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in the Arab Region  
Cairo, 30 October - 1 November 2007



**Summary Report  
on  
Agriculture in the Arab Region**



By

Arab Organization for Agricultural Development  
(AOAD)

Khartoum, September 2007

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## **1. Introduction:**

Agricultural development and food security problems, in their political, economic and social dimensions, are among the most outstanding issues that are receiving wide attention in the Arab region and internationally at all levels. Since the turn of the third millennium, the goal of achieving sustainable agricultural development and food security has attracted the prime attention of Arab leaders. This is especially because of the pivotal role that agriculture can play in response to regional and international development concerns. Hence, and in response to the growing concern with sustainable development, both regionally and internationally, more attention is being directed in the Arab region to the call for removal of environmental, technical, economic and organization barriers of sustainable agricultural development and food security in the different states. It is increasingly recognized that the achievement of sustainable agricultural development and food security requires the strengthening of cooperation, coordination and integration among the countries of the region. Regional cooperation and economic integration are believed to be the only viable means for economic survival, in the face of competition from giant international economic associations and the binding international treaties. There is a conviction that sustainable agricultural development and food security and safety in the Arab region is achievable only through coordinated efficient use of resources, and the expansion of agricultural trade, in the context of regional integration.

## **2. The current status of agriculture in the Arab region:**

### **Development and maintenance of agricultural resources:**

#### **2.1. Water resources**

Water scarcity is regarded as the main factor limiting agricultural development in the Arab region as a whole. It is estimated that the water resources of the Arab countries amount to only 1% of those of the world. The per capita share of water is estimated at 1057<sup>3</sup> meters per annum, which is a little over the water poverty line of 1000<sup>3</sup> meters. Only in few Arab countries that the per capita share of water is above the poverty line. The water resources of the Arab region are also characterized by uneven distribution and difficulties associated with their tapping and use in many parts of the region. Different methods are used in the development of water resources from traditional and nontraditional sources in the Arab countries, depending on the nature of the available water sources and the extent of water scarcity in the different countries. The problem of availability of water for agricultural purposes is even more difficult in many of the countries of the region, especially under condition of growing demand for water for non-agricultural use, which reduces the share of water available for irrigation purposes.

#### **2.2. Land resources**

Land is the second limiting factor facing sustainable agricultural development in the Arab region. The total land area of the Arab region is estimated to be about 14.06 million square kilometers, which is equivalent to about 10.8% of the land area of the world. Land under cultivation, however, is estimated to be only about 5% of that of the world. It was found that only small increase in the amount of land under cultivation of approximately 2% took place in the Arab region by the end of the period stretching between 1990 and 2004. Room for substantial expansion of arable land in the Arab region as a whole is limited by land suitability problems. At present only 35% of land in the Arab region is regarded as suitable for agricultural production purposes.

Most of the countries of the Arab region are located in arid and semi-arid areas. Consequently, the region is subject to land degradation and desertification, and the associated environmental and socio-economic problems, which hampered agricultural land conservation efforts. Land affected by desertification in the Arab region is estimated to be about 9.8 million square kilometers (about 68% of the total land area). Among the factors that increased the rate of desertification is degradation of the natural vegetation, which currently is estimated to cover about 6.6% of the total area of the Arab region. Excessive deforestation is practiced in some areas to make room for arable farming, housing and development of infrastructure. This is coupled with deterioration in the natural pasture lands, which are estimated to cover about 28% of the total land area of the region.

### **2.3. Animal resources**

A third factor which limits sustainable agricultural development efforts in the Arab region relates to the potential for expanding animal production. Animal resources contribute to socio-economic stability in rural areas. It was estimated that animal wealth in the Arab region has increased from 259.3 heads in 1990 to 373.3 heads in 2004 (a yearly increase of about 2.9%). However, there are a number of factors that limit the possibilities for expanding animal production in many of the countries of the region. The potential for integration of animal production in the region with fodder production has not been achieved, despite the existing opportunities. Natural and irrigated fodder in the countries of the region that are endowed with suitable environmental conditions can be used for fodder production for the export to the water-scarce countries of the region. The clear example in this respect is the existing potential for use of pasture and irrigated lands in Sudan, Somalia and Morocco to produce fodder crops for export to the Gulf countries.

### **2.4. Fisheries**

The expansion of fisheries production in the Arab region is also limited, mainly because of the lack of investment in the development of the huge fishery resources that have remained largely unused. Consequently, the potential for contribution to food security through the development of fishery production has not been captured. The percentage of the total investment in agricultural production in the Arab region which is committed to fisheries development is very small. Countries differ in this respect in accordance with the relative importance of the fisheries sector to the national economy.

Another factor which limits the potential for sustainable agricultural development in the Arab region relates to population growth. In 2005, the population of the Arab region was 309 million. The agricultural labor force was estimated as 35 million (amounting to about 32% of the total labor force of the region). Comparison with the 1990 figure indicates a 52.4% increase in the agricultural labor force occurring by 2004. The cultivated area per laborer land availability has declined from an average of 2.06 hectare in 1990 to 1.98 hectare in 2004. This calls for more efficient use of land resources which can be aided by capacity building training.

Because of recognition of the importance of specialized agricultural capacity building training for sustainable agricultural development, Arab organizations and institutions have contributed collaboratively to the implementation of a large number of specialized agricultural training programs in the countries of the Arab region.

