

## Tech Talk - Oil producers just below 1 mbd: India, Argentina, Egypt, and Oman

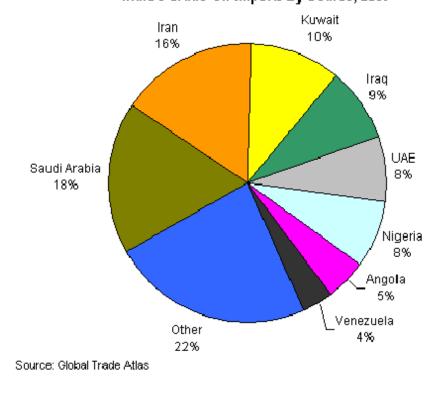
Posted by Heading Out on March 20, 2011 - 10:03am

In 2008, there were nine countries that produced between 500 kbd and 1 mbd, according to the EIA. Of these, Azerbaijan has been able to increase production to just over 1 mbd, and I wrote about it <u>last week</u>. Therefore, let me look at the first four of the remainder – India, Argentina, Egypt, and Oman, in this post. The latter two are some of those countries where popular protests have, in one case, brought down the government, and in the other,have caused some changes to be made. How this will play out in terms of oil production and oil exports remains one of the questions which is currently unanswerable.

India was producing 888 kbd of oil in 2008. It is a country with recognized growing demand for oil, to the point that Libya's Gadaffi has <u>offered it the chance</u> (along with Russia and China) to replace Western companies who have shut down operations because of the turmoil. The growing internal demand for vehicular liquid fuel, remembering that India was the country that introduced the Tata Nano, is reaching <u>record levels</u>. Growth for different sectors of that market are rising at more than 10% a year.

Local car sales jumped 23% from a year earlier in February to 189,008 vehicles, according to data issued Wednesday by the Society of Indian Automobile Manufacturers, an industry lobby group. The figure is more than January's all-time monthly record sales of 184,332 cars.

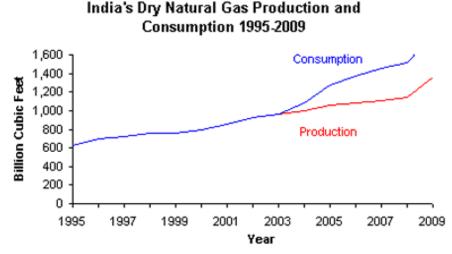
Indian demand for oil is now more that 2 mbd above domestic production and the country is increasingly dependent on imports. In 2009, the EIA showed where these came from:



Source **EIA** 

As one looks at the coming global oil market, therefore, India is one of the BRICS nations (Brazil, Russia, India, China and South Africa) that will drive increased international trade, likely well above the levels of today. The EIA considers that Indian growth will be on the <u>order of 100,000</u> <u>bd per year</u>, which will likely have to be met by additional imports.

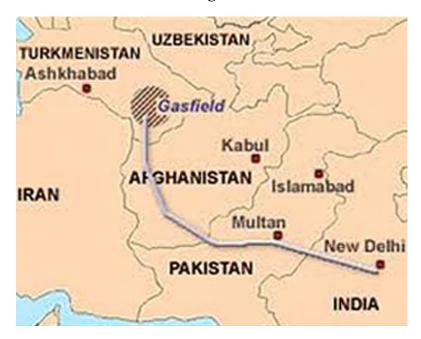
The Indian situation in regard to natural gas is similar. Although production has started to increase signficantly, demand continues to outstrip it.



Source: U.S. Energy Information Administration

In the global market, India has often been overbid by China as both seek to guarantee fuel

The Oil Drum | Tech Talk - Oil producers just below 1 mbd: India, Argentina, Edythp: Artwontaeoildrum.com/node/7686 supplies into the future. India is currently seeking to add Russia to its suppliers and there has been an ongoing effort to run a pipeline down from Turkmenistan into India, via Afghanistan and Pakistan, for a number of years (the TAPI Pipeline). At the moment agreements are reported to be imminent, and these will be followed by natural gas purchases. It should be remembered, however, that the pipeline has to run through Afghanistan, and over its thousand-mile length will pass through Kahdahar Province and then through the troubled tribal areas of Pakistan.



Route of the planned TAPI pipeline to India.

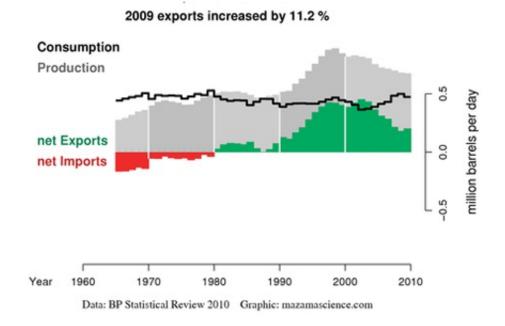
The pipeline would deliver up to 2 bcf from the rich Turkmen fields, though some of the resulting flow would likely be tapped along the way to help both transmitting countries, before the remainder reaches India.

An alternative would be to run a pipeline from the natural gas fields of Iran down through Pakistan into India. This is the IPI pipeline, but (because of the sanctions on Iran) is less favored, at least by the US. And, unlike China, which has already created the pipelines into Turkmenistan, India is still not that far along in the discussion.



