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EUROPEAN TRADE AND ASSISTANCE
POLICIES IN THE SOUTH MEDITERRANEAN
NEIGHBOURHOOD IN THE FIELDS OF
AGRICULTURE, WATER AND RURAL
DEVELOPMENT

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ABSTRACT

MEDRESET Work Package 5 (WP5) aims at evaluating the effectiveness and potential of EU trade and assistance policies in the area of agriculture and water (including trade liberalization, EU-funded agro-food and water projects and cooperation initiatives) in light of different bottom-up actors' interests, needs and expectations on both shores of the Mediterranean, with the purpose of identifying inclusive, responsive and flexible policy actions to reinvigorate Euro-Mediterranean relations. The paper first reviews challenges and opportunities of agriculture, food security and rural development in Southern and Eastern Mediterranean countries. It continues by outlining national development plans, past EU projects and prevalent perceptions among stakeholders. It then surveys related European assistance programmes, their synergies and policy agendas. Finally, it discusses the methodological approaches that have been chosen for the fieldwork in the four case studies of the MEDRESET project (Morocco, Tunisia, Egypt and Lebanon). It concludes by giving an overview of local stakeholders outlined in a separate, more comprehensive stakeholder map.

INTRODUCTION

Agriculture plays a pivotal role in the socio-economic development of countries of the Southern and Eastern Mediterranean (SEM). It is by far the largest water consumer of the arid region and agriculture still accounts for a considerable share of employment, if not of GDP. Employment that is often structured along class based and gendered lines. Agriculture, water and rural development are of great importance to the Euro-Mediterranean Partnership (EMP) process and related programme assistance such as the European Neighbourhood Instrument (ENI) and the European Neighbouring Programme for Agriculture and Rural Development (ENPARD). Challenges of rural and agricultural development in the region and perceptions of regional stakeholders vis-à-vis EU assistance and motivations are crucial for the success of such programmes.

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This background paper is part of the MEDRESET project, and specifically of WP5 on "Agriculture and Water", which aims at evaluating the effectiveness and potential of EU trade and assistance policies in the area of agriculture and water (including trade liberalization, EU-funded agro-food and water projects and cooperation initiatives). It does so by taking stock of different bottom-up actors' interests, needs and expectations on both shores of the Mediterranean, with the purpose of identifying inclusive, responsive and flexible policy actions to reinvigorate Euro-Mediterranean relations. Particular attention is being paid to the segmentation of the agricultural labour force and how these different segments (e.g. women, small-scale farmers) articulate themselves in the political process of gaining access to resources such as land.

The paper first reviews challenges and opportunities of agriculture, food security and rural development in SEM countries. It continues by outlining national development plans, past EU projects and prevalent perceptions among stakeholders. It then surveys related European assistance programmes, their synergies and policy agendas. Finally, it discusses the methodological approaches that have been chosen for the fieldwork in the four case studies of the MEDRESET project (Morocco, Tunisia, Egypt and Lebanon). It concludes by giving an overview of local stakeholders that have been outlined in a separate, more comprehensive stakeholder map.

1. THE CHALLENGE OF AGRICULTURE, FOOD SECURITY AND RURAL DEVELOPMENT IN THE SOUTHERN AND EASTERN MEDITERRANEAN (SEM)

1.1 SHORT OVERVIEW

Like elsewhere in the world, agriculture in the Southern and Eastern Mediterranean (SEM) countries has seen a relentless decline in GDP contribution and employment compared to industries and services. Agriculture's share of GDP now hovers in single digit territory and is only slightly higher in Egypt, Syria, Morocco, Algeria and Tunisia (see Table 1). However, its contribution to employment and livelihoods is more significant and it is by far the largest water consumer of the region. Its developmental and political importance is often overlooked and can only be properly understood against the backdrop of historical legacies, the agenda of local constituencies and environmental factors (Woertz 2017).

Besides environmental constraints of water and arable land, major challenges of agriculture in the SEM countries are the vulnerability of the rural population, which is unable to compete with larger operations due to low productivity and lack of market access (CIHEAM 2008), the lack of government support and its relative decrease (Santos and Ceccacci 2015), unemployment, especially among the rural youth (Cognac 2014), and poor and unsafe working conditions that often include a flexibilization of working arrangements along gendered lines that disadvantage women. While there are macro statistics on the size of farms, data quality on the gender composition of the agricultural labour force is spotty and so volatile over time that it raises questions about data reliability.² This makes qualitative field studies such as the ones of WP5

² The female share of the agricultural labour force MENA is 37 percent on average, in the statistics it varies from

of MEDRESET so important.

Table 1 | Share of agriculture, 2016: rural population, labour force, value added (%)

	Rural population (% of total population)	Labour force in agriculture (% of total labour force)	Agriculture, value added (% of GDP)
Algeria	29	30.9	13.2
Egypt	57	29.2	11.3
Israel	8	1.1	2.1
Jordan	16	2	4.2
Lebanon	12	NA	5.7
Libya	21	17 (2004)	1.9
Morocco	39	39.1 (2014)	13.1
Palestine - West Bank	25	11.5 (2013)	3.5 (2014)
Palestine - Gaza	25	5.2 (2015)	3.3
Syria	42	17 (2008)	19.5
Tunisia	33	14.8 (2014)	10.1
Turkey	26	18.4	6.1

Sources: Rural population: World Bank Data: *Rural Population*, <http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS>; Labour force and GDP: CIA, *The World Fact Book*, <https://www.cia.gov/library/publications/the-world-factbook>.

1.2 COLONIAL LEGACIES AND LAND REFORM

Although formally never colonies (with the exception of Algeria), the SEM countries were integrated in a European-dominated world economy in the 19th century in a typically colonial fashion. Quasi-colonial export trade of agricultural commodities like cotton, sugar, opium and silk led to a transformation of the land-tenure system from Ottoman tax farming to the establishment of private land ownership and a cadaster system (Issawi 1995, Owen 1993).

By the first half of the 20th century SEM countries like Egypt and Syria had one of the most unequal distributions of land ownership in the world. Absentee landlords and colonialism were perceived as impediments to development by revolutionary regimes. Turkey was the first to launch land reforms in the 1930s and 1940s. Revolutionary regimes in the Arab world followed suit in the 1950s and 1960s. They pushed for land reform, especially in Egypt, Syria and Iraq. The idea was to cultivate a political support base in the countryside, provide input factors to the nascent industrialization in the cities and to generate demand for its manufactured products (Waterbury 1983, Hinnebusch 1989, Batatu 1978). The power of large landlords under traditional regimes declined, but the landless and poor peasants saw only limited gains. What they gained was also fragile, as the reduced plot sizes that resulted from inheritance sapped their competitiveness. This particularly applied to women who tend to be disadvantaged in

virtually non-existent (e.g. Saudi Arabia, Israel) to around 60 percent (Morocco, Sudan) and more or less balanced (Iraq, Egypt). However, the figures gyrate wildly during different years. In Syria the share plummeted from over 80 percent in the early 1970s to less than 20 percent in 2010, which is hardly believable. For Lebanon no gender related data is available. See World Bank Data: *Employment in agriculture, female (% of female employment)*, <http://data.worldbank.org/indicator/SL.AGR.EMPL.FE.ZS>.

inheritance cases and whose share under Shari'a law is half that of men. It was mostly an upper middle segment of the peasantry that benefitted from such reforms, as it was able to increase its holdings and market access.

In countries with monarchical regimes (Jordan, Morocco) this push for land reform was much more limited (Nims 2005). In Morocco, as in Tunisia, it mostly focused on redistribution of former colonial estates (CIHEAM 2008). Lebanon also did not see meaningful land reform as its established channels of outward migration functioned as a social safety valve and its traditional ruling classes were able to maintain power (Askari et al. 1977). The partial privatization approach was mainly applied in Jordan and Lebanon; the state retained land ownership while beneficiaries were granted use rights (McIntyre et al. 2009: 49, see also Markou and Stavri 2005).

1.3 STRUCTURAL ADJUSTMENT AND EXPORT AGRICULTURE

By the 1970s many SEM countries faced balance-of-payment crises as their strategies of import-substituting industrialization were not successful. They only shifted import dependency from manufactured to intermediate goods. The agricultural sector was neglected as a result of urban bias and the oil boom. Insufficient extension services and inefficiency of cooperatives and state farms were common in places such as Algeria, Tunisia, Egypt and Iraq. Informal sector employment increased as the formal sector and the bureaucratic apparatuses failed to provide enough job opportunities. Cities faced increasing difficulties in absorbing rural migration flows. Starting in the 1980s, structural adjustment measures were implemented. Earlier land reforms were pushed back and the agricultural sector was liberalized under bureaucratic-authoritarian reform coalitions (Henry and Springborg 2010).

In the 1980s the Egyptian state began to dismantle an often-confusing mix of production taxation and consumer subsidies: cereals were taxed, while livestock production was protected. This had caused a shift of production into fruit, vegetable and fodder (birsim) that were free of government interference. Cereal self-sufficiency declined, which alarmed the government for strategic reasons. Liberalization policies were pushed further in the 1990s. By 1997 only four consumer items were still subsidized: coarse "baladi" bread, coarse "baladi" flour, edible oil, and sugar, while the government encouraged cereal production by paying procurement price at or above world market levels (Richards and Waterbury 2008, Adams 2003). Agricultural liberalization and promotion of export agriculture such as cotton and fruit was accompanied by changes in the land tenure system that contributed to increased inequality. In Egypt, Law 96 was fully implemented in 1997 and pushed back the land reforms of the Nasser era, damaging many smallholding farmers and reinforcing land concentration (Bush 2002 and 2014).

