

Near East and North Africa food and agriculture



# FAO STATISTICAL YEARBOOK 2014 Near East and North Africa Food and Agriculture

Food and Agriculture Organization of the United Nations Regional Office for the Near East and North Africa

Cairo, 2014

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-108147-1 (print) E-ISBN 978-92-5-108148-8 (PDF)

© FAO, 2014

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via www.fao.org/contact-us/licence-request or addressed to copyright@fao.org.

FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.

## **Foreword**

The Near East and North Africa region includes 19 countries that share a common cultural heritage but are very distinct from one another in their levels of development, their resource endowments and their potential for food and agricultural production. There are extremes of wealth and poverty among these countries. However, they are all addressing a common set of problems and challenges that could threaten their development prospects.

One of the primary challenges facing the region is overcoming hunger, food insecurity and malnutrition. Currently, there are 43.7 million undernourished people in the Near East and North Africa. Most of these people live in rural areas and rely on agriculture for their livelihoods. A wide range of interconnected issues challenge the region, including dwindling water and land resources, the gap between food needs and food production, increasing difficulties in balancing employment and income generation as populations expand, declining investment in the rural sector, increasing threats from environmental strain, natural and human-induced disasters, as well as the impacts of climate change.

Meeting these challenges with evidence-based policymaking will require timely statistical information from a wide range of fields. As a contribution to this effort, the Food and Agriculture Organization of the United Nations has prepared this Regional Yearbook for the Near East and North Africa. The Yearbook presents a visual synthesis of the major trends and factors shaping the regional food and agricultural landscape and their interplay with broader environmental, social and economic dimensions. In doing so, it serves as a reference document on regional food and agriculture for policymakers, donor agencies, researchers and analysts, and the general public.

Reliable data and information are fundamental prerequisites for rigorous analysis and hence sound strategy for development and equitable distribution of income to the various sectors of the economy according to national priorities. For this reason it is crucial that statistics and information be collected, compiled, analyzed and disseminated using the best methodologies, concepts and classifications at national, subnational, regional and global levels.

FAO's preparation of regional and global Yearbooks is part of a much broader effort by the organization and its national and international partners to improve the quality of statistical data related to food insecurity, agriculture and the sustainable management of natural resources. At the 31st session of the FAO Regional Conference for the Near East in 2012, the organization unveiled its plans for the development of a regional strategy to improve agricultural statistics. The regional strategy – which is being developed by regional stakeholders and countries – is an integral part of the Global Strategy to Improve Agricultural and Rural Statistics, a long-term project promoted by FAO and international partners. The Global Strategy is built on three major pillars: producing a minimum set of core data and determining national priorities, integrating agricultural statistics into national statistical systems, and fostering the sustainability of agricultural statistics through governance and statistical capacity development.

This 2014 edition of the Near East and North Africa Statistical Yearbook of food and agriculture contains a breadth of data and topics related to food security and agriculture. FAO remains committed to working with partners and Member States in the Near East and North Africa to improve agricultural and rural statistics and facilitate the process of transforming this information into policies that will strengthen food security in the region and ensure more sustainable food production.

#### Abdessalam Ould Ahmed

Assistant Director-General and Regional Representative for the Near East and North Africa

#### Pietro Gennari

FAO Chief Statistician, and Director, Statistics Division

## **Acknowledgements**

This publication was prepared by the Statistics Division (ESS) and the Near East and North Africa Office (RNENA) of the Food and Agriculture Organization of the United Nations. The work was carried under the quidance of Pietro Gennari (Chief Statistician, FAO, and Director, ESS) and Abdessalam Ould Ahmed (Regional Representative and Assistant Director General, RNENA). Production was managed by Amy Heyman (ESS) and Mohamed Barre (RNENA), and the work was carried out by Filippo Gheri (ESS) and Shira Fano (ESS). Hadi Fathallah (RNENA) was a principal contributor. Contributors include Nienke Beintema (the International Food Policy Research Institute - IFPRI), Riccardo Biancalani (NRC), Andrea Borlizzi (ESS), Chiara Brunelli (ESS), Carlo Cafiero (ESS), Cinzia Cerri (ESS), Rocio Condor-Golec (Climate, Energy and Tenure Division - NRC), Piero Conforti (ESS), Elisenda Estruch (Gender, Equity and Rural Employment Division – ESW), Alessandro Ferrara (NRC), Karen Frenken (Land and Water Division - NRL), Nandini Gunewardena (FAOLOW), Gary Jones (International Monetary Fund -IMF), Arvydas Lebedys (Forest Economics, Policy and Products Division - FOE), Erdgin Mane (ESS), Robert Mayo (ESS), Verena Nowak (Nutrition Division - ESN), Michael Rahija (IFPRI), Simone Rossi (NRC), Mirella Salvatore (NRC), Nadia Scialabba (NRC), Gert-Jan Stads (IFPRI), Nathalie Troubat (ESS), Sachiko Tsuji (Statistics and Information Service - FIPS), Francesco Tubiello (NRC), Stefania Vannuccini (FIPS), NathanWanner (ESS) and Firas Yassin (ESS). A special thanks goes to Andrea Alcibiade (ESS), Guido Barbaglia (ESS), Giorgia DeSantis (ESS), James Edge (ESS), Carola Fabi (ESS), Amanda Gordon (ESS), Nicola Graziani (ESS), Fabio Grita (ESS), Francesca Loiacono, Michelle Kendrick (ESA), Adam Prakash (ESS), Gordon Ramsay, Nicholas Sakoff (ESS), Nicola Selleri (ESS), Sylvaine Thomas (ESS), and Boris Veytsman.

## How to use this book

#### The structure

The FAO Statistical Yearbook products build on the process that began with the 2012 edition. The book has been created from beginning to end with the statistical software R and the typesetting language LaTeX: from data retrieval, to data processing, indicator construction, and blueprint-ready pdf file for distribution. This technique has circumvented the traditional route of manual production, involving costly software licences, significant labour costs and inefficiencies associated with a lack of integration.

Using data from global statistical providers, including FAO, the publication presents a visual synthesis of major trends and factors shaping the global food and agricultural landscape, and their interplay with broader environmental, social and economic dimensions. In doing so, it serves as a unique reference point of world food and agriculture for policy-makers, donor agencies, researchers, analysts and the general public.

The book is divided into four thematic parts, in an attempt to present the full spectrum of issues relevant to the subject matter:

- **Part 1** The setting measures the state of the agricultural resource base by assessing the supply of land, labour, capital and inputs, and examining the pressure on the world food system stemming from demographic and macroeconomic change.
- **Part 2 Hunger dimensions** gauges the state of food insecurity and malnutrition, measuring the multitude of dimensions that give rise to hunger and shape undernourishment.
- **Part 3 Feeding the world** evaluates the past and present productive capacity of world agriculture, together with the role of trade in meeting changing food, feed and other demands.
- Part 4 Sustainability dimensions examines the sustainability of agriculture in the context of the pressure it exerts on the environment, including the interaction of agriculture with climate change, and how it can provide ecosystem services through the bio-based economy.

Several page spreads are used to present each thematic issue. Each spread contains visualizations of the data in maps and charts, along with text providing background to the salient issues and an assessment of current trends. Tables are provided at the end of each part. A list of indicators used throughout the book and a section on concepts and methods can be found in Part 5.

#### Country definitions and classification

The publication follows the FAO Regional Office for the Near East and North Africa composition (see "Table: Country list" or http://neareast.fao.org/).

#### *Aggregations*

Two types of aggregations are used in the book: sum and weighted mean. Two restrictions are imposed when computing the aggregation: i) the sufficiency condition – the aggregation is computed only when sufficient countries have reported data, and the current threshold is set at 50 percent of the variable and the weighting variable, if present; and ii) the comparability condition – as aggregations are usually computed over time, this condition is designed to ensure that the number of countries is comparable over several years; under the current restriction the number of countries may not vary by more than 15 over time.

#### Data presentation conventions

The cutoff date for the data is 30 September 2013.

- When country data have not been reported for the reference year, an asterisk (\*) on
  the year label indicates that the value for the most recent year available is shown.
  For example, 2008–2010\* means that the most recent value for the period from
  2008 to 2010 is shown. When a growth rate is computed, the specified interval
  always refers to available data.
- A billion is 1 000 million.
- A trillion is 1 000 billion.
- A blank means that data are not available or that aggregates cannot be calculated because of missing data for the years shown.
- In tables, 0 or 0.0 means zero or a number that is small enough to round to zero at the displayed number of decimal places.
- A ~ in the maps refers to the range specified in the class intervals.

