Executive Summary: Three scenarios for the Euro-Mediterranean by 2030

The southern Mediterranean region is at a historical turning point following the unprecedented uprisings that ended many decades of repressive authoritarian regimes. Before 2010, and the start of the Arab uprisings, the ‘business as usual’ scenario prevailed in a blend of un-sustainability and partial Euro-Mediterranean cooperation. Un-sustainability, coupled with phony stability, was thought to be the long-term future for southern Mediterranean countries. The deterioration of political freedoms and the rule of law appeared to be the norm. The European Union’s policies towards the region were equally unsatisfactory as they failed to drive the region towards a sustainable future. Following the Arab revolts, domestic changes are being prepared and external actors’ policies towards the region are being rethought. While ruling out business as usual, other scenarios may emerge in a 2030 perspective.

Starting with the worst possible scenario; the “Euro-Mediterranean Area under threat” the Mediterranean Sea would divide conflicting civilizations. Sporadic conflicts would become protracted and spill over borders, creating political uncertainties and socioeconomic difficulties. These uncertainties would offer new opportunities for terrorist organizations to take power and in the absence of cooperating authorities, would undermine EU’s and other actors’ power to influence developments in the region. This scenario must not be underestimated. Averting it is crucial if we are to avoid the worst for the Euro-Mediterranean generations to come.

Two optimistic futures of sustainability, with different paths of Euro-Mediterranean co-operation, could become reality if there is sufficient political and economic will, both in the region and the EU.

In the perspective of a “Euro-Mediterranean Common Union”, recognizing their common past and believing in their common future, the European and the southern Mediterranean countries would form an integrated region with a common market following the European Economic Area model the so - called Euro-Mediterranean Economic Area (EMEA), leading to the adoption of the EU “acquis” . Under such a scenario, the current tensions in the Euro-Mediterranean region could be resolved. The Union for the Mediterranean (UfM) could play a key role in fostering regional cooperation but as countries join the EMEA, its importance would diminish over time. In this scenario, by 2030, a new tri-polar world would emerge, with the US, China and the Euro-Med Union

Another perspective worth looking at is the “Euro-Mediterranean Alliance”, which keeps the two regions separate: the EU on the northern side and the southern Mediterranean countries to the south. Under such a scenario, there is no perspective (or need) to form the EMEA. The European Neighborhood Policy would become obsolete if it were not rethought to integrate this vision. After the Arab revolts, the southern Mediterranean could become integrated, capitalize on a stronger role for regional institutions; and other players such as the Gulf Cooperation Council (GCC) could play a bigger role in the region. The EU and the southern Mediterranean could establish a Euro-Mediterranean Alliance Treaty and a renewed UfM would help meeting its objectives. Such a vision is also coherent with a multi-polar world scenario for the year 2030, without a unique dominant leader.

Today, and after completion of MEDPRO research it seems that the signals picked up during these three years corroborate the scenario of a Euro-Mediterranean under threats. Two years on since the Arab revolts, countries are still beset by uncertainty. The EU response remains timid, short- sighted and with no coherent vision. Hence, moving to a successful and sustainable future scenario does not seem very plausible today, unless serious action towards one or the other path is taken without delay.
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1. Introduction: summary description of the project context and main objectives

MEDPRO, short for Mediterranean Prospects, is a project involving a consortium of 17 highly reputed institutions from throughout the Mediterranean region, coordinated Dr. Rym Ayadi Senior Fellow at the Centre for European Policy Studies (CEPS), based in Brussels.

At its core, MEDPRO explores the challenges facing the southern and eastern Mediterranean region, which is committed to implementing ambitious political and economic reforms while at the same time addressing the most pressing social and environmental issues, such as curbing chronic unemployment, improving living standards, addressing inequality, ending all forms of discrimination and conserving the natural habitat. Addressing these challenges requires political will, good governance, the broadest possible participation, and, above all, a sharp understanding of the driving forces at play. The outcome of the ongoing reforms will ultimately be determined by their relationship with the predominant social, cultural, political and environmental factors. By considering a wide range of interactions, MEDPRO aims to explore a number of alternative scenarios that can be expected to arise by 2030 in the region with a view to laying a sound foundation for future policy on social and economic development, paying special attention, where relevant, to the role and potential contribution of the EU.

The aim of MEDPRO is to contribute to the reform process in the political, economic and social agendas of the countries in the southern and eastern Mediterranean region, by means of increasing the level of knowledge on the diverse set of challenges and developing useful insights into the policy options. MEDPRO delivered the best available scientific underpinning for future policy decisions, both domestically and at EU level within the framework of the Union for the Mediterranean (UfM) – the successor to the Barcelona Process – as well as the EU European Neighbourhood Policy (ENP) Programme.

In order to achieve this aim, the research undertaken is multidisciplinary, bringing together highly respected research institutions from both sides of the Mediterranean and drawing from a pool of highly qualified researchers with diverse backgrounds, regional expertise and proven track records. By undertaking an inclusive analysis of the main development issues for the region, the project provides state of the art foresight qualitative and quantitative methodologies applied to the understanding of the challenges in the region, fresh evidence on the long-term outlook with different assumptions, the cohesion between the different aspects of socio-economic development and long term growth and inclusion and the resulting challenges for public policy.
2. Research Areas
The MEDPRO research has been coordinated scientifically within a separate work package. The coordinator together with a member of the MEDPOR consortium produced a background/methodological framework from month 3 of the project. This framework has been updated over time until the end of the project.

The paper on what future for the Mediterranean: Methodological framework co-authored by MEDPRO coordinator Rym Ayadi and member of the scenario building committee Carlo Sessa provided the overall concept and methodological framework of MEDPRO. This paper is available in the MEDPRO members’ area.

In addition, seven scientific meetings have been organised to implement the MEDPRO project. All reports of the meetings are publicly available.

The MEDPRO research programme covers nine areas of study that are highly relevant for the socio-economic development of the region: Geopolitics and governance; Demography, ageing, migration, health and gender issues; Human capital, social protection, inequality and migration; Energy and climate change mitigation; Sustainable development, management of resources and adaptation to global warming; Economic development and regional integration; Financial services and capital markets; Scenario building and impact assessment; and Scenarios for regional integration and cooperation with the EU. These fields of study have been selected to reflect the key challenges facing the region in the coming decades. A multidisciplinary approach enables us to draw up the most promising scenarios for further development in the region and better cooperation with Europe. They are briefly described below.

Geopolitics and Governance
As demonstrated by the Arab Spring, the neo-authoritarian nature of Arab regimes have created serious political challenges that have been until now rather unexplored in the literature. A trend of state failure in which the latter does not fulfil its elementary security and development functions and a growing concentration of political capital among groups opposing incumbent regimes and external actors are two features that have led to revolutionary waves. The aim of this research area is to provide an analysis of these trends while identifying at the same time the factors likely to give rise to them. Scenarios were drawn in which these trends are likely to manifest themselves within specific country contexts. Wider implications for the sustainability of the state within the Mediterranean region are extrapolated.

Demography, Health and Ageing
The Mediterranean countries under consideration are already in a process of demographic transition with the decline of youth population. This poses serious challenges to policy-makers given the fact that most of the economies under consideration have failed to provide either employment for the current active workforce and employment prospects for those who will enter the job market in the next decades. Moreover, the low rate of female involvement in the labour force and society is a major issue to be tackled in the coming years in order to provide robust foundations to socio-economic development. Drawing on an analytical framework, work under this area provides a series of population projections under different scenarios and according to country-specific methodologies and data.

Human Capital, Social Protection, Inequality and Migration
Social protection schemes in the region suffer from major weaknesses, including the demographic shifts and rampant unemployment, especially among the youth. These challenges seriously hamper the sustainability of these schemes, where they exist. Moreover, the countries of the Middle East and North Africa continue to lag behind their peers in terms of educational attainment of adult population. Integration of women into the labour force is critically low in most countries in the region, despite significant public investment in education and their correlative increase in enrolment and literacy rates. Research undertaken by the World Bank shows household incomes could rise as much as 25% in the region if women participated in the labour force accordingly to their education levels and age structure. Gender equality, education, and integration are the heart of challenges faced by policy-makers in the region. This research area addresses four main issues: 1) The adequacy and sustainability of social protection schemes, the current state and performance of the educational system, 2) The current and future educational attainment of adult population, 3) The effects on growth and employment of enhancing the use of human capital of women and, 4) The prospective analysis of the likely future path of human capital endowment in the southern and eastern Mediterranean countries. The major outcome of this exercise is to give an unprecedented insight into the performance of education in the southern and eastern Mediterranean countries through an in-depth analysis of both the current and future state of education and human capital endowment.

**Energy and Climate Change Mitigation**

Socio-economic development is also driven by the availability of energy, which is a crucial input and accounts for a significant share of several Mediterranean countries’ export revenues. The Mediterranean countries, and in particular Algeria and Libya, are already among the EU’s energy suppliers, and in the foreseeable future, their role is expected to increase. The shift to a low-carbon economy can translate into losses in oil and gas revenues while at the same time promoting the development of renewable energy sources, such as solar energy. Moreover, demographic pressures and increased economic activity will translate into a rising demand for electricity, thus creating challenges in terms of supply and climate change mitigation. In order to give practical insights into the options available to policy-makers, this research will undertake four tasks: 1) A critical assessment of oil reserves, resources, and infrastructure, taking into account the transit role of the region; 2) An assessment regarding the scope for enhancing the region’s contribution to the mitigation of global warming through the development of renewable energy sources and energy savings strategies and investments; 3) A development and exploration of several energy supply and demand scenarios and their respective socio-economic and environmental implications and, 4) An exploration of different policy scenarios for closer cooperation between the EU and the Mediterranean countries in order to increase mutually beneficial energy exchanges and to launch the region on sustainable energy development paths. The analysis undertaken here is closely related to MEDPRO’s demographic research since changes in population will translate into changes in energy demand through both direct and indirect channels.

**Management of Environment and Natural Resources**

One of the biggest challenges for public policy in the region is to provide long-lasting economic growth so as to guarantee employment and a decent quality of life while at the same time preserving environmental sustainability. Countries in the region already face desertification risks and water scarcity, which contribute to a lower agricultural yield. Many strategies developed in response to this challenge lead to an inefficient allocation of resources. The introduction of such sustainable management policies not conflicting with each other and preserving the development potential of the
region is therefore crucial. This research involves ii) two domain specific assessments targeted respectively to agriculture and water resource management including a mapping of current situations on a country basis and assessments of future demand and supply taking into account demographic developments and consequences of climate change; ii) an investigation into the consequences of climatic changes on tourist industry, a key economic sector in the region.

Economic Development, Trade, Investment and Sectoral Analyses
The pace of economic growth in the southern and eastern Mediterranean has lagged behind other emerging economies during the last two decades: only in the early 2000s there has been an improvement. This lag has translated into social unrest and despair among the workforce, creating major challenges for the governments in the region and fuelling the current revolutionary wave. Imprudent macroeconomic policies have fuelled inflation and poor economic integration has translated into restrictive trade and investment policies, with tariffs in some sectors averaging at the two-digit level. Governments of the region face the challenge of boosting integration and cooperation, developing new activities and strengthening existing ones. This research area first assessed whether fiscal and monetary policies have been growth-inducing and stability-facilitating; then it quantified the potential of the region in terms of trade and investment flows. In this aspect, the research devoted special attention to selected sectors of importance for the southern and eastern Mediterranean countries, especially infrastructure, tourism, agriculture and fisheries given that they are the main source of income for the region.