### **3. Efforts and Achievements**

#### **3.1. Agricultural and economic policies and their congruence with the MDGs:**

Wide changes have occurred in the economic policies of most of the countries of the Arab region during the 1990s. These changes came into being as a result of a strong conviction among the governments of the region that the central control of the economy, coupled with the enlargement of the role of the state in economic activities and the curtailing of the role of the private sector, and use of market control measures by the state, and enforced commodity pricing irrespective of the true production costs, have all led to expansion of subsidies and the consequent problems of balancing of state budgets. They also had negative effects on the rates of economic growth and on the ability to deal with international marketing demands. Economic reform policies were therefore needed to save the situation.

Most of the countries of the Arab region have started to implement economic reform and restructuring programmes, and the accompanying agricultural policies which have direct impact on agricultural performance and the rate of progress toward achievement of the MDGs.

#### **3.2. Agricultural technology development and its impact on sustainable agricultural development:**

The positive developments that have been achieved in agricultural technology development have enabled the countries of the Arab region to maintain self sufficiency in the principal food commodities, despite the deficiencies in the needed resources, such as adequate supply of irrigation water, and despite the average 2.3% annual increase in the population. Thus, use of agricultural production technology can compensate, at least to some extent, for deficiencies in the other ingredients of the production mix. The available information reveals that use of improved agricultural technology had produced by 2004 increases in production of irrigated wheat and other grains crops ranging between 2 and 2.6 percent, and an increase in production of fruits and vegetables ranging between 1.7 and 0.4 percent, compared to the production levels of 1990. Milk production per animal unit achieved an increase by 1.6% by the end of the same period. However, meat production achieved only 0.9% annual increase in response to application of improved production technology. However, the achieved increases in commodity production by use of improved technology achieved in the Arab region are rather modest because of the effects of the prevailing limiting factors.

The available local and regional studies that were conducted in the Arab region have suggested the presence of an association between environmental degradation, poverty and unemployment in rural communities because of their dependence for survival on the use of scarce land and water and pasture resources, and because of the seasonality of their low-income farm work and its vulnerability to environmental hazards. Desertification constitutes the principal factor that lead to environmental and socio-economic problems linked to poverty, as large land areas (constitution about 80% of the total area of the Arab region) are located in the arid zones where the annual rainfall range between 100-300 mm/year. Besides desertification, environmental hazards are caused by unwise use of pesticides and chemical fertilizers and other harmful and unsustainable production practices which lead to excessive exploitation of the already scarce water resource and constitute a threat to biodiversity.

### **3.3. Evaluation of agricultural development efforts in Arab countries:**

Agricultural development efforts have produced increases in production and consumption of several food commodities, and the reduction of food deficits, despite increases in population growth and scarcity of the natural resources in the Arab region. During the past two decades, Arab countries have been adopting agricultural policies targeting the achievement of sustainable agricultural development and efficient use of the available scarce resources. Governments have also encouraged the private sector to invest in agricultural industry as a means for achieving added values and protection of producers from fluctuation of commodity price. Governments of the Arab countries have also succeeded in the provision of agricultural production support services, especially extension, training and credit supply services, in congruence with the economic reform and restructuring policies which they have adopted during the past two decades.

### **4. Constraints and challenges of Arab agricultural development:**

The main barriers facing agricultural development in the Arab region, that were identified for the purpose of this report, are classified into four main categories, namely institutional barriers, physical barriers, technological barriers, and economic barriers. The challenges of Arab agricultural development that were identified are briefly summarized below.

- The needed development of natural resources, especially water resources.
- The need for adapting agricultural development to changes that are occurring at regional and national levels.
- The need for keeping abreast with the speedy technological developments relating to agriculture.
- The need for balancing the country and regional approaches in the formulation and implementation of agricultural development policies.
- The need for improving the effectiveness of farmer organizations' support to agricultural production and marketing activities.
- The need for providing incentives to attract Arab agricultural financial resources for investment in a suitable agricultural production environment.
- The need for securing peace, socio-economic stability and food security in Arab rural communities.
- The need for increasing the competitiveness of Arab agricultural products in the markets.

### **5. Recommendations and the way forward**

#### **5.1. Arab strategy for sustainable agricultural development:**

The Arab ministers of agriculture and the Arab organization for agricultural development have agreed to develop and implement a strategy for agricultural development in the Arab region guided by a set of agreed future orientations and specific objectives. The strategy is to take into consideration the prevailing state of the Arab economy, and trends of agricultural performance in the different countries, the perceived future challenges and barriers of sustainable agriculture development in the region, the existing opportunities for improving agriculture, the need for improving agricultural technology, the need for adapting development activities in the region to current and future regional and international developments orientations, and the strengthening coordination and integration of agricultural development activities between the countries of the region with the ultimate objective of creation of a Common Arab Market. The principal objectives of the proposed strategy include Improvement of water resources and their management (water being perceived as the main limiting factor), Development and protection of agricultural land resources, integrated use of Arab

agricultural resources, development of agricultural technology, the setting of agricultural development priorities, capacity building and development of human resources, encouraging and protecting joint private agricultural investment projects, facilitating domestic and external agricultural trade, adapting to regional and international trends, alleviation of rural poverty, and encouraging private sector and community participation in sustainable agricultural development projects.

## **5.2. Recommendations for Arab sustainable agricultural development:**

It is recommended that the countries of the Arab region implement the agreed Arab strategy for sustainable agricultural development, giving special attention to the needs for identification, planning and implementing of joint integrated projects based on recognized development priorities and the areas that need more work for sustaining development in each of the countries of the region; joint investment in technology development activities, the planning and implementation of commodity improvement projects, the development of agricultural industries, the enhancing agricultural trade; expansion of human and institutional capacity building projects, development of support institutions and income- generating projects for alleviation of rural poverty, support of women development activities, the development of natural resource management and environment protection capabilities.