

The USGS gas resource assessment myth

NURUDDIN MAHMUD KAMAL

THERE is an old saying that the proof of the pudding is in the eating. You need experienced cook to prepare the delicacy. Similarly to secure an acceptable national gas assessment report honest and competent professionals with commensurate field experience are required. Conscientious observers and the media have been following carefully the progress of the Committee meetings over the past five months. Apparently, some motivated members of the committee have been disclosing information to the media from time to time, which has been creating confusions all along. On 29 May, 2002 the media reported, after shifting their position several times the Committee decided to submit to the government a *split report* incorporating split opinions (UNB, Dhaka). However, the present assessment is only a part of the drama that is now moving towards an uncertain end. Let me begin with an anonymous episode. Last week in a barbecue dinner one oil company executive in a whispering voice assured a Bangladeshi business partner, "Don't you worry about the Gas Assessment Report being prepared by a naive committee. We have good relations with the big boss. But we don't camp on his doorstep. We work directly. It's better that way." The oil company man then reassured his friend by saying that enough confusion has been spread among some influential committee members about "gas reserves" and "gas resource potential" in Bangladesh. Those members would continuously interchange these two terminologies to create more confusion among innocent people.

At this juncture one would like to recall the contents of the Unocal Corporation's Natural Gas Pipelines Project submitted to the government/Petrobangla in October, 2001 regarding *export of gas to India*. The project envisioned Gas-Initially-In-Place (GIIP) volumes for Bibiyana gas field at 6.6Tcf including 3.1 Tcf as 'proven (P₁) plus probable (P₂)' and 3.5 Tcf as 'possible (P₃)'. Unocal continued to hoodwink the government by boasting about reserve figure of 6.6 Tcf for almost two years. But finally as a requirement under the Production Sharing Contract

(PSC) the company was obligated to conduct a reserve assessment of Bibiyana gas field through internationally reputed independent organization in 2000. Degolyer and MacNaughton (D&M), USA undertook the professional assessment and reportedly certified Bibiyana proven plus probable recoverable reserves at 2.4 Tcf, which is almost 36 per cent of what they claimed for all these years. However, the rumour goes that D&M did not actually certify any "proven" figure, rather they categorised 2.5 Tcf as probable reserve.

Nevertheless, Unocal was not disheartened. They cleverly maintained that Bibiyana's proven plus possible reserves represent 15 per

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cent of Bangladesh's existing *identified* Resource Base. Notwithstanding all these gimmicks originated by the Unocal Corporation in their submission in October 2001, stated that results from a recent report prepared by USGS/Petrobangla combined with estimates for field discovery and field growth etc, demonstrate that Bibiyana's proven plus possible reserves account for less than 5 per cent of the country's *Total Resources Base*, currently estimated at 61 Tcf. This is a blatant lie. Firstly, because one cannot compare a huge jackfruit with tiny litchi although they may look similar. And secondly, Unocal's resource base is a fictitious number without any scientific basis.

Contradicting their original proposal for a 500 million cubic feet per day (MMcfd) for 20 years amounting to 3.65 Tcf, the Corporation (it is not certain whether Unocal Corporation and Unocal are one and the same entity) stated, "under this proposed pipeline project Bibiyana's proven plus probable reserves of 2.4 Tcf can sustain the

proposed production rate of 500 MMcfd for 10 years from start-up of the pipeline." The next sentence reads: the field's 'proven' plus 'probable' plus 'possible' reserves amounting to 5.5 Tcf can extend production for an additional 14 years i.e. for a total of 24 years. No one knows whether the oil company executives consider the people of Bangladesh as dummies. But it is certain they are trying to take the *willful* Ministry of Energy for a ride. According to Unocal Corporation, the gas export proposal is a window of opportunity to maximise revenues and benefits of Bangladesh through the development of Bibiyana field. If one examines the

project proposal carefully, he will find the same bunch of lies and distortions of facts. In the heart of his hearts he knows such episodes (as stated above) are meant to befoul the citizens of Bangladesh. At the end of the day those tricks would simply get a strong rebuff from the citizens.