Financial Services and Capital Markets
Financial services and capital markets are at the heart of economic transition as was clearly stated at the 12th Euro-Mediterranean Conference on Economic Transition. A sound financial system can spur growth by mobilising savings, providing funds for infrastructure development and private firms, improving the allocation of resources facilitating risk management and trade as well as enhancing corporate governance practices. Such a system is particularly important for the growth of small and medium-sized enterprises (SMEs), which represent an important source of activity but lack the internal resources to grow. Capital markets in the region are relatively underdeveloped and external financing needs are met almost entirely through bank loans. This research provides quantitative and qualitative prospective analysis of the financial services sector and capital markets development, using all available international and national sources in order to assess the potential for further growth and integration in the financial services sector.

Scenario-Building and Impact Assessment
The partial foresight analysis undertaken in the previous research fields was brought together under a common ‘roof’ of analysis of different scenarios within an internationally consistent framework. To do so, all results of partial findings and scenarios were used in a Computational General Equilibrium (CGE) Model under the GEM-E3 package developed within a multinational project, which was partly funded by the 5th Framework Programme and is now being used by the European Commission and other national authorities. It is dynamic, recursive and driven by accumulation of capital and equipment, and allows for different representations of technological progress. It is based on backward-looking expectations and its features, such as the multiple sector coverage and the links between output and availability of natural resources, will improve the state-of-the-art analysis of the prospects of the southern and eastern Mediterranean countries.
Scenarios for Regional Integration and Cooperation with the EU
Although, the Barcelona Process launched in the wake of the 1993 Oslo accords has been received with unprecedented enthusiasm, its results were not as expected. The political momentum appears to be stagnating and in this aspect, both shores share the responsibility. Drawing on the lessons from the EU’s enlargement, experience shows that the bases for the continuation of reforms are to be found in the involvement of all actors. In contrast, uncertainties that surround the prospects of the region act as a comparative disadvantage affecting the dynamics at play. Moreover, the linchpin of the economic Euro-Mediterranean Partnership, namely trade liberalisation, has had little effect because efforts were mainly focused on North-South relations while change was less important in the region. The future of Euro-Mediterranean relations and its instruments of cooperation shaped under the Union for the Mediterranean (UfM) should reflect these lessons. Consequently, issues such as regional geopolitical tensions, development of human capital, domestic production of goods and services, sustainability of resource management and environmental pressures are taken into account within this research field. The evolution of the aforementioned factors and the outbreak of the Arab spring translated into the retention of a number of scenarios built within this research area in order to provide a basis for further policy analysis aimed at closer cooperation with the EU under the UfM framework both broadly and per theme.
3. Publications and Deliverables: Description of the main S & T results/foregrounds

Over three years of research, the MEDPRO team has delivered three series of outputs in the form of Technical Reports, Reports, Policy Papers, Commentaries, Databases and unpublished memos.

**Technical Reports** are the project’s main media for dissemination of results. They are prepared by the individual participating institutes and some were submitted to academic journals, as well as to interested policy-makers for in-depth comprehension.

**Reports** summarise results under each research area. In addition to specific reports, a final report summarising the methods, activities, main findings and recommendations will be produced at the end of the project.

**Policy Papers** review the major findings and recommendations in each field. They present policy-relevant outcomes and aim at providing further policy guidance to both stakeholders and researchers.

**Commentaries** are short pieces on policy relevant issues within MEDPRO areas of research.

**Databases** are all collected data for the purpose of the project.

**Memos** are documents and case studies that are unpublished but served to produce the final papers.

The full texts and abstracts of all MEDPRO publications and also databases can be downloaded from the MEDPRO website ([www.medpro-foresight.eu](http://www.medpro-foresight.eu)) and the CEPS website ([www.ceps.eu](http://www.ceps.eu)). A dissemination platform has been created to continue enhancing the outreach of MEDPRO publications and ideas through ([www.euromed-economists.org](http://www.euromed-economists.org))

Other unpublished materials such as case studies and memos can be accessed from MEDPRO Members area.

Abstracts for these publications and other deliverables are presented on the following pages, organised by research area.

**Geopolitics and Governance**

**Publications:**

**The Southern Mediterranean: Between Changes and Challenges to its Sustainability**

Silvia Colombo (IAI). MEDPRO Technical Paper n°1
Forecasts about the Mediterranean in terms of economic, social and human development are premised on a critical assumption: the continuation, mutatis mutandis, of the status quo in political and governance terms. Indeed over the last decades, not only have the regimes in the southern and eastern Mediterranean demonstrated a remarkable resilience, but also the states have enjoyed a situation of overall stability achieved through a number of skilfully arranged reform measures. Yet this status quo does not appear to be sustainable in the decades ahead because of the cumulative effect of the multiple challenges confronting the countries of the region. By drawing a critical distinction between short-term stability and long-term sustainability, this paper argues that in the long run it will become increasingly difficult to sustain the current configuration of state power against the backdrop of deteriorating socio-economic conditions and above all of increased domestic unrest. This paper explores the changes that have taken place in the last two decades and that have contributed to creating the current situation of apparent stability. Then, it moves on to assess the conditions under which this situation may become unsustainable owing to the emergence of challenges in the political, economic, social and external domains. This exercise aims at presenting a number of stylised scenarios on the future of the region.

**Morocco at the Crossroads: Seizing the Window of Opportunity for Sustainable Development**

Silvia Colombo (IAI). MEDPRO Technical Paper n°2

The question of state sustainability is highly relevant in the case of Morocco. The recent upheavals in the Maghreb and the Middle East, alongside the growing problems of poor education and high unemployment are likely to bring to the surface the unsustainable elements of Morocco’s status quo. The central issues concern the quality of institutions, reforms aimed at promoting the rule of law, curbing corruption and overhauling the judiciary.

This paper will argue that while institutional quality is a pre-requisite for successful and sustainable socio-economic performance, this cannot be achieved unless major reforms in the political system are carried out. There is a window of opportunity to accelerate reforms and to address the acute centralisation of Moroccan politics and decision-making, the lack of accountability of the monarchic institutions, as well as the fragility of representative bodies, such as parties and trade unions. Seizing this opportunity could spare Morocco a period of instability, while also assuring continuity in the transition that began in 1999, when the new king came to power.

**Tunisia: Changes and Challenges of Political Transition**

Maria Cristina Paciello (IAI). MEDPRO Technical Paper n°3

For 23 years, a combination of harsh repression and impressive socio-economic development in Tunisia ensured a certain level of stability of Ben Ali’s regime. However, on 14 January 2011, after several weeks of anti-government protests, the President fled the country, revealing the fallacy of the ‘Tunisian model’. While the departure of Ben Ali is an important step towards Tunisia’s political change, the fate of its democratic transition remains uncertain. In light of these changes and challenges, this paper first assesses the factors underpinning the former stability of Ben Ali’s regime; it then investigates the causes of its underlying unsustainability, culminating in the anti-government popular uprising in December 2010-January 2011 and the removal of Ben Ali; finally the paper evaluates the prospects for a real democratic transition in Tunisia, by highlighting the main political and socio-economic challenges that confront the country.
Egypt: Changes and Challenges of Political Transition

Maria Cristina Paciello (IAI). MEDPRO Technical Paper n°4

Hosni Mubarak’s regime and its power system enjoyed remarkable stability for over 30 years. On 11 February 2011, however, after 18 days of mass protests, the Egyptian president was forced to step down, revealing the unsustainability of the political and economic system that had ensured his continuity for so long. While the revolution of January 25th led to a major success – the fall of Mubarak – Egypt’s political future is still opaque and exposed to a number of risks. This paper first highlights the factors underpinning the former stability of Mubarak’s regime; it then assesses the causes of its underlying unsustainability, leading to the popular anti-government mobilisation in January-February 2011 and the removal of Mubarak; finally the paper evaluates the prospects for a genuine democratic transition in Egypt, by looking at the main political and socio-economic challenges facing the country.

Israel and Palestine and State (Un)Sustainability

Paolo Napolitano (IAI). MEDPRO Technical Paper n°5

This report explores the concept of state (un)sustainability in Israel and Palestine. The starting point sees conflict resolution as an independent variable for any change and progress in the area, in terms of a political, just and credible agreement between the two parties, which will then play a decisive role in the development of the Mediterranean region. These developments and prospects for a solution are then evaluated on the basis of state (un)sustainability, a broad notion that refers to the possibilities for long-term development at the political, social and economic levels.

The very nature of Israel’s democracy and its relations with its Arab minority, the challenges related to the establishment of a viable and sustainable Palestinian state, and the regional dimension of all the actors involved are considered in order to evaluate future scenarios in this context. Three scenarios are tested: sustainability, which corresponds to the end of the conflict and the establishment of two viable and independent states with a tangible improvement in political and economic indicators; unsustainability, which refers to the perpetuation of the political status quo and the progressive deterioration of all political, economic and social indicators; and finally, weak stability, which entails the achievement of a sterile political stability, able to sustain the present status quo but unable to confront the main challenges for the future of the country(ies).

Syria and Lebanon: Diverging Paths of State Unsustainability

Silvia Colombo (IAI). MEDPRO Technical Paper n°6

Any analysis of the prospects for stability and sustainability in the states of Syria and Lebanon reveals the strong ties that exist between these two countries and the impact of external influences on their overall development. Their trajectories, while starkly divergent in terms of the challenges confronting them at present, converge on a path of long-term unsustainability.

Lebanon is in the midst of yet another transition phase, triggered by the collapse of Hariri’s government in January 2011. The current situation might be described as one of deteriorating status quo; the state is performing poorly in terms of its delivery of fundamental public services and its
institutional legitimacy is tenuous in the face of emerging para-state structures and latent (occasionally active) violence.

In Syria, challenges to the sustainability of the state have evolved dramatically since the beginning of 2011, and are now nearing a tipping point. In view of the mounting unrest and violence in the country, the future prospects for its economic and political development are dim. More ominously, the risk of widespread conflict, with sectarian overtones, cannot be discounted.

**Algeria’s Failed Transitions to a Sustainable Polity: Coming to yet another Crossroads**

Hakim Darbouche (IAI). MEDPRO Technical Paper n°7

Algeria is so far the only country in North Africa not to have experienced sustained mass protests calling for political change. The government in Algiers has by no means remained indifferent to the groundbreaking events in neighbouring countries, but it is responding to this sweeping wave of change at its own pace. This paper argues that, despite its apparent stability, the Algerian polity suffers from underlying currents of instability that risk undermining the long-term sustainability of the state. It identifies the failure of the country’s political and economic transitions and its implications as the most serious challenge confronting the Algerian state today. Unless a) the process of democratic transition that was initiated in 1989 is refined and put back on track, leading to the advent and consolidation of the rule of law, popular enfranchisement and total civilian control of the military; and b) the efforts to diversify the economy away from hydrocarbons are intensified and made more coherent, Algeria will remain susceptible to future instability. This is all the more pertinent given that the country is heading towards a crossroads where the issue of generational transition will also become imperative for the current leadership to deal with.

