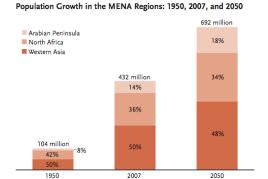
## When the Dust Settles in Arabia

Just a few years ago, the Libyan (ex?) leader Gaddafi addressed a group of European women in a tent erected symbolically in Rome about how Islam would conquer Europe within one generation. His recipe was simple and wonderfully imaginative; through population growth in the spirit of the biblical "make love and multiply", humble and fertile Islamic women would "out-produce" the spoiled and infertile women of the West. As the Europeans disappeared, their lebensraum would be occupied by a growing population of immigrants from the Islamic world.

Gaddafi was not the only one captivated by this vision, however. Perhaps it was not even his idea – he could have easily borrowed it from frustrated jihadists. Their vision of an Islamic Europe certainly did not go unnoticed, finding fertile ground not only in parts of Islamic world, but also in the minds of American evangelical Christians and European xenophobes. Some of them coined the fearsome expression "Eurabia" and flooded the internet with images of a European future as envisioned by Gaddafi et al. In the video Immigration - The world is changing, snappy music and a mesmerising voice attempt to spread fear in the hearts of impressionable Europeans. Enjoy a horror film about the collapse of western "culture" in the form of a semi-literate product made in some Republican corner of the United States!

The apocalyptic vision of a Europe dominated by minarets and governed by Sharia law is partly based on the extremely high population growth in the Middle East and North Africa (MENA) region. In 1950, there were only 44 million people (slightly more than the current population of Poland) living in all of North Africa, and only just over 8 million on the Arabian Peninsula. Current figures are dramatically different: 157 million people – 3.6 times more – were living in North Africa in 2007. The population increase in the Arabian Peninsula was even higher, rising seven-fold to 58 million.

To compare, there were 200 million people living in Europe in 1800. In a century, the European population doubled, reaching 420 million in 1900. Today there are some 700 million people in all of Europe from Lisbon to the Urals. In more than one hundred years, then, Europe's population increased by only 70%, as compared to a more than 300% increase in the population of the Arab world in a mere 60 years. According to UN forecasts, this growth will continue until 2050, albeit at a slower rate.



Source: UN Population Division, World Population Prospects: The 2006 Revision (2007; http://esa.un.org, accessed April 7, 2007).

MENA: Middle East and North Africa

How was such growth possible? How could the desert feed 230 million people?

The answer is simple and clear: it cannot. The desert has not been able to feed such populations in the past, cannot do so today, and will not be able to do so at all in the future. The Arab world has experienced a population bubble that cannot be sustained and will soon begin to rupture, although the real bursting of the bubble will evolve over the coming years and decades.

Arab population growth took on its monstrous dimensions due to a single factor: oil. Thanks to the crude, the population of Libya has increased six-fold during these three generations, that of Saudi Arabia eight-fold, Kuwait nineteen-fold, Bahrain thirty-three-fold, and the population of the United Arab Emirates has increased an astounding sixty-three-fold. Obviously, some of this growth is due to immigrant labourers and servants from southern Asia, but a great part of it is due to excessive domestic birth rates during this period.

The enormous population growth came at a great price. The MENA world today is full of poor young men and women without the slightest prospects of improving their social standing. Obviously, part of the problem is widespread corruption

and the staggering incompetence of Arab rulers, but even with competent and honest rulers – should such enlightened elites be available – the prospects for improvement in social conditions for the poor masses remain very bleak.

Of Egypt's population of 80 million, 33% are children under 14 years of age. 40% are reportedly suffering from hunger and 30% are illiterate.

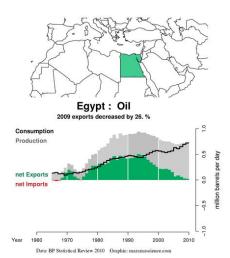
The median age of Yemen's population of 24 million is under 18 years, with 40% of Yemenis living on less than two dollars a day, and one third facing chronic hunger.

And in Iraq, with its shaky democracy brought directly from the United States on the wings of bombers and the treads of the tanks, state of emergency is in effect as of this writing in early March 2011 in order to prevent mass protests. Even there, in a formal democracy, demonstrators are protesting week after week against unemployment, poor basic services, corruption and a lack of freedom. And these are not peaceful protests -13 people were killed on 25 February alone.