# **CONTENTS**

Foreword:	iii
Acknowledgements:	V
How to use this book:	vii
Part 1 The Setting:	1
Overview Economy Land and Water Labour Inputs Capital and Investment Innovation Tables	4 8 10 14 16 18 20 22
Part 2 Hunger dimensions:	29
Number undernourished and their prevalence in the population Anthropometric indicators Poverty Food Availability Economic and physical access Clean water and sanitation Economic and political stability Education and health Natural and human-made risks Tables	32 34 36 38 40 42 44 48 50
Part 3 Feeding the world:	57
Aggregate agriculture Growth in crop production Trends in the crop sector Trends in the livestock sector Trends in the fisheries sector Trends in agricultural trade Tables	60 62 64 74 80 84 92
Part 4 Sustainability dimensions:	105
Land and Forestry Water Biodiversity Agri-environmental indicators Organic farming Bio-based economy Climate change Greenhouse gas emissions Tables	108 112 114 116 118 120 122 124
Part 5 Metadata: Country list Metadata Bibliography	<b>131</b> 131 133 155

## **List of Charts**

1	Near East and North Africa rurat and diban population (1960-2030)	
2	Rural and urban population, share of total population (2011)	
3	Agricultural population, share of total population (1990 and 2012)	
4	Population ages 0-14, 15-64 and 65+, share of total (2010)	5
5	Life expectancy at birth, selected countries (2000 and 2011)	6
6	Value added in agriculture, industry, and services as shares of GDP (2008)	8
7	Near East and North Africa trade, FDI, and ODA as shares of GDP (2000-2010)	
8	Arable land per capita (2000 and 2011)	10
9	Land area (2011)	
10	Agricultural area (2011)	
11	Irrigation potential, selected countries (2012)	11
12	Total equipped area (2009)	12
13	Female employment in agriculture, share of female employment, selected countries (2005-2010*)	
14	Labor force participation rate by gender, ages 15+ (2011)	
15	Near East and North Africa fertilizer consumption per ha of arable area and permanent crops (2002-2011)	
16	Fertilizer consumption per ha of arable area and permanent crops (2011)	
17	Credit to agriculture, share of added value in agriculture, selected countries (2005-2010)	
18	ODA received in agriculture, total share of ODA (2002 and 2010)	18
19	Share of components in capital stock (2007)	
20	Government expenditures in agriculture, forestry, fishing, and hunting, selected countries (2010)	19
21	Total public agricultural research expenditure, share of agricultural GDP, selected countries (2008)	
22	Mobile cellular, broadband internet, and telephone lines subscribers (2012)	20
23	Undernourishment in the developing world (1990-1992 to 2011-2013)	32
24	Number of people undernourished (1990-1992 and 2011-2013)	
	Percentage of children under 5 years of age who are stunted (2005-2011*)	
25		
26	Percentage of children under 5 years of age who underweight (2005-2011*)	54
27	People in the world living on less than 2005 PPP \$1.25 and \$2 a day (1981-2005)	36
28	Gini coefficient for Near East countries (1995-2000 and 2007-2010)	
29	Average dietary supply adequacy (1990-1992 and 2011-2013)	
30	Trend of the value of food production (1992-2011)	
31	Share of energy supply derived from cereals, roots and tubers (1990-1992 and 2008-2010)	
32	Relative change in average protein supply (between 1990-1992 and 2008-2010)	
33	Relative change in average protein supply from animal origin (between 1990-1992 and 2008-2010)	39
34	Relative change in average fat supply (between 1990-1992 and 2008-2010)	39
35	Rail-lines density (2011)	
36	Relative price of food (2000-2010)	
37	Percentage of population without reasonable access to improved water sources (1992 and 2011)	
38	Percentage of population without reasonable access to improved water sources (1792 and 2011)	
39	Value of food imports over total merchandise exports (1992 and 2010)	
	Cereal imports over total infermations exports (1992 and 2010)	11
40	Cereat import dependency ratio (1992 and 2009)	44
41	Domestic food price volatility (1995-2013)	
42	Per capita food production variability (1990-2011)	
43	Domestic food price volatility (2000 and 2013)	
44	Domestic food price volatility (2000 and 2013)	
45	Per capita food supply variability (1995-2010)	47
46	Girls' and boys' enrolment in primary education (2011)	
47	Total health expenditure, share of GDP (1995-2011)	
48	Droughts, floods, extreme temperatures - share of population affected (2009)	
49	Refugees in Near East and North Africa region (2000-2011)	50
50	Food supply in crops primary equivalent (2000-2009)	
51	Near East and North Africa protein and fat supply in crops primary equivalent (2000-2009)	
52	Protein supply in crops primary equivalent (2009)	61
53	Fat supply in crops primary equivalent (2009)	
54	Crops, gross per capita production index number (2004-2006 = 100) (2000-2011)	
55		
	Growth in cereal production (2012)	
56	Per capita cereal production (2000-2011)	
57	Per capita coarse grain production (2000-2011)	
58	Per capita rice production, selected countries (2011)	
59	Per capita wheat production (2000-2011)	66

60	Per capita oil crop production (2000-2011)	68
61	Per capita pulse production (2000-2011)	68
62	Per capita root and tuber production (2000-2011)	
63	Per capita citrus fruit production (2000-2011)	70
64	Per capita fruit production, excluding melons (2000-2011)	
65	Per capita vegetable production, including melons (2000-2011)	72
66	Near East and North Africa stocks of cattle and buffaloes, and sheep and goats (2000-2011)	
67	Stock of poultry birds (2000-2011)	74
68	Stocks of cattle and buffaloes, and sheep and goats (2011)	
69	Stock of poultry birds (2011)	
70	Near East and North Africa meat production (2000-2011)	
71	Meat production by type (2010)	
72	Near East and North Africa per capita meat production (2000-2010)	77
73	Per capita total meat production (2010)	
74	Egg production (2000-2011)	
75	Cheese production (2000-2011)	78
76	Capture fish production, per capita (2000-2011)	
77	Aquaculture fish production, per capita (2000-2011)	80
78	State of the world's fishery stocks (1974-2010)	82
79	World composition of fish products (2010)	
80	Per capita world fish food supply (1990-2011)	83
81	Sugar and honey net trade (2000-2011)	84
82	Sugar and honey net trade (2010)	84
83	Near East and North Africa composition of global exports (2000-2011)	85
84	Cereal net trade (2000-2011)	86
85	Cereal net trade (2010)	86
86	Major export flows of oranges from Near East and North African countries (US\$, 2011)	87
87	Fruit and vegetables net trade (2000-2011)	88
88	Fruit and vegetables net trade (2010)	
89	Major export flows of sugar refined from Near East and North African countries (US\$, 2011)	89
90	Animal fats, oilseeds and veg. oils net trade (2000-2011)	90
91	Animal fats, oilseeds and veg. oils net trade (2010)	90
92	Annual growth rate in forest area (1990-2011)	108
93	Forest characteristics (2010)	108
94	Near East and North Africa production of selected forest products (1970-2012)	110
95	Near East and North Africa production of selected forest products (1970-2012)	110
96	Exports of forest products (2000 and 2012)	111
97	Imports of forest products (2000 and 2012)	111
98	Freshwater withdrawal by agricultural sector, shares of total (2000-2010*)	112
99	Freshwater withdrawal by industrial sector, shares of total (2000-2010*)	112
100	Species threatened in Near East and North Africa (2012)	114
	Terrestrial protected areas, share of total land area (1990 and 2010)	
102	Livestock density per ha of agricultural land, cattle and buffaloes, sheep and goats (2011)	116
103	Agricultural land, share of total land area (1995 and 2010)	116
	Organic water pollutant (BOD) emissions (2005)	
105	Organic water pollutant (BOD) emissions per worker (2005)	117
	Organic agriculture area (2011)	
107	Organic agriculture, share of total agricultural area (2011)	118
108	World area under bioenergy crops (2005-2010)	120
	Biofuel production (1990-2009)	
	Share of food crop usage in world bio-based economy (2009)	
	Global land-ocean temperature index, base period 1951-1980 (1880-2012)	
	Global land-ocean temperature index for three latitude bands, base period 1951-1981 (1880-2011)	
	Net emissions/removals from net forest conversions (1990, 2000 and 2010)	
	Agricultural greenhouse gas emissions (1990-2010)	
	Near East and North Africa agricultural greenhouse gas emissions by sector (2010)	125