**The Tunisian Revolution: An Opportunity for Democratic Transition**

Rym Ayadi, Silvia Colombo, Maria Cristina Paciello and Nathalie Tocci (CEPS and IAI). MEDPRO Commentary

To help promote a peaceful transition to democracy in Tunisia, a new Commentary by Rym Ayadi, Silvia Colombo, Maria Cristina Paciello and Nathalie Tocci calls upon the EU to act quickly on its declaration of support for “a genuine democratic transition” and to consult with political parties both from the transition government and beyond to prepare for the running of the next elections. A positive resolution of the crisis will only be achieved if the internal and external players follow the lessons of successful democratic transitions elsewhere.

**State (un)Sustainability in the Southern Mediterranean and Scenarios to 2030: The EU’s Response**

Nathalie Tocci (IAI). MEDPRO Policy Paper n°1

In this first MEDPRO project Policy Paper, author Nathalie Tocci considers the concept of sustainability and how it is central to any understanding of Mediterranean politics. Too often confused with stability in policy debates in the Mediterranean region and the West, Tocci argues that not only are these two concepts distinct, with sustainability being broader and deeper than
stability, but stability, as interpreted with regard to the regimes in the region, has often run counter to the very conditions that underpin state sustainability. In order to avoid the weakening and failure of EU-MED cooperation, Tocci urges the EU to overcome its political and institutional inertia, and to develop a truly credible Mediterranean policy pursued alongside other state and non-state actors at both the regional and global level.

Memo:
- **Libya**
  Dario Cristiani (IAI), MEDPRO Memo

Database:
- **Governance Database**
  Prepared by Silvia Colombo (IAI)

**Demography, Health and Ageing**

**Publications:**

**Population Scenarios for South Mediterranean Countries: 2010-2050**

George Groenewold, Joop de Beer, and Corina Huisman (NIDI). MEDPRO Report n°2

This report describes four population growth scenarios for 11 countries in the Southern and Eastern Mediterranean region, using the MEDPRO economic-political development framework to consider how indicators of fertility, mortality and international migration might change if people in these countries were to live in different macroeconomic and political contexts. The paper also reflects on the results obtained in light of recent political developments in the region.

**Demography, Health and Ageing: Policy Recommendations**

George Groenewold, Joop de Beer, and Corina Huisman (NIDI). MEDPRO Policy Paper n°5

Four population scenarios were derived describing changes in indicators of demographic behaviour on the basis of different future political-economic contexts. The focus of this policy brief is on expected trends in: (1) population growth at regional and national levels; (2) working age populations in view of demographic dividend potential for the economy; and; (3) population of elderly persons in view of the future financial burden this group might impose on societies. The results show that different economic-political development scenarios do have large effects on population growth, at least up to 2030. This is due to the so-called population momentum effect in the relatively young age-structures of most countries. In the short term, up to 2030, and depending on which economic-political scenario unfolds, these countries are expected to grow from 280 million people to a figure between 362 and 349 million people. In that same period, EU27 populations will grow by 21 million only from about 500 to 521 million people. Between 2030 and 2050, additional population growth is foreseen in Southern and Eastern Mediterranean Countries between 48 and 62 million people, while EU27 populations are expected to grow with only 4 million during that period. SMCs appear to vary widely regarding demographic transition profiles so that
demographic dividend potentials also vary. For instance, Egypt has considerably demographic dividend potential ahead in the coming decades as the working age population shares will rise from 63% (2010) to a peak level of about 68% by 2045. In Turkey however, the working age population share is already high (68%) and near the expected peak level of 69% (by 2025) after which a decline will set in. The window of opportunity - the period when working age population shares rise to peak levels and remain at a high level - is starting to close for Lebanon and Tunisia although levels will remain high up to 2035 after which a decline sets in due to ageing of these populations. Ageing implies an increase of the economic burden to economies as elderly generally do not contribute any longer to economies as they did during their working age years. Old-age dependency ratios, the share of elderly in relation to the working age population, are still low compared to EU27 ratios but will increase after 2035. Should SMCs remain politically, economically and environmentally fragile in the coming decades, these lower dependency ratios will impose a relatively higher social and financial burden to societies than the high dependency ratios in EU countries.

Memos:

- **Demography in Algeria, Libya and Morocco**
  Hammad Kassal (IMRI). MEDPRO Memo
- **Country sections on the analysis of demographic developments in Israel and Turkey**
  George Groenewold, Joop de Beer and Corina Huisman (NIDI). MEDPRO Memo
- **Country sections on the analysis of demographic developments in Jordan and Palestine**
  Mohammed Shaheen (MAS). MEDPRO Memo
- **Country section on the analysis of demographic developments in Tunisia**
  ITCEQ, MEDPRO Memo
- **Country sections on the analysis of demographic developments in Egypt, Lebanon and Syria**
  Fatma El Zanaty (FEPS). MEDPRO Memo

Database:

- **Annex on availability and quality of demographic, socioeconomic and health data in MED11 countries and on estimation methods to improve data quality**
  Prepared by George Groenewold, Joop de Beer and Corina Huisman (NIDI), with the support of IMRI, ITCEQ, MAS, FEPS, and CEPS

Management of Environment and Natural Resources

Publications:

**Economic and Climate Change Pressures on Biodiversity in Southern Mediterranean Coastal Areas**


This paper establishes and measures key biodiversity and ecosystem health indicators and the number of world heritage sites in coastal areas at global level. It then estimates – econometrically – the indicators’ influence on the provision of tourism values through the marine ecosystem function...
as a harbour of biodiversity, and as a provider of amenity values and marine cultural identity. The report then focuses on the MEDPRO region, providing some estimates of the potential impact of climate change on these services for a given temperature increase scenario. Finally, the effect on ecosystem-related tourism is computed for the four MEDPRO social economic scenarios. The analysis is enriched by some quantification of the potential costs of adaptation.

Economic Impacts of Climate Change in the Southern Mediterranean

Francesco Bosello, Fabio Eboli (FEEM). MEDPRO Technical Paper n°25

This report analyses the potential economic impacts of climate change on 11 southern and eastern Mediterranean countries through the effects of changes on the coastal ecosystem and on agriculture. The impacts are quantified through bottom-up studies assessing the consequences of the deterioration of the coastal ecosystem and protected areas for tourism arrivals, and the effects on yields of major crop families by mid-century. These data are then used as inputs into a world CGE model that quantifies the impact on GDP, sectoral production and prices. The results point to a generalised, albeit moderate loss in the region’s GDP, ranging from -0.1% to -0.25% in 2050. The countries that are more adversely affected are Tunisia (-0.26%/ -0.41% of GDP in 2050) and Morocco (-0.04%/ -0.14% of GDP in 2050). High losses (-0.13%/ -0.36% of GDP in 2050) are also highlighted for the ‘Middle East’ aggregate (including among others Jordan, Syria, Palestine, Lebanon and Israel), which together make up 26.5% of the region’s GDP. Negative impacts are more perceptible at the sectoral level. In the Reference Scenario, the average production loss for the agricultural sector is -0.5% in 2050, with a peak of -1.4% in Tunisia, while that of the service sector is -0.45% in 2050 with a peak of -0.9% in the Middle East. In general, GDP losses linked to tourism activity are greater than those related to agriculture, although this is not the case for Tunisia or Morocco.

Adaptation to Climate Change in the Southern Mediterranean: A Theoretical Framework, a Foresight Analysis and Three Case Studies

Daniel Osberghaus, Claudio Baccianti (ZEW). MEDPRO Technical Paper n°26

Adaptation to climate change in southern and eastern Mediterranean countries is particularly relevant because of the strong expected effects on the region and the sensitivity of important sectors like agriculture and tourism to climate change. This work analyses qualitative scenarios with the support of insights from the theoretical literature and information collected from case studies about Tunisia, Egypt and Turkey. We deal with several dimensions of adaptation, including the role of the government, equity, uncertainty and linkages with mitigation. In general, we conclude that inaction is not a viable option and this report shows how adaptation policy should be designed. We identify major areas of intervention, from removing barriers to private adaptation to the fostering of international cooperation.

Assessment of Economic and Climate Change Pressures on Agricultural Activity in Southern and Eastern Mediterranean Countries

Consuelo Varela-Ortega, Paloma Esteve, Irene Blanco, Gema Carmona, Jorge Ruiz, Tamara Rabah (UPM). MEDPRO Technical Paper n°28

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The Mediterranean region is one of the world's climate change hotspots and the heart of drastic socioeconomic and human transformations. Social and political developments as well as future climate projections envisage dramatic implications for the agricultural and water sectors that will endanger economic development and might lead to natural resources degradation and social instability. This study aims to assess the socioeconomic and environmental effects of different societal and human development scenarios and climate change in the water-scarce region. To address the complex interactions of the human and water systems, the study has developed a two-stage modelling methodology. Firstly, it proposed a panel data based econometric analysis of water use trends and 2030 future projections under the four different scenarios (developed in MEDPRO) across all the countries under study in the project. To cope with water resources variability and a changing social environment, different scenario-based adaptation measures have been analysed for each country. Secondly, to complement the country-wide econometric analyses, the study focuses on three specific case studies in a selection of countries (Syria, Jordan and Morocco). For each country an economic mathematical programming model has been integrated with a hydrology model. This is to assess, with more detail, the effects on the agricultural sector, including water policies (such as the application of water tariffs and quotas) as well as climate impacts. The modelling integration, at aggregated national scale, permits us to evaluate the effects on farm income, labour use, cropping strategies and water consumption. While results on water withdrawals show that climate as well as socioeconomic projections in the different scenarios may have clear differential effects across countries in the region and over time, in all countries closing the gap between water supply and demand will require a combination of water investments under the different MEDPRO scenarios.

Perspectives in Resource Management and Climate Change Adaptation in the Southern and Eastern Mediterranean

Francesco Bosello, Nicola Lamaddalena, Daniel Osberghaus, Consuelo Varela Ortega (FEEM, IAMB, ZEW, and UPM). MEDPRO Policy Paper n°6

The Mediterranean region is one of the world's climate change hotspots and the heart of drastic socioeconomic and human transformations. Recent research confirms that temperature increases will be higher compared to the global average; precipitations are projected to decline, and the probability of extreme drought to increase. Final vulnerability however, depends also on sensitivity and adaptive capacity which are highly country specific and differentiated particularly between the Northern and the Southern shore of the Mediterranean. Against a rather low vulnerability of Euro-Mediterranean countries, with losses ranging from the -0.25% to the -1.4% of GDP for temperature increases above the 4°C, stands a much higher vulnerability of South Eastern Mediterranean Countries. Particularly, the area will experiment adverse impacts on crop production driven by an increasing water scarcity which worsens ongoing processes of desertification and water overuse, pollution, salination in a context of increasing demand. Another less obvious, but relevant channel of potential negative economic impacts in SEMC is the climate-induced loss of biodiversity. In addition to threaten ecosystem life-support services it can impact negatively tourism attractiveness.