Nevertheless, such multiple collisions of domestic and international events could quickly create the prospect of an immediate crisis. Many of us would be jolted out of our soft mattress bed onto a bed of gas thorns if we hear what is happening in the gas assessment committee and the gas utilisation committee meetings. Further it may be noted that neither the USGS report (itself) nor during its presentation in February 2001 the team did claim the assessment as gas reserve. Instead, they categorically mentioned that the study was undertaken for identifying undiscovered potential of gas resource within the next thirty years i.e. during 2000-2030. But, that's another interesting story. It deserves exclusive treat-

ment. USGS gas resource assessment for Bangladesh is not as holy as it apparently looks.

Indeed, there is a great difference between *reserve* and *resource*. The former indicated the quantities (of petroleum including natural gas) of discovered and known gas which are anticipated to be *commercially recoverable* from known accumulations from a given date forward. However, all reserve estimates involve some degree of uncertainty. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of these data by professionals who have both academic as well as field experience. The relative degree of uncertainty may be observed by placing reserves into one of two principal classifications, either *proven* or *unproven*. Unproven reserves are further classified as *probable* and *possible* to denote progressively increasing uncertainty. For any commercial utilisation purpose only proven reserve (or P₁, identified by international oil companies) category is considered as a standard practice in USA and elsewhere (New York Stock Exchange does not even bother to consider probable category, let alone the possible category as *bankable Petroleum assets*).

The far-fetched story, however, is the Undiscovered Resource, indicated in the USGS/Petrobangla study, is obviously a different animal altogether. This honey-comb report cannot justifiably be considered by the gas utilisation committee even for the purpose of comparison or inference. Besides, there are many revealing concoctions in the USGS/Petrobangla study. The so-called pudding has been prepared a 'cook' whose full identity and professional experience in this part of the geologic sub-province is said to be highly questionable. Consequently USGS's *Undiscovered Gas Resources Assessment Report* may need to be reviewed by Bangladeshi experts soon.

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Bush and Putin put last nail in cold war's coffin

But the horizon is still dark

A M M SHAHABUDDIN

US President George W. Bush's recent week-long visit to Europe and Russia had produced two tremendous, rather historic, achievements for which he definitely deserves credit. First, the signing of the Moscow Treaty by Bush and President Vladimir Putin, under which both countries had committed to cut their present nuclear arsenals from 6000 to between 1,700 and 2,200 in ten years. Secondly, both the leaders have put the last nail in the so-called Cold War's coffin, when Russia was admitted as a member country of the hitherto western military alliance, NATO (North Atlantic Treaty Organisation) that was created in the post-World War II era, as a shield against Warsaw Pact countries of the Socialist bloc, led by Soviet Union. The Warsaw Pact was dismantled as its member countries, related to the Soviet regime, disassociated themselves from the Pact, following a 1991 agreement, after the demise of the Soviet Union. Russian Federation was considered as the successor country inheriting former Soviet Union's obligations, including the nuclear arsenals. The new developments undoubtedly carry a good and heartening message for the peace-loving peoples of the world. The expansion of NATO eastward to include in its fold its former arch rivals and the decision to cut down by America and Russia their present possession of nuclear arsenals by two-thirds in ten years, is expected to augur well for the future to establish peace and security in the world, fulfilling the goal set by the UN towards disarmament.

Ifs and buts
But there are always 'ifs' and 'buts' that may vitiate a most impressive scenario, as things are not always what they seem. There are always some hidden rocks under the surface that make one stumble here and there. Each coin has two sides. One may be bright and most impressive, while the other side is dark and shady. I am not just trying to throw a smokescreen to belittle the new developments. But I will try to pinpoint the 'landmines' left behind here and there that might jeopardise the whole exercise for establishing peace and security in the long run. It is not raising a false alarm but is a 'ground reality'.