Syria's liberalization drive of the 1990s sought to cut domestic spending and mobilize international private capital (Hinnebusch 2012). In the 2000s these policies intensified. Regime cronies, urban clients and military-security networks were main beneficiaries, while rural areas faced neglect (Haddad 2012). The withdrawal of agricultural support schemes affected small-scale farmers and left them vulnerable to the epic drought between 2006 and 2010 (Kelley et al. 2015). Food insecurity and migration movements to cities in the west caused severe stress to the socio-economic fabric. The Syrian uprising of 2011 has been blamed on climate change in crude Malthusian terms, yet one needs to stress the increasing social polarization ahead of the drought and the inadequate reaction of the regime to the drought's impact (Châtel et al. 2014, Woertz 2014).

Morocco, Tunisia and Jordan have been the most prominent examples of structural adjustment policies in the SEM countries (El-Said and Harrigan 2014). This entailed a push towards export agriculture. Tunisia is a major exporter of olive oil, while Morocco now is the fifth largest exporter of strawberries in the world. Jordan is extremely water-scarce, but like Syria it has been an exporter of fruit and vegetables, most notably to Iraq and the Gulf countries (Alterman and Dziuban 2010).

Turkey is the most prominent example of an agricultural export economy. Price supports, input subsidies and marketing monopolies have been pushed back with privatization and removal of trade barriers. Turkey is the seventh largest agricultural economy of the world. It is the world's largest producer of hazelnuts, apricots, figs, cherries, quinces, raisins and poppy seeds. It also has considerable self-sufficiency in cereals and is the second largest global producer of melons, watermelons, strawberries and leeks, and the third largest of lentils, apples, cucumbers, green beans, green peppers, chestnuts and pistachios (Compés López et al. 2013, Atalaysun 2014).

Export agriculture has caused increased irrigation needs, often at the expense of traditional farming and small-scale farmers, who are not able to buy the necessary equipment and drill deeper into ever-decreasing water tables or lack political access. The role of capital, rich farmers and intermediaries was strengthened (Ayeb 2011, Alterman and Dziuban 2010). This raises the issue who benefits from agricultural development policies and how such policies might contribute to inequalities (see section 1.5).

1.4 ENVIRONMENT, WATER SCARCITY AND AGRICULTURAL PRODUCTION CHALLENGES

The fiscal reform impetus towards export agriculture and a strategic concern to maintain a degree of cereal self-sufficiency put pressure on scarce resources of water and arable land. The Mediterranean is one of the most water-scarce areas in the world, holding only 3 percent of the world's freshwater resources but more than 50 percent of the world's "water poor" populations, or around 180 million of the region's 460 million inhabitants (Châtel et al. 2014). The Middle East as a whole had already lost its ability to grow its food requirements from renewable water resources by the 1970s (Allan 2001). Land is largely allocated; the unused land bank is small. Soil quality struggles with salinity, erosion and salt-water intrusion close to coastal lands. Climate change is likely to exacerbate many of these issues and could increase the occurrence of drought (Vermeulen et al. 2012, Kelley et al. 2015, NOAA 2011).

Water scarcity is arguably the most pressing production challenge in SEM countries. It is estimated that by the end of this century, per capita freshwater availability will fall by more than 40 percent for some MENA countries (World Bank 2012: xiii). Agriculture accounts for roughly 80 percent of water withdrawals, with outliers above and below that level. In the countries of our four case studies it is around 80 percent in Tunisia (FAO Aquastat 2011), 86 percent in Egypt (FAO Aquastat 2010), 88 percent in Morocco (FAO Aquastat 2010) and 60 percent in Lebanon (FAO Aquastat 2005). Evapotranspiration through plants means that agricultural water withdrawal cannot be recycled like residential water supplies or used twice like the cooling water of power plants. Therefore the average share of agriculture in *consumptive* water use in SEM countries is even higher than 80 percent, at around 92 percent (Allan et al. 2015, Allan 2011, 2001).

Increased irrigation for the cultivation of fruit and vegetables, some of which are produced for export, and semi-irrigated cereal production and livestock needs have led to falling ground water tables (Voss et al. 2013). Massive depletion of aquifers is now an even more pressing issue than the contentious sharing of surface water in those countries that have sizable rivers, most notably the Nile valley and Mesopotamia (Alterman and Dziuban 2010, Waterbury 2002, Shamout and Lahn 2015). The Gulf countries and Israel have taken recourse to desalination for residential water supplies. However, this is only an option for richer countries and not economically and ecologically viable for the much larger water needs of agriculture (Dawoud 2007, Tal 2016).

Hence, agricultural production in the SEM countries cannot be substantially increased due to natural constraints. At best it can be stabilized at currently achieved levels with improved water management (e.g., irrigation efficiency, water harvesting) and rainfed farming. Food imports will continue to rise, as population growth will only level out after 2050. The "virtual water" that is embedded in these food imports and was used for their production elsewhere on the globe will need to make up for the water shortage in the SEM countries (Allan 2001). Reliance on such imports and their global value chains constitutes a strategic liability, but is unavoidable.

1.5 HETEROGENEITY OF THE PEASANTRY AND GENDER ISSUES

"Peasants defy categorization", John Waterbury argued in an introduction to a book about peasants in the Arab world (Waterbury 1991). The farming population in the SEM countries is as heterogeneous as anywhere in the world and ranges from sharecroppers to mid-sized farmers and large landowners. Generalizations about their socio-economic status and political attitudes can be misleading. There is no monolithic rural constituency and political activism in the countryside can be different from the cities. The participation of the SEM countries' farmers in political conflict has historically often taken the form of ethnic cum peasant protests rather than class-based conflict. Considerable traditional ties can exist between various strata of the rural population; at the same time there has been considerable dynamism. Land reform weakened the very large landowners that had presided over the export of colonial export crops such as cotton during the first food regime of the late 19th and early 20th century. The upper middle segments of the peasantry that benefitted most from the land reforms were sometimes able to capitalize on the globalization of fruit and vegetable trade that has been expanding during a third food regime since the 1980s (McMichael 2009). Women faced a disadvantage in this process. Because their access to land, capital and technology is more limited and also hampered by higher illiteracy rates, they often occupy the lower rungs of agricultural employment and value creation as well as their voices are marginalised in decision-making processes. One important aspect of MEDRESET and other future research is to find out whether and how distinct forms of political articulation have developed as a result of such gender differences.

As late as 1980 the share of the rural population was above 50 percent in many SEM countries;³ nowadays it is much smaller (see Table 1). Many jobs in the cities are better paying, even though they show the same qualification, wage and access gaps along gendered lines as rural

3 World Bank Data: *Rural Population*, <http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS>.

employment. Besides this pull factor, the dismantling of subsidy schemes for fuels and other input factors in the wake of structural adjustment policies has functioned as a push factor of rural migration. Extension services after land reform often have been insufficient to provide the kind of productivity enhancement that small-scale farming would require to farm profitably.

Rigid inheritance rules of Islamic law and population growth have contributed to dispersal of landholdings over generations and have hampered access of women to agricultural production factors. Small-scale farmers do not necessarily have the capital to scale up their operations, and infrastructure provision via cooperatives is often missing. Land sales by small-scale farmers have increased as a result of such pull and push factors, leading to land concentration in the hands of larger commercial farmers. A recent initiative in Egypt seeks to fight rural flight of smallholders by providing training, price support and input assistance (Farouk 2017). But it is not clear whether such measures are able to stem the tide of urbanization and scaling up of more concentrated agricultural operations. Some development economists have argued that this is a necessary and natural development step. Paul Collier even deplored a misguided "middle- and upper-class love affair with peasant agriculture", especially in Western academia (Collier 2008: 71). Others have in turn criticized such viewpoints for misjudging the productivity, environmental sustainability and considerable development potential of smaller farming operations (De Schutter 2010).

Besides stratification of the farming population according to land size and market orientation and the increased exposure of poor farmers and landless farm labourers to precarious working conditions, there is also a gender-based differentiation (Motzafi-Haller 2005, UNICEF 2011, Doumato and Posusney 2003). Within a household, male family members often handle market-orientated cash crop production, while women are confined to subsistence farming. As far as they participate in large-scale commercial agriculture, wages of women are considerably lower. On newly irrigated land of agro-businesses in Tunisia they typically range between 3–4 dollars per day, while male workers receive 5–6 dollars (Ayeb 2011). One important aspect of WP5 in MEDRESET is to illustrate such gendered wage differences in different countries, regions and sectors.

1.6 FOOD SECURITY ISSUES

Food import dependence is often perceived as a strategic vulnerability in SEM countries. As a result food self-sufficiency is sometimes equated with food security, yet the two are different (Woertz 2013, Harrigan 2014). Food import-dependent countries such as the UK, Italy or Singapore can be perfectly food secure, while the same time many food security issues in the SEM countries are not related to a lack of calories, but rather a lack of micronutrients (Breisinger et al. 2012). At the heart of the matter are unbalanced diets that are caused by lack of economic accessibility and bias towards wheat and sugar as a result of consumer subsidies. Poor dietary education, habits and choices and the rise of junk food are also among the contributing factors. Egypt has a 30 percent share of obese people, many of them poor, yet they are food insecure as they lack micronutrients like iron and vitamins.

Pregnant mothers and children are particularly affected by lack of micronutrients. The impact can be lasting. Stunting can be caused by nutritional deficiency in the womb and during the first 1,000 days after birth. The cognitive abilities and educational achievements of children can be affected for the rest of their lives (Ghattas 2012). Sudden price spikes and poverty

can put balanced and varied diets out of reach for poor people. As a solution they fall back on basic calorie-rich food, either permanently or as a temporary stopgap solution. Thus, the costs of food price volatility and inflation of food items are only insufficiently measured by their short-term impact on financial indicators and nutrition. They can have severe long-term developmental effects as they compromise the physical and mental abilities of children for life.