Memo:

- Report on Crop Water Requirements and Irrigation Water Requirements in Southern and Eastern Mediterranean Countries
Nicola Lamaddalena (IAMB). MEDPRO Memo
The goal of this report is to calculate crop water requirements, net irrigation requirements and relative yields under various climatic conditions of Southern and Eastern Mediterranean countries: Morocco, Algeria, Tunisia, Libya, Egypt, Jordan, Syria, Lebanon, Palestine, Turkey and Israel, each represented with three or four locations with its own soil and climatic conditions. In the report crop response to water was tested for spring and winter durum wheat, barley, maize as representatives of Graminaceae, for citrus, grape, olives and peach as perennial cultures and orchards, for pepper, tomato, potato and water melon as horticultural crops, and for sunflower (oil crop), sugar beet (sugar crop), cotton (fibre crop) and fava bean (leguminose). The output of the simulations are crop water requirements under various irrigation management conditions (i.e. full irrigation-optimum, deficit irrigation practices, or rainfed); net irrigation requirements; and, relative yield of the crops obtained in respect to water deficit that crops suffer. Based on water requirements under each scenario, the report proposes different irrigation strategies for the different location.

Database:
- Environmental Resources Database
  Prepared by Paloma Esteve (UPM)

Energy and Climate Change Mitigation

Publications:

Carbon Market Opportunities in Southern Mediterranean Countries

To date, Southern and Eastern Mediterranean countries have hosted a limited number of projects under the Clean Development Mechanism (CDM). There are three challenges to the participation of middle income countries in future carbon markets: the limited size of future demand for offsets or credits; restrictions on the use of CDM credits in Phase III of the EU Emissions Trading Scheme; and the lack of prompt preparation for the start of new market-based mechanisms. This study examines existing and emerging activities in Southern Mediterranean countries that could fit into new market based mechanisms. It explores options for the evolution of mechanisms and discusses the merits of post-2012 carbon funds in bridging the gap between the end of the first commitment period of the Kyoto Protocol and the entry into force of a new international agreement.

Outlook for Oil and Gas in Southern and Eastern Mediterranean Countries
Manfred Hafner, Simone Tagliapietra, El Habib El Elandaloussi (FEEM). MEDPRO Technical Paper n°18

The aim of this report is to elaborate the MEDPRO Energy Reference Scenario for oil and gas supply and demand up to 2030 for southern and eastern Mediterranean countries. The report gives an assessment of:
• Oil and gas reserves by country
• Oil and gas production, domestic demand and export scenarios by country;
• The existing and planned infrastructure for oil and gas exports.

Finally, the report presents some insights on the future role of the Mediterranean as an oil and gas transit region.

**Outlook for Electricity and Renewable Energy in Southern and Eastern Mediterranean Countries**

Manfred Hafner, Simone Tagliapietra, El Habib El Elandaloussi (FEEM). MEDPRO Technical Paper n°19

The aim of this report is to elaborate the MEDPRO Energy Reference Scenario for electricity demand and power generation (by energy source) in the Southern and Eastern Mediterranean countries up to 2030. The report assesses:

• The prospects for the implementation of renewable energy in the Southern and Eastern Mediterranean countries over the next decades. The development of renewable energy is a cornerstone of the Southern and Eastern Mediterranean countries’ efforts to improve security of supply and reduce CO2 emissions;
• The prospects for regional renewable-energy plans (the Mediterranean Solar Plan, DESERTEC and Medgrid); and
• The development of electricity interconnections in the region and the possible integration of Mediterranean electricity and renewable markets (both south–south and south–north).

**Energy Efficiency: Trends and Perspectives in the Southern Mediterranean**

Frédéric Blanc (FEMISE). MEDPRO Technical Paper n°21

This paper has two objectives. First, it attempts to establish the potential of policies on energy efficiency and energy demand-side management in the southern Mediterranean region. Second, by examining past trends in energy intensity and trends up to 2030, it analyses the prospects and costs of such policies, compared with expected developments in the price of energy resources. Based on both analyses and on prospects for growth, it seems that energy intensity in the Mediterranean should fall perceptibly by approximately 13% in the next 20 years. But given the programmed energy mix, this will not limit emissions of CO2, which are likely to increase by more than 90%.

The paper first presents the rationale for demand-side management policies. After a general discussion of concepts, it tackles the question of instruments and measures for implementing such policies, before posing the question of the cost-efficiency approach for monitoring the measures the authorities introduce. Secondly, the paper assesses energy consumption and energy efficiency in the countries of the southern Mediterranean and the ways in which their main economic sectors have changed in recent decades. The third section outlines the demand management measures introduced and, taking Tunisia and Egypt as examples, estimates the cost of such policies. The fourth and last section offers a forecast analysis of energy consumption in the Mediterranean up to 2030, highlighting probable trends in terms of final consumption, energy intensity, energy mix and
emissions of CO2. The section concludes with estimates in terms of cost, comparing objectives for lower intensity, results in terms of resource savings and the types of costs this approach represents.


Panagiotis Fragkos, Nikos Kouvaritakis (ICCS). MEDPRO Technical Paper n°22

The aim of this technical report is to quantify alternative energy demand and supply scenarios for ten southern and eastern Mediterranean countries up to 2030.

The report presents the model-based results of four alternative scenarios that are broadly in line with the MEDPRO scenario specifications on regional integration and cooperation with the EU. The report analyses the main implications of the scenarios in the following areas:

- final energy demand by sector (industry, households, services, agriculture and transport);
- the evolution of the power generation mix, the development of renewable energy sources and electricity exports to the EU;
- primary energy production and the balance of trade for hydrocarbons;
- energy-related CO2 emissions; and
- power generation costs.

**The Relationship Between Energy and Economic and Social Development in the Southern and Eastern Mediterranean**

Emmanuel Bergasse, Wojciech Paczynski, Marek Dabrowski, Luc Dewulf (CASE). MEDPRO Technical Paper n°23

This report aims to identify, explain and detail the links and interactions in Southern and Eastern Mediterranean Countries (SMCs) between energy supply and demand and socio-economic development, as well as the potential role of energy supply and demand policies on both. Another related aim is to identify and analyse, in a quantitative and qualitative way, the changing role of energy (both demand and supply) in Southern and Eastern Mediterranean economies, focusing on its positive and negative impact on socio-economic development.

This report investigates:

- The most important channels through which resource wealth can contribute to or hamper economic and social development in the analysed region
- Mechanisms and channels of relations between energy supply and demand policies and economic and social development
- The burdens of energy subsidies and ‘oil syndrome’ are of particular relevance for the region. An integrated socio-economic development and energy policy scenario approach showing the potential benefits and synergies within countries and the region is developed in the final part of the report.

**A New “Euro-Mediterranean Energy Roadmap” for a Sustainable Energy Transition in the Region**
Today SEMCs face a range of pressing socio-economic challenges including solving the problems of poverty and large structural unemployment, in the context of fast demographic growth. Energy is an essential commodity enabling socio-economic development. The current energy situation in SEMCs is characterised by a rapid increase of energy demand, low energy efficiency and low domestic energy prices due to extensive universal consumption subsidy schemes, the latter exerting undue pressure on the countries’ public finances. As the current energy situation does not, appear sustainable and poses several risks to the prospects of socio-economic development of the region, this MEDPRO Policy Paper proposes the creation of a “Euro-Mediterranean Energy Roadmap” to anchor the region into a sustainable energy transition.

Database:
- Energy and Climate Change Database
  Prepared by Pantelis Capros (ICCS)

Economic Development, Trade, Investment and Sectoral Analyses

Publications:

The EU-Turkey Customs Union: A Model for Future Euro-Med Integration
Subidey Togan (FEMISE). MEDPRO Technical Paper n°9

This paper studying the 1995 EU-Turkey Customs Union (CU) reveals that the CU has been a major instrument of integration of the Turkish economy into the EU and global markets, offering powerful tools to reform the Turkish economy. Turkish producers of industrial goods are protected by tariffs from external competition to exactly the same extent as EU producers, and they face competition from duty-free imports of industrial goods from world-class pan-European firms. In return, Turkish industrial producers have duty-free market access to the European Economic Area, which was recently extended to certain Mediterranean countries. Trade liberalisation achieved through the CU has thus successfully moved the Turkish economy from a government-controlled regime to a market-based one, and Turkish producers of industrial goods have performed remarkably well. The paper further shows that market access conditions for Turkish producers are determined, in addition to tariffs, by standards, conformity assessment procedures, competition policy, industrial property rights and contingent protectionism measures. The CU also offered Turkey the opportunity to establish new institutions, and modernise and upgrade rules and disciplines required for the elimination of technical barriers to trade, and for the implementation of the EU’s competition, industrial property rights, and contingent protectionism policies.

Determinants of Growth and Inflation in Southern Mediterranean Countries
Leonor Coutinho (CCEIA). MEDPRO Technical Paper n°10
Despite significant economic reforms in many EU neighbouring countries in the Southern and Eastern Mediterranean, their growth performance has on average been subdued. This study analyses the differences in growth performance and macroeconomic stability across Mediterranean countries, to draw lessons for the future. The main findings are that these countries should benefit from closer ties with the EU that result in higher levels of trade and FDI inflows, once the turbulence of the ‘Arab Spring’ is resolved, and from the development of financial markets and infrastructure. They will also benefit in keeping inflation under control, which will depend in great part on their ability to maintain fiscal discipline and sustainable current accounts. One of the main challenges for the region will be to implement structural reforms that can help them absorb a large pool of unemployed without creating upward risks to inflation.

**Shallow vs. Deep Integration in the Southern Mediterranean: Scenarios for the region up to 2030**


This research develops a quantitative analysis aimed at simulating the trade effects of various integration scenarios between the EU and its Mediterranean Partners (MPs). Results for shallow integration show that the completion of tariff removal is expected to produce limited gains, except in Algeria. However, further steps toward deep integration would lead to much more significant gains. In this regard, the elimination of non-tariff barriers is expected to increase EU exports to MPs up to 60%. In addition, MPs’ imports and exports to the EU could also considerably increase due to an improvement of logistics performance in these countries.

**Manufactured Exports and FDI in Southern Mediterranean Countries: Evolution, Determinants and Prospects**

Khalid Sekkat (FEMISE). MEDPRO Technical Paper n°14

This paper investigates the evolution and determinants of manufactured exports and foreign direct investment (FDI) in 11 Southern and Eastern Mediterranean countries over the period 1985–2009 as well as their prospects under different scenarios pertaining to the development of the determinants. The econometric analysis confirms the role of exchange rate depreciation, the openness of the economy and the quality of institutions and infrastructure in fostering manufactured exports and FDI inflows in the region. The assessment of the prospects suggests that a scenario of deeper integration with the EU entails superior performance for manufactured exports and FDI compared with either the status quo or less integration with the EU but greater integration within the region.

**Tourism in the Mediterranean: Scenarios up to 2030**

Robert Lanquar (CASE). MEDPRO Report n°1

Over the last two decades Morocco, Occupied Palestinian Territory, Syria, Tunisia and Turkey have recorded the highest growth rates in inbound world tourism. In the same period, domestic tourism in
these countries also increased rapidly. Southern and Eastern Mediterranean Countries’ tourism performance has been astonishing, given the security risks, natural disasters, oil prices rises and economic uncertainties in the region. Even the last financial crisis had no severe impact on this growth, which confirmed the resilience of tourism and the huge potential of Southern and Eastern Mediterranean countries in this sector. This trend came to an abrupt halt in early 2011 during the Arab Spring, but could well resume when the situation stabilises.

