



# **MEDPRO - Prospective Analysis** for the Mediterranean Region

FP7 Project financed by the European Commission 244578-FP7-SSH-2009-A

#### MEDPRO – Stakeholder Engagement Workshop Report

Barcelona, 30 November 2011

**OVERVIEW** 

On 30th November 2011, MEDPRO Work Package leaders and external experts gathered in IEMed's headquarters in Barcelona. The meeting was aimed at fine tuning researcher's results and first draft scenarios based on external experts' views to ensure MEDPRO's results are consistent with other works on the future of Euro-Mediterranean relations.

**European Commission's** forward looking activities (FLA)

European Commission's (E.C.) Scientific Officer Dr. Domenico Rossetti Di Valdalbero gave a brief presentation of FLA undertaken by the E.C. FLA are part of E.C.'s work since 1989 and the creation of the "Cellule de Prospective" by Commissioner Jacques Delors. Their mandates have been gradually expanded to become wide economic, social, and political foresight analyses which are often translated into long term policy orientations embedded for example in the EU Budget, the EU2020 Strategy and Commission Communications. Currently, 7th Framework Programme Social Sciences and Humanities (FP7 SSH) research projects are important components of EU's FLAs. As regards the Mediterranean and the Arab World, besides MEDPRO, the E.C. issued the EuroMed 2030 report which called for a unified policy toward the region. Changes in the aftermath of the Arab Spring will also be examined by a project set to begin by 2013 which will examine the social, political and economic causes and consequences of the 2011 upheavals.



#### Qualitative and quantitative foresight (WP8&9)

# Thinking Ahead for the Mediterranean

MEDPRO's foresight framework elaborated by Dr. Carlo Sessa\* (Istituto di Studi per l'Integrazione dei Sistemi, ISIS, Italy) rests on the combination between progress towards reaching sustainable patterns of development and depth of Euro-Mediterranean cooperation. The qualitative scenarios are integrated into a quantitative framework developed by Prof. Pantelis Capros' modeling team (Institute for Communication and Computer Studies at the National Technical University of Athens, ICCS/NTUA, Greece). First, the reference scenario is quantified, under the assumption of a continuation of current trends in the project's research areas; and, second, deviations from the reference scenario are calculated for variety of socioeconomic variables under each vision of the future. This methodology leads to three possible futures of Euro-Mediterranean relations by 2030:

- 1. Under a Threats scenario, MED11\*\* countries fail to anchor in sustainable patterns of development, current conflicts in North Africa and the Middle East spread, resulting into a halt of Euro-Mediterranean cooperation. Trade levels decrease due to increased barriers, and economic development is significantly slowed due to infrastructure dilapidation, with GDP growth decreasing by 8.7% compared to actual values.
- 2. The Union scenario posits MED11 countries will join the European Economic Area (EEA) and fully implement the European "acquis", hence creating a powerful Euro-Mediterranean region with an important influence on the world stage. Governance is significantly enhanced, countries are commercially integrated with themselves and the rest of the world, infrastructure is upgraded, total factor productivity increases and drives economic performance in an upward trend. As a result GDP increases by 4% compared to the reference scenario.
- 3. Under the Alliance scenario\*\*\*, MED11 countries meet the challenge of sustainable development, and conclude agreements with the in restricted areas such as trade, education, research etc.

These visions of the future should not be seen as rigid, since the future Euro-Mediterranean relations will be influenced by a number of country specific and contextual factors, resulting in deviations from the storylines.

<sup>\*</sup> For a discussion on the scenarios, see R. Ayadi, C. Sessa: "What Scenarios for the Euro-Mediterranean in 2030 in the wake of the Arab Spring?", MEDPRO Policy Paper n°2, October 2011; http://www.medpro-foresight.eu/publication/what-scenarios-euro-mediterranean-2030-wake-post-arab-spring

<sup>\*\*</sup> Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, Tunisia, Turkey

<sup>\*\*\*</sup> Quantifications are still work in progress under this scenario.



Geopolitics and governance (WP2)

Dr. Silvia Colombo (Istituto Affari Internazionali, IAI) presented the conclusions of WP2 devoted to Geopolitics and Governance. The uprisings in the Southern Mediterranean shook long held US and European foreign policies, that translated in decades' long support for authoritarian regimes, perceived as ramparts against religious extremism and reliable partners in pursuing commercial, security, energy and migration interests. By equating apparent stability with state sustainability, such policies contributed to reinforce the incumbent regimes. The future of the Euro-Mediterranean region points at an overall move towards sustainability albeit with an increased polarization with intra and interstate pockets of conflict.