Still, the high dependence on cereal imports causes an increasing strain on the balance of payments for SEM countries (see Table 2). It can also be a matter of strategic concern in case of supply disruptions caused by war, sanctions or the export restrictions by agro-exporters that happened during the global food crisis of 2008.

Table 2 | Trade deficit in cereals for selected countries, ordered by 2011 US dollar value

	2002 (\$ million)	2011 (\$ million)	Share of cereal imports in total agrifood imports (average 2009–2011), %
Egypt	1,305	5,376	37
Morocco	707	1,938	34
Tunisia	426	847	33
Lebanon	113	350	11

Source: Santos and Ceccacci (2015: 46).

1.7 RURAL DEVELOPMENT BEYOND AGRICULTURE

The rural population and food producers who have no sources of income other than agriculture are most vulnerable to food insecurity in SEM countries (Zurayk 2011, Tohmé Tawk et al. 2014). Even in rural settings agriculture is only one source of household income. A government salary, a retail store, a job in tourism, a mine or a manufacturing plant can be equally if not more important for family income. Rural development goes beyond agriculture and measures to improve it need to go beyond agriculture as well.

In the postwar decades until the 1970s, rural development was largely identified with agriculture. Nowadays about half of rural incomes are of non-farm origin in Asia and Latin America. Agriculture itself has been transformed dramatically as well, with the globalization of agrifood systems. Subsistence farming has declined and the vertical coordination mechanisms of agribusiness supply chains have reduced the importance of spot markets (Berdegué et al. 2014). Via migration, commuting, remittances, new business relations and varying state penetration of the countryside, rural livelihoods are interlinked with urbanization and broader development (Saunders 2010). Some of them can be positive and provide extra income, while others can contribute to inequalities or undermine agricultural lifestyles via their environmental impact. Rather than thinking about the "rural" as an emptying space in the process of urbanization, one needs to highlight and conceptualize such interdependencies and integrate them in developing policies.

2. NATIONAL RESPONSES

2.1 IMPROVEMENT IN THE PERFORMANCE OF IRRIGATED AGRICULTURE AND SECURITY OF FOOD SUPPLY TO TOWNS

A major issue that agricultural policies have focused on is *improvement in the performance of irrigated agriculture and security of food supply to towns*. Tunisia adopted a “policy of mobilisation and rational management of water and hydro-agricultural improvements justified by the aridity of the climate and the irregularity of rainfall”. Accordingly, in order to conserve water and soil, several initiatives were instigated such as the

network of interconnected dams in the North of Tunisia [which] is intended to regulate water resources, and the water mobilisation strategy after 2010 [which was] based on the use of non-conventional water sources (drainage water, waste water, desalinated sea water). In Morocco, the national irrigation programme envisages a major hydro scheme to extend irrigation in several areas [...] and small and medium-sized schemes to extend irrigation in smaller areas as well as the refurbishing of traditional areas. The projects for exploiting land in *bour* (dry) zones are based on improved irrigation, equipment and basic services, agricultural development actions, etc. Under the programme, it is planned to implement 71 projects covering a total area of 1.1 million hectares. (CIHEAM 2008: 174)

Another policy has been “*improvement of land in arid and semi-arid zones and renewal programmes designed to increase employment and the incomes of farmers and rural communities by development (plantations, irrigation) and better farming methods*” (CIHEAM 2008: 174). In some countries, from Morocco to Egypt, programmes have been introduced

to combat the effects of drought and aridity. In the Maghreb, management of climate risk over the vast expanses of steppe and pasture rely on a combination of cereal crops and livestock, food supplements purchased from the sale of animals, resources drawn from emigration and agriculture using irrigation from pumps. (CIHEAM 2008: 174)

This last aspect has developed especially in countries such as Morocco and Tunisia. However, it is encountering serious limitations “due to the sometimes rapid depletion of the water sources (salinisation, fall in the water table)” (CIHEAM 2008: 174). Morocco has also strengthened research in agriculture.

Agricultural policies still suffer from insufficient financial resources and their unequal distribution. Resources targeted to agriculture “represent less than 10% of total public investment while contributing enormously to employment in many SEM [countries ...], to exports [...] and to wealth creation, as growth in GDP is closely linked to that of the agricultural sector (especially in Tunisia, Morocco and Egypt)”. Furthermore, “efforts advocated in strategic documents do not always lead to actions to match the high ambitions announced” (CIHEAM 2008: 175).

In terms of rural development, policies have focused on *combating poverty* through “specific rural equipment actions (education, literacy, health, drinking water supply programmes, rural electrification, connection to the drainage network, etc.) and improvement of the rural

environment". However, "the dynamic of the application of the various programmes varies considerably, and the results often fall short of the objectives set" (CIHEAM 2008: 178).

Part of rural development is also the *protection of natural resources*. "The economic and social fragility of rural areas is identified as one of the major causes of the degradation of natural resources. This degradation, sometimes irreversible, in turn imposes strict constraints on the economic and social development of rural communities" (CIHEAM 2008: 180).

Most SEM countries have introduced a legal and institutional framework targeting better management of resources and solutions to environmental and natural problems. This framework includes "action plans or programmes aimed at limiting the degradation of forests or integrating forests in the dynamic of rural development, programmes to improve roads, and national programmes to combat desertification (NPCD)" (CIHEAM 2008: 180).

In Tunisia, a National Action Plan to Combat Desertification (NAPCD) was adopted in 2000. The NAPCD was intended to

alleviate drought in arid, semi-arid and dry sub-arid areas, thanks to measures to protect resources and development based on improving productivity of land and conditions of life in the rural communities concerned. It involves an integrated and participatory approach, relying on partnership and cooperation between the authorities, local communities, farmers, professional organisations and NGOs. (CIHEAM 2008: 180)

2.2 NATIONAL DEVELOPMENT PLANS

"Medium- and long-term plans and strategies [...] aim at improving economic and social development starting from improvements in the agricultural sector", while simultaneously paying attention to "environmental sustainability and the related efficiency of domestic natural resources, rural poverty and food safety" (Santos and Ceccacci 2015: 39). In Morocco and Egypt, where agriculture still has a fundamental role in the economy, strategies cover all aspects related not only to the agriculture sector but also to rural development. In Tunisia, where agriculture's role in GDP has decreased, strategies pay more attention to specific issues related to the sector, "such as the use of natural resources (e.g., water scarcity, land depletion, etc.)" (Santos and Ceccacci 2015: 40). In **Egypt**, the Sustainable Agricultural Strategy 2030 was devised in 2009 with six main objectives: (1) manage natural resources more efficiently to ensure their sustainability by using water resourcefully in irrigated agriculture; (2) make land and water units more productive; (3) improve food security "with regard to strategic commodities"; (4) decrease the price of agriculture products to ensure a sustainable competitive advantage; (5) enhance economic conditions in order to attract investments in agriculture; and finally (6) create employment opportunities for rural youth especially (Santos and Ceccacci 2015: 40).

In addition, the strategy draws the attention to the need [to] improv[e] the institutional context, highlighting the importance of producers' associations for the better marketing of small-holder farmers production, making market information more freely available, enforcing laws and regulations on product standards, linking agricultural extension more closely to research and developing the private sector's role in providing extension services. (Santos and Ceccacci 2015: 40)

One of the objectives of the strategy is also to improve the livelihood of rural inhabitants, and this is achieved through a number of policies, the most notable of which is *strengthening the role of women in agricultural development*.

This includes (i) introducing continued and focused media campaigns to highlight role of women in the rural development process; (ii) merging all entities active in the field of rural women in one entity; (iii) providing educational, institutional and financial support to this entity to [enable] it to play its role in the implementation of the proposed policy; and (iv) introducing new concessional credit lines compatible with the economic conditions of rural women, and facilitating group lending procedures, through women's associations active in economic projects. (Egypt 2009: 32)

The strategy justifies this policy by many reasons:

(i) the majority of rural women do not have legal or fixed assets that would enable them to effectively carry out their roles in rural development; (ii) the dominance of poverty, illiteracy and unemployment prevails among rural women; (iii) women have diverse responsibilities in the absence of a high percentage of their spouses to earn off-farm income, this calls for enabling women to appropriately carry out their responsibilities and provide them with an enabling environment; and (iv) the presence of many entities active in the fields related to rural women in the MALR [Ministry of Agriculture and Land Reclamation], with no effective coordination, a fact that reduces the effects of the administrative and technical effects of these units. [The objectives of this policy are to] (i) increas[e] women's capability to endure natural disasters; (ii) improv[e] investment climate of agricultural activities for women; and (iii) establis[h] a more appropriate climate for contractual farming for women. (Egypt 2009: 117-118)

In 2008, **Morocco** adopted the "Plan Maroc Vert" (PMV) or Green Morocco Plan. The aim is to reduce poverty and to improve the competitiveness of Moroccan agriculture. It is expected to contribute 15.6 billion euros (174 billion dirhams) to the country's GDP. It intends to create 1.15 million jobs by 2020 and triple the income of nearly 3 million people in rural areas (Compés López et al. 2013: 7). The strategy is "to lead and reform the agricultural sector, promote the integration of agriculture into international markets and help agriculture achieve sustainable growth. Most importantly, the PMV recognizes that the agrifood sector is of critical importance for the socio-economic development of the country. The PMV relies on two pillars". The first focuses on developing "productive farming systems and agro-industries" through an integrated value chain model (including improved farmer linkages)" that focuses on products in which the country "can be competitive internationally (olives, fruits and vegetables) while simultaneously seeking to improve cereal productivity". Pillar two promotes "poverty reduction in rural areas through increasing incomes of small-scale agriculture" in disadvantaged areas. Structural reforms in the Plan target "land tenure policy, water policy and development of regional agro-tech platforms". They also focus on institutions and governance. (Santos and Ceccacci 2015: 40-41)

