhya Pradesh because of lower production and increase in private purchase, the government is likely to reconsider its decision to allow exports of excess food grains from Food Corporation of India (FCI) stocks through private traders.

Official sources told FE that the expected curb on exports would be to ensure that sufficient quantity of wheat is available for the existing Public Distribution System and likely rise in demand for food grain, following enactment of the National Food Security Act by the government.

Recently, the government revised the current year (2013-14) wheat procurement target from 44 million tonnes (mt) to 33 mt, as farmers bringing in their produce to mandis in key growing states have declined during the last one week. The daily wheat arrival in various mandis on Wednesday has dropped to only 2.2 lakh tonnes from close to 6 lakh tonnes reported on the same day last year.

<http://www.financialexpress.com/news/govt-to-reconsider-wheat-exports-from-fci-stocks/1113764/2>

Global

Research points out to \$125 billion cost of global malnutrition

Being malnourished in the womb causes deficiencies in cognitive development that will reduce a child's future earning potential by 20 per cent and is projected to cost the global economy \$125bn by 2030, a leading charity has warned.

Research by Save the Children on infants in Ethiopia, India, Peru and Vietnam has found that those who do not receive the necessary nutrients in the first 1,000 days of life – from conception until their second birthday – suffer from developmental brain deficiencies that hold back their learning ability regardless of the quality of their schooling. Unless treated, the charity says, this risks causing a serious “brake” on progress in emerging economies.

According to the study, which monitored 3,000 children, those who were malnourished scored 7 per cent lower on maths tests and were 19 per cent less likely to be able to read a simple sentence by the time they were eight, compared with their non-malnourished peers. They were also 12 per cent less likely to be able to write a simple sentence and 13 per cent less likely to be in the appropriate grade for their age at school.

The long-term result of these educational difficulties is an estimated 20 per cent drop in future earning potential, which will translate into a \$125bn loss to the global economy by the time these children reach adulthood.

Brendan Cox, director of policy and advocacy at Save the Children, said the problems of malnutrition had been “under-recognised and under-appreciated” by countries that have traditionally traded on agriculture or lower-skilled sectors of the economy.

<http://www.ft.com/intl/cms/s/0/5a8d6d40-c6c9-11e2-8a36-00144feab7de.html#axzz2Vzwa37k5>

Cover Illustration Courtesy:

<http://questgarden.com/116/11/6/101206202446/process.htm>

<http://environmentetechnology.wordpress.com/2012/01/29/climate-changes-due-to-global-warming/>

<http://foreignaid.nepal.im/2010/05/food-security-a-concern-in-nepal/>

<http://www.philstar.com/opinion/2013/03/16/920235/editorial-water-security>