This paper looks at whether this trend will continue up to 2030, and provides four different possible scenarios for the development of the tourism sector in Southern and Eastern Mediterranean countries for 2030: i) reference scenario, ii) common sustainable development scenario, iii) polarised (regional) development scenario and iv) failed development - decline and conflict – scenario. In all cases, international and domestic tourism arrivals will increase. However, two main factors will continue to influence the development of the tourism sector in Southern and Eastern Mediterranean countries: security and adjustment to climate change.

This paper has been updated in 2011 and 2012. Final version is published in the MEDPRO website.

**What Prospects for Transport Infrastructure and Impacts on Growth in Southern and Eastern Mediterranean Countries?**

Robin Carruthers (CASE). MEDPRO Report n°3

Lack of adequate infrastructure is a significant inhibitor to increased trade of the countries of the Mediterranean region. Bringing their transport infrastructure to standards comparable with countries of a similar per capita GDP will be costly but worthwhile. We compare the current quantities of six types of transport infrastructure with international, and estimate the additional quantities needed to reach the benchmarks. We also estimate the cost of that infrastructure and express it as a percentage of GDP. Finally we make tentative estimates of how much trade might be generated and how this might impact on GDP. All the estimates are made for each MED11 country and for each of four scenarios. The highest need for additional infrastructure will be for airport passenger terminals (between 52% and 56%), whereas the lowest need was for more unpaved roads (between 7% and 13%). The investment (including maintenance) cost would be between 0.9% of GDP and 2.4% of GDP, although the investments in some countries would be between 1.4% and 4.5% of GDP. The impact on non-oil international trade would be substantial, but with differences between imports and exports. The overall trade balance of the MED11 region would be an improvement of between 5.4% and 17.2%, although some countries would continue to have a negative balance. A final assessment was of the benefit ratio between the increase in GDP and the cost of transport investment. This varied between about 3 and 8, an indication of the high return to be expected from increased investment in transport infrastructure.

**Scenarios for the Agricultural Sector in the Southern and Eastern Mediterranean**

Saad Belghazi (IMRI). MEDPRO Report n°4

The paper builds predictive scenarios for the agricultural sector of Southern and Eastern Mediterranean countries. First, it assesses the performance trends of the region’s agricultural sector with a focus on production, consumption and trade patterns, incentives, trade protection policies and trade relations with the EU and productivity dynamics and their determinants. Secondly, it presents
four scenarios based on the main value chains of the agriculture sector of Southern and Eastern Mediterranean countries: animal products, fruits and vegetables, sugar and edible oil, cereals and fish and other sea products. The outcome of the prospective analysis shows that the best scenarios for the region are the EU-Med Union and alliance scenarios.

**What can Arab Countries Learn from the Post-Communist Transition?**
Marek Dabrowski (CASE). MEDPRO Commentary

More than a year has passed since the start of the political uprising against the authoritarian regimes in the Arab world. But, as demonstrated by the ongoing unrest in Syria, the process is far from over. Many politicians and experts, especially those from Central and Eastern Europe, suggest that their Arab colleagues should learn from the post-communist transition of the early 1990s. However, while learning from others’ experience is always a useful exercise, the geopolitical and socio-economic context of the Arab revolution appears to be different, argues author Marek Dabrowski, from that of former Soviet bloc countries more than twenty years ago.

**Economic Development, Trade and Investment in the Southern and Eastern Mediterranean Countries: Policy Recommendations**

Marek Dabrowski, Luc De Wulf (CASE). MEDPRO Policy Paper n°4

Persistent high unemployment, growing income disparities, unequal level playing field in business, corruption and nepotism, poor governance, conspicuous consumption of a small elite and lack of political voice have been led to a broad discontent and to the Arab Spring revolutionary events in 2011-12. While it is too early to assess the impact of the revolutionary wave on the region’s economies, there are several measures that governments in the region can implement to facilitate growth. This Policy Paper concludes the work under the area of economic development, trade, investment and sectoral analysis of MEDPRO by putting forward a number of macroeconomic institutional and industrial policy recommendations for the region.

**Memos:**
- The Determinants of Trade in the MED11 Countries: Summary of the Literature
  Khalid Sekkat (FEMISE), MEDPRO Memo
- **Macro Data and Stylized Facts for the Mediterranean**
  Leonor Coutinho (CCEIA). MEDPRO Memo
- **Report on Private Sector Development in the MED-11 Region**
  Richard Woodward, Mehdi Safavi (CASE). MEDPRO Memo
- **Information and Communication Technology in the MED11**
  Jawad Abbassi (CASE). MEDPRO Memo
- **Study on the Manufacturing Sector in the MED-11: The Case of the Textile Industry**
  Christiane Haberl (CEPS). MEDPRO Memo
- **Summary Paper: Economic Development, Trade and Investment in the Eastern and Southern Mediterranean Region**
  Marek Dabrowski, Luc De Wulf (CASE). MEDPRO Memo

**Databases:**
- Macroecnomics Database
Financial Services and Capital Markets

Publications:

Challenges Arising from Capital Account Liberalisation in the Countries of the South Mediterranean Region

Sami Mouley (ITCEQ). MEDPRO Technical Paper n°11

This report confirms the importance of commercial openness and macroeconomic performance (i.e. the control of inflation and stability of current account balance and exchange rate) on growth dynamics in the south Mediterranean countries. In particular, the positive impact of capital account liberalisation is conditioned by the imperative reinforcement of institutional quality, country risk reduction, and government stability. An examination of the Tunisian case shows that only sectors subject to tariff dismantlement within the framework of the Association Agreement with the EU appear to benefit from capital account liberalisation.

Furthermore, the report shows that a scenario of capital account liberalisation requires the anticipation of monetary policy reaction functions. It follows that the mechanisms for interest rate adjustment, or inter alia, the interest rates’ reaction to price fluctuations, are weakly volatile. In turn, the analysis shows that an active control of inflation mismatches occurs essentially through exchange rate corrections, thus highlighting the greater interest central banks have in exchange rate stability over real stability. A capital account liberalisation scenario would hence impose a tightening of monetary policy. The report is in French with Executive Summaries in English and French.

The Role of Monetary Policies and Macroeconomic Convergence in the Development of Financial Systems in Southern Mediterranean Countries

Sami Mouley (ITCEQ). MEDPRO Technical Paper n°12

This MEDPRO Technical Report shows that the monetary and exchange rate policies conducted by central banks in the Southern and Eastern Mediterranean region display apparent homogeneity in their operational frameworks, albeit with some specificities and differing degrees of advancement. While central banks state that price stability is their ultimate objective, failures to control interest rates as operational objectives of monetary policy result in monetary authorities resorting to quantitative approaches to monetary policy, meaning that monetary aggregates and credit targets are being used as intermediate targets of monetary policy. An econometric exercise limited to Maghreb countries (Algeria, Morocco, and Tunisia) has been conducted to analyse the potential scenarios of
convergence and monetary policy coordination. Given the high structural heterogeneity and the slow pace of real convergence due to weak commercial integration in the Maghreb, results nevertheless show alternative dynamics in the integration of effective nominal exchange rates, as well as a complete convergence dynamic in exchange rate policies. Partial convergence of monetary policies regarding the stabilisation of inflation rates remains an open option for a transitional phase where financial integration is low. The report is in French with Executive Summaries in English and French.

**The Dynamics of Bank Efficiency in the European Union and the Southern and Eastern Mediterranean: Is there Convergence?**

Barbara Casu-Lukac, Alessandra Ferrari (CEPS). MEDPRO Technical Paper n°33

It is a long-held belief among economists and policy-makers that financial development can help foster economic development through an improved allocation of savings and investment opportunities; (ii) the entry of foreign banks, which in turn fosters (iii) an influx of new capital; (iv) product and process innovation; (v) increased competition and (vi) an increased efficiency of the domestic banking system. The emerging consensus in the literature, however, is that, for financial development to be beneficial, certain conditions need to be met, including an adequate and operational regulatory structure, a well-defined supervisory authority, legal systems that reinforce property and creditor rights, restrained control of government over the financial system and macroeconomic stability. To achieve these objectives, governments in the Southern and Eastern Mediterranean countries have embarked in reform programmes, but evidence shows they have been less comprehensive and far reaching compared to other developing and transition countries. Against this backdrop, this paper seeks to assess the dynamics of bank efficiency for a large sample of countries located in the European Union and in the Southern and Eastern Mediterranean region over the period 1997 - 2010. The first part of the study examines the dynamics of efficiency for the banking industries of the sample countries via the estimation of stochastic frontiers, while recognizing the heterogeneous nature of banking technology across countries. The second part of the analysis assesses whether the banking systems in the sample countries are converging towards the same efficiency and technology. The paper concludes that the policy agenda for policymakers in the region should prioritise reforms that promote bank efficiency and financial sector stability simultaneously.

**Determinants of Financial Development across the Mediterranean**

Rym Ayadi, Emrah Arbak, Willem Pieter De Groen, Sami Ben-Naceur (CEPS and FEMISE). MEDPRO Technical Paper n°29

Casual observation shows that that the financial systems in the Southern and Eastern Mediterranean are unable (or unwilling) to divert the financial resources that are available to them as funding opportunities to private enterprises. Using a sample of Northern and Southern Mediterranean countries for the years 1985 to 2009, this study empirically assesses the reasons underlying such conditions. The results show that strong legal institutions, good democratic governance and adequate implementation of financial reforms can have a substantial positive impact on financial development only when they are present collectively. Moreover, inflation appears to undermine banking development, but less so when the capital account is open. Government debt growth appears to strongly weaken credit growth, which confirms that public debt “crowds out” private debt. Lastly,
capital inflows appear to primarily have an income effect, increasing the incomes and thereby national savings and thus increasing the availability of credit.

This paper has been submitted to a scientific journal; Emerging Markets Review.

**Financial Development, Bank Efficiency and Economic Growth across the Mediterranean**

Rym Ayadi, Emrah Arbak, Willem Pieter De Groen, Sami Ben-Naceur (CEPS and FEMISE). MEDPRO Technical Paper nº30

The paper has looked at the relationship between financial sector and economic growth using a sample of Northern and Southern Mediterranean countries for the years 1985 to 2009. We included several variables to measure the development of the financial sector in order to account both for quantity and quality effects. The results indicate credit to private sector and bank deposit are in many specifications negatively associated to growth meaning that there are problems of credit allocation in the region and weak financial regulation and supervision. On the stock market side, the results seem to indicate that stock market size and its liquidity are playing a significant role in growth, especially when the quality of institution is low. Investment whether domestic or in the form of FDI contribute significantly to economic growth. Better institutions and low inflation are key growth factors. Initial GDP has a persistently and significantly negative impact on growth, which implies that poorer countries are catching up richer countries in terms of economic growth.

This paper has been submitted to a scientific journal; European Journal of Political Economy.

