Energy & Geopolitical Risk

Volume 3, No. 10 November 2012

Iraq Oil Development: Rising Capacity

Nigeria Still Awaiting A New Dawn

The Socio-Economics Of The Arab Spring

ثِق بها، إعتمِدها.

مَصرفُ لبنَانَ

Energy & Geopolitical Risk

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CONTENTS

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COMMENT

Iraq's oil and gas industry is progressing dynamically, despite the many challenges, argues Mr. Thamir Ghadhban. A measure of the rapid advance of the country's petroleum industry is the increase between 2010 and 2012 of around 500,000 b/d of production and export capacity. In terms of growth, the ramping of production resulted in a growth rate of year-on-year of 13% in August 2011 and 18% in August 2012. Last July, Iraq's crude oil production exceeded 3mn b/d for the first time since 1990, placing Iraq second after Saudi Arabia among OPEC members.

The significant increase in production was made possible not only due to the successful implementation of megaprojects in the oil fields, says Mr. Ghadhban, but also because of significant progress made so far in the offshore export project, when loading capacity exceeded field production capacity for the first time, after several months of constraints on export capacity.

As for Iraq's future production capacity, according to Mr. Ghadhban, it will be shaped by a variety of factors, both national as well as international. These include: Iraq's need for substantial revenues, the possession of huge proven reserves and a large number of discovered fields with a prolific productivity and the engagement of a large number of IOCs. However market fundamentals such as world economic growth, supply and demand, future call on OPEC's oil and finally, Iraq's share within OPEC, shall play a role in defining the production capacity that the country will opt for.

Nigeria is primarily associated in oil markets with force majeures, oil theft, illegal refineries and violence. President Goodluck Jonathan's 2013 budget calls for an average production of 2.53 mn b/d compared to 2.4 mn b/d in 2012. However, Ms. Amrita Sen believes the current and future performance of the Nigerian oil sector is ultimately linked to the evolution of the structural problems affecting Nigeria's oil producing region- poverty, poor governance (Minister of Finance Dr. Ngozi Okonkwo-

Rivala , puts the country's figure of oil theft and illegal bunkering at 0.4mn b/d, which equals around $40mn lost daily, or around $15bn annually), and the proliferation of weapons. Moreover, the lack of fresh investment due to the stalling of the Petroleum Industry Bill could lead to a drastic reduction in oil output in the next few years. Years, argues Ms. Sen.

The Arab Spring revolutions have been a manifestation of rebellions against social, economic and political exclusions and injustices, says Dr. Randa Alami. The demands for social justice constitute a clear rejection of the prevailing economic model of non-inclusive growth, suggests Mrs. Alami, emphasizing that the Arab Spring epitomizes many of the structural problems faced by the economies of the region, including very high unemployment, pervasive inequalities in access to public services, and deficient and inefficient social protection mechanisms that failed to reduce vulnerabilities or mitigate risks, pushing people into precarious and informal livelihoods.

According to Dr. Samih Masoud, the Arab Spring constitutes an answer to many political, social, and economic questions. It is a response to the backwardness of institutions of governance that for decades have held the reins of state without accountability, and with scant efficiency and a monopoly of power. The Arab Spring is also a response to tyranny, corruption and injustice, and to the absence of freedom and democracy, as well as civil and political rights. Furthermore, it represents a response to the failure of Arab development, and its negative repercussions for public life as a whole, including high rates of poverty, unemployment, hunger, and illiteracy, manifested in the lack of adequate food, water and security, as well as social marginalization. Hence, powerful incentives for the social movements contributed to the rise of Arab Spring, particularly, the failure of Arab development in political, social and economic fields.

Iraq Petroleum Megaprojects 2012

Thamir A. Ghadhban*

A year has passed since we last met in Istanbul to discuss Iraq's ongoing megaprojects. It is time to revisit this topic and examine the progress achieved and what events have impacted the implementation of megaprojects in Iraq's oil and gas sector.

In my last year's keynote speech, I raised three main questions that were directly related to the conference theme: What are those megaprojects? Why are they needed? How is the progress in their implementation?

I believe by now everyone knows what these projects are and why we need them. But let me give you an update on the progress which is quite dynamic since it is an ongoing process that is facing various challenges.

To start with, let me say that the first results of these megaprojects is that we witnessed a significant increase in Iraq's oil production and exports in 2011 and more so during the last nine months of 2012.

500,000 B/D Production And Export Increase Between 2010-2012

On average, the increase between 2010 and 2012 is around half a million barrels per day in production and export rates. In terms of growth, the ramping of production resulted in a growth rate year-on-year of 13% in August 2011 and 18% in August 2012.

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* *Mr. Ghadhban is Chairman of the Prime Minister's Advisory Commission, Iraq. The following paper was the keynote speech at the CWC "Iraq Megaprojects 2012", Dubai, 2-3 October, 2012.*

Last July, Iraq's production exceeded 3 million b/d for the first time since 1990, placing Iraq second after Saudi Arabia among OPEC members.

Although significant increase in production has come from the brown fields such as Rumaila and Zubair, green fields like Al Ahdab and Halfaya also contributed, with more expected from those fields in coming months. Majnoon oil field will come back on-stream after rehabilitation work is completed at year end, with an initial production of 70 thousand b/d.

In the fields, activities, services and operations are going on unhindered. Drilling and work over rigs actually deployed reached a record level of 83 rigs. A record of 240 wells were drilled in 2011.Work is also progressing on the expansion of storage and transportation network of crude oil. Although the common sea water injection project, which is essential for boosting and maintaining field production, witnessed significant delay, some progress has been achieved recently in the contracting process that would hopefully speed up its implementation.

This significant increase in production was made possible not only due to the successful implementation of megaprojects in the oil fields, but also due to significant progress made so far in the expansion of the offshore export project, where loading capacity exceeded available field production capacity for the first time, after several months of constraints on export capacity.

Future production capacity

I would like now to turn to another subject that has been frequently discussed inside and outside of oil conferences, and that's Iraq's future production capacity. Ever since the First Bid Round was concluded, I have stated in many conferences that Iraq's future production capacity shall be shaped by a number of factors, both national as well as international. Iraq's need for substantial revenues, the possession of huge proven oil reserves and large number of discovered fields with a prolific productivity, the engagement of a large number of IOCs, are all enabling factors to acquire a high production capacity that is sustainable for a fairly long period. However, market fundamentals such as world economic growth, supply and demand and future call on OPEC's oil and finally Iraq's share within OPEC, shall play a role in defining the production capacity we will opt for.

Recently carried studies which are expected to be published soon, such as the Iraq Integrated National Energy Strategy (INES) and the IEA Iraq Oil Outlook 2012 (The study has been published since the lecture-Editor), emphasize the importance of Iraq's oil for the stability and security of world oil markets. Recent statements by the IEA chief economist Dr. Fatih Birol clearly point out to the growing and important role of Iraq's oil for the world when he stated that Iraq would play an increasingly critical role in supplying global

markets. He went on even further saying: "I do not see any other country which could match Iraq, which could bring so much oil in such a short period of time". INES, which is drawn up by Booz & Co under the supervision of the Prime Minister's Advisory Commission (PMAC), examined three different scenarios for Iraq's future production capacity. A medium production plateau of just over 9.0 million b/d to be reached by 2020 is the favored one. After meeting an expected domestic demand of I.5 million b/d, some 7.5 million b/d shall be made available for export. Such level could include some surplus capacity that shall provide flexibility for Iraq to be used when needed. However, market fundamentals shall dictate the final export volumes.

It is worth mentioning here that INES recommended a prudent approach for deciding in time the level of the country's future production plateau.

The scope and volume of work, whether directly financed by the government or the private sector, is huge by all standards and shall take many years to implement. It is estimated that the development of the energy sector plus some linked industries shall cost $620 billion, most of which shall be spent in the next 15 years. It is expected, based on the National Development Plan and the Integrated National Energy Strategy that Iraq will become the most dynamic business center in the Middle East.

Legal, Political And Security Challenges

In addition to the three questions mentioned earlier, three challenges that are more related to the politics of the country are worth considering. These are the legal environment, the political environment and security. Those challenges, and in particular the first and second, proved difficult to solve during the last twelve months. However, some progress has finally been achieved in September with an agreement reached between the Federal government and Iraq's Federal Region of Kurdistan that led to the resumption of export of oil produced in the region via the national export network. The agreement is a package of nine points that define an export rate from the Kurdistan Region of Iraq of up to 200 thousand b/d, an advance payment of one trillion dinar or around $1 billion, in addition to the verification of volumes of oil produced and exported or sold domestically by the KRG, as well as the auditing of expenditures and payments made to the operating companies in the region.