With 20 years of experience building democracy in Central and Eastern Europe and with the region's democratically elected governments frequently run by demagogues and grand-scale thieves, we can be quite confident that even if all the "Jasmine Revolutions" succeed in establishing formal democracies, this will by no means guarantee improvements in living conditions for the poor, especially in view of the fact that certain absolutely key preconditions for the betterment of their social and economic situation are missing.

The population explosion in the Arab world during the last 60 years was made possible by huge oil revenues. Oil, however, is a non-renewable resource. Its once vast reserves are being exhausted quickly by humans' insatiable appetite for cheap energy. What happens to a country once it runs out of its oil resources? A graph of Egyptian crude oil production, consumption and exports makes this crystal clear.

As in virtually all oil producing countries, Mubarak's regime bought the support of Egyptians through low fuel prices. In addition to explosive population growth, cheap fuel led to rapidly growing domestic oil consumption. Together with Egypt's steadily declining oil production due to the exhaustion of its oil fields, this policy led to an ever-decreasing flow of oil revenues into government coffers. Finally, in 2010, state revenues from oil exports dried up completely.



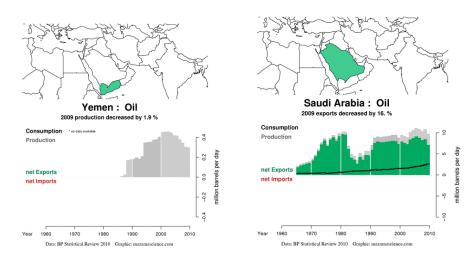
It was precisely the oil revenues, however, that allowed Egypt to feed and sustain its rapidly proliferating population. In 2005 – when Egypt still had at least some revenues from oil exports – the country imported 40% of its grain needs (Algeria imported even more, over 50%). Since then, Egypt has gained some 7 million new hungry mouths to feed, so by 2010 its food imports had increased to 55% of total food consumption.

And then the 2010 Russian heat wave came, destroying 40% of Russia's wheat harvest. This single climatic event removed what had been the world's second-largest wheat exporter in 2009 from the list of exporters entirely. From the summer of 2010 on, grain prices began to rise, pulling the prices of many other foods along with them. As food prices reached historical levels in early 2011, first in Tunisia, and later throughout the region, desperate people began to set themselves on fire and the Jasmine Revolution erupted. A graph from the Food and Agriculture Organization of the United Nations (FAO) shows global food prices over the past 20 years.



Source: http://www.fao.org/worldfoodsituation/wfs-home/foodpricesindex/en/

Egypt is by no means the only Arab country to reach its peak in oil production. The moment when MENA countries fail to increase their oil production – and later even to maintain it – has now come and gone for many, as oil production has declined in almost all Arab countries over the last decade. Populous and fast-growing Yemen, where a third of the population is starving according to some sources, is yet another illustration of the same trend. And the gap is widening even in the crown jewel of the Arab oil fields – Saudi Arabia. Today, 27 million inhabitants of Saudi Arabia consume the same amount of oil as Germany with its 80 million citizens and hyper-productive economy.



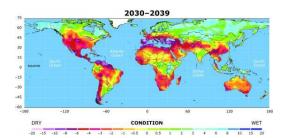
The options available to Arab countries to avoid the brutal consequences of rapidly declining oil revenues and accelerated population growth would be extremely limited even if these countries were corruption-free and run by professional and competent governments investing seriously into the diversification of their economies. Some MENA countries, such as Algeria, have been relatively successful at increasing their income from exports of another energy commodity – natural gas, and Egypt and Tunisia became major tourist destinations for millions of Europeans. Unfortunately, like crude oil, natural gas is a finite commodity too, and sustaining incomes and employment in the tourism industry depends heavily on where global oil and food prices go and how fast. Increasingly expensive oil and food will lead to a steady decline in tourist numbers. First Czechs, Poles, Slovaks and Russians, but over time also Germans, Britons and shrinking middle classes across the developed world will no longer be able to afford increasingly expensive air travel to exotic destinations.

Regardless of what kind of governments emerge from the Jasmine maelstrom – formal democracies, military regimes or religious dictatorships – there is yet another difficulty lurking on the horizon for MENA countries in addition to depleted oil fields and rising food costs. Arab countries are at great risk of becoming permanently destabilised by extreme numbers of young people in the population. A high proportion of young men without jobs or prospects will become a particularly serious problem for the entire MENA region even without any other challenges, and will threaten its long-term stability.