WP2 external expert, Dr. Roberto Aliboni (IAI) noted that the conceptual framework of WP2, which opposes sustainability and un-sustainability of state, could lead to negative connotations of European policies towards the region. While the EU sought to promote "structural stability" characterized by respect for fundamental rights, sustainable socio-economic development and peaceful management of divergences; EU individual Member States' policies supported non structural stability, a result of the ambiguous nature of the Common Foreign Security and Defense Policy. As the Arab Spring is leading to a rise of religious based political parties, it forces external actors to change their policies; the EU is being now challenged to review its strategy of conflict management in the region.

Demography, health and ageing (WP3)

The report on demographic scenarios presented by Dr. George Groenewold (Netherlands Interdisciplinary Demographic Institute, NIDI) shows that since the 1960s, MED11countries have embarked in a demographic transition translating into declining fertility and mortality rates as well as higher life expectancy\*\*\*\*. Regarding the future, with the exception of the Threats scenario, demographic projections point at the continuation of current trends. Under the Union scenario, fertility rates will eventually drop below replacement levels and life expectancy will increase due to the sanitary and socio-cultural consequences of the economic takeoff. Preservation of traditional norms and values under the Alliance scenario would lead to less pronounced decline in fertility and even higher life expectancy due to better food consumption patterns and health status. As regards migration, MED11 countries are expected to remain net emigration countries. However, under the Union scenario, after 2030, the region's economic performance will attract foreign workers, leading to an offset of migration outflows.

<sup>\*\*\*\*</sup> Current fertility rates are converging towards EU levels but remain higher, with an average close to 3 children per woman. Life expectancy ranges on average between 70 and 74 for both sexes.



According to demographer Youssef Courbage (Institut National des Etudes Démographiques, INED, France), translating geopolitical and economic scenarios into demographic projections is challenging due to difficulties inherent to assumptions on demographic drivers (i.e. fertility, mortality and migration). The main concern relates to the direction of causality between economic cooperation and the evolution of demographic drivers, since contrary to what is implicitly assumed in the report, changes in MED11 demographic profiles might drive changes in economic cooperation. The results of the demographic projections suggest the MED11 population will be 425 million in 2050, an estimate higher than United Nations' due to initial assumptions on high fertility rates which could have been lower if the influence of education on fertility would have been accounted for.

Energy and adaptation to climate change (WP4a)

The objective of WP4a is to assess the economic impact of climate change on two sectors of critical importance for the Southern Mediterranean countries: tourism and agriculture, both being important sources of income and labor for MED11 populations. Dr. Francesco Bosello (Fondazione Eni Enrico Mattei, FEEM) presented the results on the tourism sector. The estimation of a model of tourist arrivals considering biodiversity and temperature as determinants shows that increases in temperature, lead to a decrease in biodiversity, negatively impacting tourist arrivals. According to his calculations, an increase of 1.9°C by 2050 could lead to decreases in tourist arrivals of 5, 9 and 20% in Israel, Jordan, Lebanon, Palestine, Syria; Algeria, Egypt, Libya; Morocco, Tunisia; and, Turkey respectively.

As far as agriculture is concerned, contrary to commonly reported views, Dr. Nicola Lamaddalena's (Mediterranean Agronomic Institute of Bari, MAIB, Italy) research shows that climate change, could in fact enhance crop productivity in the Southern Mediterranean. The main reason for this somewhat striking result is to be found in photosynthesis: a higher concentration of CO2 in the atmosphere results in crops producing more organic compounds. Regarding the future of water use in the region, climate change will stress water availability, calling for more efficient use. Against this backdrop, as MED11 economies grow, they will tend to allocate more water resources to the industrial sector, thus lowering water resources available for irrigated agriculture. Yet, depending on the countries and locations, the negative effects on farm income of reduced irrigation could be offset by better crop yields stemming from bio-atmospheric conditions.



Sebastien Abis (Centre International des Hautes Etudes Agronomiques, CIHEAM, France) congratulated WP4a team for their robust scientific approach but also called on the research to be more linked to international developments, especially in the Mashrek where future water availability is a source of significant geopolitical tensions. According to him, the foresight exercise should also take into account "wildcards" (i.e. un-expectable developments with wide implications such as technological developments, natural catastrophes etc.). Technological developments might for example allow less water intensive technologies to emerge in industry, hence offsetting the negative effect of water scarcity on farm income.