# **List of Maps**

1	Population annual growth (percent, 2000-2012)	
2	GNI per capita (current US\$, 2010-2011*)	7
3	Under-5 mortality rate (per 1000 live births, 2010-2011*)	7
4	Agriculture, value added per worker annual growth (percent, 2000-2010)	
5	Agriculture, value added as share of GDP (percent, 2008-2012*)	9
6	Cropland per capita (ha/cap, 2011)	11
7	Share of equipped area actually irrigated (percent, 2000-2012*)	13
8	Water resources per capita (m <sup>3</sup> /yr/cap, 2010)	13
9	Employment in agriculture, share of total employment (percent, 2005-2010*)	15
10	Children in employment, share or children ages 7-14 (percent, 2000-2011*)	
11	Nitrogen and phosphate fertilizers consumption per ha of arable area and permanent crops (kg/ha, 2011)	
12	Agricultural tractors, total (tractors, 2000-2010*)	17
13	FDI (inward flows) to agriculture (million US\$, 2010-2011*)	19
14	Access to mobile cellular phone subscriptions annual growth (percent, 2000-2012)	21
15	Total public agricultural research expenditure, share of agricultural GDP (percent, 2006-2010*)	21
16	Map of hunger (percent, prevalence of undernourishment 2011-2013)	33
17	Prevalence of food inadequacy (percent, 2011-2013)	
18	Percentage of children under 5 years of age who are stunted (percent, 2005-2011*)	
19	Percentage of children under 5 years of age who are underweight (percent, 2005-2011*)	
20	Poverty gap at national poverty line (percent, 2005-2012*)	
21	Poverty headcount ratio at national poverty line, share of population (percent, 2005-2011*)	
22	Road density (km per 100 square km of land area, 2005-2010*)	
23	Percent of paved roads over total roads (percent, 2005-2010*)	
24	Share of population without reasonable access to improved water sources (percent, 2011)	
25	Share of population without reasonable access to improved water sources (percent, 2011)	
26	Political stability and absence of violence/terrorism (index, 2009)	
27	Literacy rate, adult female - share of females ages 15 and above (percent, 2005-2010*)	
	Primary completion rate, total (percent, 2005-2010*)	47
28 29	Droughts, floods, extreme temperatures - share of population affected (average 1990-2009) (percent, 2009)	47
	UNHCR total population of concern (thousand people, 2011)	
30		
31	Food supply in crops primary equivalent (kcal/cap/day, 2009)	61
32	Crops, net per capita production index number (2004-2006 = 100) (index, 2011)	
33	Food, net per capita production index number (2004-2006 = 100) (index, 2011)	6.5
34	Cereal producing countries (million tonnes, 2011)	65
35	Coarse grain producing countries (million tonnes, 2011)	65
36	Rice producing countries (million tonnes, 2011)	67
37	Wheat producing countries (million tonnes, 2011)	67
38	Oil crop producing countries (million tonnes, 2011)	
39	Pulse producing countries (million tonnes, 2011)	
40	Root and tuber producing countries (million tonnes, 2011)	71
41	Per capita citrus fruit production (tonne/cap, 2011)	71
42	Fruit producing countries, excluding melons (million tonnes, 2011)	
43	Vegetable producing countries, including melons (million tonnes, 2011)	
44	Stock of cattle and buffaloes (million heads, 2011)	75
45	Meat producing countries (million tonnes, 2011)	77
46	Milk production (million tonnes, 2011)	79
47	Butter and ghee production (million tonnes, 2011)	
48	Capture fish producing countries (thousand tonnes, 2010-2011)	81
49	Aquaculture producing countries (thousand tonnes, 2010-2011)	81
50	Geo-location of harvests by capture and aquaculture (thousand tonnes, 2010)	83
51	Import value index (index, 2010)	
52	Major export flows of cheese from whole cow milk from Near East and North African countries (US\$, 2011)	
53	Global distribution of risks associated with main agricultural production systems	
54	Forest area as share of total land area (percent, 2011)	
55	Roundwood production (thousand m <sup>3</sup> , 2012)	111
56	Total water withdrawal per capita (m <sup>3</sup> /yr/cap, 2000-2010*)	117
57	Renewable freshwater resources withdrawn by agriculture (percent, 2000-2010*)	
58	Terrestrial protected areas, share of total land area (percent, 2010)	
59	Marine protected areas, share of territorial waters (percent, 2010)	
ンク	maine protected areas, share of territorial waters (pertent, 2010)	113

Nitrogen fertilizer consumption per ha of arable area and permanent crops (kg/ha, 2009)	447
Thirdgen refunded consumption per ha of arabic area and permanent crops (kg/na, 2007)	11/
Organic agriculture area (ha, 2011)	119
Organic agriculture, share of total agricultural area (percent, 2011)	119
Biofuel production (kilotonne of oil equivalent, 2009)	121
Surface temperature, anomaly versus 1951-1980 (degrees Celsius, 2012)	123
Share of population living in areas with elevation of 5 meters or less (percent, 2000)	123
Total agricultural greenhouse gas emissions (gigagrams $CO_2eq$ , 2010)	125
(	Organic agriculture, share of total agricultural area (percent, 2011)

## **List of Tables**

1	Population and structure	
2	Demographic indicators	
3	Economy	
4	Land	
5	Water resources per capita and irrigation	. 24
6	Labour	. 24
7	Inputs	
8	Agricultural capital stock	
9	Foreign direct investment and official development assistance	. 26
10	Government expenditures	. 26
11	Innovation	
12	Outcomes: Inadequate access to food	. 52
13	Utilization	
14	Poverty	
15	Determinants: Availability	
16	Determinants: Physical and economic access	
17	Vulnerability/Stability	
18	Health and education	. 55
19	Population at risk	
20	Cereal producers and their productivity	
21	Coarse grain producers and their productivity	
22	Rice producers and their productivity	. 93
23	Wheat producers and their productivity	
24	Oilcrop producers and their productivity	. 94
25	Pulse producers and their productivity	
26	Root and tuber producers and their productivity	
27	Vegetable producers and their productivity	
28	Sugar producers and their productivity	
29	Treenut producers and their productivity	
30	Fruit producers and their productivity	
31	Citrus fruit producers and their productivity	
32	Fibre crop producers and their productivity	98
33	Jute and jute-like producers and their productivity	98
34	Meat producers	99
35	Eggs, milk, and processed milk	
36	Fish production	
37	Volume of total cereal trade	100
38	Volume of total oilseeds	
39	Volume of total sugar and honey trade	101
40	Volume of total meat trade	
41	Volume of total dairy products trade	
42	Value of fish trade	
43	Land and Forestry	
44	Forestry production and trade	
45	Forestry production: finished products	
46	Water withdrawal and pressure on renewable water resources	
47	Species threatened and nationally protected areas	
48	Agri-environmental indicators	128
49	Water pollution	129
50	Renewable feedstocks	
51	Agricultural emissions	

## **PART**

## The Setting

The countries of the Near East and North Africa, as with the rest of the world, are in a situation where they must find ways of feeding more and more people with a limited amount of land and water and other natural resources. Transforming the agricultural sector so that it can meet the growing demand for safe and nutritious food, reduce rural poverty and at the same time contribute to environmentally sustainable development is the challenge the region, and the entire world, is facing.

To meet this challenge, attention will need to be paid to the communities whose livelihoods depend on agriculture, forestry and fisheries, particularly smallholder farmers. In the Near East, rural communities must cope with dry conditions and face chronic outmigration and high levels of poverty. Within the region, there are wide variations among countries in terms of their economic and agricultural development. The region includes the oil-exporting countries of the Gulf Cooperation Council (GCC) and Yemen on the Arabian Peninsula, the Maghreb sub-region, which includes Algeria, Libya, Mauritania, Morocco, and

Tunisia, and the Oriental Near East countries (the Islamic Republic of Iran, Iraq, Egypt, Jordan, Lebanon, the former Sudan and Syria). But whatever the level of agricultural development, every country will need to invest in agriculture and food supply systems to ensure that production can be sustained for future generations and that agriculture can continue to be a motor for sustainable economic growth, particularly in rural areas.

Recent years have seen upheavals that have affected the agricultural sector: food prices have soared and then declined on volatile international commodity markets and a global financial crisis has slowed down economic growth. For many countries in the region, agriculture can provide an important haven against global economic and financial turmoil, often more effectively than other sectors.

Downward trends in the global economy are slowly turning, with improved accessibility to financial resources. Recent events have created a greater understanding among governments and donor agencies that agriculture must be the mainstay of any development agenda and of policies promoting economic growth. The reaffirmation of the sector's role in development and growth provides fresh impetus for fostering investments that raise productivity and incomes in agriculture.

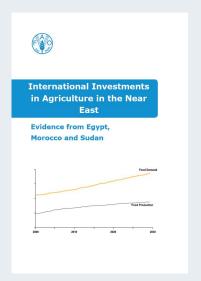
In order to formulate effective evidence based policies, decisions must be based on sound data on a wide range of subjects. There needs to be complete picture of the overall context in which sustainable agriculture development is to take place. This involves gathering information on agriculture, forestry and fisheries, as well as on the natural resource base that supports these activities and the competing demands on these resources from other sectors. Information on livelihoods in agricultural communities is essential for determining the best possible options for achieving sustainable food production and reducing hunger and malnutrition. This includes a greater understanding the demographic trends and the labour situation in rural communities. Although women make significant contributions to the rural economy, they often have less access to productive resources than men, and families often rely on children's work for survival. For this reason, gender-sensitive data on the different roles men and women play in agricultural production and the alleviation of hunger and malnutrition is also required.