## Planned route of the Iran, Pakistan India pipeline

Argentina does not attract a whole lot of attention on the hydrocarbon front page. Yet, the picture of how it illustrates the Export Land Model can perhaps easily be seen from this plot from the Energy Export Databrowser.



The Argentine oil statistics (<u>Export Energy Databrowser</u>)

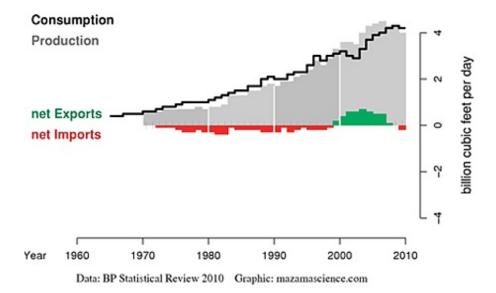
The situation in the Argentine is perhaps illustrated best by the <u>actions of Repsol</u>, Spain's largest oil company.

"The sale of YPF shares is part of Repsol's strategic goal to rebalance its portfolio of assets," the company said.

Repsol is seeking to reduce business in maturing fields in Argentina while investing in exploration in Brazil's offshore Santos Basin and elsewhere to increase output.

Thus, as production in the country falls, and demand rises, the amount that is available for export will likely continue to decline. The EIA, which listed Argentine production at 782 kbd in 2008, anticipates that it will be slightly down at 760 kbd this year continuing the trend shown above. Nevertheless, as Spain pulls out, China is moving in, buying out the Exxon Mobil interests in the country.

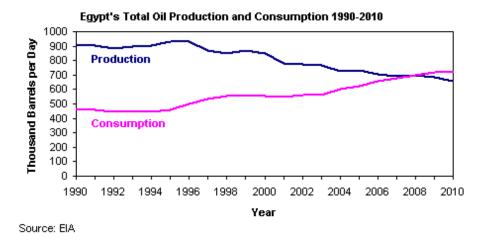
The natural gas picture is just a little further along, with production having peaked and domestic consumption, which had followed right along, now requires that the country begin to import natural gas.



The Argentine natural gas statistics (Export Energy Databrowser)

It is expected that the natural gas fields in Argentina will collapse fairly quickly, with reports that the country will sensibly run out of the fuel <u>within seven years</u>. Within that time frame, it is likely that only the current glut in supply will help. But (as with the UK) as more countries find themselves in this predicament, the supply excess will more rapidly attenuate.

Egypt was, of course, one of the two countries that started the current popular protests against state leaders that had led too long. Producing 718 kbd in 2008, it was about that time that domestic consumption overtook production. Production in 2010 averaged 660 kbd, of which 540 kbd was crude oil.



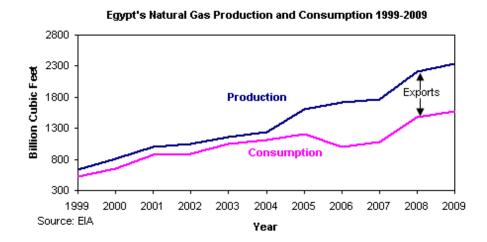
Government plans to control demand as the country moves to import a larger percentage of that demand are likely now out of the window, at least in the short term. Because the country has about a million b/d refining capacity, it will continue to both export and import hydrocarbons, but with the balance swinging toward the import need, it is difficult to predict how this will evolve in the future within the frame of the current unrest.

Consider, in this regard, the natural gas exports to Israel and Jordan. Until five weeks ago a pipeline carried the gas across the Sinai. Following a terrorist attack on the pipeline, flow has been restored to only a quarter of the previous level, and even that is now in question, as a leak just

Egypt has been supplying 40% of Israel's natural gas since May 2008 – raw material for the production of 20% of the country's electricity – through the state-owned EMG company, businessmen Hussein Salem of Egypt, Yossi Maiman of Israel and Jewish American Sam Zell, and Thai energy company PTT.

The Egyptian opposition openly objects to the gas deal signed between the two countries in 2005. Since the Egyptian supply was halted, Israel Electric Corp. and the private power plants have been purchasing their gas from the Israeli Yam Tatis reservoir.

Gail has <u>recently written</u> on some of the back story to the Egyptian problems. With the rising population and as their increasing expectations from whatever new government finally evolve, it is likely that demand will continue to grow. However, with a relatively large reserve, Egypt can continue to export into the future, though the customers may be more politically screened.



Finally, for this session, I will refer again to Oman. I wrote about Oman just recently, as the protests in other countries had started to be repeated there. There has not been much of a change in the situation since then. Protests are continuing. Saudi Arabia is now responding more aggressively than they had earlier, with troops having been sent into Bahrain. And this, perhaps, implies that reactions will not be as peaceful as they have been to date. In this scenario it is not possible to predict whether even popular monarchies such as that of Oman will survive. That, in turn, calls into question the overall reliability of oil and natural gas supply from the Middle East and North Africa. Given the nervousness about nuclear power, it will be interesting to see how the governments of the world react. There are no easy answers.

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