There has been some progress on the legislative front also as a result of an agreement between the main parliamentary blocks to reactivate debate on the Oil and Gas law. It is also agreed that legislation of such a law should be made in accordance with the constitutional procedures. As such, this entails that the draft law presented by the Council of Ministers will be the basis for this debate. We certainly hope that the implementation of the agreement in its entirety shall improve relations and create a conducive legislative environment.

I am personally of the opinion that all concerned parties should respect the agreement and abide by it, irrespective of the political difficulties and differences. Oil should not be used as a political tool because this would lead to the erosion of the thin confidence that is prevailing now between the political parties. Building up confidence should be a prerequisite for improving relations and providing the required political environment for carrying major reform on the legislative, economic and political fronts.

It is also to be stressed here that it is the duty of all parties, especially the regional government, to respect their obligations, in particular meeting production and export levels as stipulated in the Federal annual Budget Law. As for the country's oil exports, it is imperative to state here that no Federal government in Baghdad will ever accept the exporting of two oils from a unified federal Iraq. Oil export has always been and shall remain the responsibility of the Federal government.

The political environment witnessed its ups and downs, which is not strange in a country passing through a period of transition with a nascent democracy. Security is relatively stable as compared with last year. No serious security threat has been faced by the oil sector though more work is required in the northern part of the country in order to provide better security conditions that are necessary to conduct oil operations as in the south and central parts of Iraq.

In closing, I would like to assure you all that the Government of Iraq is giving first priority to the development of the energy sector. This is clearly reflected in next year's federal budget whereby 44% of the capital expenditure or 21.3% of the total budget is allocated to the energy sector, and in particular to the financing of projects linked to the ramp up of production, rehabilitation and expansion of storage, transportation and export facilities together with the rehabilitation of the power sector and the expansion of power generation. Government departments at the highest levels have been instructed to ease and simplify logistics and administrative requirements and improve the business environment.

Nigeria: Still Awaiting A New Dawn

Amrita Sen*

• In the oil market, Nigeria is primarily associated with force majeures, oil theft, illegal refineries and violence. While attacks on oil installations have receded since the 2009 amnesty program, oil theft is on the rise, and companies continue to declare force majeures frequently. Indeed, the latest incident took place in early October, prompting Shell to defer 150 thousand b/d of production.

• President Goodluck Jonathan, as parts of his efforts to define a new Nigeria, presented the 2013 budget pegging liquids production at 2.53 mn b/d, a significant increase from the current 2.4 mn b/d. The Nigerian National Petroleum Corporation (NNPC) also restated its determination to ensure continued increases in crude oil production.

• Yet, we believe that the current and future performance of the Nigerian oil sector remains ultimately and intimately linked to the evolution of the structural problems affecting Nigeria's oil producing region - poverty, poor governance and proliferation of weapons. In the absence of a clear shift in the current dynamics – which we judge to be unlikely at present despite the recent changes in the oil sector, including a new board at NNPC – Nigerian oil production is set to continue performing poorly.

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* *Ms. Sen is Chief Oil Analyst, the oil research consultancy (Energy Aspects), London..*

• Moreover, the lack of fresh investment due to the stalling of the Petroleum Industry Bill could lead to a drastic reduction in oil output in the next few years. There are also contentious issues in the new draft Bill. The government's intention to raise its stake in offshore blocks to 73% is deemed extremely unfavorable by oil companies.

• Aside from corruption and oil theft, there is another pressing issue for Nigeria; that of the growth of US tight oil. Nigeria exports around 2.1 mn b/d of total oil production, of which almost 45% used to be earmarked for the US. Today, that share has more than halved and we expect almost no light sweet crude to make its way to the Gulf Coast by end 2013. Increasingly, Nigeria and other West African grades are heading towards Asia, particularly India, but the country is struggling to sell all of its cargoes. The commercialization of oil in Ghana, Equatorial Guinea, Ivory Coast and Cameroon may result in further losses of Nigerian exports, as it also loses its African market.

• With output of North Sea grades in steady decline, pushing North Sea, and in particular Forties, prices higher, a weakening in Nigerian prices is likely to allow for substitution in European refineries as Nigerian grades start to yield better margins. While this in turn can start to weigh on Brent differentials over time, it is also likely to contribute towards widening light-heavy differentials, as the global crude slate gets incrementally lighter.

"Let's say there are prospects for a new Nigeria, but I don't think we have a new Nigeria yet." – Wole Soyinka

Despite being the largest oil producer in Africa, Nigeria has been in the limelight over the last decade for all the wrong reasons. Beginning in the late 199s, the cozy relationship between Big Oil and a despotic Nigerian state was challenged by popular, and increasingly militant, pressure from local communities, or more properly from armed youth movements. The shift from non-violent protest to militancy, and ultimately to armed struggle, was in many respects the inevitable result of the Nigerian government's brutal repression of the Ogoni movement. A decade later, the Niger delta is home to a fully-grown local insurgency. While sporadic episodes of violence and attacks on oil facilities have always proved an inherent feature of the Nigerian oil sector, the problems have escalated dramatically since the election cycle of 2003.

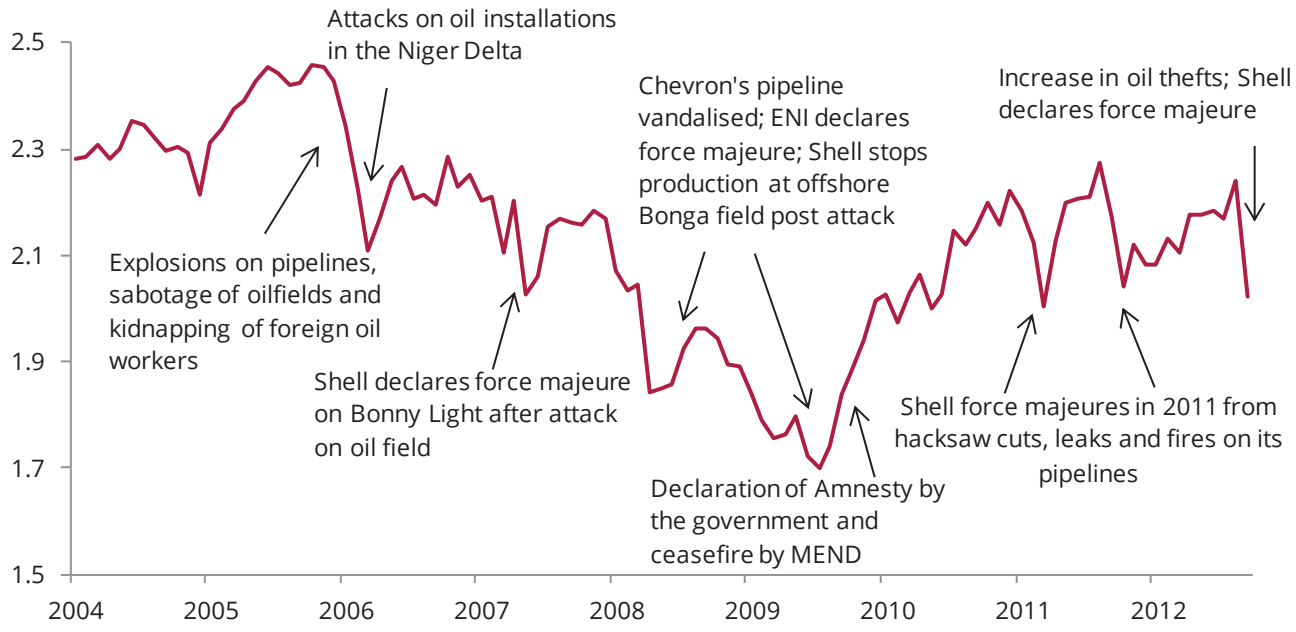
In late 2005, a new and well organized militant group the Movement for the Emancipation of the Niger Delta (MEND) exploded out of the creeks of the western delta promising to close down the oil industry (Watts 2005). Since then, the increased frequency of the attacks translated into a growing chunk of production capacity exiting the market. After reaching a peak of 2.45 mn b/d in October 2005, Nigerian production fell steadily through to 2009, touching a low of 1.7 mn b/d in mid 2009, despite Nigeria's nameplate oil production capacity being around 2.9 mn b/d. Companies declared force majeures on a regular basis and key facilities that were shut down in early 2006 repeatedly failed to resume operations according to schedule. Tentative restarts usually proved ineffective as poor security in the region continued to hamper repairs and prevent the normal flow of oil through the country. Indeed the Nigerian oil production outlook cannot be easily linked to particular events affecting individual oil installations. The return of a facility was normally followed by a downing of another, as attacks continued making the output flow from the country increasingly unsteady.