The recent strategic plans of **Tunisia** focus on the development of [...] agro-food industries [...] rather than primary agricultural production. In addition, its development strategy "Stratégie de Développement Economique et Social 2012-2016" highlights the sustainable use of soil and water, while recognizing the special role of agriculture in

the development of certain regions. The most recent 11th five-year plan for agricultural policy (2010–2014) was based on four main pillars: (i) the consolidation of food security as a national sovereignty vector, (ii) improving the competitiveness of the sector, (iii) the promotion of exports as an engine of growth and (iv) the promotion of natural resources as a fundamental basis for sustainable agricultural development. (Santos and Ceccacci 2015: 42)

In **Lebanon**, a strategy for the years 2015–2019 was formulated by the Ministry of Agriculture (MoA) using a participatory approach in strategic planning under the framework of the EU-funded Agriculture and Rural Development Programme (ARDP). The strategy is expected to address agricultural challenges, enhance food safety and improve the contribution of the sector to the national GDP to 3 billion dollars by 2019 (ARDP 2015). The general objective is “to develop the institutional capacities and increase preparedness” of the MoA in order to “overcome [the] challenges in the agricultural sector and respond to crises [...] through partnerships and collaboration among relevant stakeholders”. The specific objectives are three-fold: “(i) to provide safe and quality food; (ii) to improve the contribution of agriculture to the economic and social development of the country; [and] (iii) to promote the sustainable management of natural and genetic resources”. (Lebanon 2014: 8)

In addition to the MoA strategy, the Lebanese Crisis Response Plan (LCRP) 2015–2016 has provided support to the agriculture sector, especially in terms of food security.

The Food Security Strategic Response Plan 2016 aims to improve food security and increase resilience of the agriculture sector and related activities in response to the current food security situation in Lebanon. It considers four main outcomes [...]: (i) improve food availability through in-kind food assistance and development of sustainable value chains; (ii) improve food accessibility through food assistance and agricultural livelihoods; (iii) improve food safety and nutrition practices through promotion of consumption of diversified and quality food; and (iv) enhance information on food security and support institutions. (FAO 2016)

3. EU POLICIES TOWARD AGRICULTURE IN THE SEM REGION

3.1 OVERVIEW OF EURO-MEDITERRANEAN AGRICULTURAL POLICIES

With the launch of the Euro-Mediterranean Partnership or Barcelona Process in 1995, EU cooperation with countries in the Middle East and North Africa (MENA) has become closer. This also includes agricultural cooperation and trade liberalization. Agriculture was largely exempt from trade liberalization in the post-war decades. It was only included in the Uruguay Round of the GATT (General Agreement on Tariffs and Trade) (1986–94) that led to the establishment of the World Trade Organization (WTO) in 1995. The politics around such trade liberalization have been contentious. The EU and the USA with their large grain–livestock complexes have pushed for the abolition of tariffs in developing countries, while being reluctant to cut price stabilization and support schemes for their own farmers. There has been a shift from protectionism, export promotion and price stabilization to direct aid to farmers, in the US since the late 1990s and in the EU since the reform of the Common Agricultural Policy (CAP) in 2003. Still, considerable support schemes remain in place (Winders 2011, Andrews et al. 2004).

The emerging agro-exporters of the Cairns group (e.g., Brazil, Argentina, Thailand, Canada, Australia, South Africa) have criticized the EU and the US for unfair competition. They equally seek to expand their market share. Meanwhile China and India with their large populations are anxious to maintain self-sufficiency for strategic reasons, and marginalized countries in the developing world fear for the livelihood of their rural populations while exploring export niches in developed countries (Weis 2007, Margulis 2017, Narlikar 2003).

Trade liberalization is a key aspect of the Barcelona Process. The Euro-Mediterranean Partnership (EMP) aims at establishing a Euro-Mediterranean Free Trade Area (EMFTA). With the development of the European Neighbourhood Policy (ENP)⁴ in the wake of the EU enlargement of 2004 and the establishment of the Union for the Mediterranean (UfM) in 2008, such efforts have intensified. In 2011 the Council authorized the Commission to enter negotiations with Egypt, Jordan, Morocco and Tunisia about Deep and Comprehensive Free Trade Areas (DCFTAs) that would go beyond mere trade liberalization and would also cover regulatory issues relevant to trade such as investment protection and public procurement. Institutional adaptation to EU rules, such as the CAP and food safety standards, is a crucial aspect of this process. South-South trade liberalization is also part of the process towards the EMFTA and is encouraged by the EU, such as the Agadir Economic Agreement of 2004 between Morocco, Tunisia, Jordan and Egypt or bilateral FTAs between Turkey and several MENA states (Compés López et al. 2013: 6).

The Southern and Eastern Mediterranean countries (minus Libya and Palestine) maintained a 5.5 percent share of global agricultural production between 1994 and 2007. Turkey, Egypt, Morocco, Algeria and Syria made up the large majority of this share with 91 percent. Turkey alone accounted for 39 percent. The SEM is one of the top ten agricultural producers globally (Belghazi 2013). There are winners and losers of agricultural trade liberalization. Positive outcomes require compromises, adaptation measures and transfers of some of the net gains to the losers of trade liberalization. Currently countries of the Euro-Mediterranean Partnership have duty free access to the EU for manufactured goods, but only preferential treatment for their exports of agricultural, processed agricultural and fisheries products. More than 80 percent of their agricultural exports enjoy duty reduction and even exemption in some cases. In turn about a third of EU agricultural exports enjoy preferential treatment in EMP countries.

SEM countries are the biggest cereal importers of the world; only Turkey and Syria have substantial self-sufficiency ratios. Egypt, for example, is the largest wheat importer globally. Such dependency is perceived as a strategic vulnerability for food security in many EMP countries (Woertz 2013, Harrigan 2014). Agricultural exports of the EMP countries focus on fruit and vegetables and in some cases livestock. While farmers in Mediterranean countries of the EU (Spain, Portugal, Italy, Greece, France) are worried about competition in fruit, vegetables, olive oil and wine, farmers in the South are worried about the influx of cheap grain and meat products from the EU in protected domestic markets, and fear that their remunerative export business in fruit and vegetables could be hampered by EU regulations and food safety standards. Competitiveness has moved from cost competitiveness on a firm level to effectiveness of transboundary value chains, which is necessary to assure that exportable

4 See the EEAS website: *European Neighbourhood Policy (ENP)*, https://eeas.europa.eu/topics/european-neighbourhood-policy-enp_en.

products are competitive in terms of quality (SUSTAINMED 2013). Apart from Turkey, the EU has a surplus in the agricultural trade balance with all EMP countries. The surplus increased between 2006 and 2011 as exports almost doubled while imports from Southern EMP countries flat lined. This signals increased EU competitiveness and the need for adjustment assistance to Southern EMP countries. There are also concerns about the non-inclusion of environmental issues and labour rights and loss of culinary traditions, such as the Mediterranean diet (Compés López et al. 2013: 11).

The EU offers financial assistance to countries within the European Neighbourhood, an assistance that comes with conditionality tied to government and economic reform. To this end the EU and the target country usually agree on an Action Plan.⁵ The MEDA I and II programmes lasted from 1995–1999 and 2000–2006.⁶ They were followed by the European Neighbourhood and Partnership Instrument (ENPI) that was in force between 2007 and 2013 with a budget of 11.2 billion euros. It was replaced by the European Neighbourhood Instrument (ENI) that came into force in 2014 with a budget of 15.4 billion euros over the period 2014–2020. Funds are managed and allocated by the DG Development and Cooperation – EuropeAid. Additionally there are the lending activities of the European Investment Bank (EIB) in the fields of agriculture, food and rural development.⁷ Morocco has been the largest beneficiary of funding under the European Neighbourhood Policy with 654 million euros (in 2007–2010) and 580 million euros that were earmarked for the period 2011 to 2013 (Compés López et al. 2013: 16).

Countries that are part of the current EU enlargement, such as Turkey, are not part of the ENP and its assistance programme. Turkey applied for EU accession in 1987, entered a customs union in 1995 and became a candidate for accession in 1999, which has been negotiated inconclusively since 2005. As such it has access to the Instrument for Pre-Accession Assistance (IPA), its sub-programme for rural development (IPARD) and the Instrument for Structural Policies for Pre-Accession (ISPA). It can also participate in the FP European innovation and research funding and the Agricultural Research for Development (ERA-ARD) on equal footing with European partners.

Past European programme experiences in different geographic areas could be made viable in a Euro-Mediterranean context. In 1985 the European Economic Community used the Integrated Mediterranean Programmes (IMP) to prepare farmers in Greece, Southern Italy and France for the EU accession of Spain and Portugal (Compés López et al. 2013: 18). Similar adjustment assistance could be offered to farmers of the EU Mediterranean in anticipation of improved market access of farmers from the South. The Agenda 2000 reforms of the CAP elevated rural development and made it a second pillar alongside production support. In terms of rural

5 For Egypt agriculture appears as one of the main sections of economic development in its Action Plan: see European Commission (2016b: 12). For Lebanon the aspect of job creation is stressed: see European Commission (2007: 11). For Morocco see European Commission (2013: 38). For Tunisia see European Commission (2005).

Agriculture and agricultural products are mentioned in the document, but there is no particular section related to it. Agriculture is mentioned in the sectors of health, law, new partnerships and sustainable development. This indicates the lack of a European agenda dedicated to the improvement of the agricultural sector in the country.