US gets upperhand?
It must be admitted that today's Russia is not the former Soviet Union. It is rather just the shadow of what then Soviet Union was to

America. On the other hand, America, economically, politically and also militarily, is the most powerful nation in the world today. So when America and Russia sign a treaty, they sign it not as equal partners. America had already shown that it had its upperhand in the signing of the Treaty of Moscow for the reduction of their nuclear arsenals. There has already been a murmur and grumbling in the Russian military authorities and Russian Communists which form a powerful opposition to Putin. They allege that Washington has got the 'better part of the deal' as Russia has agreed (or, made to agree with nice baits for admission in the NATO as well as WTO to allow America to keep some of its nuclear warheads "in reserve" to "reactivate" them for use in self-

fully crafted" to wipe off "vapour", created by the opposition Democrats questioning his handling of the FBI's advance warning of Al-Qaida activists' hijacking of planes prior to 11 September tragedy. Although Bush and his administration is trying hard to escape the fire by putting the blame on FBI for their 'incomplete' information, the debate had already cut much deeper on Bush's popularity. According to the US magazine *Newsweek's* opinion poll, Bush's approval ratings which had reached 72 per cent following whatever action he had taken to eliminate terrorists with a global action plan, beginning with the grand success in Afghanistan, the ratings took a sudden nosedive slide to 38 per cent, after his alleged failure to properly handle the FBI warning prior to 11 September

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defence, which goes against the very provisions made in the UN-sponsored START I and START II (Strategic Arms Limitation and Reduction Treaty I & II) which had streamlined the equal reduction in the nuclear warheads of America and Russian Federation. So the beginning of the journey has been on the wrong foot, although apparently the step is in the right direction.

It is an open secret that Russia is eager to secure US support for entering the WTO (World Trade Organisation), attract greater American investment in Russia and cooperate with America to export Caspian Sea oil. Moreover, Putin also wants Bush's help to win the status of a free-market economy entitling Russia to get the US trade benefits, besides facilitating better trade transactions with the EU countries. This much-coveted goal of Russia has already been met at the recent Rome meeting of the NATO-Russia Council. Hence it would serve as a big boost for Russia's sick and falling economy.

In view of these added benefits, Russia might have conceded US demand for keeping some nuclear warheads in reserve for use in future whenever necessary. Moreover, Russia, being economically much poorer than America, was naturally eager to get rid of the heavy burden of nuclear arsenal. So the less the better for Russia. Taking advantage of this, Bush tried to prove the maturity of his politics – military sagacity to his home gallery, looking much larger than his size to his people.

Bush's approval ratings down from 72 to 38 per cent
However, all indications show that Bush's recent week-long visit to Europe and Russia had been "care-

fully crafted" to wipe off "vapour", created by the opposition Democrats questioning his handling of the FBI's advance warning of Al-Qaida activists' hijacking of planes prior to 11 September tragedy. Although Bush and his administration is trying hard to escape the fire by putting the blame on FBI for their 'incomplete' information, the debate had already cut much deeper on Bush's popularity. According to the US magazine *Newsweek's* opinion poll, Bush's approval ratings which had reached 72 per cent following whatever action he had taken to eliminate terrorists with a global action plan, beginning with the grand success in Afghanistan, the ratings took a sudden nosedive slide to 38 per cent, after his alleged failure to properly handle the FBI warning prior to 11 September

treaty on the ground that it was an "impediment" to US policy of making its security against nuclear attacks by some nuclear 'minnows' like Iran, Iraq and North Korea. Such a unilateral withdrawal from an international treaty, to which America is a signatory and party, would be a bad precedent and a cruel mockery of international obligations of a UN treaty.

Criticism by China and Russia
When the 60-billion dollar NMD programme was first announced by President Bill Clinton towards the fag end of his second term, he had to face a sweeping storm of criticism both from China and Russia. Chinese and Russian Presidents, in joint statements, as well as in their separate statements, emphasised the "unshakability" of the ABM treaty and they agreed that such a US policy would "violate" the treaty and "upset the nuclear balance" by opening the floodgates of nuclear proliferation against which the UN is fighting hard. Getting the wrong signal from the other side of the fence, Clinton withdrew from his programme, perhaps leaving it for his successor. So where Clinton retreated because of the rising criticism from China and Russia, Bush had rushed in to go ahead, come what may.