Following years of negotiation, in October 2009, MEND declared an indefinite ceasefire under the government's amnesty program. Although the militants have threatened to end the truce from time to time, in general there have been fewer attacks on oil installation than in the pre-ceasefire period. The ceasefire has also enabled some companies to repair damaged oil infrastructure, allowing Nigerian production to climb back above 2 mn b/d since 2011.

Yet today, Nigeria is the world's capital of oil theft. The Minister of Finance, Dr. Ngozi Okonjo-Iweala, puts the figure of oil theft and illegal bunkering at 0.4 mn b/d, which equates to around $40 million lost per day (or around $15bn annually) at a price of $100 per barrel. Others put the estimate lower, but still staggeringly high. According to Shell, Nigeria has been losing about $5 billion annually to the activities of illegal oil bunkerers operating in the oil fields located in the coastal parts of the country due to the loss of an estimated 0.15 mn b/d of oil output. Crude oil theft has degenerated from the occasional and haphazard operations of some local thieves to well coordinated syndicates of criminals who are prepared to do anything to obtain crude oil, according to officials. An increasing number of canoes, barges and illegal refineries are visible all over the coastal area these days. The Joint Task Force in the Niger Delta recently reported that it had destroyed 3,778 illegal refineries and seized eight vessels, 120 barges, 878 Cotonou boats, 178 fuel pumps, 5238 surface tanks, 606 pumping machines and 626 Outbound engines allegedly belonging to oil thieves in the first quarter of 2012. Despite the efforts, oil theft is on the rise in Nigeria, playing a significant role in taking production in September down below 2 mn b/d for the first

time in over a year. Shell has declared force majeure on its Bonny Light crude exports several times this year due to illegal bunkering on the Nembe Creek Trunk line, with the latest incident taking place only earlier this month, prompting Shell to shut down the Bomu-Bonny trunk line and deferring 150 thousand b/d of production. ENI stated in their Q2 results call that they were facing a sharp increase in bunkering in Nigeria, thereby expecting lower production. But oil theft is only a part of a wider industry problem. The oil industry is characterized by wastage, corruption, low productivity and unchecked dominance of foreign multinationals. Many commentators allege that high-level politicians, former and serving military officers, militant leaders and former workers of oil companies are all complicit. This makes a crack down on oil theft almost impossible, as the Government simply does not have production figures and has to rely on export numbers. In the absence of production data, companies currently pay taxes and royalties based on available export figures and not production figures as stipulated by law. Further, in terms of know-how and upstream technology, the initiative still remains with foreign multinationals and local contribution is abysmally low.

Fig 1: Nigerian oil production, mn b/d



Source: IEA, EIA, MEES, Platts, Bloomberg, Reuters, Energy Aspects

Gas flaring is another significant issue, with areas near Port Harcourt particularly impacted, and for many, it underscores the failure of upstream operations. According to World Bank statistics, more than 150 billion cubic meters (bcm) of gas are flared and vented annually around the world and Nigeria leads that

list. The annual 35 bcm of gas flared in Africa alone is equal to half the continent's power consumption. Considerable attention has also been drawn to the environmental damage caused by oil spills in the Niger Delta. According to the Nigerian 16 Oct 12 | Geopolitical update Nigeria: still awaiting a new dawn

National Oil Spill Detection and Response Agency (NOSDRA) approximately 2,400 oil spills were reported between 2006 and 2010 as a result of sabotage, bunkering and poor infrastructure.

Then there is NNPC. The financial situation of NNPC has been a long-standing constraint for the country's oil industry. The funding problems of the state-owned company have been well documented and its inability to meet its cash obligations to IOCs in a period of heightened liquidity constraints has added further impediments to THE country's growth. Corruption was rife among members, with a KPMG Report in 2010 detailing the manipulative opacity, deliberate duplicity, self-inflicted inconsistencies and corruption within the NNPC network. As a result, oil companies severely lamented that NNPC was under funding projects. In July this year, the board of NNPC was completely revamped, but it is too soon to tell whether this will herald a new era for Nigeria's oil industry.

President Goodluck Jonathan presented a $31 billion budget to parliament for 2013, which assumed total oil production of 2.53 mn b/d. Even if one includes NGL output, Nigeria will struggle to reach 2.5 mn b/d by next year, in our view. Despite the amnesty program and various steps taken in the right direction, tackling the deep structural problems facing the Nigerian energy sector will require firm and decisive leadership in Abuja.

Within the oil sector itself, the current laws governing the oil and gas sector are obsolete and have failed to address many current issues. The Petroleum Industry Bill (PIB), which was first presented to the National Assembly in 2008 is yet to become a law and is holding back some $40 billion worth of investments in the oil sector. The federal Government recently sent a new version of the bill to the National Assembly after the previous copy was rejected yet again by the 6th National Assembly. But there are still contentious issues in the new draft. Shell thinks the tax terms in the new oil bill are so uncompetitive that they risk rendering offshore oil and gas projects unviable, as the government now intends to raise its stake in deep offshore blocks from 61% to 73%. Many also suggest that the bill has taken away all the good provisions such as incorporated joint ventures.

Thus, the start-up timing of planned upstream projects, highlighted below, remains in doldrums. Although Total managed to start up the 180 thousand b/d Usan field in February this year, the start-up of the remainder will depend heavily on the PIB and the fiscal/regulatory terms it imposes on the oil industry. Most of these projects have already been delayed several times. Thus, current and future performance of the Nigerian oil sector remains ultimately and intimately linked to the evolution of the structural problems affecting Nigeria's oil producing region - poverty, poor governance and proliferation of weapons. In the absence of a clear shift in the current dynamics, which we judge as unlikely at present despite the recent changes in the oil sector, Nigerian oil production is set continue to perform poorly.

Aside from the concerns of future oil production prospects in the country, there is another pressing issue for Nigeria; that of the growth of US shale. Nigeria exports around 2.1 mn b/d of total oil production and around 1.7-1.8 mn b/d of crude oil. Almost 45% of those exports used to be earmarked for the US, with

Fig 2: Upcoming projects in Nigeria

Project	Capacity (thousand b/d)	Estimated start-up	Operator
Usan	180	2012	Total
Gbaran Ubie Phase 1	70	2012+	Shell
Ehra North Phase 2	50	2013+	ExxonMobil
Agami 2	100	2014	Chevron
Bonga North, Northwest	50-100	2014+	Shell
Bonga Southwest	140	2014+	Shell
Egina	150-200	2014+	Total
Bosi	135	2015	ExxonMobil
Nsiko	100	2015+	Chevron
Uge	110	2016	ExxonMobil

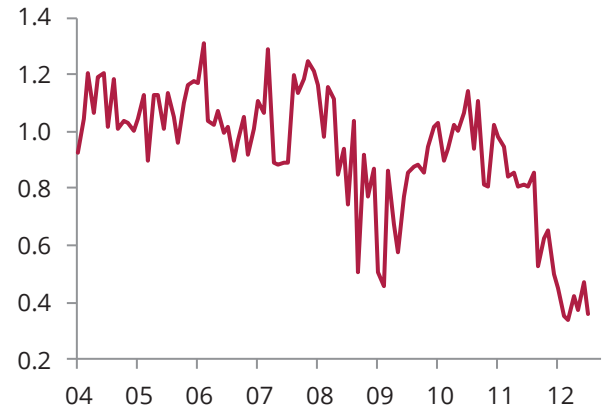
Source: EIA, Reuters, Energy Aspects

Nigeria ranking as the fourth largest foreign oil supplier to the US in 2010. With the exponential growth of tight oil plays in the US, together with declining demand, imports of crude oil have fallen by over 11% since 2006. However, within that, it has really been the import of light sweet crude that has declined sharply, given the API gravity of tight oils averaging 40 or above.

Moreover, Gulf Coast refineries have added a significant amount of new upgrading capacity, including a large tranche of coker capacity. Just a few years ago, the marginal supply barrel was getting heavier, led by the quality incremental supplies from Canada, Brazil and Venezuela. With Canadian exports to the US Gulf expected to increase, these refineries invested in upgrading capacity to take advantage of cheaper heavy crude. Since then, Brazilian production has disappointed, Canadian crude has failed to reach the Gulf Coast due to pipeline politics, and the boom in shale oil in the US has altered the API gravity and sulfur content of the marginal barrel. Most of the larger refineries remain focused on capturing discounts from heavy waterborne crudes, and eventually tapping into the heavy Canadian supply once it is able to make its way down to the Gulf Coast. However, some refineries in the Gulf coast region have made fairly drastic shifts in their investment strategies to accommodate more light sweet Eagle Ford oil.