**Benchmarking the Financial Sector and Designing 2030 Financial Sector Scenarios for the Eastern and Southern Mediterranean**

Rym Ayadi, Emrah Arbak, Willem Pieter De Groen, Sami Ben-Naceur (CEPS and FEMISE). MEDPRO Technical Paper nº31

This paper aims at devising scenarios for the development of the financial system in the Southern and Eastern Mediterranean region for the 2030 horizon. The results of our simulations indicate that bank credit to private sector, meta-efficiency and stock market turnover could reach at best respectively 108, 78 and 121 percent if Southern and Eastern Mediterranean countries adopt the best practices in Europe. These scenarios are much higher those of the present levels in the Southern and Eastern Mediterranean region but still lower that the best performers in Europe. More specifically, we find that improving the quality of institutions, increasing per capita GDP, opening further capital account and lowering inflation are needed to enable the financial system in the region converge to those of Europe.

**Convergence and Integration of Financial Sectors in the Southern and Eastern Mediterranean Countries**

Rym Ayadi, Emrah Arbak, Willem Pieter De Groen (CEPS). MEDPRO Technical Paper nº34

The MED-11 countries have faced substantial reforms in their financial sectors in recent years. This paper develops a number of indicators to assess and track the evolution of the adequacy of banking regulations using publicly available and comparable surveys for a large sample of countries since the
early 2000s. To allow comparability across the Mediterranean, the section develops the measures for ten southern and eastern Mediterranean Countries and seven EU-Mediterranean countries. Seven distinct regulatory areas are identified for assessing the various dimensions of regulatory adequacy. These cover definition of banking, licensing requirements, capital requirements, independence and power of supervisor, presence of safety nets, disclosure and availability of credit information.

**MSMEs Access to Finance in the Southern and Eastern Mediterranean: The Case for a Euro-Mediterranean Guarantee Initiative**

Rym Ayadi, Salim Gadi (CEPS). MEDPRO Technical Paper n°35

Micro Small and medium sized enterprises (MSMEs) in the Southern and Eastern Mediterranean suffer more from credit constraints than their counterparts in middle and high-income economies. Given their contribution to employment and growth, similarly as in other regions, policy-makers have developed credit guarantee schemes (CGS), in order to facilitate small companies’ access to debt capital. CGS are risk-sharing mechanisms under which a guarantor ensures the lender against a share of the possible losses he incurs when extending a loan. Despite the maturity of some schemes, credit to small companies in most countries in the region continues to lag behind. This paper builds on the results of an exclusive questionnaire addressed to CGS executives of Southern Mediterranean schemes between May and June 2011. It argues that the creation of a Euro-Mediterranean Guarantee Initiative (EMGI) would be a key step to alleviate SMEs access to finance in the region. First, the paper reviews the conditions of MSMEs’ access to finance in the South and Eastern Mediterranean and provides a description of the political background for such initiative; second, it assesses CGS characteristics and performance; thirdly, it introduces the EMGI, the objectives it should pursue as well as its potential impact.

**Financial Sector Development and Integration in the Southern and Eastern Mediterranean: Towards a Long-Term Sustainable transition**

Rym Ayadi (CEPS). MEDPRO Policy Paper n°7

Drawing on the research conclusions under this field of study, this paper explores various reforms to enhance the financial sectors’ contribution to growth in the region. Among other findings, the Policy Paper underlines the need to support to small companies’ access to finance, through an enhancement of the financial infrastructure and regulatory convergence with the EU and the creation of a Euro-Mediterranean Guarantee Initiative (EMGI) gathering credit guarantee schemes from both shores of the Mediterranean.

**Memo:**
- **Work Package 6: Financial Services and Capital Markets: Concept paper**
  Rym Ayadi (CEPS). MEDPRO Memo
- **Technical & Methodological Note**
  Sami Mouley (ITCEQ). MEDPRO Memo

**Database:**
- **Finance Database**
  Prepared by Emrah Arbak and Willem Pieter de Groen (CEPS)
Human capital, Social Protection, Inequality and Migration

Publications:

Measuring Returns to Education and Human Capital in the Southern Mediterranean

Emrah Arbak (CEPS). MEDPRO Technical Paper n°17

Measuring human capital has been a significant challenge for economists because the main variable of interest is intangible and not directly observable. In the Southern and Eastern Mediterranean region the task is further complicated by the general scarcity of comparable and reliable data.

This study overcomes these challenges by relying on a unique international survey that covers most of the region and by deriving a market-based measure that uses returns to education and various labour market factors as guidance. The results show that private returns to schooling are relatively low in most Southern and Eastern Mediterranean countries (SEMCs). Israel and Turkey are clear outliers, surpassing even the EU-MED averages. In Algeria and Jordan, the returns are almost flat, implying that earnings do not respond significantly to education levels. Despite high attainment levels, Greece, Spain and Portugal also perform badly; only marginally surpassing some of the bottom-ranked SMC, providing evidence of problems in absorption capacity. The baseline scenarios for 2030 show substantial sensitivity to current estimates on returns to education. In particular, improving attainment levels can produce measurable gains in the future only when the returns to education are already high. Such is the case for Egypt, Morocco and Turkey, which substantially improve their human capital stocks under the baseline scenarios, surpassing several EU-MED countries with little or no room for improvement.

Female Labour Force Participation and Economic Development in Southern Mediterranean Countries: What scenarios for 2030?

Stella Tsani, Leonidas Paroussos, Costas Fragiadakis, Ioannis Charalambidis (ICCS). MEDPRO Technical Paper n°19

This paper investigates the relationship between female labour force participation rates and economic growth in Southern and Eastern Mediterranean countries. A two-step methodology involving econometric estimations and the use of a general equilibrium model was used for this purpose.

The econometric estimations suggest that there is a U-shaped relationship between economic growth and female labour force participation rates and they indicate the presence of region-specific barriers impeding women's entry into the labour force in southern Mediterranean countries.

The econometric results were fed into a general equilibrium model, the GEM-E3-MEDPRO, which was used to simulate two alternative assumptions on developments in female labour participation rates in the region up to 2030. The first of these simulated changes in female labour force participation rates arising from income level trends projected for the period 2015–2030 in southern Mediterranean countries. The second assumed the lowering of region-specific barriers which deter female labour force participation.
The results of these simulations suggest that lower female labour force participation rates may lead to marginally lower economic growth in the region, while the removal of region-specific barriers to female labour force participation may encourage economic growth. This has important policy implications, suggesting that policies intended to remove such barriers could help to promote the growth of the region's economies.

**Education and Social Protection Systems in Southern and Eastern Mediterranean Countries**

Alia el Mahdi, Ola el Khawaga, Ashraf el Araby (FEPS). MEDPRO Technical Paper n°20

This report assesses the current status of the education and social protection systems in 11 southern and eastern Mediterranean countries. It compares these countries using various education indicators and attempts to highlight the main differences in the social protection systems among the countries using qualitative analysis. The report finds that despite the differences among the countries, they share a common feature: when measured by the UN Development Programme’s Human Development Index (HDI), their inequality-adjusted values are significantly lower than their HDI values and ranks when not taking inequality into account. Nevertheless, significant improvements have been achieved in all the quantitative indicators for education, while the qualitative performance is still modest in the majority of the countries studied. As to the social protection aspect, the research reveals that various social protection programmes are being adopted in the 11 countries. As most of their financing is covered by government budgets, however, this places a high fiscal burden on them. Yet few of the countries (Turkey being the most notable) are trying to improve the sustainability of their social insurance schemes.

**Inequality in the Southern Mediterranean: A Survey of Selected Countries**

Heba El Laithy (FEPS). MEDPRO Technical Paper n°23

This paper addresses the issues of current levels of inequality: their trends, determinants and future scenarios, demonstrating that welfare levels are measured by per capita consumption. Location, educational attainment and employment status have been identified as the key factors affecting levels of welfare and its distribution. A benefit incidence analysis was performed to investigate benefits of different deciles of per capita expenditure from education and health services. The inequality patterns in countries under investigation present significant variations; countries such as Turkey, Morocco and Tunisia show relatively high inequality while others, such as Egypt or Syria, show moderate to low inequality. Inequality in human development was addressed using the inequality-adjusted human development index (IHDI), introduced by Global HDR 2010. The average loss in the HDI due to inequality in all Arab countries under investigation is about 20%. Two reference scenarios (optimistic and pessimistic) were used to project future paths up to 2020 and 2030. The impact of positive growth is increasing inequality and a shrinking middle class. Results show that the rich benefit most from this growth path. The opposite trend is observed for the pessimistic scenario.
Human Capital, Inequality and Migration in Southern and Eastern Mediterranean Countries: Towards a Coherent Policy Agenda

Rym Ayadi, Alia El Mahdi (CEPS and FEPS). MEDPRO Policy Paper n°8

The future demographic structures in the Southern and Eastern Mediterranean region will undergo changes that require new sets of policies in employment and social fields due to the projected increases in the working age population. Past trends in education, human capital, skills mismatch, unemployment, migration and increasing levels of inequality point to malfunctioning social policies; if these trends continue they will turn the ‘demographic dividend’ to a ‘demographic curse’. Against this backdrop, this MEDPRO Policy Paper delves into the long term trends in the demographic, social and migration fields to propose policy recommendations for the Southern and Eastern Mediterranean and the EU that aim to promote sustainable patterns of socioeconomic development. Enhancing education quality, creating well-planned income distribution policies as well as reforming the EU’s current approach to migration feature among the many recommendations proposed by the authors.

Memos:

- Human capital as a determinant of migration flows in MED11: Migration’s scenarios for MED11 countries
  Boris Najman (CASE). MEDPRO Memo
- Section on education systems in Tunisia
  Bouslama Néjib (ITCEQ). MEDPRO Memo
- Section on social protection schemes: Adequacy and sustainability in Tunisia
  ITCEQ. MEDPRO Memo
- Sections on education systems in Algeria, Libya and Morocco
  Hammad Kassal (IMRI). MEDPRO Memo
- Sections on social protection schemes: Adequacy and sustainability in Algeria, Libya and Morocco
  Hammad Kassal (IMRI). MEDPRO Memo
- Sections on education systems in Egypt, Lebanon and Syria
  FEPS. MEDPRO Memo
- Sections on social protection schemes: Adequacy and sustainability in Egypt, Lebanon and Syria
  FEPS. MEDPRO Memo
- Sections on education systems in Jordan and Palestine
  MAS. MEDPRO Memo
- Sections on social protection schemes: Adequacy and sustainability in Jordan and Palestine
  MAS. MEDPRO Memo
- Sections on education systems Israel and Turkey
  Emrah Arbak (CEPS) MEDPRO Memo
- Sections on social protection schemes: Adequacy and sustainability in Israel and Turkey
  Emrah Arbak (CEPS). MEDPRO Memo

Database:
Scenario building and impact assessment

Publications:

Economic and Structural Database for the MEDPRO Project

Leonidas Paroussos, Kostas Fragkiadakis, Ioannis Charalampidis, Stella Tsani, Pantelis Capros (ICCS). MEDPRO Report n°5

The aim of this report is to provide an overview of the economic and structural database compiled for the MEDPRO project. The research team of the E3M Lab, ICCS, has developed an extensive database which includes figures on governance, development indicators, infrastructure, finance, environment, energy and agriculture for the countries studied in the MEDPRO project. In addition other data has been compiled: detailed social accounting, bilateral trade, consumption and investment matrices for each of the countries under study. The compilation of the database has combined several data sources, ranging from the scholarly literature to the international financial institutions (such as the IMF, World Bank etc) and the national statistical offices. The construction of the economic and structural database faced significant limitations associated with the data scarcity and the lack of detailed matrices available from official national or international sources for most of the countries. In the presence of data scarcity, an extensive part of the research has regarded the employment of the available data in tandem with appropriate balancing methods, so as to derive the final data set.