#### **Key Resources**

## International Investments in Agriculture in the Near East: Evidence from Egypt, Morocco and Sudan

Three case studies in Egypt, Morocco and Sudan were commissioned by the FAO Regional Office for the Near East and North Africa. The purpose was to (i) identify past and current investment trends in terms of the actors involved, modalities, size and impact, (ii) assess these investments in the context of the region and its food security challenges, and (iii) identify areas to be addressed by policy makers to ensure food security in the long run and provide a starting point to evaluate investments for timely and targeted policy measures. While information on international investments in agriculture is not readily available, the case studies provide an overall picture of agriculture investments, specifically focusing on foreign direct investments.

Webpage: www.fao.org/fileadmin/templates/est/INTERNATIONAL-TRADE/FDIs/Egy\_Mor\_Sud.pdf



#### **Key Resources**

#### The State of Food and Agriculture

The State of Food and Agriculture, FAO's major annual flagship publication, aims at bringing to a wider audience balanced science-based assessments of important issues in the field of food and agriculture. Each edition of the report contains a comprehensive, yet easily accessible, overview of a selected topic of major relevance for rural and agricultural development and for global food security. This is supplemented by a synthetic overview of the current global agricultural situation.

2013: Food systems for better nutrition

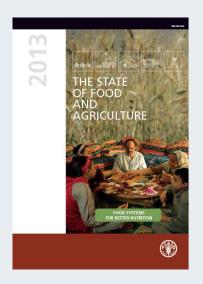
2012: Investing in agriculture for a better future

2010-11: Women in Agriculture, Closing the gender gap for development

2009: Livestock in the balance

Publication cycle: Annual

Webpage: www.fao.org/publications/sofa



#### **Overview**

The Near East and North Africa Region covers about 1.2 million hectares (approximately 9.4 percent of the world's total land area). In 2012, the population in the region was 432 million people, and over the next 10 years it is expected to reach 780 million people. The region's share of the world population has increased from 5.6 percent in 2001 to approximately 6.1 percent in 2012.

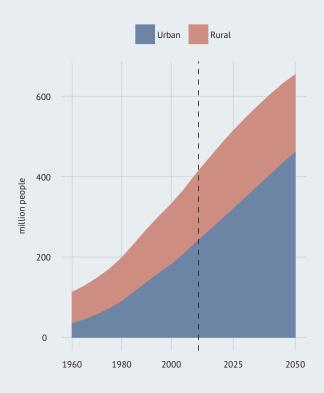
The average annual population growth rate between 2000 and 2012 is 2.2 percent. Some of the world's highest rates of population growth can be found in the region's GCC countries. Sub-Saharan Africa is the only other region with a higher rate of population growth.

Although population density in the region is relatively low (29.2 persons per square kilometer) compared to other regions, densities are increasing. Within the region there is a wide range of densities, with the small island country of Bahrain having a very high population density (1 701 people per square kilometer), and Libya and Mauritania having the lowest densities (roughly 3.5 persons per square kilometer).

In line with the global trend, the population of the Near East region is becoming increasingly urban. Between 2000 and 2011, the percentage of the total population living in rural areas fell from 42.6 percent to 38.8 percent. There are only three countries in the region where the rural population is greater than 50 percent: Yemen (67.7 percent), Mauritania (58.5 percent) and Egypt (56.5 percent). In the region, the percentage of the population that is engaged in agriculture stood at 22.7 percent in 2011, down from 30 in 2000.

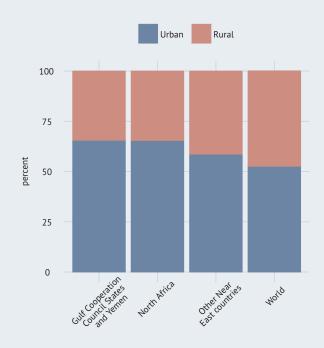
Given this demographic situation, which on the whole is similar to the global outlook, a clear challenge for the region is to ensure that agricultural communities are able to contribute to ensuring that expanding urban populations have access to safe, nutritious food, and can do so in a manner that does not exhaust the limited natural resources.

CHART 1: Near East and North Africa rural and urban population (1960-2050)



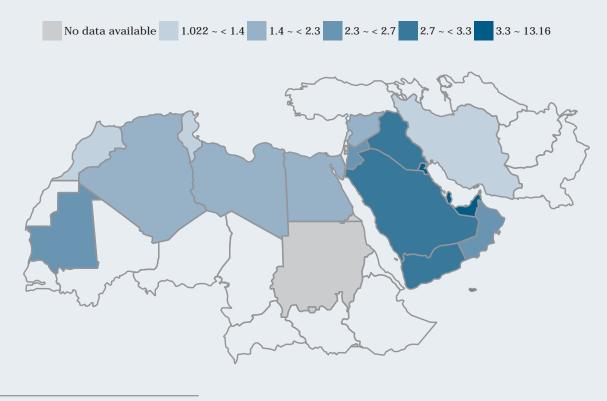
*Source*: United Nations Population Division. Data after 2011 are projections.

CHART 2: Rural and urban population, share of total population (2011)



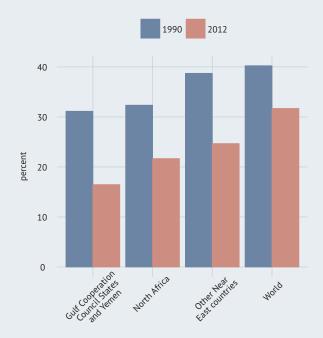
Source: United Nations Population Division.

MAP 1: Population annual growth (percent, 2000-2012)



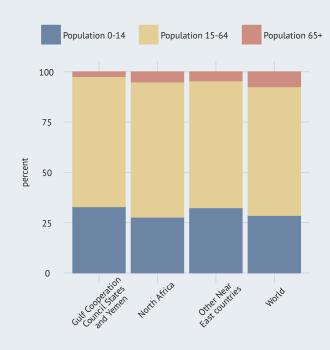
Source: United Nations Population Division.

CHART 3: Agricultural population, share of total population (1990 and 2012)



Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 4: Population ages 0-14, 15-64 and 65+, share of total (2010)



Source: United Nations Population Division.

Progress in being made in key health-related indicators, which will affect the region's future demographic situation. Between 2000 and 2011, life expectancy in the region increased from 68.5 years to 70.6 years, which is slightly higher than the world average. Mauritania had the lowest life expectancy (61.2 years) and has made limited progress in this area. In Yemen life expectancy is also under 70, but the country has made noticeable advances over the last decade. Iraq is the only other country in the region where life expectancy is less than 70. Qatar has the highest life expectancy in the region (78.2 years).

Increases in life expectancy partly reflect progress that has been made in lowering infant and under-five mortality. Between 2000 and 2012, infant mortality decreased from 34.6 deaths per 1 000 live births to 25.6. Over the same period, under-five mortality declined from 46.1 deaths per 1 000 live births to 32.7. Both of these figures are below the global average. The figures for the GCC countries and Lebanon are significantly lower than the other countries in the region. Mauritania and Yemen are the only countries where the figures for both these indicators are above the global average.

In 2011, the region's per capita income was US\$15 000. Per capita income in the region is considerably higher than the 2011 global per capita income level of US\$10 000. However, wealth in the region is very unevenly distributed, and this has a clear correlation to the above-mentioned indicators. In 2011, GCC countries account for about 84 percent of the regions' per capita income. Qatar registered the highest per capita income (US\$ 80 000), and Mauritania and Yemen the lowest (approximately US\$ 1 000). This disparity is due to the heavy concentration of oil resources in GCC countries and the population difference between the countries.

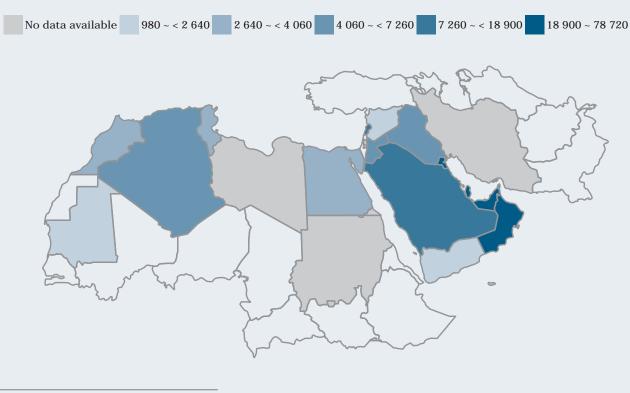
#### Further reading

- Regional Conference For The Near East, FAO Regional Priority Framework for the Near East (http://www.fao.org/docrep/meeting/020/k9512e.pdf)
- World Population Prospects: the 2011 revision (www.un. org/esa/population/)
- UN Population Fund (www.unfpa.org/)
- FAO Food and Nutrition Security in Urban Environments (www.fao.org/ag/agn/nutrition/urban\_security\_en.stm)

CHART 5: Life expectancy at birth, selected countries (2000 and 2011)

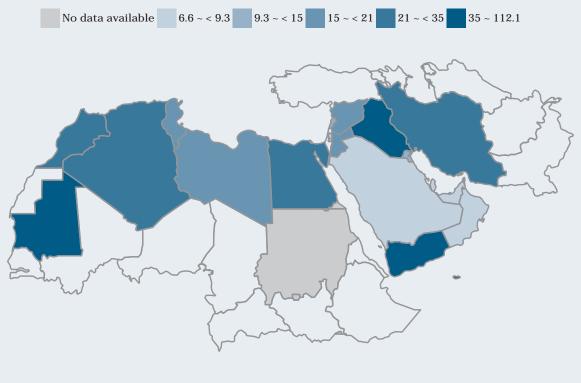


MAP 2: GNI per capita (current US\$, 2010-2011\*)



Source: World Bank (WDI).