And the most strange thing is that when Bush and Putin signed recently the Treaty of Moscow deciding to cut down their present possession of nuclear warheads, there was no mention by Putin about America's NMD programme, for some reason or other, which must have been a big success for Bush. Perhaps Putin observed silence to make the august signing ceremony a success, without vitiating the atmosphere by bringing in controversial issues. Only future will show whether Putin was either allured by Bush's offer of support to Russia's admission in the WTO and NATO, or a diplomatic posture shown by him.

But the real 'snag' seems to lie in this game of 'give and take'. It is a two-way flow, no doubt, but not a parallel flow towards better prospects, rather to opposite directions with a disastrous end in view. Because what is being given by one hand in the Treaty of Moscow was taken away, in a bigger way, by US decision to withdraw from ABM treaty and go ahead with its NMD programme.

The question of global peace and security seems to have reached a critical stage. The goal set by the UN for achieving total disarmament, since its inception, by adopting a number of anti-nuclear treaties and declarations, of which anti-ballistic missile (ABM) treaty of 1972 is the most outstanding, seems to be facing a big hammer aimed at its 'desecration'.

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Expulsion at examination centres

Crisis must be solved at the grassroots level.

MD. ASADULLAH KHAN

DESPITE all out precaution and vigilance to prevent copying in the on going H.S.C. examinations that commenced from May 16 last under seven education boards in the country, about 7700 examinees were expelled on the first day of the examination along with 32 teachers. On the second day of the examination on English 2nd paper about eight thousand examinees and 25 teachers were expelled from examination centres in different parts of the country. Incidents of sporadic violence, shooting, hurling of cocktail bombs at the exam centres, damaging properties and stabbing of some teachers have also been reported from many centres in the country. The result is really worrisome when in about seven lakh students sitting for the H.S.C. examinations, amidst strict vigilance about 15,000 have been expelled from the exam centres in just about two days. The on-going scenario of adopting unfair means in the examination as well as corruption in the educational institutions calls for an in-depth analysis of the state of education in the country. While the country is agog with lofty schemes of building infrastructure for development and leaders are making great fuss about national identity and culture, the educational structure in the country is crumbling down. Turn outside the Dhaka city and one will find to his utter disappointment that most of the villages of Bangladesh are portraits of human misery because of our failure to invest in our children's future.

In most of the primary schools, they have students on their rolls, yet most drop out after a year or two. Most Primary schools have no buildings and no teaching tools. On the other hand teachers are not attending schools and are most reluctant to perform their jobs or rather most incompetent to commit themselves to the challenging job of teaching, but they are drawing their salaries. The situation in the secondary schools and colleges is also equally appalling. Most shocking, English is hardly taught even at the Secondary stage and there is dearth of competent English Teachers in the School level. Education from Primary to College level is a low priority subject.

But there is display of wealth in state businesses : new cars are being imported, businessmen and politicians of all hues are crowding hotels, industrial concerns and government offices flashing their

cellular phones. However, the hectic activities by a section of musclemen has not necessarily either unleashed the inherent entrepreneurial drive or a business boom or growth in the country other than an artificial extravaganza of virtual growth.

But artificial or actual no boom can be sustained if certain problems are not solved specifically educating the masses and providing them such basic necessities as sufficient food, vaccines for the young and water that does not make people sick. The report card on these vital issues is still quite dismal. The report sponsored by the United Nations Development Programme in the recent past concludes that this part of Asia has become the poor-

est, most illiterate and malnourished region in the world. It is the only region in the world where there are fewer women alive than men, the result of wilful neglect of women's health. Despite so much of hue and cry, Bangladesh has still about 46 per cent illiterate population and literacy means just to be able to read "*Adarsha Lipi*" or write one's name. So while our leaders adopt policies to lift the masses from such gloom, they are still neglecting essential ingredients such as health and education a serious failing.

Let us look at Kerala in India, a region nearer our home with a per capita income of only \$E165, definitely much lower than Bangladesh. But the literacy rate is an impressive 90 per cent. Its life expectancy and infant mortality rival those in the west. The literate politically demanding masses of Kerala have proven that given commitment and willingness, solutions are feasible. Sri Lanka also boasts high life expectancy and 90 per cent literacy rates.