The MEDPRO dataset is publically available.

Quantitative Reference Scenario for the MEDPRO Project

Leonidas Paroussos, Kostas Fragkiadakis, Ioannis Charalampidis, Stella Tsani and Pantelis Capros (ICCS). MEDPRO Report n°6

In general equilibrium models the reference scenario is important, as the evaluation of the alternative policies modelled is based on their deviation from the reference scenario. The reference scenario relates to the development of an economic outlook for each region and sector of the model. This means that assumptions are made about the main drivers of growth, e.g. population growth and technical progress. This report provides the main assumptions used for the development of the reference scenario in the MEDPRO project. The report also provides a brief country and sectoral overview for each of the southern and eastern Mediterranean countries covered by the MEDPRO project.

Macroeconomic scenarios for the Euro-Mediterranean area quantified using the GEM-E3 model
Leonidas Paroussos, Kostas Fragkiadakis, Ioannis Charalampidis, Stella Tsani and Pantelis Capros (ICCS). MEDPRO Report n°7

This report documents the work completed for the scenario building and impact assessment of the MEDPRO project. The goal of this research field is to simulate alternative economic development scenarios for the Euro-Mediterranean region which focus on cooperation policy. The research work for this purpose included extensive data collection, model calibration and scenario construction using the GEM-E3-MEDPRO model, a computable general equilibrium model derived from the standard GEM-E3 model and extended for the MEDPRO project. The scenarios simulate the implementation of policies associated with: i) Euro-Mediterranean cooperation (QII), ii) the development of global policy of the Mediterranean countries i.e. opening up and cooperation with the rest of Middle East countries and other developing countries like China (QIII) and iii) a deterioration of the political climate in the region (QIV). The scenarios are compared to the reference scenario (QI) which assumes continuation of current Euro-Mediterranean policies.

Memos:
- Assumptions and definition of alternative quantitative scenarios
  Zoi Vrontisi, Leonidas Paroussos, Stella Tsani, Panagiotis Karkatsoulis and Pantelis Capros (ICCS). MEDPRO Memo
- Consolidated report on quantitative reference scenario and assumptions and definitions of alternative scenarios for the water sector
  Consuelo Varela-Ortega, Gema Carmona, Irene Blanco, Paloma Esteve, Tamara Rabah (UPM). MEDPRO Memo

Database:
- Economic and Structural Database
  Prepared by Pantelis Capros (ICCS)

Scenarios for Regional Integration and Cooperation with the EU

Publications:

EU Migration Policy in the wake of the Arab Spring: What prospects for EU-Southern Mediterranean Relations?
Sergio Carrera, Joanna Parkin, Leonhard den Hertog (CEPS). Technical Paper n°15

The outbreak of the Arab Spring and the unrest, revolution and war that followed during the course of 2011 have forced the EU to acknowledge the need to radically re-think its policy approach towards the Southern and Eastern Mediterranean, including in the domain of migration. Migration and mobility now feature as key components of High Representative Catherine Ashton’s new framework for cooperation with the region (Partnership for Democracy and Shared Prosperity), while the EU has declared its intention to strengthen its external migration policy by setting up
“mutually beneficial” partnerships with third countries – so-called ‘Dialogues for Migration, Mobility and Security’ – now placed at the centre of the EU’s renewed Global Approach to Migration and Mobility (GAMM). However, the success of this approach and its potential to establish genuine cooperative partnerships that will support smooth economic and political transformation in North Africa hinge on the working arrangements and institutional configurations shaping the renewed GAMM at EU level which has long been marked by internal fragmentation, a lack of transparency and a predominance of home affairs and security actors.

This paper investigates the development of the Dialogues for Migration, Mobility and Security with the Southern Mediterranean in a post-Lisbon Treaty institutional setting. It asks to what extent has the application of the Lisbon Treaty and the creation of an “EU Foreign Minister” in High Representative Ashton, supported by a European External Action Service (EEAS), remedied or re-invigorated the ideological and institutional struggles around the implementation of the Global Approach? Who are the principal agents shaping and driving the Dialogues for Migration, Mobility and Security? Who goes abroad to speak on the behalf of the EU in these Dialogues and what impact does this have on the effectiveness, legitimacy and accountability of the Dialogues under the renewed GAMM as well as the wider prospects for the Southern Mediterranean?

What Scenarios for the Euro-Mediterranean in 2030 in the Wake of the Post-Arab spring?

Rym Ayadi, Carlo Sessa (CEPS and ISIS). MEDPRO Policy Paper n°2

In the wake of the Arab Spring, the Southern Mediterranean region has reached a turning point in its history, presenting many opportunities and challenges for the EU. In this MEDPRO Policy Paper, Rym Ayadi and Carlo Sessa explore various possible scenarios that could play out in EU-Mediterranean relations over the next two decades but find, lamentably, that the EU has set itself on a ‘business as usual’ course, leaving the region open to further polarization and the involvement of other external players.

This paper has been updated twice to factor in the adaptations brought to the MEDPRO scenarios.

The Euro-Mediterranean Partnership and Financial Assistance: Past Trends and Future Scenarios

Rym Ayadi, Salim Gadi (CEPS). MEDPRO Technical Paper n°32

The 2011 uprisings in the Southern Mediterranean have put the region at the forefront of current policy developments, questioning the future of their domestic political systems and the future of the EU partnership with its Southern and Eastern Neighborhood. Against this backdrop, this paper analyses and assesses EU’s development assistance to the region since 1995 and provides insight for the future of the Euro-Mediterranean Partnership. First, the paper reviews the policy and financing frameworks governing Euro-Mediterranean relations; second, it examines the determinants of Official Development Assistance (ODA), third, it analyses the impact of EU’s ODA to the Southern Mediterranean against the objectives set in the different policy frameworks governing Euro-Mediterranean relations; and fourth, it assesses EU’s response to the changes in the region and section five provides four prospective views on the future of Euro-Mediterranean relations.

Scenarios and Transitions towards a Sustainable Euro-Mediterranean in 2030
In the aftermath of the Arab Spring events, the Mediterranean region has reached a turning point in its history, presenting as many opportunities as challenges for the EU. In this MEDPRO Policy Paper, Rym Ayadi and Carlo Sessa examine and assess various possible scenarios that could play out in EU-Mediterranean relations over the next two decades and offer recommendations towards long-term sustainable transitions.

**Memos:**

- **What Future for the Mediterranean in 2030: Methodological Framework**
  Rym Ayadi and Carlo Sessa (CEPS and ISIS). MEDPRO Background Paper
- **Assumptions and definition of alternative quantitative scenarios**
  Zoi Vrontisi, Leonidas Paroussos, Stella Tsani, Panagiotis Karkatsoulis and Pantelis Capros (ICCS). MEDPRO Memo
4. Impact of MEDPRO: Dissemination activities and exploitation of results

Strategic impact
The countries in the East and South Mediterranean region face the challenge of coping with huge problems over the coming decades: economic and financial reforms, trade liberalization, upgrading infrastructure, more prudent management of natural resources (economically and environmentally), fighting poverty and inequality, eradication of illiteracy, overhaul of education system and securing equal access of boys and girls to education, elimination of other forms of female discrimination, reform of labour markets aiming in diminishing chronic unemployment, improving access to water and sanitation, coping with climate warming mitigation and adaptation, further improvement of health standards and many others. On the institutional and political front the task is to build a democratic and secular state of rule of law and respect to civil rights and freedoms, which will not contradict the dominant cultural and religious tradition in the region.

These challenges will require both political will and good governance at the level of each individual country and the outcome will both determine and interact with a number of cultural and social factors. The MEDPRO project aims at helping this process by enhancing the level of information and knowledge on the challenges and providing deeper insight into the policy options.

Having undertaken over three years a deep qualitative and quantitative foresight analysis of the main developmental challenges in the eleven countries of the Southern and Eastern Mediterranean, The impact of MEDPRO is threefold:

1. Reinforcement of research links across the Mediterranean;
2. Enhancing the knowledge on political and socio-economic development issues in the region and assessment and clarification of the issues facing the EU and the MED11 countries in the formulation and implementation of policies aiming at approximation and integration in line with the objectives of the European Neighborhood Policy and the Union for the Mediterranean.

The reinforcement of research links across the Mediterranean was achieved through the participation of research institutions from Morocco, Tunisia, Egypt and Palestine and experts originating from the 11 countries of the Southern and Eastern Mediterranean. Partner institutions and their experts provided the necessary qualitative and quantitative inputs for MEDPRO research in addition of having carried several fieldwork missions. Not only partners have been extensively engaged in research activities, but they have also actively participated in the organization of Stakeholders Engagement Meetings in Barcelona, Tunis, and Cairo. Furthermore, MEDPRO’s outputs are publicly disseminated through the project’s website in an effort to stimulate future state of the art research on the area.

The scientific contribution to the formulation of EU policies vis-à-vis Southern and Eastern Mediterranean countries is a key impact of the MEDPRO Project. The scenario analysis undertaken in each research area of the project provides fresh evidence on the long term outlook of the region.
taking into account its current context in the areas of politics and institutions, demography, health, ageing, human capital, economic and gender inequality, social protection, migration, energy and climate change, management of environment and natural resources, economic development, trade, investment and sectoral policies, financial services and capital markets. MEDPRO’s research and policy recommendations are of particular relevance for the EU and the region in the medium to long term in the current context of the post “Arab Spring”. As uprisings in the region unfurled, partners have undertaken an exceptional effort to amend the research agenda when relevant and incorporate the current developments in their foresight analysis. In addition to this, the project’s recommendations have been fine tuned in the final phase of MEDPRO through the organization of Stakeholders’ Engagement Meetings, where researchers and experts presented their preliminary result to an audience of policymakers, civil society representatives from the region and the EU.

In the same line of thought, a key impact of the MEDPRO Project is the provision of evidence based policy recommendations to Southern and Eastern Mediterranean countries’ policymakers. Indeed, while a high proportion of the project’s recommendations address Euro-Mediterranean cooperation, they are also a tool for strategic advice for policy and decision makers in the region. This was demonstrated during the high level Stakeholder Engagement Meetings, where high level officials and representatives from national authorities as well as representatives of the private sector as well as civil society discussed the project’s recommendations, made proposals to refine the recommendations and increase their relevance in their respective countries’ contexts in the fields of education, social protection, energy, environmental management, international trade, finance, and economics.