MAP 3: Under-5 mortality rate (per 1000 live births, 2010-2011\*)



#### **Economy**

Changes in the wider economy and macroeconomic policies continue to affect the performance of the agricultural economy. Although recovery continues, growth in the advanced economies remains too low to reduce unemployment notably. In particular, fiscal consolidation, a financial system that is still weak, and a general feeling of uncertainty have had a negative impact on incomes, and hence demand. This situation, in turn, affects emerging market and developing economies through trade and financial channels, including volatile capital flows. Given the growing integration of the global economy, macroeconomic policies play an increasingly important role in determining the performance of agriculture sectors.

In 2011, the combined total Gross Domestic Product (GDP) for the region stood at US\$ 1.1 trillion, up from US\$ 0.8 trillion in 2000. Between 2001 and 2011, the region's share of the world's GDP remained relatively steady and stood at 2.5 percent. As the region is highly reliant on the export of its oil resources, its share of the world's GDP is determined by increases in international oil prices. In 2008, when oil prices were at a record high, the region reached its highest level of GDP (US\$ 2.3 trillion). Growth in GDP in the region increased from 2.9 in 2001 to 4.3 in 2011. The highest average growth rate for the region was recorded in 2004 (8.9 percent). Qatar had the highest rates of growth in 2011 (roughly 19 percent).

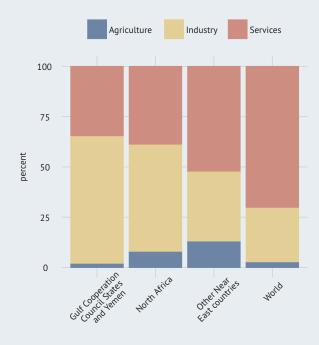
In the Near East and North Africa, the value added of agriculture declined from 13 percent of GDP in 2001 to 9 percent in 2011. Egypt, Mauritania and Morocco are the countries in the region where agriculture's share of added value to the GDP exceeds 10 percent. The agricultural value added per worker is quite high in the region (US\$ 9 000 in 2011) compared to the global average (US\$ 1 000).

Foreign direct investment (FDI) represents a small share of the region's GDP ( 1.4 percent). This is lower than the global figure (2.5percent). Lebanon (8.7 percent) and Jordan (5.1 percent) are the countries in the region where FDI contributes the largest share of GDP.

#### **Further reading**

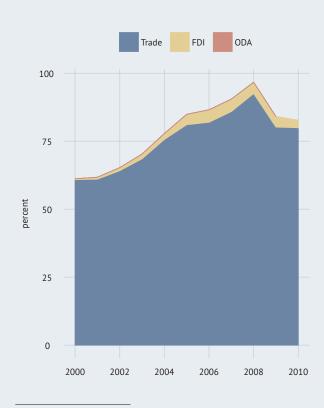
- FAO (2013a)
- World Bank: Global Economic Prospects (wwwr.worldbank. org/prospects/)
- International Monetary Fund: World Economic Outlook (www.imf.org/external/index.htm)

CHART 6: Value added in agriculture, industry, and services as shares of GDP (2008)

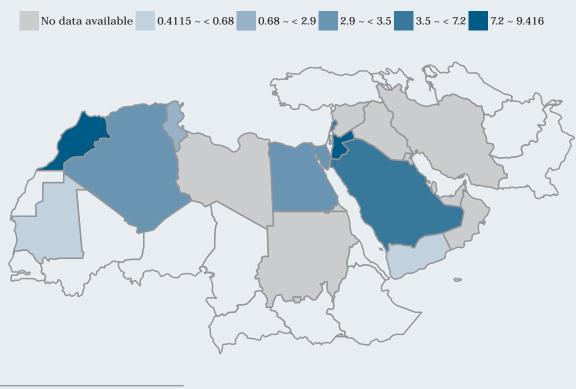


Source: World Bank (WDI).

CHART 7: Near East and North Africa trade, FDI, and ODA as shares of GDP (2000-2010)

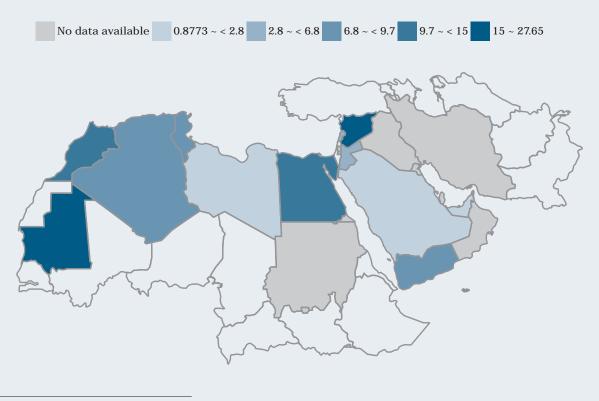


MAP 4: Agriculture, value added per worker annual growth (percent, 2000-2010)



Source: World Bank.

MAP 5: Agriculture, value added as share of GDP (percent, 2008-2012\*)



#### **Land and Water**

Desert climatic conditions predominate throughout the Near East and North Africa region, and much of the land is not suited to agriculture. Out of the region's total land area of 1.2 billion hectares, only a third is considered agricultural land. Most of this agricultural land (85 percent) is used for meadows and pastures. In the GCC countries and Yemen, the percentage of land dedicated to pastures and meadows is 97.5 percent. In Mauritania, it is almost 100 percent. This is much higher than the global average, and a clear indication of the central role livestock plays in agriculture in the region.

Within the region, the arable land represents about 13.7 percent of total agricultural land area, covering an area of about 52 million hectares. There are significant variations in the percentage of arable agricultural land within the region. In the GCC countries and Yemen, the percentage of agricultural land that is arable is only 2.2 percent. Egypt has the lowest percentage of agricultural land to total area in the region (3.7 percent), but much of this is arable (78.3 percent). This is by far the highest percentage of arable land to total agricultural area in the region. Iraq has the next largest percentage (48.7 percent).

The amount of agricultural land dedicated to permanent crops is also low (2 percent). Tunisia and Egypt are the only two countries in the region with significant areas of agricultural land under permanent crops (23.8 percent and 21.7 percent respectively).

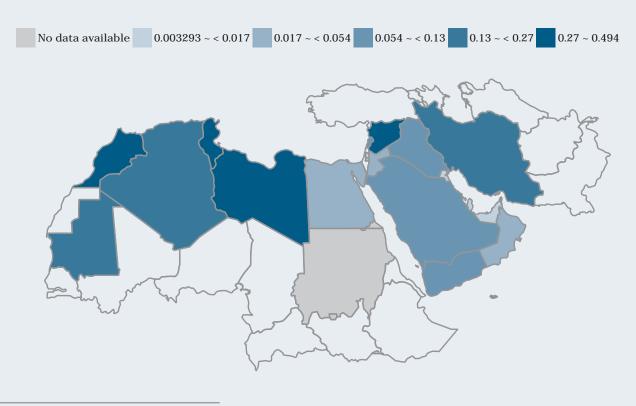
With forests covering only about 1.9 percent of its total land area, the region has meager forest resources, accounting for only 0. 6 percent of the world's total forest resources. Only Lebanon and Morocco have more than 10 percent forest cover. In nine countries, forests cover less than one percent of the total land area.

CHART 8: Arable land per capita (2000 and 2011)



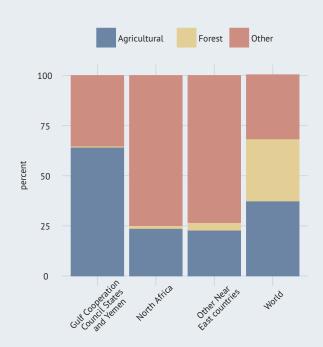
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division

MAP 6: Cropland per capita (ha/cap, 2011)



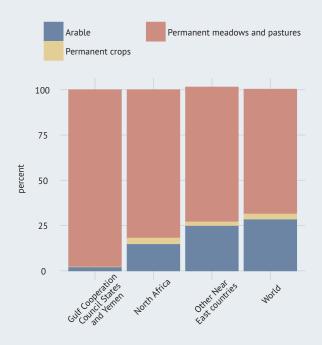
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 9: Land area (2011)



Source: FAO, Statistics Division (FAOSTAT).