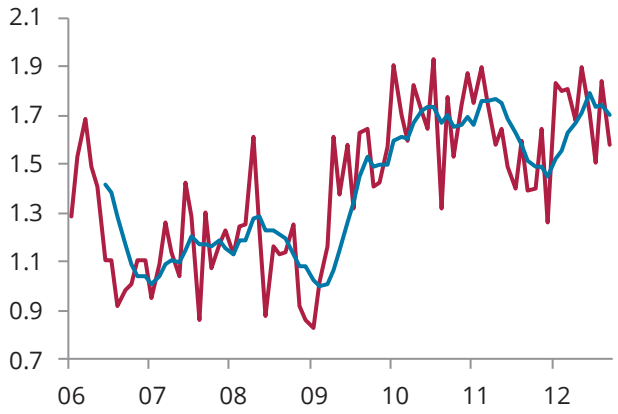
Citgo, a major refiner of heavy grades, will blend Eagle Ford crude at its 165 thousand b/d Corpus Christi refinery. Valero has increased runs of Eagle Ford crude to 100 thousand b/d since Q2 12, split between its Three Rivers and Corpus Christi refineries. Corpus Christi is reportedly taking around 40 thousand b/d of Eagle Ford crude, while Three Rivers is shifting from a combination of Venezuelan and Nigerian crudes to 60% Eagle Ford. Marathon Petroleum plans to move its 72 thousand b/d Texas City refinery to an entirely domestic crude slate, mostly from Eagle Ford, by early 2013. NuStar has retrofitted its tiny 14 thousand b/d jet fuel refinery in San Antonio, Texas, to process entirely Eagle Ford shale oil. This, in turn, has heavily impacted Nigerian exports. Imports of light sweet Nigerian crude to the US have fallen to around 300 thousand b/d in July from around 800 thousand b/d a year earlier (see figure 3). We expect this trend to continue, with almost no light sweet crude making its way to the Gulf Coast by end 2013, with our projections even pointing towards a slight surplus of light crude oil in the US unless more refineries are able to convert to processing from lighter barrels.

Fig 3: US Imports of Nigerian Oil, mn b/d



Source: EIA, Energy Aspects

Fig 4: West African Exports to Asia



Source: Reuters, Energy Aspects

While the pace of decline in US light sweet crude imports have stalled somewhat, the start-up of almost 1.4 mn b/d of pipeline carrying Eagle Ford light sweet crude to the Three Rivers, Corpus Christi, Port Arthur and St. James refineries next year is likely to once again accelerate the decline of seaborne imports. Currently, given the wide differential between WTI, and other Northern US crudes like Bakken, to Gulf Coast benchmarks (LLS), significant volumes of crude are being transported by rail, trucks and even barges. The start-up of pipelines should help speed up the process of bringing greater volumes of crude to the Gulf Coast, where crude values are the most attractive in the country, and further displace light sweet crude imports.

Fig 5: US crude pipelines towards the Gulf Coast, thousand b/d

Name	Company	Route	Start-up	Capacity
Currently operational				
Seaway reversal	Enterprise	Cushing-USGC	May-12	150
West Texas - Houston access	Sunoco	West Texas-Houston	Jun-12	40
Eagle Ford condensate	Kinder Morgan	Eagle Ford - Galena Park, Texas	Jun-12	300
Eagle Ford to Houston pipeline - Phase 1	Enterprise	Lyssy - Sealy Terminal	Jul-12	350
Under Construction				
Seaway expansion	Enterprise	Cushing-USGC	Q1 13	400
Twinned Seaway expansion	Enterprise	Cushing-USGC	Q2 13	400
Eagle Ford to Houston pipeline - Phase 2	Enterprise	Sealy Terminal - Houston	Mar-13	200
Eagle Ford pipelines	Plains All America	Eagle Ford - Three River/Corpus Christi	H2-12	300
Texas Line	Koch	Pettus - Corpus Christi	mid-2012	250
Permian expansion projects	Plains All America	Expansion of existing pipelines	Late-2012	40-60
Planned				
Permian Express Phase 1	Sunoco	Wichita Falls - Nederlands, texas	Apr-13	90-150
West Texas - Nederland access	Sunoco	Permian Basin - Beaumont-Port Arthur	Q1-13	40
Keystone XL South leg	TransCanada	Cushing-Port Arthur	Late 2013	550
Houston-Beaumonth Port Arthur	Enterprise	ECHO terminals, Houston - GC refineries	Early 2014	200
TexStar's Eagle Ford pipeline	TexStar Midstream	Lasalle and McMullen - Nustar's line, Oakville	Q3 2012	100
Houma-Houston pipeline reversal	Shell	Houston - Houma	Q1 13	300
Westward Ho	Shell	St James - Houston	Q3-15	900
Longhorn pipeline reversal	Magellan	Crane - Houston	Q1 13-mid 13	135-225
Double Eagle Pipeline	Copano/Magellan	Eagle Ford condensate - Corpus Christi	Early 2013	100
Karnes to Corpus Christi	Koch	Karnes - Corpus Christi	Mid-2013	120
Allegheny Access Pipeline	Sunoco	Midwest - east Ohio and west Pennsylvania	H1 14	85-110

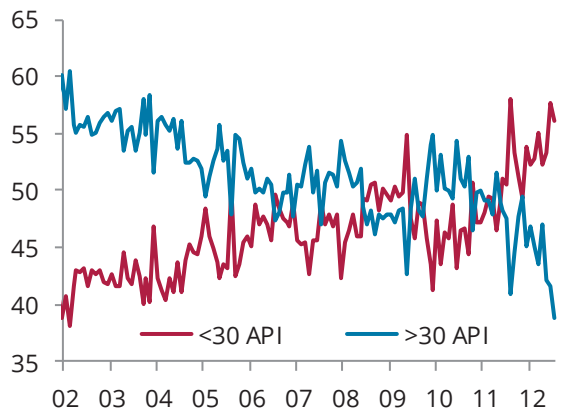
Source: Company Reports, Energy Aspects

Increasingly, Nigeria and other West African grades are heading towards Asia, the epicenter of world oil demand growth. While the preference of Nigerian crude in Asia bodes well for the country at a time when its primary customer, the US, is set to cease imports almost entirely, our view is that Nigeria will increasingly struggle to place all of its volumes in the market with as much ease as it used to. Already, Nigeria is struggling to sell all of its cargoes, as, despite robust appetite in Asia, it has not been able to offset the entire decline from the US one for one. Just days ahead of the release of the December loadings, around 10-15 November cargoes remain unsold, a trend we expect to persist. Nigerian grades are popular with Indian refineries, which have helped raise Nigeria's Qua Iboe grade differentials frequently in recent months. In contrast, the Chinese refineries prefer the more acidic Angolan crude for their refinery specifications. Indian imports of Nigerian crudes are nearing 20% of total Nigerian exports, but still substantially lower than the 45% that used to be exported to the US.

Worse still, discovery and commercialization of oil in Ghana, Equatorial Guinea, Ivory Coast and Cameroon may result in further losses of Nigerian exports, as it also loses its African market. Moreover, it is not just the US where refineries have upgraded to process from heavier crude; this is a common theme around the world, arising from expectations that the crude slate would be getting incrementally heavier that were dominant before the advent of tight oil. In 2011, the US and the four African countries mentioned above imported around $40 billion worth of crude from Nigeria (assuming an average price of $110 per barrel), almost 40% of Nigeria's total oil revenue.

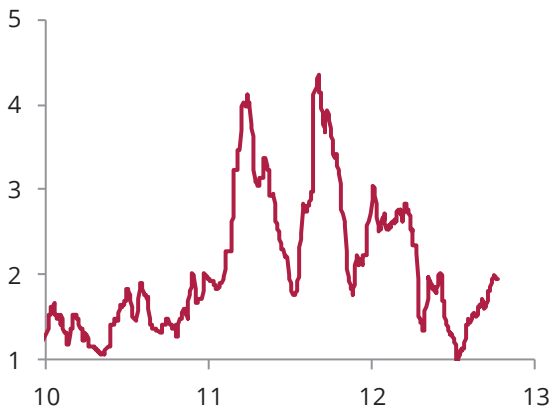
With output of North Sea grades in steady decline, pushing North Sea, and in particular Forties, prices higher, a weakening in Nigerian prices is likely to allow for substitution in European refineries as Nigerian grades start to yield better margins. While this in turn can start to weigh on Brent differentials over time, it is also likely to contribute towards widening light-heavy differentials, as the global crude slate gets incrementally lighter.