Even today, masses of young, poor, unemployed men are left without the chance to get married and start a family. Such young men are more or less condemned to wander around aimlessly in youth gangs. A prudish society suppressing informal contact with the women fully guarantees a build-up of sexual frustration and aggression, and at the same time prevents the cultivating female influence on young men. Even today, without the possibility of fulfilment in work or family, too many young men are left looking for other ways of achieving a place and recognition in their society. Without responsibility toward families and children, adolescent men are free to behave in a rash and risky manner. Such a generational psyche is fertile ground for those able to offer young men an alternative sense of importance and self-esteem. When you are twenty-something with no commitments or prospects, dying is easy. For many, "death in action" may be the only way to gain recognition. If one has only one's chains to lose, the choice is very easy. A multitude of restless young men will keep the risk of violence high and limit chances for peaceful development.

The decisive blow for the MENA region, however, will come from the inability of the desert ecosystems of North Africa and the Arabian Peninsula to feed 200 million people and the region's enormous dependence on imported food.

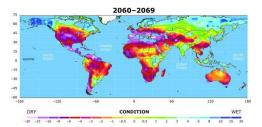
The graphic below illustrates how droughts will intensify with the warming of the climate in the medium term. In this projection of the Palmer Drought Severity Index, minus 2 points represents slightly drier conditions compared to today, minus 3 severe droughts, and minus 4 or more extreme droughts. The colours on the map speak for themselves. Within the lifetimes of current generations, severe droughts will engulf densely populated regions from Morocco through Algeria, Tunisia, Libya, Egypt, Saudi Arabia, Syria and Jordan to Iraq and Iran. Translated into plain language, if the MENA countries are today able to grow perhaps one half of their food and thus to secure at least some nourishment for their poor, their food production capacity will decrease rapidly in the coming years and decades. Inevitably, their dependence on food imports will soar.



Those MENA countries still able to export large quantities of oil and gas 10 to 20 years from now may remain at least partially able to offset their declining food production by increasing imports. For the rest, however, the troubles have already begun and are set to worsen.

The real tragedy will occur when droughts begin to reduce productivity in the major agricultural regions of the world. These large production areas are mainly the central United States and southern Canada, parts of Australia and Argentina, southern Russia and, of course, large parts of Europe, especially France and Germany. The map above confronts us with a suggestive question: how long will the United States, Canada, Australia or Europe be able and willing to export food? How many more years, how many tonnes and at what price? American analyst Lester Brown recently calculated that if a heat wave similar to the 2010 Russian summer heat wave hit the American prairies, the American grain harvest would fall by 140 million tonnes. To put this in perspective, the entire annual world trade in wheat is in the range of 100 million tonnes, of which some 30% usually comes from the United States.

When such drought – or perhaps a series of consecutive droughts – hits the central United States or Europe, international trade in cereals will fall considerably at best. In the worst case scenario, trade could cease completely as a result of export restrictions introduced quite legitimately by producer countries to protect their own populations. Russia, for instance, introduced a ban on wheat exports by presidential decree in August 2010. When this happens – and it inevitably will, we just do not know exactly when – not even those MENA countries still able to export oil will be able to buy enough food for their swollen populations. It is difficult to imagine how famines could be prevented in such a scenario. The population bubble built on desert sand and oil will then burst.



Europe itself will not be spared severe droughts and desertification either. It is very likely that within the lifetime of today's young generation, the mighty Sahara will jump over the Mediterranean and begin to engulf Spain, Italy and the Balkans. The face of Europe will indeed change dramatically and certain parts will become reminiscent of Arab lands. Migration from the south to the north of the continent will indeed become a huge issue for Europeans. This will not, however, be the "Eurabia" predicted by Colonel Gaddafi or American religious fanatics.

Before this happens, Islamic immigration will cease to exist as a perceived or real threat to Europe. What was supposed to fuel it and was supposed to be a source of Arab power and advantage – its rapid population growth – will be its downfall. People still living along the northern shores of Africa, in the oases and on the banks of the Nile, the Euphrates and the Tigris 50 years from now will be working hard to secure their very survival with no potential to pose any meaningful direct or indirect threat to countries farther north. It is difficult to imagine that one hundred and fifty million MENA people will in the

not so remote future be but a distant memory of a short period in history when oil bubbled under the sand and rain fell at least occasionally on the Arab lands – a memory blowing in the desert wind. But is there any realistic alternative?

**Dr. Juraj Mesik** has been extensively involved in the development of the environmental movement and the broader civil society. Mr. Mesík is also the author of numerous commentaries and analytical articles published in opinion-making dailies.