Bangladesh today faces gigantic problems on many fronts and diverse issues. Not so long ago, this country was thought to be among the areas with the greatest potential for progress in the Third World. But now the spurt of chaotic violence, divisive politics and hatred on party lines consumes the whole country.

Some of our leaders may have visionary moves, but these moves still fail to focus on the basic needs of the masses, long overlooked. Nowhere is this more apparent or potentially hobbling for development than in the realm of education. Arresting unfair means or expelling students resorting to unfair means is no solution of the problem the nation is now facing in the education front. Most worrisome, nobody talks or thinks about the quality of education our children are offered. Schools in the length and breadth of Bangladesh have failed to cater to the needs of our children. Our best schools are those that use English as the medium of instruction. Most traditional vernacular Schools in the country are without exception

class and even upper middle class families. Look at the predicament of Sabera, a young mother (27) living in Rajabazar area of Dhaka city who along with a three year old daughter has been deserted by her husband, fairly educated and doing a well-paid job, for her parent's inability to pay handsome dowry money. Sabera feels genuinely concerned about the schooling of her daughter. Mentionably, Sabera, a postgraduate degree holder from the Dhaka University works in an NGO on a monthly salary of Tk. 8,000/-. Out of desperation she has booked a seat for her only daughter in an English medium school in the city with an advance fee of Tk. 25,000/- by taking loan from friends and relations. The situation was so

Khmer Rouge being defeated even though the country was in ruins. Precisely speaking, poverty is not an excuse for failing to invest in our children's future. Many countries poorer than Bangladesh like Vietnam, Kenya, Kazakhstan have literacy rates of between 80 per cent and 90 per cent. Bangladesh also can turn things around but there has to be the political will. Unless a child's interest in education is created at the primary stage, the most formative period of one's life, investment at later stages proves futile. And the result as we see now is large scale expulsion in the public examination. But this is hardly the panacea of the ills accumulated over the years.

What has happened in the country in the education sector is mostly an irrational approach. Education programmes were based on targets hurled from above. Some new schools with political consideration were built and quite a substantial amount of fund distributed. Government attempted to get a certain percentage of population onto schools but did little else. The process only helped to turn some "record keeper" in the Education Directorate office into millionaires owning personal cars and apartment buildings because of unbridled corruption creeping in the system in absence of proper checks and balances, surveillance and monitoring of projects by the elected representatives.

This is now a soul searching question for the whole nation and our visionary leaders must now ponder as to what it means on investing in education above all other projects. Situation in the educational sector in the country is now messy and chaotic. Most institutions have been pushed to the ropes by a severe resource crunch, dearth of qualified and competent teachers, lack of supervisory control in the teaching modules. To meet all such challenges, all these impoverished schools and colleges need efficient and qualified teachers with motivation, commitment and dedication.

Most encouraging and perhaps a bright spot in such an appalling situation is that even in the poorest villages in the country, parents are getting the message about the importance of education. But the increasing motivation of parents to educate their children has not been matched by a corresponding improvement in schooling facilities either in the city hub or rural places. Because of all pervading rot that has infected public and private schools in the country, not only affluent sections of the society, even middle class families are getting genuinely concerned. In a bid to educate their children properly, they have made beelines at the English medium preparatory schools as well as O Level and A Level institutions that demand high entry and tuition fees, hardly affordable by the middle

critical that many who reported after Sabera for such booking did not get the chance.

Surprisingly, her daughter would start going to a high-cost English-medium school after about two years. Consider the predicament and hardship of those families if they have more than one children!

Shockingly, the country is failing in the crucial test of providing a sound education for all. While there is much truth in the saying that buildings don't make institutions, the infrastructure of an educational institution cannot be completely ignored. In most places outside Dhaka, schools and colleges exist in name, teachers draw salaries but do not teach in the classes and student abstinence is rampant. Precisely speaking, there is no supervisory activities about how a school or college is functioning throughout the year. Starting from Primary to Secondary to Higher Secondary stage, the total process of educating children remains defective. A survey conducted in recent times by an NGO with the support of UNDP has revealed that primary education in the country remains most neglected and quality is still a far cry.

Mentionably, Zimbabwe, which had low black literacy at the end of white rule, had all children put in primary school in three years. Cambodia did it within three years of

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