Fig 6: US imports by grade, %



Source: EIA, Energy Aspects

Fig 7: Qua Iboe differentials, $/B



Source: Datastream, Energy Aspects

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The Economics Of Arab Spring: The Need For Inclusive Growth

Randa Alami*

The Arab spring revolutions have been, *inter-alia*, a rebellion against social, economic, and political exclusions and injustices. People took to the streets of Tunisia, Egypt, and other Arab countries demanding dignity, basic freedoms, and socio-economic justice. These demands for social justice constitute a clear rejection of the prevailing economic model of non-inclusive growth. They indicate that not only was prosperity not shared, but that poverty and deprivation are rampant and significant.[i] The fate of Bouazizi epitomizes many of the structural problems faced by the economies of the region, including: very high unemployment (particularly among the youth), pervasive inequalities (in opportunity, in access to public services, across regions), and deficient and inefficient social protection mechanisms that failed to reduce vulnerabilities or mitigate risks, pushing people into precarious and informal livelihoods.

Being anchored in the demands for social justice, the Arab Spring is intimately linked to social policy, and connects the region to the international consensus on the issue. The Millennium Development Goals (MDG)process committed the world, including Arab countries, to halving world poverty and to other developmental goals by 2015, and highlighted the importance of social security and public services in fighting poverty. As we approach the 2015 target year for achieving these goals, and looking beyond the $1.25 a day poverty line, we find that both income and non-income poverty remain substantive throughout the region, worsened by the ragged state of most public services and infrastructure which amplify the misery of the average Arab citizen.

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[i] *For example, Galal and Sekkat (2010) argued that "the North African region has been successful in reducing poverty despite modest economic growth ... It argues that low poverty in Algeria, Egypt, Morocco and Tunisia can be traced to a combination of social policies, cultural characteristics and the nature of the political regimes"*

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Severity and headcount measures of poverty do vary according to which poverty line or concept is being used. However, there is no doubt that more than half the population is poor in the Arab Least Developed Countries (Yemen, Sudan, etc). Palestine and Yemen represent some of the worst cases of escalating poverty amongst developing countries. Outside the GCC, the region registers poverty rates of 20% to 40%, when the more relevant $2/day line is used (ESCWA 2012). Table 1 below shows the prevailing rates using the lower bounds of the national poverty rates, and which are close to $2/day. Still, on average, 17% of the Arab population is poor, representing some 30 million people, to which the poor in Iraq and Sudan must be added. More strikingly, if we use the $3 poverty line, the number and proportions of poor people rise significantly. The proportions of people living under $3 a day ($90 a month) are around: 51% in Egypt, 16.5% of Jordan, 29% in Tunisia, and 73% in Yemen. Similarly, a 2008 study of poverty in Lebanon put poverty at 28% using the $4/day upper poverty line (with 8% being extremely poor, falling below the $2/day line), with levels having worsened after the 2006 Israeli aggression. Note that the current world crisis and the uprising are likely to have worsened the situation.

Table 1: Poverty using lower limit of national poverty lines

	survey year	poverty incidence	estimated number of poor (millions)	survey year	poverty incidence	estimated number of poor (millions)
Lebanon	1997	10	0.4	2005	7.97	0.3
Egypt	1999	16.7	10.6	2009	21.6	13.7
Iraq				2007	22.9	
Jordan	1997	15	0.7	2007	13.3	0.7
Syria	1997	14.3	2.2	2007	12.3	2.3
Occupied Palestinian Territories	1998	20.3	0.6	2007	34.5	1.2
Yemen	1998	40.1	6.2	2006	34.8	6.8
Algeria	1994	14.1	4.1	2006	5.6	1.8
Morocco	1990	13.1	3.5	2007	9	2.7
Tunisia	1990	7	0.7	2005	3.8	0.4
Total (exc.iraq)			20.7	2009		29.9

Source: ESCWA (2010); World Bank Development indicators (April 2011)

The number and extent of poverty in Arab countries can also grossly underestimated if we consider the surveys on which they are based. Sabry (2010) argues that the 2009 official poverty ratio of 21.6% can become easily higher depending on which geographic areas are included in the surveys. Furthermore

these surveys use poverty lines which do not reflect the absence of free public services (such as schools); they also exclude many essential categories (rent, medication, repairs to drains; water connections..). Consequently, estimates of poverty in Egypt and elsewhere grossly underestimate the number of poor people and degree of their deprivation. Similarly, the Tunisian surveys used a very low poverty line, allowing the previous regime to halve the poverty problem through simple manipulation of data. Hence, poverty is one of the key areas being re-examined by the national authorities at present.

Similarly, beyond national indicators of human development, within each country, development outcomes are highly differentiated according to income, gender and locality. Hence, the lack of education remains a key characteristic of the Middle East's poor, rural, and female populations *(The Third Arab Report On The Millennium Development Goals 2010)*. 60% of children not enrolled in Arab countries are girls, with higher ratios in Egypt, Iraq, Yemen, Syria (World Development Indicators, September 2011). Similarly the out of school ratios for rural and urban areas are 30% and 18%: in remote, poor areas, schools are either unavailable or accessed with difficulties. The region also lags behind its comparators on other fronts. In 2010, the average years of schooling in Peru, Mexico, Thailand and Korea were at least 9 years, compared to 6.8 in the region (though Bahrain, Jordan, Oman and UAE achieved 8 years or more of schooling), so that the region only attained 54% of the mean years of schooling commensurate with its income levels. And although the region did well in terms of average literacy rates, it is still the case that about 1 in 5 of the population aged 15+ has not received any schooling, with the 2010 the ratios of people with no schooling at 31% in Egypt and Iraq, and 57% in Yemen.

Similar disparities exist in health. Maternity mortality rates in rural areas can be five times greater than those in cities. Child mortality rates are 2.6 higher for the poorest income quintiles in Egypt and Morocco (*World Bank Indicators, September 2011*). More generally, life expectancy indexes in Arab countries are 21.3% lower than they could be because of inequality, with losses ranging between 11.1% in Syria and 31.2 % in Yemen (El Laithy 2011, p.13). Except in the GCC, Arab countries are unlikely to meet their Millennium Development Goals (MDG) targets for reducing hunger and malnutrition. Although these mostly affect children in Arab LDCs, it seems over 21% of under-fives in Algeria are stunted (*Arab Human Development Report 2009*). More generally, Arab countries have some of the highest out-of-pocket health expenditures in the world, leaving considerable parts of the populations unable to pay for health care and therefore vulnerable to catastrophic health events (*El Laithy 2011 and World Development Indicators 2011*).

Arab countries do have social protection systems, and in theory, these do include social assistance programs, including social safety nets. However, throughout the region, resources allocated to social protection are mostly spent on universal food and fuel subsidies in the first instance, and in the second instance, on restricted social insurance systems, which are centred on public and formal sector employees. As such, direct poverty relief is largely a left-over of the budgetary allocations for subsidies, which typically account for three quarters of the share of social assistance in GDP. Given that data are lumped together, it is difficult to obtain solid figures for direct transfers per se, but it can be generally estimated that direct social assistance is probably 1% or less of GDP (0.4% of GDP in Lebanon – see Weigand and Grosh 2008 for a survey of levels around the developing countries). In contrast, food and fuel subsidies in Egypt in 2007 amounted to 8.5% of GDP, while in Syria they amounted to 2.3 and 10.3% of GDP respectively (see Femise 2009, El Laithy 2011).

This assistance is set up as charitable handouts: they do not address the factors causing poverty and reflect a perception of the poor as a minority facing hardship and in need of charitable assistance. These programs suffer from complex and inefficient administration, poor information (lack of surveys or mechanisms to identify and register the poor), design and delivery problems (ESCWA 2009, El Laithy 2011). Moreover, their outreach and impact have been dismal, and levels of benefit paid are low. Hence an Egyptian scheme has only recently said to reach one million people (out of at least 14 million), but the payout is around E£120 ($20-30) a month (El Laithy 2011). Similarly, Tunisia's family allowance was at only $130 per quarter in 2008 (ILO, 2011).