6 See EUR-Lex (2007) and the EMWIS website: The MEDA Programme, <http://www.emwis.org/overview/fol101997/fol221357>.

7 See the EIB website: *Agriculture, Food and Rural Development*, <http://www.eib.org/projects/sectors/agriculture>; and *Projects Financed: Agriculture, Fisheries, Forestry: Egypt*, <http://www.eib.org/projects/loan/list/?from=®ion=5§or=6000&to=&country=EG>.

development the EU has experience with its LEADER programme for rural development in Europe, which was launched in 1991 to support projects for the revitalization of rural areas and job creation that were initiated at the local level.⁸ Similarly it provided such programmes for Central and Eastern Europe via the Special Accession Programme for Agricultural and Rural Development (SAPARD) until 2007 and afterwards via the IPA.

Scientific cooperation projects that were funded by the EU under the Framework Programmes 5–7 have also specifically targeted agricultural production and trade in the Mediterranean, such as Sustainable Agri-Food Systems and Rural Development in the Mediterranean Countries (SUSTAINMED, FP–KBBE-2009-3,⁹ also EUMED AGPOL and MEDFROL). Projects encompass trade liberalization, best practices and technology of agricultural production, water and irrigation projects and rural livelihood strategies.

Besides these programmes at the EU level, there are assistance and development cooperation programmes on the national level of EU Member States, such as the Italian Development Cooperation, the Spanish Agency for International Development Cooperation (AECID), the German GIZ, the Swedish Development Cooperation Agency (SIDA), the British Department for International Development (DFID) and the French Development Agency (AFD).¹⁰

European development cooperation plays out in cooperation with international organizations such as the FAO, the World Bank, the World Food Programme (WFP) and the International Fund for Agricultural Development (IFAD). There are also other powerful national and international development actors that can be in a complementary, but also competing role with the EU. These include USAID, Iranian organizations such as the Organization for Investment Economic and Technical Assistance (OIETA), the Islamic Development Bank (IsDB) in Jeddah, and development funds of the Arab Gulf States, such as the Kuwait-based Arab Fund for Economic and Social Development (AFESD), the Kuwait Fund for Arab Economic Development (KFAED), the Saudi Fund for Development (SFD) and the Abu Dhabi Fund for Development (ADFD). The Gulf funds mostly spend between 15 and 18 percent of their budget on agricultural projects (World Bank 2010). This is similar to the USAID, which spent 11 percent on agriculture and food security and another 2 percent on nutrition in 2013 globally. Yet in the EMP countries, its spending on agricultural projects has been more limited. In Egypt, one of its largest recipient countries in the region, funding only amounted to 9.2 million dollars in 2015. In all other EMP countries, agriculture does not even figure as a separate statistical item in the USAID reporting.¹¹ While some institutions such as USAID, IFAD and the Islamic Development bank have bespoke programs to advance gender equality, this topic does not rank prominently among the Gulf development funds.

8 See the website of the European Network for Rural Development (ENRD): *LEADER/CLLD*, http://enrd.ec.europa.eu/leader-clld_en.

9 See the SUSTAINMED project website: <https://sustainmed.iamm.fr>.

10 For their respective websites see: <http://www.cooperazioneallosviluppo.esteri.it/pdgcgs>; <http://www.aecid.es/EN>; <https://www.giz.de/en>; <http://www.sida.se>; <https://www.gov.uk/government/organisations/department-for-international-development>; <http://www.afd.fr/en>.

11 See the USAID database: <https://explorer.usaid.gov>.

3.2 EUROPEAN POLICY RATIONALES: RURAL DEVELOPMENT, SUSTAINABILITY AND POLITICAL STABILITY

Trade agreements and development cooperation do not happen in a socio-economic and political vacuum. In the wake of the Arab Spring the EU has seen the need to undertake a thorough and deep revision of the ENP that goes beyond trade issues and focuses on the “stabilisation of the region, in political, economic, and security related terms”.¹² Interlinkages between development, security and political stability are highlighted. Job creation for the burgeoning youth population is seen as an urgent priority. Agricultural livelihoods and rural development play a central role in the revised ENP:

Agriculture is a major source of jobs in many partner countries and the EU should continue to support sustainable and inclusive policies and investment in modernisation of the sector, and diversification to other income creating activities in rural areas where necessary. The EU will support a resource-efficient economy by addressing environmental challenges such as degradation of and competition for natural resources. Similarly, the EU should also contribute to developing maritime economies, while working together towards a common vision for the sustainable use of shared seas (European Commission 2015: 9).

The MEDA programme only allocated a fraction of its funds to rural development projects. The European Neighbouring Programme for Agriculture and Rural Development (ENPARD), which runs from 2014 to 2020, is a cornerstone of this revised ENP strategy. It builds on debates in academic and policy circles that see agriculture as part of broader rural development. This includes non-agricultural sectors such as tourism or manufacturing as well as areas of agricultural production that have received less attention compared to irrigated cash crop production, such as sustainable management of rangelands, rural governance issues and preservation of culinary traditions such as the Mediterranean diet (CIHEAM 2009 and 2012, Chatterton and Chatterton 1996).

ENPARD encompasses two axes: the first axis consists of improved Agricultural Productivity, Market Efficiency and Food Safety and Quality Standards, while the second focuses on rural development, including economic diversification and infrastructure support. Its focus areas include youth and women, governance of rural territories, good agricultural practices, extension and training, production chain organization and marketing of rural and agricultural products.¹³ It also has a horizontal capacity-building support aspect that relies on expertise of the member countries, such as Twinning between public administrations of EU Member States and of beneficiaries of partner countries or the Technical Assistance and Information Exchange Instrument (TAIEX).¹⁴ Hence, agricultural and rural development are part and parcel of the EU's foreign policies and its bilateral relations.¹⁵ Beyond specific humanitarian and developmental

12 See the European Commission website: *European Neighbourhood Policy*, https://ec.europa.eu/neighbourhood-enlargement/neighbourhood/overview_en.

13 See the ENPARD website: <http://www.enpardmed.org>. For projects in Georgia and Armenia see EEAS (2016b) and the ENPARD Georgia website: <http://enpard.ge/en>.

14 For TAIEX and enlargement tenders, see the European Commission website: *TAIEX*, https://ec.europa.eu/neighbourhood-enlargement/tenders/taiex_en.

15 For an overview of these bilateral relations, see the European Commission website: *Agriculture and Rural Development: Bilateral Relations*, https://ec.europa.eu/agriculture/bilateral-relations_en.

food security policies, it has been argued that the EU's food diplomacy should be better embedded in a clear strategic framework that takes broader implications into consideration, such as sustainability, climate change and security policies. The European External Action Service could play a leading role in coordinating such food diplomacy (Fattibene 2016).

Given the importance of the Common Agricultural Policy (CAP) in the history of the European Union and its budgetary spending, it is surprising that agriculture has not played a more prominent role in the EMP. Future scenarios for agricultural cooperation in the EMP oscillate between the poles of a more inward-looking agricultural sector that seeks to protect domestic producers and a unified Mediterranean region acting as a global player. While the inward-looking scenario would result in modest employment gains, it would reduce revenues and productivity growth and increase trade deficits (Belghazi 2013). The global player scenario would open avenues for transboundary cooperation within the EMP, for example between Moroccan and European growers for tomatoes; Moroccan, Turkish and European growers for citrus fruits; and Tunisian, Moroccan and European growers for olive oil (Compés López et al. 2013: 19).

3.3 EU PROJECTS IN THE FOUR CASE STUDIES

In **Lebanon**, the EU is considered a major donor. One of the foremost projects in the agriculture sector is the abovementioned Agriculture and Rural Development Programme (ARDP),¹⁶ which was supported by the EU through the ENPI. The implementation period was from 2011 to 2015, with a total budget of 14 million euros (ARDP 2015).

Under ARDP, the EU proposed a Credit Guarantee scheme for Agricultural and Rural Development (CARD), the purpose of which is to increase access to credit for small-scale farmers and agricultural cooperatives. It is worth noting that the Programme does not make any specific reference to women farmers. In addition, EU and Kafalat, a Lebanese financial company, co-financed a Small Agriculture Credit (SAC) endeavour, which guarantees loans to finance all types of farming and agricultural activities, including fixed assets and working capital needs. Another product is the Trees Credit (TC), which guarantees loans to finance fruit tree growing activities. The EU Delegation, MoA and the Green Plan also signed a grant contract for the construction of eight medium-sized hill lakes and for providing help to farmers and cooperatives to manage irrigation networks and to adequately use modern irrigation systems. This action is expected to contribute to the improvement of the livelihoods and income of farm households by increasing the quantity and quality of their agricultural production.

In the water and wastewater sectors, the EU is currently financing infrastructure projects worth 80 million euros, mainly in the Bekaa valley and Northern Lebanon. In addition, the EU continues to accompany the Ministry of Energy and Water and the Water Establishments through the SISSAF Programme (Support Programme for Infrastructure Sector Strategies and Alternative Financing) totalling 9 million euros.¹⁷

16 For details on the programme, see EEAS (2016a).

17 See the official website: <http://sissaf-lebanon.eu>.

Some water projects focus on improving access to drinking water, not only for the Lebanese, but also for Syrian refugees, in Northern Lebanon (El Fouar and Bekaa Valley) and in areas such as Kfarfila, Kfarroummane, and Mayfadoun, Nabatiyeh, as well as in several villages in Akkar. One of these projects concerned improving access to water and sanitation services to Lebanese and Syrians in the Bekaa Valley, and this is one of the only water projects that involved women as active participants in its activities. Among these activities, it organizes focus groups with different actors from the community, which include activists, women, and youth, in order to discuss water and wastewater problems and their suggested solutions, cost recovery problem and service responsibility.¹⁸

Other projects concern water infrastructure rehabilitation, upgrading water supply networks, and management of water resources, mainly in Akkar and Bekaa and South Lebanon (Districts of Bent Jbeil and Marjayoun). The aim of these projects is to improve the living conditions of rural communities, especially those affected by the Syrian crisis, by mitigating the risk of mortality and morbidity related to water, sanitation and hygiene through the provision safe water, sanitation facilities and hygiene services. Furthermore, these projects aim to improve the efficiency and safety of water distribution networks.