CHART 10: Agricultural area (2011)



Source: FAO, Statistics Division (FAOSTAT).

Large parts of the region are desert and experience extremely low natural precipitation, and water resources are scarce. The rainfall data from 2008 indicate that the region received a total of 2 905 mm of rainfall. Three countries, Syria, Lebanon and Iran, obtained approximately 40 percent of the region's rainfall. The figure of 2 000 cubic meters per person per year is usually used as an indicator of water scarcity. In 2010, Mauritania and Iraq were the only countries where per capita water resources exceed this water scarcity threshold.

Due to the lack of precipitation, the region relies heavily on irrigation for its agricultural production. Fresh water withdrawals for agriculture account for about 78 percent of the region's water withdrawals. In 2009, the region's fresh water withdrawal stood at 4 509 billion cubic meters.

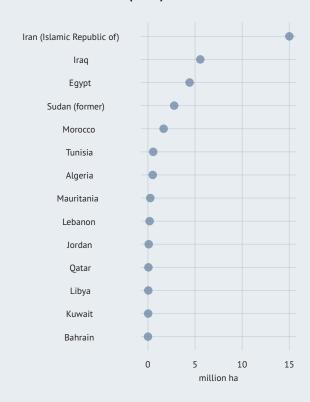
Iran has the largest area equipped for irrigation, at over 9 million hectares, and the most potential for expanding irrigation. Egypt and Iraq have the next highest potential for increasing irrigation. AQUASTAT, FAO's global water information system, points out that it is important to distinguish between land under irrigation and actually irrigated land. The first indicator is the physical area equipped with irrigation infrastructure. The second is expressed as a percentage and is defined as part of the area under irrigation that is actually irrigated in a given year. The most recent data indicates that, for most of the countries in the region, the share of actually irrigated land is quite high.

The agricultural sector is facing increased competition from cities and industries for water resources, and realizing irrigation potential may be difficult. Countries in the region must increase the efficiency of their water usage and ensure higher returns per volume of water used. They also need to adopt practices, such as the re-use of waste water, for expanding available water resources. Strategies will also need to be developed to ensure countries in the region can adapt to the impacts of climate change on their limited water resources.

#### Further reading

- AQUASTAT, FAO's global information system on water and agriculture (http://www.fao.org/nr/water/aguastat/ main/index.stm)
- FAO The State of the World's Land and Water Resources for Food and Agriculture (SOLAW) - Managing Systems at Risk 2011 (www.fao.org/nr/solaw/solaw-home/en/)
- Bruinsma (2011)
- FAO Natural Resources and Environment Department (www.fao.org/nr/)

CHART 11: Irrigation potential, selected countries (2012)



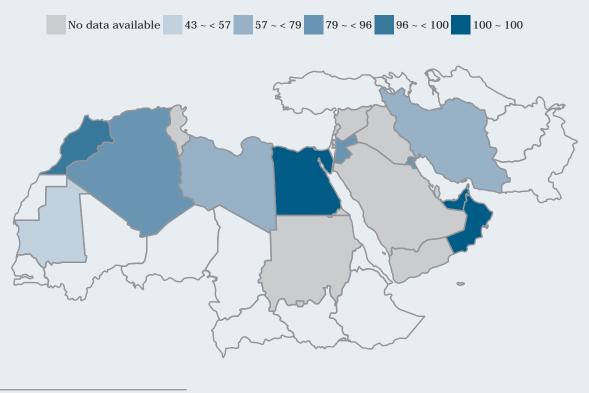
Source: Land and Water Division (AQUASTAT).

The irrigation potential area includes the area already equipped for irrigation. CHART 12: Total equipped area (2009)



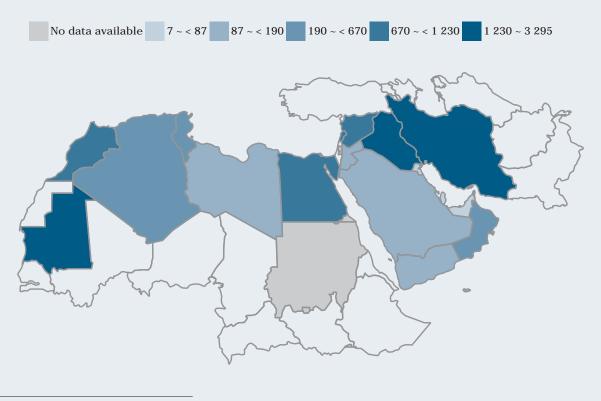
Source: Land and Water Division (AQUASTAT).

MAP 7: Share of equipped area actually irrigated (percent, 2000-2012\*)



Source: Land and Water Division (AQUASTAT).

MAP 8: Water resources per capita (m<sup>3</sup>/yr/cap, 2010)



Source: Land and Water Division (AQUASTAT).

#### Labour

In developing regions, employment growth is often driven by demographic changes. It is common that workers are not engaged in formal wage employment but instead are selfemployed or do unpaid family work, such as in agriculture, especially subsistence farming.

In the Near East and North Africa, there is wide variation among countries in terms of the percentage of the labour force engaged in agriculture. In the GCC countries and Jordan the share is less than five percent. Morocco has the highest share at 40.2 percent, followed by Egypt, Iraq and the Islamic Republic of Iran.

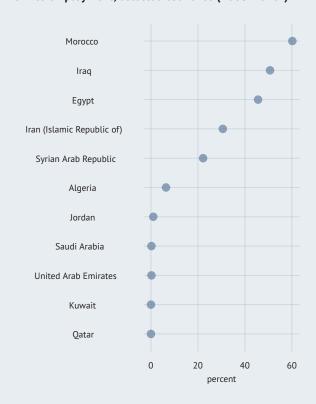
The participation of women in the overall labour force in the region (21.6 percent) is much lower than the world average (49 percent). Qatar is the only country in the region where the rate of women's participation in the labour force exceeds the global average. However, the female share of the agricultural labour force in the Near East and North Africa appears to have increased significantly, from 30 percent in 1980 to almost 45 percent in 2010. Jordan, the Libya and the Syrian Arab Republic display some of the highest and fastestgrowing rates of female agricultural labour force participation. In Morocco, women make up more than 60 percent of the agricultural labour force, whereas men represent 33 percent. In four other countries (Egypt, the Islamic Republic of Iran, Iraq and the Syrian Arab Republic), the percentage of women employed in agriculture is much higher than the percentage of men.

The percentage of children between the ages of seven and 14 that are employed varies widely among the countries in the region. Of the countries for which data are available, Mauritania has the highest percentage of employed children (21.3 percent).

#### **Further reading**

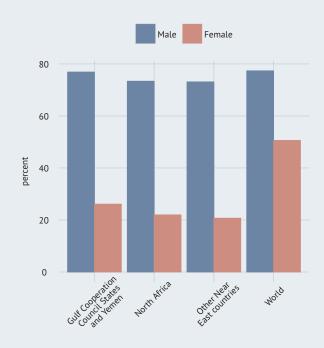
- FAO (2012c)
- FAO Gender, Equity and Rural Employment Division (www. fao.org/economic/esw/)

CHART 13: Female employment in agriculture, share of female employment, selected countries (2005-2010\*)

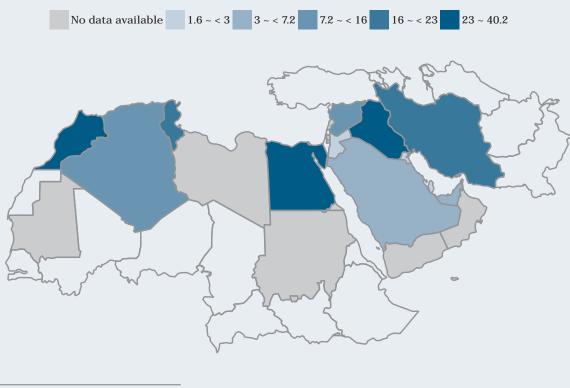


Source: World Bank (WDI).

CHART 14: Labor force participation rate by gender, ages 15+ (2011)

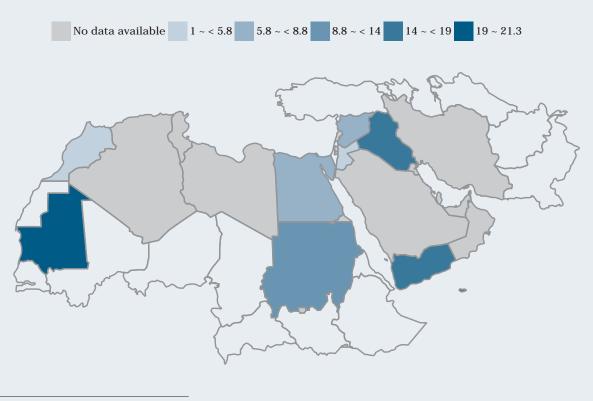


MAP 9: Employment in agriculture, share of total employment (percent, 2005-2010\*)



Source: World Bank (WDI).