Other developing countries tend to spend between 1% and 3.2% of their GDP in a variety of cash transfers and assistance schemes, on top of social insurance and public services. The top spender, South Africa, reaches a quarter of its population (11 to 14 million people) with social grants and social pensions; these programs have lifted at least six percent of the population over the poverty line. More generally, over the last decade, over 30 low and middle income countries have reformed their social assistance and expanded coverage by adopting universal social grants or large family allowances schemes. In contrast to the piecemeal and short-termist schemes in Arab countries, the anti-poverty programs of successful reformers were at the heart of multi-year, cross-party, national political efforts. Brazil initially committed to a universal health system in 1990, and went on to scale up and improve its Family Health Care primary health system since 1996. Its flagship Bolsa Familia program costs a mere 0.4%-0.5% of GDP, but reaches over 11 million families with social grants. The program was the result of combining and reforming, in 2003,

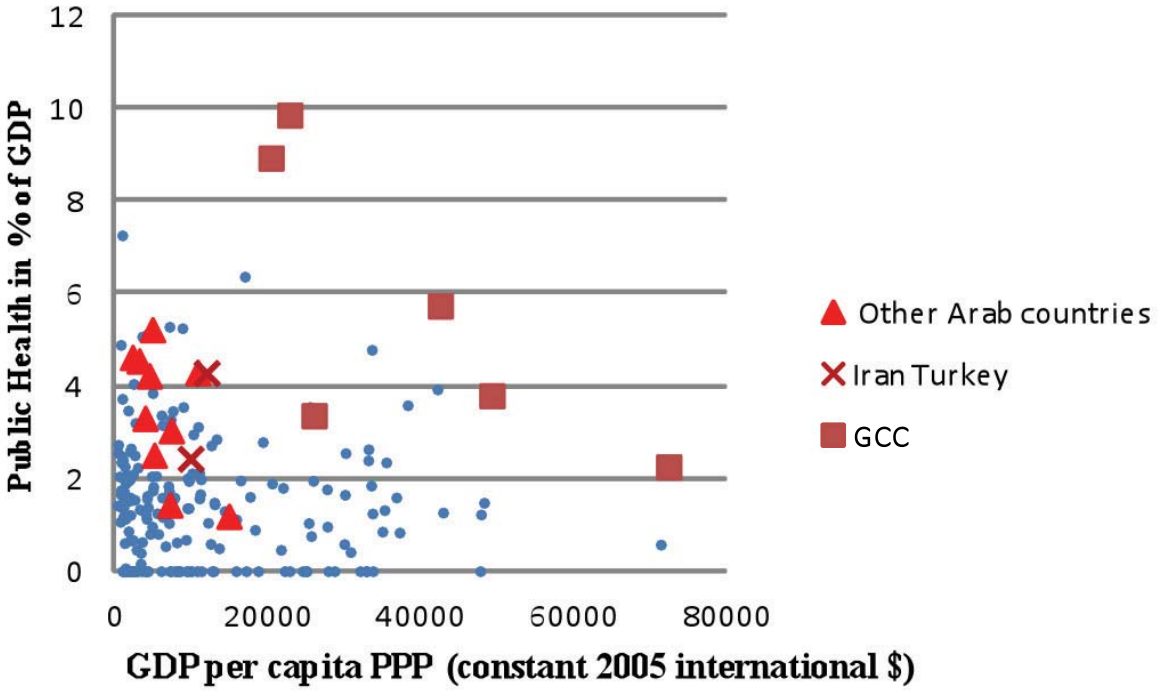
four assistance programs; a key element to the reform was the construction by a common information and registry system called *Cadastro Unico* (ILO 2011, Prasad 2008). Likewise, India's National Rural Employment Guarantee Scheme, launched in 2006 at the cost of 0.3% of GDP, now benefits 40 million families. Thailand committed to address domestic social problems and extend health care to all the population back in 2001, in response to the East Asia Crisis. In all these cases, the processes were supported by accurate statistical and actuarial information and by developing appropriate administrative capacity .

In contrast, up to the Arab Spring, one would struggle to find evidence of central political commitment to fight poverty amongst Arab regimes, except perhaps in the international agencies they are members of. Many countries presented to these agencies national development or action plans incorporating some of the international discourse on poverty (see ESCWA 2009), but these plans had little significant impact in practice. Worse still, in the case of Tunisia, Ben Ali simply assumed away the problem and claiming that 80% of Tunisians were middle class (*Invest in Tunisia 2007*). As amply demonstrated or at least exposed by the Arab Spring revolts, though some anti-poverty initiatives were launched, whatever was done, it was" too little, too late".

Hence, budgetary discussions and allocations to poverty reduction programs remained marginal. For example Iraq spends most of its "social affairs" budget on food rations (13% of budgetary allocations), with little other direct support to the 22-23% of its population below the poverty line (Iraqi Institute for Economic Reform 2012). Yet, simple calculations show that with a poverty line of just 86,000 Iraqi Dinars (about $65-$70 a month), it would take a mere 0.31% of public spending to lift the eight million people up to that line. Similarly social affairs are only allocated 7% of total capital or investment spending in the current budget (Ibid). Moreover, Iraq allocates of its budget under 15% to defence and security, but only just over 3% to agriculture and industry put together.

More generally, Arab countries have the highest average share of military spending to GDP in the world, a trend clearly visible in Figure 1 overleaf. This average of 4.3% of GDP reflects a 5.3% average share in GDP in the GCC countries, and 3.4% of GDP for the rest of the region. These compare with shares of 2.6% for high income countries, 2.2% in low and middle income countries, 1.4% in Latin America and 1.8% in East Asia. Yet, public spending on health as a share of GDP in Arab countries is below international norms, and below the 2.7% average for Sub-Saharan Africa. The main exceptions are Jordan and Turkey, with Algeria and Tunisia following closely at 3.3%. Similarly, the share of public spending on health in total government expenditure for GCC and non-GCC countries is just over 7. 7%, compared to 8.6% in middle income countries and 15% for high income countries.

Figure 1: Military Spending in percent of GDP in Arab countries



The above numbers neither show nor seek to prove the existence of a direct trade-off between "guns and butter". However, they do highlight the relative neglect of social sectors, particularly those with direct effects on poverty reduction. Equally significantly, it points out to the possibilities of resource re-allocation and possible fiscal spaces which could help to finance any expansion or reforms of social programs. The Arab Spring has highlighted the political urgency of addressing social needs and of revamping social policies to achieve a less exclusive growth. But needless to say, these measures may not be sufficient: tackling unemployment is also urgently needed.

Indeed, fighting poverty and progress in development cannot be reduced to throwing a few percentage points of government resources at the street. Fighting poverty must address its causes and roots in each context, and in the Arab world, this necessarily involves income generation through job creation. In the same grain, what is needed are comprehensive and interlinked policies to achieving inclusive growth, whose main pillars are:

- Economic growth, but with a growth focused on job creation and that would dent unemployment levels significantly;
- Social protection and public services that are comprehensive in coverage, and that support growth by investing in human capital and public goods; and
- Equal access to opportunities, reversing the hopelessness and exclusions that underpinned the current explosions.

These pillars are needed to tackle the triple "nexus of poverty, unemployment and inequality" that had trapped entire generations of Arab people. What is needed is not just more handouts, but a shift to a rights-based approach to social policies and citizenship, and opening up the economic space to those who never benefitted from the macro-economic growth record of the region.

Abdel Samad, Z. And D. Zeidan, (2007), "Social Security in the Arab Region: The Challenging Concept and the Hard Reality." Paper prepared for the Social Watch Annual Report 2007.

El-Laithy, H., K. Abu-Ismail, and K. Hamdan, (2008), *Poverty, Growth and Income Distribution in Lebanon*, International Poverty Centre, Country Study N°13.

El-Laithy, H., (2011), *Levels of Provision of Social Security in ESCWA Countries*, ESCWA, Beirut.

ESCWA (2009), *Integrated Social Policy Visions And Strategies In The Escwa Region, Report III*, Beirut.

ESCWA (2012), Arab Millennium Development Goals Report 2011:An inclusive approach to development in a time of transition, ESCWA, Beirut.

FEMISE (2009), *Femise Report On The EuroMediterranean Partnership: Mediterranean Partner Countries Facing The Crisis,* Marseilles.

ILO (2008), *Tripartite Meeting of the Future of Social Security in Arab States. Amman, 6-8 May 2008,* Social Security Policy Briefings. Paper 5

International Labour Office (2011). Tunisia: A New Social Contract for Fair and Equitable Growth, ILO: Geneva.

Karshenas M. and R. Alami (2012), "Deficient Social Policies Have Helped Spark the Arab Spring", *Development Viewpoint No.70,* School of Oriental and African Studies, February.

Prasad, N. (2008), *Policies for Redistribution: the Use of Taxes and Social Transfers,* International Institute for Labour Studies, Geneva.

Sabry, S. (2010), "Could Urban Poverty in Egypt Be Grossly Underestimated", *Development Viewpoint No.52,* School of Oriental and African Studies, May.