In **Tunisia**, the EU programme to support public policies for the management of water resources for rural and agricultural development (2011–2015) is endowed with 57 million euros, presented in the Environment chapter of the National Institute of Statistics (NIS) Statistical Yearbook. In addition, EU cooperation is part of the framework of the ENPARD initiative. A highlight of 2013 was a public policy dialogue at the regional level, conducted by the Mediterranean Agronomic Institute of Montpellier (Institut Agronomique Méditerranéen de Montpellier, IAMM), a member of CIHEAM. With a first donation of 10 million euros, pilot actions were financed that pursued inclusive development processes on a sample of territories representative of Tunisian diversity. They were based on:

- the sustainable exploitation of the potentials of the territories by diversifying and integrating agricultural and non-agricultural activities and by developing more territorialized and better connected channels to markets;
- better coordination of sectoral interventions for the benefit of the territories; and
- the full empowerment of people, professionals and their organizations on the future of their territories, in particular by supporting their organization and building their capacity.

The Committee of Permanent Representatives of the EU (Coreper) adopted a new Mediterranean Research and Innovation Partnership (PRIMA), an initiative to help develop projects in the water and agro-food sectors in the Mediterranean region (Council of the European Union 2017). **Morocco**, like other countries such as Egypt, Jordan and Lebanon, will be linked to the European Union through bilateral agreements signed separately with the EU and laying down the conditions controlling the countries' participation in Prima.

Between 2002 and 2007, the Moroccan Department of Agriculture conducted nearly 70 national and regional projects with financial support from foreign partners. In addition, there are other large-scale programmes, particularly with the EU and European partners, involving

¹⁸ For more information, see the Together for Water website: *Improving Access to Water and Sanitation Services in Hosting Communities Affected by the Syrian Crisis in the North Bekaa Valley*, <https://shar.es/1V7VOs>.

several projects and actions. Sixty percent of these projects have received financial assistance in the form of grants or loans.

Morocco has benefited since 2008 from an “advanced status” of neighbourhood with the Union. One of the major EU projects in the agriculture sector is a programme to support the Plan Maroc Vert, amounting to 60 million euros and taking place between 2014 and 2018. In the rural development sector, an integrated development programme in the Northern Region amounting to 19 million euros was introduced for the period from 2012 to 2018. The objective of this programme is to improve the living conditions and incomes of the rural populations of the Northern region of Morocco (Al Hoceima) through territorial rehabilitation, economic diversification, social development and capacity building.

In **Egypt**, the EU strives to promote Good Agricultural Practices (GAP). In 2015, European and Egyptian partners held a workshop on GAP in Dry-Land Areas in the governorate of Marsa Matrouh. The EU allocated 21,895,000 euros for this project that will be implemented by the Italian Development Cooperation in three governorates: Matruh, Fayoum and Minia. The aim of this initiative in Matrouh is to increase sustainable agricultural production through the adoption of GAPs, and to boost the quality and quantity of the main crops and of the livestock sector in the areas between Foka and Saloom (EU Delegation to Egypt 2015).

The EU has also funded projects in the water sector. One such project is the Improved Water and Wastewater Services Programme (IWSP) launched in 2008.¹⁹ It involves rehabilitation and expansion of existing water and wastewater treatment plants and sewer networks in some of the most deprived areas. The overall budget is 295 million euros, of which the EU contribution is 34 million (as a grant). The project will provide water to an additional 533 thousand inhabitants in four governorates (Gharbia, Sharkia, Dameitta and Beheira) and improve water and wastewater services to 3 million inhabitants. The programme has undertaken another phase to increase the coverage to four additional governorates: Qnea, Sohag, Assuit and Minya. The budget is 303 million euros, of which the EU contribution is 23 million, again as a grant. The initiative, however, lacks any gender sensitive perspective.

Another project is the Water Sector Reform Programme,²⁰ which is in two phases. The first phase included a total grant of 80 million euros and the second included an additional grant of 120 million euros. The project started in 2011 and will end in 2019. Its objectives are to improve the management of water resources, both in terms of financial and operational management, in order to ensure the supply of drinking water to the population, while balancing conflicting needs of industry, agriculture and other water uses. Like in the above-mentioned initiatives, there is no attempt at adopting a gender sensitive perspective.

19 For further details, see the European Commission website: *Improved Water and Wastewater Services Programme Upper Egypt (IWSP)*, <http://europa.eu/!uh73cj>.

20 See EEAS (2016c) and European Commission (2016a).

4. METHODOLOGY

4.1 ACTORS, POLICY ISSUES AND INSTRUMENTS

The literature has suffered from the lack of a critical assessment of EU policies and projects from the perspective of people's welfare and the needs of local economies, including a gender sensitive perspective. Work Package 5 aims to fill this gap and to expand the target audience of the EU by interviewing a variety of stakeholders, including those actors who have been excluded by EU interventions and Euro-Med dialogue, in the field of agriculture and water. WP5 will ask for their perspectives on the sectors in their countries, local and EU policies regarding these sectors, and EU interventions in these sectors. This WP will provide a critical, local-sensitive assessment also by highlighting policy impacts from the perspective of people's welfare and the needs of local economies in relation to the relevant challenges highlighted above, including employment, water, environment, food security, small farmers' production and so on. This WP will also reflect male and female perspectives, which are likely to differ. Research results will also be evaluated from a gender perspective.

Fieldwork will be done in three countries only: Lebanon, Tunisia and Morocco. Fieldwork will not be carried out in Egypt, as Cairo University was not granted permission to collect data. The study will target representatives of civil society, such as trade unions, human rights groups, youth groups and so on. This sample can also include officials, elected representatives, members of government and diplomats, depending on the institutional and political architecture of each policy field, but the latter group should not represent more than one third of the entire sample. In addition, the sample can include: Producer Associations (farmers-based associations, cooperatives and societies); supranational (such as the EU), national (such as Ministries of Agriculture, Environment and Water) and regional public bodies (e.g., IFAD, FAO, USAID, UNDP); NGOs (e.g., organizations supporting the agriculture sector through agricultural development activities and projects); research centres; the private sector (e.g., small companies and shops, water companies, companies specializing in producing and selling pesticides); syndicates (e.g., syndicates of food industrialists, traders, labourers, and importers and exporters of agricultural and agro-food products) and so on.

An approximate number of stakeholders to be interviewed could be 30, of which at least 20 should be from bottom-up groups. Particular attention will be given to ensuring a heterogeneous sample, including those actors who have been excluded by EU interventions and Euro-Mediterranean dialogue as well as those with credible claims to "grassroots" representation. After the first round of fieldwork in the case study countries, there will be consultations with EU stakeholders (e.g., lobbies, CSOs or networks supported by the EU) on their views of EMP agricultural policies, in which the preliminary results of the stakeholders interviewed in the three country case studies will be used.

4.2 RESEARCH TECHNIQUES

EU policies have frequently been characterized as monologues that have marginalized the perspective of the other. The literature has repeated this trend. The key concepts with which the Mediterranean region has been studied have relied on Western international relations and comparative politics, which have not spoken to local perspectives and perceptions (Feraboli

2014). This trend has been cemented by the lack of engagement with the related literature that has emerged in MENA. Thus, what is missing is a more reflexive methodology that identifies alternatives to prevailing structures (Hopf 1998). Moreover, while there is a growing literature on external perceptions of EU foreign policy in Asian countries (Chaban et al. 2013), very little is yet known about the perspectives of Southern Mediterranean countries themselves vis-à-vis European policies and the European role in the region (Bayoumi 2007, Krüger and Ratka 2014). In addition, available surveys are either focused on the elite level, or look at perceptions at the citizen level through quantitative methods. Thus, perception analyses are currently missing more *qualitative* assessment of perceptions of the EU, EU policies and the region itself, on the top-down and bottom-up level, including not only the Mediterranean tier states, but also the broader region. In light of this, MEDRESET will rely on a multi-method approach merging different methodologies and sources, as shown below.

Literature review. The academic and grey literature which has emerged in the Middle East and North Africa (in Arabic) and in Europe will be reviewed to critically examine the impact of different EU policies in the agriculture and water sectors from the perspective of people's welfare and local economic needs (e.g., job creation, decent employment opportunities, local production, marginalized regions versus wealthy regions and so on).

Content analysis. Content analysis will be applied on public documents produced by the relevant stakeholders involved in agriculture and water (e.g., local governments and bottom-up groups). These documents include, but are not limited to: policies and national strategies and plans published by stakeholders, such as ministries; reports and progress reports on the work, initiatives and projects done by the stakeholders in the agriculture and water sectors; and studies and assessments (e.g. research papers) that are relevant to these sectors and that highlight the problems and possible action plans.

Recursive multi-stakeholder consultations. MEDRESET will make extensive use of a qualitative methodology based on semi-structured interviews. Work Package 5 will pursue Recursive Multi-Stakeholder Consultations (RMSC), an innovative methodology which will allow us to reverse the ordinary approach whereby perceptions and priorities of Southern shore partners are included in the picture only marginally and/or a posteriori. In MEDRESET, by contrast, EU-level stakeholders are invited to react and position themselves with reference to structured inputs coming from Mediterranean partners. This reversal represents an innovative approach capable of generating fresh policy perspectives (for further details, see the Guidelines).