MAP 10: Children in employment, share or children ages 7-14 (percent, 2000-2011\*)



#### Inputs

The use of fertilizers is becoming increasingly important due to the impact of more intensive cultivation practices and shorter fallow periods on soil fertility. In 2011, the countries of the Near East and North Africa applied nearly 36 tonnes of nitrogen per hectare of agricultural land. This is less than most developing regions and the global average (73.3 percent). Only Africa applies less nitrogen fertilizer (6.87 tonnes per hectare). There are wide variations within the region. The GCC countries and Yemen apply roughly 94 tonnes of nitrogen per hectare of arable land and permanent crops. Qatar applies nearly 9 000 tonnes of nitrogen per hectare land. In Egypt, farmers apply over 360 tonnes of nitrogen fertilizer per hectare. By contrast, farmers in Algeria, apply only 7.5 tonnes. Farmers in Sudan apply the least amount of nitrogen fertilizer (5.0 tonnes per hectare).

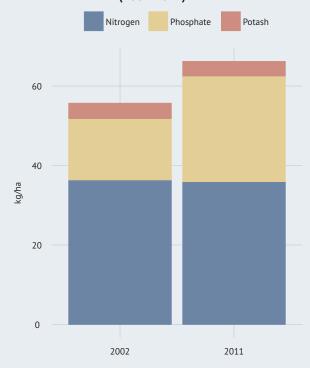
The region applies a relatively high amount of phosphate fertilizer (26.6 tonnes per hectare). This is the highest of any region other than Latin America and the Caribbean. Jordan applies the most phosphate fertilizer per hectare of arable land and permanent crops (162 tonnes), followed by Tunisia (155 tonnes). Relatively little potash fertilizers is used, however (3.7 tonnes per hectare). Jordan applies the most potash fertilizer (487 tonnes per hectare) followed by Bahrain (292 tonnes per hectare) and Kuwait (244 tonnes per hectare).

Pesticides are the insecticides, fungicides, herbicides, disinfectants and other substances or mixtures of substances used to prevent, destroy or control any pest. Pests include vectors of human or animal disease, and unwanted species of plants or animals that harm or interfere with the production, processing, storage, transport or marketing of food, agricultural commodities, wood and wood products or animal feedstuffs, or the substances that may be administered to animals for the control of insects, arachnids or other pests in or on their bodies. Pesticides include substances intended for use as plant growth regulators, defoliants, desiccants or agents for thinning fruit or preventing the premature fall of fruit, and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. Data refer to quantities of pesticides applied to crops and seeds in the agriculture sector.

#### Further reading

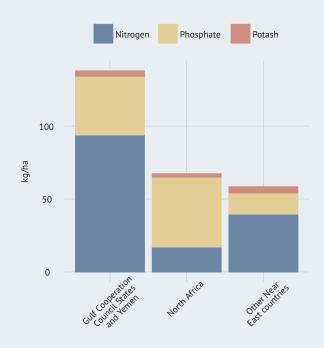
- Schmidhuber, J. and Bruinsma, J. (2011)
- FAO Agriculture Department (www.fao.org/ag/portal/index en/en/)

CHART 15: Near East and North Africa fertilizer consumption per ha of arable area and permanent crops (2002-2011)



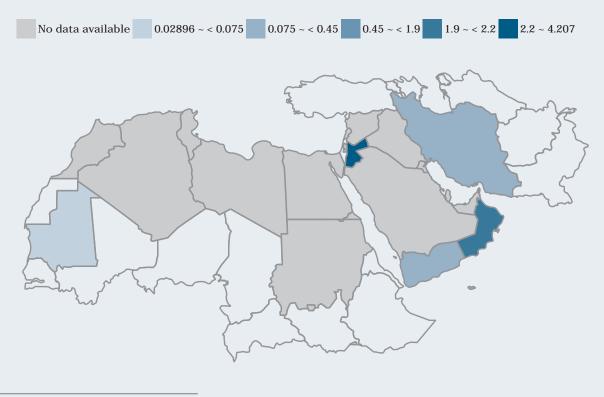
Source: FAO, Statistics Division (FAOSTAT).

CHART 16: Fertilizer consumption per ha of arable area and permanent crops (2011)



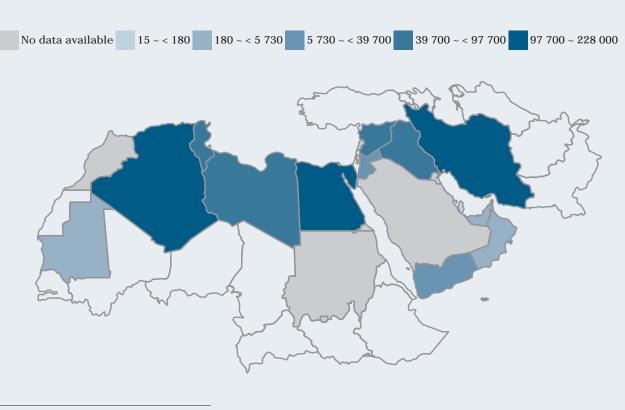
Source: FAO, Statistics Division (FAOSTAT).

MAP 11: Nitrogen and phosphate fertilizers consumption per ha of arable area and permanent crops (kg/ha, 2011)



Source: FAO FAO, Statistics Division and FAO, Statistics Division (FAOSTAT).

MAP 12: Agricultural tractors, total (tractors, 2000-2010\*)



Source: FAO, Statistics Division (FAOSTAT).

#### **Capital and Investment**

Investment drives agricultural growth and development by improving productivity and productive capacity. This can be measured either in the form of physical assets or in terms of financial assets. Investment in agriculture is an important factor for analyzing a number of policy issues related to achieving food security and sustainable growth of agriculture. In addition to giving information on the capital base for agricultural activity, it also provides share and trend information on private and public as well as domestic and external resources diverted from short-term consumption and other forms of productive and non-productive expenditures for improving agriculture and rural development.

Although investments are often mobilized by the farmers themselves, expenditures by general government units and public corporations can create a conducive environment – economic incentives – and ensure sufficient availability of public goods such as basic rural infrastructure and market openness. The efficiency of public expenditure for agriculture is therefore a key element of the overall policy mix and will require a reversal of the declining trend observed over the last 20 years.

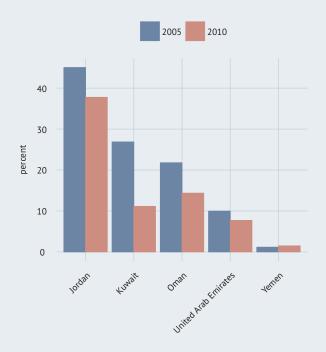
Between 2000 and 2010, total net ODA to the region increased from US\$6.2 billion to US\$11.7 billion. Much of this increase in ODA was directed to Iraq, where ODA rose from US\$136 million to US\$2.3 billion. Morocco also saw a significant increase in ODA, where it rose from US\$996 million to US\$2.5 billion. The Islamic Republic of Iran and Saudi Arabia were the only countries in the region to register a decline in ODA between 2000 and 2010.

The percentage of ODA to agriculture, forestry and fisheries to the entire region was 3.9 percent, the lowest for any developing region. The percentage was highest in the Former Sudan (7.3 percent). Egypt, Lebanon, Morocco and the Syrian Arab Republic were the only other countries in the region where the percentage was six percent or higher. Forestry received almost no ODA. Mauritania and Yemen were the only two countries where ODA to fisheries exceeded two percent.

#### **Further reading**

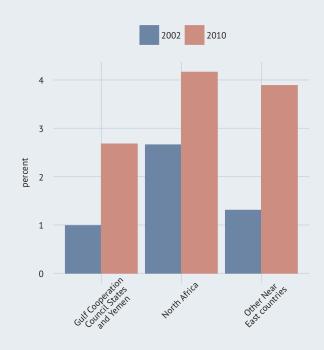
- FAO How to Feed the World in 2050: Investment Brief (www.fao.org/wsfs/forum2050/)
- FAO Foreign Investment in Agriculture (www.fao.org/economic/est/investments/)
- Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources (www.unctad.org/en/Pages/Home.aspx)
- Foreign Agriculture Investment Database (www.fao.org/tc/policy-support/investment-policy/fdi/en/)

CHART 17: Credit to agriculture, share of added value in agriculture, selected countries (2005-2010)



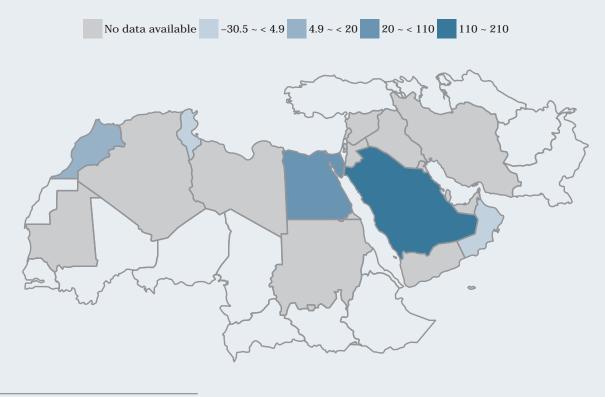
Source: FAO, Statistics Division.