Energy and climate change mitigation (WP4b)

Prof. Pantelis Capros (ICCS/NTUA) briefly outlined MED11's main energetic characteristics. Energy systems in the MED11 are dependent from hydrocarbon resources, which are produced and exported essentially by Algeria and Libya\*, while other countries resort to imports to cover their needs and the entire region presents an important but untapped renewable energy potential. With the exception of Israel, energy demand is not saturated, meaning that increases in GDP will not exert pressures on hydrocarbons demand. As regards electricity, countries have embarked since the 1990s in ambitious electrification efforts, a trend likely to be sustained in the foreseeable future. The main challenges ahead of the region are to progress towards more efficient energy use, invest in infrastructure and in renewable energy sources (RES). These challenges can be met provided the region cooperates with the EU. For example, computations under the GEM-E3 model show that under the assumption the EU implements a climate policy consisting in decreasing CO2 emissions by 40% by 2030 and agrees with the MED11 to: i) extend the Emissions Trading Scheme (ETS); ii) invest in solar-thermal energy; reinforce grids; and, iii) apply a solar power price ensuring a fair rate of return; mutual benefits can arise. These will translate into a rebalancing of fossil fuels use in favor of gas, increased use of RES, a lower compliance cost as well as a cheaper restructuring of the power sector in the EU and higher economic activity, employment and GDP growth in the MED11.

WP4b external expert, Dr. Houda Ben Jannet Allal (Observatoire Méditerranéen de l'Energie, OME, France) emphasized that the continuation of current trends in energy in the MED11 are environmentally detrimental and could jeopardize energy security. Against this backdrop, she pointed that not only North South and South South cooperation were essential to engage in sustainable patterns of energy use. To do so, Euro-Mediterranean policies should make energy efficiency their first priority and support the development and trade of RES across both shores.

<sup>\*</sup> Following recent discoveries, Egypt and Israel became small producers and marginal exporters of natural gas.



Economic development, trade, investment and sectors of special importance (WP<sub>5</sub>) Dr. Luc De Wulf (Center for Social and Economic Research, CASE, Poland) presented the results of three studies: i) the determinants of growth and inflation in the MED11; ii) the determinants of foreign direct investment (FDI) and manufactured exports; and, iii) analysis of deep vs. shallow integration. Results of these three analyses confirm the importance of macroeconomic stability, economic openness, good infrastructure and governance quality in stimulating GDP growth, FDI inflows, and manufactured exports. Regarding the analysis of deep and shallow integration, MED11 countries exhibit high levels of non tariff barriers (NTBs) and bad quality of infrastructure, resulting in important trade costs. Investigation of scenarios of trade liberalization and improvement of transport infrastructure could lead to significant increases of intra MED11 and EU exports.

Wafaa Sobhy Ibrahim (ANIMA Investment Network) called on taking into account the quality of FDI: much of the investment inflows in the MED11 are concentrated in coastal areas, exacerbate environmental degradation and do not generate qualified employment. By the same token, growth analyses should not only rest on per capita growth, but should also consider territorial and other disparities, since according to her; these have been important factors driving the 2011 uprising.

Financial services and capital markets' development (WP6)

Despite heterogeneity in economic performance and social indicators, financial sectors of the MED11 share a number of common characteristics. First, banks dominate the financial landscape; second, capital markets and non banking financial institutions (i.e. credit guarantee schemes, micro-finance institutions etc.) are underdeveloped; third, financial intermediation is low; fourth, banks seem capitalized and profitable; fifth, financial institutions exhibit a preference for financing short term operations at the detriment of long term investments; and, sixth, individuals and small businesses face significant obstacles in accessing finance.

The research presented by Dr. Rym Ayadi (MEDPRO Coordinator, Centre for European Policy Studies, CEPS, Belgium) shows that developing the financial sector in the region so as to alleviate constraints in access to finance and mitigate risks requires above all institutional reform: a marginal enhancement of institutional development indicators can increase credit to the private sector by up to 25% while doubling the value traded on regional stock markets. In comparison, the crowding out effect of government debt, although positive and significant appears marginal, since a reduction of 1% in growth of government debt would increase private credit only by 0.4%.



Human capital, inequality and migration (WP7)

Prof. Alia El Mahdy (Faculty of Economics and Political Sciences at the Cairo University, FEPS, Egypt), summarized the key findings on the research on social protection, education, inequality and migration. While all countries in the region have developed social protection systems, most of them are under-funded, unsustainable, and do not target adequately vulnerable groups, thus requiring important readjustments which could be facilitated by greater Euro-Mediterranean cooperation in social policies. Over the last decades, MED11 countries have implemented large education programs centered on building schools and hiring professors. As a result, enrollment rates have increased, but reforms addressing the quality of education have been underestimated, leading to a mismatch between skills provided by the education system and skills demanded by the labor market. Turning to inequalities, the research shows that educational attainment, employment and location are the main drivers of income inequality in the MED11; suggesting governments should invest in infrastructure to foster redistribution while addressing skills mismatch in the labor market to support employment. As regards migration, Xavier Aragall (Institut Europeu de la Mediterrania, IEMed, Spain) called on taking into account un-documented migration in the foresight analysis as well as the influence of African migration inflows on MED11 countries.