**Use and dissemination of the foreground**

**Target audiences and dissemination measures**

The dissemination strategy of the project is aimed to present its results and findings to the following different audiences:

1. Policy makers and stakeholders
2. Academics
3. Students and young researchers
4. The public at large

To ensure an efficient dissemination effort and maximize the outreach of the project, a three step dissemination policy has been set. First, at the beginning of the project a dedicated flyer MEDPRO flyer giving the project’s identity and summarizing the projects endeavors has been designed and printed. In this phase, the website has also been created as the key tool to disseminate the project’s outputs. Both are available in English, French and Arabic. Second, the first newsletter of the project was made available to the public and sent to interested audiences in the EU and the Southern and Eastern Mediterranean region following the creation of stakeholders’ contacts database which has been updated and amplified over the three years of research. To ensure a follow-up with previous studies on the region, the database included the contacts of the Commission Expert Group on the Mediterranean. It was uploaded on the website and sent to the audiences every six months. As the website, the newsletter is available in English, French and Arabic. Third, at the end of the project, a booklet was designed describing MEDPRO and summarizing all the project’s publications. The booklet was circulated among the final conference’s audience and will be further disseminated after the project’s end to raise awareness on MEDPRO’s research and findings.
Beyond this, different strategies have been used to reach out the three audiences.

Policy makers and business community:
The two main mechanisms for reaching policy-makers and the business community in Brussels and in the Mediterranean region are through the circulation (in paper and electronic form) of policy briefs prepared in each work package; and the organization of Stakeholder Engagement Meetings. Three series of two-day meetings were held in Barcelona (November 2011), Tunis (November 2012) and Cairo (January 2013). MEDPRO Coordinator Dr. Rym Ayadi invited H.E. Ridha Saidi, Minister of Economic Affairs of Tunisia; H.E. Osama Kamal, Minister of Petroleum and Natural Resources of the Arab Republic of Egypt; Ambassador Gamal Bayoumi, Former Diplomat and President of the Federation of Arab Investors. The meetings were also attended by high level officials from the European External Action Service (EEAS); the United Nations Development Program (UNDP); national ministries, and public bodies. In addition, MEDPRO Coordinator established several dissemination partnerships with different partners. For example a partnership was concluded with Scoopit, a FP7 program consisting in a platform disseminating FP7 programs policy relevant findings through regular and targeted alerts as well as newsletters.

Academics:
The project participants are all experienced in working on policy-relevant research and in presenting the results to public officials. However, at the same time they are all academic institutions or public bodies which give great importance to publication in academic media. The core outputs are available initially as technical papers, both from the project web site and in the discussion paper series of the individual participants. After the project’s end, participants will submit them for presentation at suitable conferences so as to obtain feedback on them and then submit them for journal publication after coordination with MEPDPRO’s Steering Committee/Scientific Bureau. Due to the multidisciplinary nature of MEDPRO, each work package leader will identify a number of academic journals in the field of the work programme. The best technical papers will be submitted. This is due to the fact that the Arab Spring erupted over the course of the project and stakeholders meetings resulted in fine-tuning the research, preventing from previous submission to peer reviewed publications. Also, to promote academic awareness of the research the newsletter was sent to academics and they were regularly invited to the project’s conferences. Dissemination partnerships were also concluded with research institutions active in the field of Euro-Mediterranean Affairs such as the Euro-Mediterranean Studies Commission (EuroMeSCo); the United Nations Blue Plan; the International Centre for Mediterranean Agronomic Studies (CIHEAM); and the Forum Euro-Méditerranéen des Sciences Economiques (FEMISE).

Students and young researchers
Taking into account the preponderance of youth in the Southern and Eastern Mediterranean; the long term nature of challenges facing the region and the crucial need to further develop research on the area, MEDPRO Coordinator partnered with the Centre Ernest Lluch of the Consorci Universitat Internacional Menendez Pelayo in Barcelona to organize a summer school: Trends and Tensions in the Euro-Mediterranean. The two days seminar held in July 2012 in Barcelona, not only presented MEDPRO’s research findings, but also gathered renowned experts in the fields of migration, environmental research, as well as Southern Mediterranean economic and political analysts with a view to disseminate results and knowledge on the region, its evolution and the challenges ahead. Among other speakers, the seminar included server members of the Commission Mediterranean Experts group.
The Public at Large:
The public at large was targeted through the printed and online media thanks to a vast network of contacts in EU and Southern and Eastern Mediterranean countries’ media. Newsletters and policy papers relevant to the journalists’ interests were sent to them. To maximize outreach to the general audience, MEDPRO Coordinator established dissemination partnerships with online media specialized in the region, such as Econostrum, Le JMED and the European Neighbourhood Policy Information Centre as well as with the Anna Lindh Foundation who were updated on a timely basis on the project’s results and policy findings to raise awareness of the project.

Furthermore, the dissemination of the MEDPRO’s outputs will last beyond the end of the project with the creation of the Euro-Mediterranean Economists’ Association (EMEA). EMEA’s creation responds to a revived interest in the Southern and Eastern Mediterranean with the eruption of the “Arab Spring”.

During the three year MEDPRO project the MEDPRO Researchers have actively participated in numerous conferences and other events. Below an overview of the most notable events is presented:

- In May 2010, Dr Rym Ayadi, the Coordinator of MEDPRO, presented the project at a high-level meeting on the Mediterranean 2030, organized by IPEMED and IACE in Hammamet.
- On 1-3 September 2010, Dr. Manfred Hafner presented the first MEDPRO results concerning “North-African Solar Electricity for Europe: Does it make sense?” at the “Asian-Europe Environment Forum 2010 Conference” in Munich, where a specific workshop dealt with solar-thermal energy including Desertec.
- In October 2010, Dr. Rym Ayadi gave a speech about the future of access to finance in the Mediterranean in MedaFinance 2010 in Cairo, financed under EU-funded invest in med program.
- On 21 February 2011, Dr. Rym Ayadi was also invited to the MENA-OECD Working Group on SME Policy, Entrepreneurship and Human Capital Development organised in Casablanca, where she spoke about the incentives to promote financing to small and medium-sized enterprises.
- On 22-25 February 2011, Dr. Rym Ayadi was invited to the 26th Session of the Intergovernmental Committee of Experts of North Africa organised by the United Nations Economic Committee for Africa in Rabat. The Committee contributed the recommendations presented to the Conference of African Finance, Planning and Development Ministers of 24-29 March 2011 in Addis Ababa. Dr. Rym Ayadi made an intervention on the role of states in financing development.
- On 19-20 May 2011, Dr. Rym Ayadi was invited to a high level meeting in Tunisia to discuss the future of EU-Tunisia cooperation after the revolution.
- On 20 June 2011, Dr. Rym Ayadi presented MEDPRO's first conclusions at a high level meeting in Sfax, Tunisia about the role of the EU in promoting regional and local development.
- On 2 February 2012, Dr. Rym Ayadi spoke at University Paris Dauphine on the socio-economic challenges facing the region post-Arab Spring.

On 1-3 April 2012, Dr. Rym Ayadi spoke at the Euro-Med conference on research and innovation in Barcelona on changing science in changing societies.

On 25 April 2012, Dr Rym Ayadi spoke at the Deauville high-level partnership event in Paris on a blueprint for MSME financing in the Mediterranean.

On 27 April 2012, Dr. Rym Ayadi spoke at the Annual Réalités forum on the future of the Mediterranean in Tunis.

On 10-11 May 2012, Dr. Rym Ayadi was invited to the European Savings Banks Group in Marrakech to speak about the future of access to finance in the Mediterranean.

On 19 November 2012, Dr. Rym Ayadi gave a speech at the OECD-GMF high-level meeting in Naples.

On 23-24 November 2012, Dr. Rym Ayadi spoke at the FEMISE Annual Conference in Marrakech.

On 24-25 January 2013, Dr. Rym Ayadi gave a speech at the Final MIRA Conference in Marrakech.

On 18-19 February 2013, Dr. Rym Ayadi gave a speech at the ETC Final Conference in Tunis.
5. Exploitation of foreground and Follow-up of MEDPRO: The Euro-Mediterranean Economists Association (EMEA)

Description of EMEA
EMEA has been founded by the MEDPRO Coordinator and partners of the project with the ultimate goal to pursue MEDPRO’s willingness to contribute decisively to the transition process in the Southern and Eastern Mediterranean by providing state of the art scientific underpinning to the policy decisions to be taken at the EU and Southern Mediterranean levels.

EMEA Mission:
The wave of recent Arab uprisings has created new uncertainties and challenges in the Mediterranean region. A profound transition process of varying magnitudes is underway. Its outcome will be determined by the interaction between a number of political, socio-economic and geopolitical factors calling both on governments and external actors to redesign and implement new and specific strategies able to cope with the new realities unfolding in the region.

Aimed at contributing to an understanding of the changing realities in the region, the Euro Mediterranean Economists Association - EMEA brings together leading economists and high-level experts to think for the future of the Euro-Mediterranean. It serves as a leading forum for debate on the political and socio-economic reforms in the south and east Mediterranean with the aim of promoting sustainability and regional economic integration. It will strive to contribute to the rethinking of the Euro-Mediterranean policies in view of the new dynamics of a multi-polar world.

EMEA Goals:
- To monitor and to contribute to the reform processes in the political, economic and social agendas
- To identify trends, signals and analyze uncertainties and prospects
- To provide recommendations on the future of regional integration and Euro Mediterranean policies
- To disseminate new political and socio-economic thinking and views through a regular flow of publications and public events
- To develop a network of excellence of economists and high level experts in the Euro-Mediterranean region

EMEA Activities
- Develop an observatory of socio-economic reforms and prospects
- Develop a Euro Mediterranean Economic Council-EMEC

EMEA Publications:
- Edited volumes
- Policy papers
- White papers
- Commentaries
- Newsletters
- Roundtables
- Annual conference
Between month 1 and 3 of EMEA’s activity, the Association EMEA Founders and Senior Expert Members will develop an action plan defining the Association’s priorities and a strategy to widen the impact of MEDPRO’s research, widen it beyond the project’s initial endeavors and develop new activities.

**Plan for exploitation of foreground**

During EMEA’s first 3 months of operations, the Association will implement a two step dissemination strategy for MEDPRO outputs.

- First, policy papers written under the different work packages of MEDPRO will be re-labelled according to the EMEA’s visual layout, and will be sent to all contacts in the database compiled for MEDPRO’s dissemination. Policy papers will be distributed for several reasons. First, as the contacts are already aware of the research that has been undertaken within the project and are acquainted with its results, it will be now necessary to anchor EMEA’s identity and clearly state that the association indents to ensure the follow up of MEDPRO. In the meantime, the Association will expand its contacts database, to increase outreach.

- Second, as the database is expanded and EMEA’s identity is recognized, MEDPRO’s Reports will be put online and circulated. When relevant, the results and the ensuing recommendations will be updated with the latest data. As the data used in MEDPRO reports was the most up to date, it will be necessary to wait until new data are released by statistical offices to assess their relevance and the overall need to update the research.

After the completion of these two phases, EMEA Members will hold the first General Assembly to discuss the Association’s orientations and work programme to agree on a set of thematic working groups inspired by MEDPRO, their internal research tasks and outputs and their sequencing. Besides the activities that are yet to be agreed among members, the association will also organize public events targeting policy and decision makers as well as academics and the public at large. These will build on the results of MEDPRO research and will aim at enriching the debate on Euro-Mediterranean relations beyond the findings and implications of MEDPRO.