UNDP (2009), *The Arab Human Development Report 2009: Challenges to Human Security in the Arab Countries*. New York: UNDP.

UN and the League of Arab States (2010), *The Third Arab Report on the Millennium Development Goals 2010 and the Impact of the Global Economic Crises,* New York and Beirut, E/ESCWA/EDGD/2010/3

Weigand, C., and M. Grosh, (2008) *Levels and patterns of safety net spending in developing and transition countries,* S P Discussion Paper NO. 0817, World Bank, Washington DC, June.

Arab Development In The Shadow Of The Arab Spring

Samih Masoud*

The Arab Spring, with the ensuing ramifications that certain Arab countries have experienced, constitutes an answer to many political, social, and economic questions. It is a clear response to the backwardness of institutions of governance that for decades have held the reins of state without accountability, and with scant efficiency and a monopoly on power. The Arab Spring is also a response to tyranny, corruption, and injustice, and to the absence of freedom and democracy, and civil and political rights for citizens. Furthermore, it represents a response to the failure of Arab development, and its negative repercussions for public life as a whole, including high rates of poverty, unemployment, hunger, illiteracy and other problems of recent years, manifested in the lack of adequate food, water and security, as well as and social marginalization.

In the light of all this, it can be said that in order to talk about the Arab Spring one needs to start identifying the causes. These were powerful incentives for the social movements contributing to its appearance in some Arab countries. In particular, one has to look at the failure of Arab development in political, social and economic fields, as this contributed significantly to the explosion of uprisings that characterized the Arab Spring.

It is not worth, at this point, to minimize or overstate matters when assessing the results of development in the countries affected by the Arab Spring and in other Arab states. In general, we find that the results are meager and do not commensurate with the efforts expended on it, or with the expenditure and high target ceilings.

** The following (MEES translation) is a summary of a lecture delivered by Samih Masoud, Director of the Canadian Centre for Middle Eastern Studies (Montreal) at the Center of Al-Rai Studies in Amman on 17 March 2012. Dr. Masoud is a former Economic Consultant, Arab Fund for Economic and Social Development, Kuwait.*

It has also not been possible to correct the structural distortions in the Arab economies, characterized as they are by weakness and disintegration, and by excessive dependence on global markets. These economies were also unable to integrate human and material development, or make changes in economic, social, political, and cultural structures to enable the establishment of appropriate systems of government and the development of a sense of social responsibility. On the contrary, they contributed to an intensification of interference in matters of money and power, and the consecration of corruption in state administration. This was accompanied by the distribution of benefits among the elites of the autocratic regimes, leaving a large group of Arab societies under the poverty line in marginalized areas outside the scope of growth.

Limited Development Achievements

According to available data on the achievements of the experiences of Arab development, the growth rates achieved in the gross domestic product GDP) in most Arab countries was less than those planned, and much lower still than the rates in other developing countries. This confirms what many economic authorities say, that economic growth in various Arab countries has been characterized by almost complete stagnation for two and a half decades since 1980. Over that same period, real per capita GDP in Arab countries did not exceed 0.5% per year.

Studies on development are generally in agreement that change in all the Arab countries failed to reach a level of sustained development. Rather it amounted to nothing more than sudden and random fluctuations, which are of little value when it comes to offering a range of options to successive generations. This important result does not deny the existence of limited achievements in Arab development, notably in the infrastructure sector, but with only modest success in scope and effect. The achievements have not met the huge demand in Arab countries for services for many reasons, the most important of which is the steady growth in population and expanding urbanization, which have increased the pressure on services being provided by the various infrastructure facilities.

For this reason, the *Unified Arab Economic Report* estimates that more than half the population of Arab countries have yet to receive electricity, especially in rural and remote areas, and that about a quarter of the population of these countries lack safe drinking water. Furthermore, a third of the population is not connected to proper sanitation networks. And the outlook in this regard is pessimistic, given the inability of certain Arab states to meet the 2015 Millennium Development Goals for these services because of the slow pace of improvement and development.

The paradox is that the state of Arab countries several decades ago was better than it is now. *The 2009 Arab Human Development Report* showed that Arab countries in 2007 were less industrialized than they had been in 1970, because of a slowdown and contraction in the manufacturing sector over the past five decades and the growing focus on infrastructure, real estate, and the financial and services sector.

Many sources have also indicated that the economies of Arab countries were characterized in the 1960s by a high level of performance, exceeding the growth of income in all regions except East Asia, and exceeding all of them in terms of income distribution. Several sources take Egypt as an example, which during that period was on an equal footing with the countries of East Asia in economic growth, and even more successful than them in reducing poverty levels. At the same time, the average per capita income in Egypt in 1950 was equal to that of South Korea, while the current figure is less than 20 per cent of South Korea's. Moreover, the average per capita gross domestic product five decades ago was the same in Malaysia, Morocco and Algeria. Today, the value of gross domestic product in Malaysia is three times higher than in Morocco.

Lack Of Development Policies

It is recognized that the meagerness of the achievements of Arab development is due mainly to the large number of constraints, which contributed to the deterioration of the situation in the region. The outcome is the current state of developmental sluggishness, erosion of per capita income, increased rates of unemployment, poverty and illiteracy, and other negative aspects that have played a role in the emergence of the Arab Spring in some Arab countries.

In short, the most important obstacles faced by Arab development spring from the lack of economic stability, and in particular the instability of fiscal and monetary policies, plus the almost complete absence in some Arab countries of economic development policies. Added to this is the absence of political stability in many Arab countries, not to mention the backwardness and lack of development of the institutions of governance. All the while these institutions have for decades continued to control and monopolize the reins of power without accountability and with minimal efficiency, while being mired in bureaucracy, tyranny and corruption, lacking democracy and with significant shortcomings in providing for the civil and political rights of citizens.

All this has impacted negatively on the experiences of Arab development because of the correlation between and interdependence of democracy and development. Since democracy can submit governing authorities to accountability and conformity with the law, the official body in question is forced to pay attention to the formulation of development plans, and mobilize the necessary resources in order to implement them in a way that achieves the best results.

Spread Of Unemployment

Among the constraints is the management backwardness in the Arab countries, and the failure of Arab states to acquire and absorb the technologies needed. Furthermore, there is a lack of local funding to meet the investment requirements for certain development plans in some Arab countries, especially lower income ones, in addition to shortcomings in joint Arab economic action, and its inability to achieve the goals of Arab coordination, cooperation, and economic integration.

It goes without saying that the failure of Arab development has helped the emergence of intractable social, security, and political crises in many Arab countries, and has impeded development and the democratization process, spreading instead the phenomena of the aggravation of crises and confrontation, along with social and security instability.

The failure of development has also contributed to the spread of unemployment, and an increase in poverty, hunger and malnutrition in the Arab world. The jobless rate in this region is one of the highest in the world, averaging between 14 per cent and 20 per cent of the Arab labor force. At the same time, the Arab world also features in the list of the world's poorest regions, with World Bank data indicating that around 20.37 per cent of Arabs live below the international poverty line of $2 a day. This means that approximately 65mn Arabs lack the capacity needed to ensure their basic human welfare, while the percentage of extremely poor people in the Arab world in 2000-2005 was around 18.3 per cent, up from the equivalent figure in the 1990s of 17.6 per cent.

In order to avoid repeating past failures in the future it is essential to provide a stable environment in political and security terms in order to help in addressing the current challenges facing Arab development. The most important of these is the backwardness of Arab regimes and the absence of political and civil rights for their citizens, along with the high population growth rate, the failing education and administrative systems, and food and water shortages.

Three Key Requirements

Without wishing to simplify or exaggerate matters, the future of Arab development is dependent on a re-examination of the current Arab economic system, which is an economic model that is based on a marriage between money and tyrannical power that does not respect the most basic rules of the distribution of income and development results. All this requires continued collective efforts on the part of all Arab states to furnish the means necessary to bring about this transformation. The three most important requirements are:

The adoption of a concept of Arab development linking economic and human development, taking into account the notion of overall development as provided for in many United Nations resolutions which state that "one of the human rights is to improve the quality of life". This encompasses a range of economic, social, political, administrative, regulatory, legal, and cultural aspects.

This means that the development required is a sustained society-based human process striving to achieve an increase in individual productivity and real average income over a long period, while improving the human condition in general. Also needed are structural changes in various political, social, and economic aspects of life which will help to broaden the human dimension of development, providing for political and media freedom and the empowerment of women to claim their maximum rights. The aim should also be the participation of all citizens in the processes that affect their lives and the establishment of systems of governance that are more transparent, and better governments that are democratically accountable.