Quantitative and qualitative assessment of selected EU-funded agro-food and water projects in terms of equity and efficiency. The research will seek to answer two central questions. Regarding equity: Have EU-funded development projects been allocated equitably across regions and actors (i.e., the most deprived region receiving the most funds? The needy and small farmers, in addition to women farmers, being targeted?); and, were these projects associated with generating good quality jobs? Regarding efficiency: Has there been a positive linkage between EU development assistance and national and regional agro-food development and water availability? To this end, in addition to desk reviews, WP5 will conduct semi-structured interviews and focus groups with the local stakeholders involved in the projects (from EU funding-body representatives to local authorities and civil society organizations at the receiving end), as well as field visits. An empirical model will be developed around the determinants of foreign development assistance through regression analysis in

order to explore whether the allocation of EU-funded projects was driven by equity, efficiency or political considerations. The main data sources will include Official Development Assistance (ODA) recorded in OECD-DAC, data from local agencies, and the qualitative information collected through interviews and focus groups.

REFERENCES

- Adams, Richard H. (2003), "The Political Economy and Distributional Impact of the Egyptian Food Subsidy System", in Hans Lofgren, ed., *Food, Agriculture, and Economic Policy in the Middle East and North Africa*, Amsterdam and New York, JAI Press, p. 105-132
- Allan, Tony (2001), *The Middle East Water Question. Hydropolitics and the Global Economy*, London and New York, I.B. Tauris
- Allan, Tony (2011), *Virtual Water. Tackling the Threat to Our Planet's Most Precious Resource*, London, I.B. Tauris
- Allan, Tony, Martin Keulertz and Eckart Woertz (2015), "The Water–Food–Energy Nexus: An Introduction to Nexus Concepts and Some Conceptual and Operational Problems", in *International Journal of Water Resources Development*, Vol. 31, No. 3, p. 301-311, <http://dx.doi.org/10.1080/07900627.2015.1029118>
- Alterman, Jon B. and Michael Dziuban (2010), "Clear Gold. Water as a Strategic Resource in the Middle East", in *CSIS Reports*, December, <https://www.csis.org/node/22955>
- Andrews, Neil, David Bailey and Ivan Roberts (2004), *Agriculture in the Doha Round*, London, Commonwealth Secretariat
- ARDP/Agriculture and Rural Development Programme (2015), *ARDP Newsletter*, April, <http://www.agriculture.gov.lb/Arabic/Publications/Pages/ARDPNewsletterApril2015.aspx>
- Askari, Hossein, John Thomas Cummings and Bassam Harik (1977), "Land Reform in the Middle East", in *International Journal of Middle East Studies*, Vol. 8, No. 4 (October), p. 437-451
- Atalaysun, Meliha (2014), "Turkey. 2014 Food Processing Ingredients Report", in *USDA GAIN Reports*, No. TN4053, 5 December, [http://gain.fas.usda.gov/Recent GAIN Publications/Food Processing Ingredients_Ankara_Turkey_12-5-2014.pdf](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Food%20Processing%20Ingredients_Ankara_Turkey_12-5-2014.pdf)
- Ayeb, Habib (2011), "Social and Political Geography of the Tunisian Revolution: The Alfa Grass Revolution", in *Review of African Political Economy*, Vol. 38, No. 129, p. 467-479
- Batatu, Hanna (1978), *The Old Social Classes and the Revolutionary Movements of Iraq. A Study of Iraq's Old Landed and Commercial Classes and of Its Communists, Ba'athists, and Free Officers*, Princeton, Princeton University Press
- Bayoumi, Soha (2007), "Egyptian Views of the EU: Pragmatic, Paternalistic and Partnership Concerns", in *European Foreign Affairs Review*, Vol. 12, No. 3, p. 331-347
- Belghazi, Saad (2013), "Scenarios for the Agricultural Sector in the Southern and Eastern Mediterranean", in *MEDPRO Reports*, No. 4 (March), <https://www.ceps.eu/node/7814>

Berdegue, Julio A., Tomás Tosada and Anthony J. Bebbington (2014), "The Rural Transformation", in Bruce Currie-Alder et al., eds., *International Development. Ideas, Experience, and Prospects*, Oxford and New York, Oxford University Press, p. 463-478

Breisinger, Clemens et al. (2012), "Beyond the Arab Awakening. Policies and Investments for Poverty Reduction and Food Security", in *Food Policy Reports*, No. 25 (February), <http://dx.doi.org/10.2499/9780896295452>

Bush, Ray (2002), "Land Reform and Counter-Revolution", in Ray Bush, ed., *Counter-Revolution in Egypt's Countryside. Land and Farmers in the Era of Economic Reform*, London and New York, Zed Books, p. 3-31

Bush, Ray (2014), "Food Security in Egypt", in Zahra Babar and Suzi Mirgani, eds., *Food Security in the Middle East*, London, Hurst, p. 89-114

Chaban, Natalia et al. (2013), "Images of the EU beyond Its Borders: Issue-Specific and Regional Perceptions of European Union Power and Leadership", in *Journal of Common Market Studies*, Vol. 51, No. 3 (May), p. 433-451

Châtel, Francesca de, Gail Holst-Warhaft and Tammd Steenhuis (2014), *Water Scarcity, Security and Democracy: A Mediterranean Mosaic*, Athens and Ithaca, Global Water Partnership Mediterranean, Cornell University and Atkinson Center for a Sustainable Future, <http://www.gwp.org/en/About/more/news/News-and-Activities/Water-Scarcity-Security-and-Democracy-A-Mediterranean-Mosaic>

Chatterton, Lynne and Brian Chatterton (1996), *Sustainable Dryland Farming. Combining Farmer Innovation and Medic Pasture in a Mediterranean Climate*, Cambridge and New York, Cambridge University Press

CIHEAM/International Centre for Advanced Mediterranean Agronomic Studies (2008), *Mediterra 2008. The Future of Agriculture and Food in Mediterranean Countries*, Paris, Presses de Sciences Po, http://ciheam.org/en/publications/mediterra/details?pub=Mediterra_2008&id=10

CIHEAM/International Centre for Advanced Mediterranean Agronomic Studies (2009), *Mediterra 2009. Rethinking Rural Development in the Mediterranean*, Paris, Presses de Sciences Po, http://ciheam.org/en/publications/mediterra/details?pub=Mediterra_2009&id=6

CIHEAM/International Centre for Advanced Mediterranean Agronomic Studies (2012), *Mediterra 2012. The Mediterranean Diet for Sustainable Regional Development*, Paris, Presses de Sciences Po, http://ciheam.org/en/publications/mediterra/details?pub=Mediterra_2012&id=8

Cognac, Matthieu (2014), "Agriculture and Youth Employment: The Missing Link", in *Huffington Post*, 6 February, http://www.huffingtonpost.com/matthieu-cognac/agriculture-and-youth-emp_b_4715093.html

Collier, Paul (2008), "The Politics of Hunger", in *Foreign Affairs*, Vol. 87, No. 6 (November/December), p. 67-79

Compés López, Raúl, José-María García-Álvarez-Coque and Tomás García Azcárate (2013), "EU-Mediterranean Relations in the Field of Agriculture: The Example of Morocco and Turkey", in *Notre Europe-Jaques Delors Institute Policy Papers*, No. 91 (18 April), <http://www.delorsinstitute.eu/011-15883>

Council of the European Union (2017), *EU-Mediterranean partnership for food and water projects: Coreper approves the "PRIMA" initiative*, 26 April, <http://europa.eu/!cd36ug>

Dawoud, Mohamed A. (2007), "Water Scarcity in the GCC Countries: Challenges and Opportunities", in *GRC Research Papers*, December

De Schutter, Olivier (2010), "Responsibly Destroying the World's Peasantry", in *Project Syndicate*, 4 June, <https://www.project-syndicate.org/commentary/responsibly-destroying-the-world-s-peasantry>

Doumato, Eleanor Abdella and Marsha Pripstein Posusney, eds. (2003), *Women and Globalization in the Arab Middle East. Gender, Economy, and Society*, Boulder, Lynne Rienner

EEAS/European External Action Service (2015), *European Union Promotes Good Agricultural Practices in Egypt*, 1 November, http://www.eeas.europa.eu/archives/delegations/egypt/press_corner/all_news/news/2015/20151101_en.pdf

EEAS/European External Action Service (2016a), *Agriculture and Rural Development Programme (ARDP)*, 8 August, <http://europa.eu/!Mh88JP>

EEAS/European External Action Service (2016b), *The European Neighborhood Programme for Agriculture and Rural Development (ENPARD) in Armenia*, 6 October, <http://europa.eu/!HM86Pv>

EEAS/European External Action Service (2016c), *Water Sector Reform Programme – Phase II (WSRP-II)*, 24 August, <http://europa.eu/!gc39Hq>

Egypt MALR/Ministry of Agriculture and Land Reclamation (2009), *Sustainable Agricultural Development Strategy towards 2030*, January, <http://faolex.fao.org/docs/pdf/egy141040E.pdf>

El-Said, Hamed and Jane Harrigan (2014), "Economic Reform, Social Welfare, and Instability: Jordan, Egypt, Morocco, and Tunisia, 1983–2004", in *The Middle East Journal*, Vol. 68, No. 1 (Winter), p. 99-121

EUR-Lex (2007), *Summaries of EU Legislation: MEDA Programme*, last updated 12 April, <http://eur-lex.europa.eu/legal-content/CS/ALL/?uri=uriserv:r15006>

European Commission (2005), *EU/Tunisia Action Plan*, <http://library.euneighbours.eu/content/eu-tunisia-enp-action-plan>