This concept of development is consistent with historical trends, and can achieve a quantum leap in development terms politically, socially, and economically. This would differ fundamentally in essence from the pattern of development that has prevailed in the Arab world over the past five decades in which the focus has been on increasing real annual per capita income over a long period of time in the complete absence of political pluralism and democracy.

The reformulation of the methods of Arab development in terms of integrated regional development that would allow Arab economies to achieve vertical and horizontal integration, with pooled human, financial, and physical resources in the context of a Arab-wide market. This would enable Arab states to reap benefits the way that many other regional blocs in the world have done. These benefits far outweigh those accruing from limited national development that relies on small and restricted markets.

What is required is a serious effort towards mutual interchange of resources and capabilities that Arab states have at their disposal, within the framework of integration based on real economic benefits rather than emotive slogans. This is the agenda for the era of economic blocs in which we live, where there is no place for small markets and where the trend towards broad international integration is the order of the day. For it is unnatural in view of the current "globalized" world, which is economically and financially open, for Arab countries to be confined to their own limited markets in a region that is divided and fragmented.

Based on previous experience of joint Arab action we should stress the need for Arab political will to learn from the lessons of past failures where the states of the region led separate economic and political lives. This led to the collapse of confidence in joint Arab action, in what was possible and feasible. So, in order to achieve long-term future aspirations, there have to be integrated programs that require genuine political commitment to various stages of joint Arab action. Otherwise all efforts will end in failure, as happened in previous decades with the plans for the Arab common market and dozens of other integration projects.

The application of serious structural reform programs ongoing within Arab states themselves aimed at addressing imbalances and fiscal deficits, curbing distortions in the labor market, supporting employment initiatives, promoting internal stability and the investment climate, developing the administrative capacity to tackle development demands, and making use of financial resources with the highest degree of efficiency possible, in addition to developing education systems in line with the standards of the 21st century to harmonize them with the demands of the labor market and to increase competitiveness.

Comprehensive Reform

All this means that partial and selective reforms that Arab states have focused on over the past few years are insufficient to meet the demands of the Arab Spring. This calls for the introduction of comprehensive reform that is necessary to develop and change all political, social, cultural, and educational aspects of life, with the emphasis on the quality and sustainability of these reforms, creating a driving force for them in the shape of civil society organizations.

This requires the revision of constitutional and legislative measures to lay the foundations of freedom and democracy in order to achieve political pluralism and the rotation of power, as well as respect for all rights governing freedom of thought, organization, and expression for all. There must also be an independent judiciary and governments subject to constitutional and popular scrutiny, along with political parties with differing intellectual and ideological platforms, a free press and a greater role for local communities. All these developments will combine to achieve a maximum degree of transparency in public life, involving the elimination of corruption and the emphasis on sound governance and the upholding of human rights according to international conventions.

The process of developing along these new lines will meet the requirements of the Arab Spring and tackle the accumulated pile of errors committed over previous years that helped create a fertile ground for unemployment, poverty, and extremism, as well as the lack of security and stability that began to affect many countries in the region.

It is not an exaggeration to say that the future of the Arab Spring will depend on the future of Arab development, and this in turn will be conditional on the implementation of basic measures capable of bringing about fundamental and radical changes in all political, social, and economic spheres, and a strengthening of links integrating all parties in the Arab world.

World Federation Of Scientists Review "Planetary Emergencies"

Hisham Khatib*

The World Federation of Scientists held its 45th session of annual "International Seminars on Planetary Emergencies", in Erice, Sicily, on 19-25 August, 2012 on the theme "Why Science is Needed for the Culture of the Third Millennium". The symposium was attended by around 120 scientists from over 40 countries.

Energy Subsidies

The Energy Planetary Monitoring Panel (PMP), held a separate meeting on the 19th of August, attended by 30 participants. The subject of Nuclear Fusion Update was reviewed and encouraging reports, both by European and Japanese experts, on the advances in this technology were discussed. Various energy topics, like the negative impacts of energy subsidies, were also discussed. Subsidies are becoming increasingly important and presently account to almost 1.5% of the Global GDP. The potential of renewable energy was reviewed. New renewables are only 1.6% of global energy supplies but their progress has been rapid during recent years, mainly due to subsidies. It is expected, however, that this growth will be moderated in the near future due to the global economic slowdown, particularly in EU countries. The Japanese energy scene, in the aftermath of the Fukushima events of 2010, was also reviewed. Participants noted with admiration how the Japanese economy and society could persevere with the closure of practically all nuclear power stations which reduced electricity output by almost one third. Finally the potential of oil recovery of existing fields was reviewed as well as the insurance value of energy research and development.

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Nuclear Power After Fukushima

A plenary session on the 21st August covered Global Nuclear Energy issues. The outlook of nuclear power in the US, Japan, China, Europe and the Middle East was each covered in five separate papers; also an IAEA paper on "World Outlook for Nuclear Power after Fukushima" was presented. The following debate considered that the Fukushima event did deliver a serious blow to the future development of nuclear power in the European Union, also the US, where public opinion has turned hostile to nuclear development and the cost of the facilities has significantly increased due to more stringent safety and regulatory requirements. Contribution of existing plants in Japan and Germany was severely restricted because of this event. However, nuclear prospects in China, Korea, India, Russia and other rapidly developing economies in Asia and the Middle East are not likely to be negatively affected. These countries are pursuing their nuclear power agenda with the same power vigor. Their investment costs are less than those expected in OECD countries. Still it is predicted that the present global contribution of nuclear to electric power, presently 15%, is going to be gradual and will slightly decline over the years in the foreseeable future.

The Private Sector And Nuclear Power

The session also discussed the economics of "Nuclear Power in a Liberalized Power Sector" with the outlook that the private sector is not going to seriously consider investing in nuclear power, not only due to its cost and long implementation time, but also due to regulatory and policy uncertainties. While the substantial capital requirements for nuclear power are not easy to mobilize, the outlook for nuclear is promising in many Asian countries where nuclear reactors are estimated to be more competitive than in the US, Europe or Japan and where private financing is less important. The increasing supplies of gas shale, in the US, and natural gas in many other countries are encouraging the development of combined cycle gas turbine plants by private and public investors. It is reckoned that without state involvement and funds, is not likely to expand.

Energy In The Cities

A special afternoon session was devoted to the subject of Energy and Sustainability in the Cities. Urbanization is increasing rapidly in almost every country of the world. Large cities with over one million are becoming common and the number of megacities, of over ten million inhabitants, is increasing. They demand enormous amounts of energy and other resources and services. Cities are complex systems and require sophisticated planning not only in their growing energy systems, but also in other vital services like water, sanitation and control of pollution. A seminar workshop took place in the morning of the 24th in which this complex issue of meeting energy requirements and emissions reduction in cities was discussed. Such subject is likely to be pursued in future seminars.

Climate Economics

The climate and climate economics were central to most plenary sessions , as has become the case in the last few years of this Seminar. Valuation of the cost of environmental damage, mainly due to rising carbon concentration caused by anthropogenic activities, using the social discount rate was debated. Particularly the discount rate used in the Stern report was thoroughly discussed. There was a consensus that the choice of the discount rate is crucial in climatic economics and mitigation policies and costs. The methods of valuing the future in present terms is an interesting but still a highly debatable issue, and the economics of the mitigation are decided to a good extent by the prudent choice of the discount rate. The outlook and cost of adaptation to possible climate changes was considered versus the prospects and costs of mitigation. The important but highly controversial subject is likely to continue to figure highly in future Erice seminars.

Energy & Geopolitical Risk

Since the later part of the 19th century oil and gas have dominated the lifestyle and welfare of the human species. The pursuit of oil and gas has brought about technological innovations that have produced both beneficial and harmful consequences for the development of human welfare. On one hand they have helped to improve the quality of human life and contributed to the reduction of disease, illiteracy, poverty and insecurity. On the other hand no other source of energy has created such devastating and unabated political instability among nations. The ensuing geopolitical risk identification, management and mitigation with respect to energy sources constitutes a central factor in the modern international relations. Their ramifications cross all boundaries among the mutually dependent economic, political, social and environmental factors that shape the plans and aspirations of nations.

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Cross-border behavior is to varying degrees attributable to the uneven distribution of energy resources, which is a significant factor in assessing the ensuing risk profiles of sovereign nations. The security of global supply and demand of energy significantly determines the flow of energy resources and their derivatives to their intended destinations within a stable price régime. This position is further enhanced as the world is increasingly interconnected and characterized by irreversible dynamic interdependence.

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