European Commission (2007), *EU-Lebanon Action Plan*, 22 January, <http://europa.eu/!PM47ft>

- European Commission (2013), *Plan d'Action UE-Maroc*, 9 December, <http://europa.eu/!qf74mu>
- European Commission (2016a), *Action Fiche for Egypt: Water Sector Reform Programme – Phase II (WSRP-II)*, 30 November, https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/aap_egypt_2010_ad1.pdf
- European Commission (2016b), *EU-Egypt Action Plan*, 12 August, <http://europa.eu/!YU34YW>
- European Commission and High Representative (2015), *Review of the European Neighbourhood Policy*, JOIN/2015/50, 18 November, <http://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex:52015JC0050>
- European Union Delegation to Egypt (2015), *European Union promotes Good Agricultural Practices in Egypt*, 1 November, http://www.eeas.europa.eu/archives/delegations/egypt/press_corner/all_news/news/2015/20151101_en.pdf
- FAO/Food and Agriculture Organization (2016), *Lebanon. Country Programming Framework 2016-2019*, <http://www.fao.org/3/a-i5605e.pdf>
- Farouk, Menna A. (2017), "Egypt Launches Initiative to Keep Farmers from Bailing on Their Land", in *Al-Monitor*, 2 June, <http://almon.co/2vfo>
- Fattibene, Daniele (2016), "Strengthening the EU's External Action: The Need for an EU Food Diplomacy?", in *IAI Working Papers*, No. 16|17 (July), <http://www.iai.it/en/node/6649>
- Ferabolli, Silvia (2014), *Arab Regionalism. A Post-Structural Perspective*, New York, Routledge
- Ghattas, Hala (2012), *Food Security, Nutrition and Health in the Arab World. The Case of Marginalized Populations in Lebanon*, Presentation at the international conference on "Food Secure Arab World: A Roadmap for Policy and Research", Beirut, 6-7 February, <http://www.slideshare.net/fsaw2012/session-3-b-hala-ghattas>
- Haddad, Bassam (2012), *Business Networks in Syria. The Political Economy of Authoritarian Resilience*, Stanford, Stanford University Press
- Harrigan, Jane (2014), *The Political Economy of Arab Food Sovereignty*, Basingstoke and New York, Palgrave Macmillan
- Henry, Clement M. and Robert Springborg (2010), *Globalization and the Politics of Development in the Middle East*, 2nd ed., Cambridge and New York, Cambridge University Press
- Hinnebusch, Raymond A. (1989), *Peasant and Bureaucracy in Ba'thist Syria. The Political Economy of Rural Development*, Boulder, Westview Press
- Hinnebusch, Raymond A. (2012), "Syria: From 'Authoritarian Upgrading' to Revolution?", in *International Affairs*, Vol. 88, No. 1 (January), p. 95-113

- Hopf, Ted (1998), "The Promise of Constructivism in International Relations Theory", in *International Security*, Vol. 23, No. 1 (Summer), p. 171-200
- Issawi, Charles (1995). *The Middle East Economy. Decline and Recovery. Selected Essays*, Princeton, Markus Wiener
- Kelley, Colin P. et al. (2015), "Climate Change in the Fertile Crescent and Implications of the Recent Syrian Drought", in *Proceedings of the National Academy of Sciences*, Vol. 112, No. 11, p. 3241-3246, <http://dx.doi.org/10.1073/pnas.1421533112>
- Krüger, Laura-Theresa and Edmund Ratka (2014), "A New Response to a Changing Neighbourhood? The Perception of European Policies in Tunisia after the Arab Spring", in *L'Europe en Formation*, No. 371, p. 9-25
- Lebanon Ministry of Agriculture (2014). *Ministry of Agriculture Strategy 2015-2019*, November, <http://faolex.fao.org/docs/pdf/leb149670.pdf>
- Margulis, Matias E. (2017), "The Forgotten History of Food Security in Multilateral Trade Negotiations", in *World Trade Review*, Vol. 16, No. 1 (January), p. 25-57
- Markou, Marinos and George Stavri (2005), *National Agricultural Policy Report. Lebanon*, <http://www.databank.com.lb/docs/National Agricultural Policy Report.pdf>
- McIntyre, Beverly D. et al. (2009), *International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD), Central and West Asia and North Africa (CWANA) Report (Agriculture at a Crossroads, Vol. I)*, Washington, Island Press, <http://www.globalagriculture.org/original-reports.html>
- McMichael, Philip (2009), "A Food Regime Genealogy", in *The Journal of Peasant Studies*, Vol. 36, No. 1 (January), p.139-169, <http://dx.doi.org/10.1080/03066150902820354>
- Milliken, Jennifer (1999), "The Study of Discourse in International Relations: A Critique of Research and Methods", in *European Journal of International Relations*, Vol. 5, No. 2 (June), p. 225-254
- Motzafi-Haller, Pnina, ed. (2005), *Women in Agriculture in the Middle East*, Aldershot and Burlington, Ashgate
- Narlikar, Amrita (2003), *International Trade and Developing Countries. Bargaining Coalitions in the GATT and WTO*, London and New York, Routledge
- Nims, Salma (2005), "The Dynamics of Socio-environmental Conflict of Land Reform in Jordan: A Political Ecology Perspective", in *EUI Working Papers RSCAS*, No. 2005/23, <http://hdl.handle.net/1814/3372>
- NOAA/National Oceanic and Atmospheric Administration (2011), *NOAA Study: Human-Caused Climate Change a Major Factor in More Frequent Mediterranean Droughts*, 27 October, http://www.noaanews.noaa.gov/stories2011/20111027_drought.html

Owen, Roger (1993), *The Middle East in the World Economy, 1800-1914*, London and New York, I.B. Tauris

Richards, Alan and John Waterbury (2008), *A Political Economy of the Middle East*, 3rd ed., Boulder, Westview Press

Santos, Nuno and Iride Ceccacci (2015), *Egypt, Jordan, Morocco and Tunisia. Key Trends in the Agrifood Sector*, Rome, Food and Agriculture Organization, <http://www.fao.org/3/a-i4897e.pdf>

Saunders, Doug (2010), *Arrival City: The Final Migration and Our Next World*, Toronto, Knopf Canada

Shamout, M. Nouar and Glada Lahn (2015), "The Euphrates in Crisis. Channels of Cooperation for a Threatened River", in *Chatham House Research Papers*, April, <https://www.chathamhouse.org/node/17418>

SUSTAINMED (2013), *Final Report Summary*, http://cordis.europa.eu/result/rcn/141339_en.html

Tal, Alon (2016), "Has Technology Trumped Adaptive Management? A Review of Israel's Idiosyncratic Hydrological History", in *Global Environment*, Vol. 9, No. 2 (October), p. 484-515

Tohmé Tawk, Salwa, Mounir Abi Said and Shadi Hamadeh (2014), "Urban Agriculture and Food Security in the Middle Eastern Context: A Case Study from Lebanon and Jordan", in Zahra Babar and Suzi Mirgani, eds., *Food Security in the Middle East*, London, Hurst, p. 158-184

UNICEF (2011), *Iraq. MENA Gender Equality Profile*, October, <https://www.unicef.org/gender/files/Iraq-Gender-Eqaulity-Profile-2011.pdf>

Vermeulen, Sonja J., Bruce M. Campbell and John S.I. Ingram (2012), "Climate Change and Food Systems", in *Annual Review of Environment and Resources*, Vol. 37, p. 195-222

Voss, Katalyn A. et al. (2013), "Groundwater Depletion in the Middle East from GRACE with Implications for Transboundary Water Management in the Tigris-Euphrates-Western Iran Region", in *Water Resources Research*, Vol. 49, No. 2 (February), p. 904-914, <http://dx.doi.org/10.1002/wrcr.20078>

Waterbury, John (1983), *The Egypt of Nasser and Sadat. The Political Economy of Two Regimes*, Princeton, Princeton University Press

Waterbury, John (1991), "Peasants Defy Categorization (As Well as Landlords and the State)", in Farhad Kazemi and John Waterbury, eds., *Peasants and Politics in the Modern Middle East*, Miami, Florida International University Press, p. 1-23

Waterbury, John (2002), *The Nile Basin: National Determinants of Collective Action*, New Haven, Yale University Press

Weis, Tony (2007), *The Global Food Economy. The Battle for the Future of Farming*, London and New York, Zed Books

Winders, Bill (2011), "The Food Crisis and the Deregulation of Agriculture", in *The Brown Journal of World Affairs*, Vol. 18, No. 1 (Fall/Winter), p. 83-95, <https://www.brown.edu/initiatives/journal-world-affairs/181/food-crisis-and-deregulation-agriculture>

Woertz, Eckart (2013), *Oil for Food. The Global Food Crisis and the Middle East*, Oxford and New York, Oxford University Press

Woertz, Eckart (2014), "Environment, Food Security and Conflict Narratives in the Middle East", in *Global Environment*, Vol. 17, No. 2 (October), p. 490-516

Woertz, Eckart (2017), "Agriculture and Development in the Wake of the Arab Spring", in Giacomo Luciani, ed., *Combining Economic and Political Development. The Experience of MENA*, Leiden and Boston, Brill, <https://poldev.revues.org/2274>

World Bank (2010), *Arab Development Assistance. Four Decades of Cooperation*, Washington, World Bank, <http://hdl.handle.net/10986/27897>

World Bank (2012), *Renewable Energy Desalination. An Emerging Solution to Close the Water Gap in the Middle East and North Africa*, Washington, World Bank, <http://hdl.handle.net/10986/11963>

Zurayk, Rami (2011), *Food, Farming and Freedom. Sowing the Arab Spring*, Charlottesville, Just World Books

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