CHART 18: **ODA received in agriculture, total share of ODA (2002 and 2010)** 



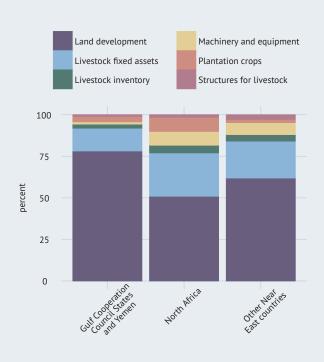
Source: FAO, Statistics Division.

MAP 13: FDI (inward flows) to agriculture (million US\$, 2010-2011\*)



Source: Foreign agriculture investment database.

CHART 19: Share of components in capital stock (2007)



Source: FAO, Statistics Division (FAOSTAT).

CHART 20: Government expenditures in agriculture, forestry, fishing, and hunting, selected countries (2010)



Source: FAO, Statistics Division (FAOSTAT).

#### **Innovation**

Economic growth is fostered not only by inputs but also through innovation. For innovation to occur, investments in research and development (R&D) must take place, including within agriculture.

Following a decade of slowing growth in the 1990s, global public spending on agricultural R&D increased steadily from US\$26.1 billion in 2000 to US\$31.7 billion in 2008. Between 2000 and 2008, spending on agricultural R&D in the Near East and North Africa region as a whole increased only slightly from US\$1.5 billion to US\$1.7 billion. The greatest share of this increase was in the Islamic Republic of Iran, where agricultural R&D spending increased from US\$574 million to US\$731 million. Increases in other countries were much more modest. In five countries in the region, investment in agricultural R&D declined, with Saudi Arabia registering the greatest drop in spending, falling from US\$132 million to US\$84 million.

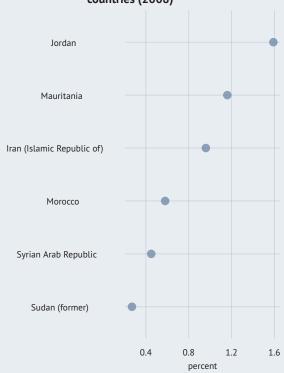
The capacity to innovate depends in part on an ability to harness information and communications technology. Mobile telephony and the Internet have become essential tools in development. In the Near East and North Africa, there were 2.3 fixed Internet broadband subscribers per 100 people in 2011. This is considerably less than the world average (8.5). Only Africa has fewer subscribers per 100 people. The GCC countries have the highest number of subscribers per 100 people in the entire region, with Bahrain leading the way with 13.8. In other countries in the region, the number is much lower.

Between 2005 and 2010, developing countries' share of worldwide mobile telephone subscriptions increased from approximately 50 to 75 percent. The Near East and North Africa region as a whole has 94.9 mobile cellular phones per 100 people, slightly lower than the global average. However, in the GCC countries the number is much higher, while Yemen, with 47 per 100 people, has the lowest.

#### **Further reading**

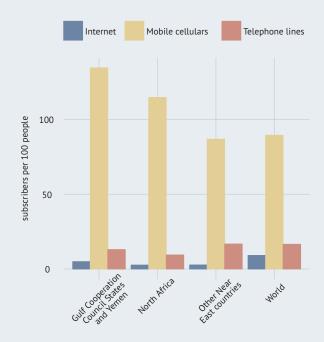
- Agricultural Science and Technology Indicators (www.asti. cgiar.org/)
- ASTI Global Assessment of Agricultural R & D Spending (www.ifpri.org/sites/default/files/publications/ astiglobalassessment.pdf)

CHART 21: Total public agricultural research expenditure, share of agricultural GDP, selected countries (2008)

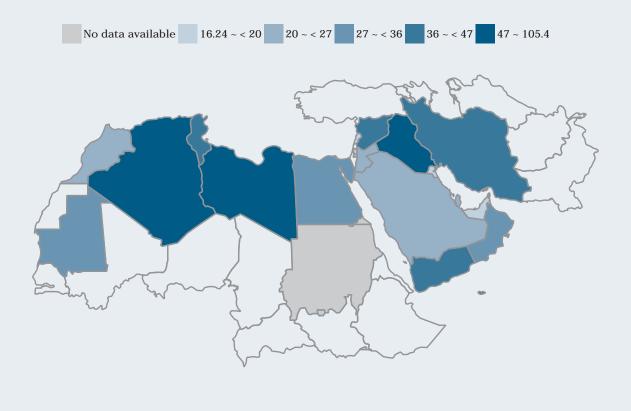


Source: ASTI.

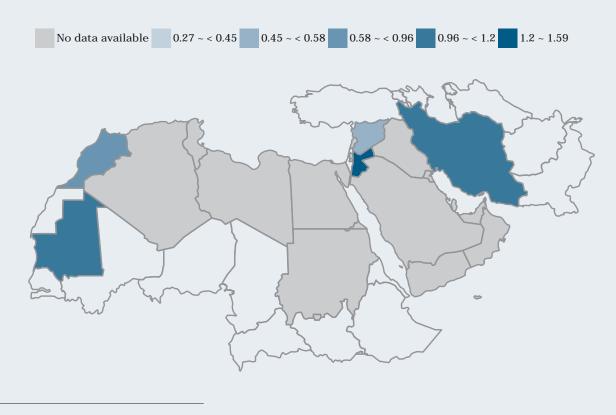
CHART 22: Mobile cellular, broadband internet, and telephone lines subscribers (2012)



MAP 14: Access to mobile cellular phone subscriptions annual growth (percent, 2000-2012)



MAP 15: Total public agricultural research expenditure, share of agricultural GDP (percent, 2006-2010\*)



Source: ASTI.

TABLE 1: Population and structure

			IADEL I	.: Popula	pulation	structure	<del>-</del>			Age com	nosition
	to	otal	ru			an	density	agricı	ıltural	between	over
		-						share o		0-14	65+
	thousand	thousand	percent	percent	percent	percent		percent	percent	percent	percent
	people	people					people/km <sup>2</sup>				
	2000	2012	2000	2011	2000	2011	2011	2000	2012	2010	2010
Regional office for the Near East and North Africa	338 485	432218	42.6	38.8	57.4	61.2	29.2	29.8	22.7	31.5	4.3
Gulf Cooperation Council States and Yemen	46235	71474	40.0	34.4	60.0	65.6	22.4	24.9	16.5	32.9	2.4
Bahrain	638	1359	11.6	11.3	88.4	88.7	1701.0	1.1	0.6	20.0	2.1
Kuwait	1941	2892	1.9	1.7	98.1	98.3	175.3	1.1	1.0	26.7	2.5
Oman	2 2 6 4	2904	28.4	26.6	71.6	73.4	9.8	36.0	27.6	27.1	2.6
Qatar	591	1939	3.7	1.2	96.3	98.8	164.6	1.4	0.7	13.5	1.0
Saudi Arabia	20 045	28 705	20.2	17.7	79.9	82.3	12.9	10.1	4.4	30.3	3.0
United Arab Emirates	3 0 3 3	8106	19.8	15.6	80.3	84.4	106.8	5.0	2.8	17.0	0.4
Yemen	17723	25 5 6 9	73.7	67.7	26.3	32.3	44.1	47.9	36.8	44.2	2.5
North Africa	76657	89882	41.3	34.5	58.7	65.5	15.6	27.4	21.7	27.7	5.1
Algeria	30534	36 486	39.2	27.0	60.8	73.0	15.9	24.2	20.2	27.0	4.6
Libya	5 2 3 1	6469	23.7	22.3	76.3	77.7	3.5	5.8	2.7	30.4	4.3
Mauritania	2 643	3 6 2 3	60.0	58.5	40.0	41.5	3.6	52.7	49.9	39.9	2.7
Morocco	28793	32 599	46.7	43.0	53.3	57.0	71.8	33.7	24.5	28.0	5.5
Tunisia	9456	10705	36.6	33.7	63.4	66.3	68.7	23.8	19.9	23.5	7.0
Other Near East Countries	215 593	270862	43.6	41.3	56.4	58.7	46.5	31.6	24.7	32.4	4.6
Egypt	67 648	83 958	57.2	56.5	42.8	43.5	79.8	34.7	26.6	31.5	5.0
Iran (Islamic Republic of)	65 342	75 612	36.0	30.9	64.0	69.1	46.3	26.6	20.7	22.9	5.2
Iraq	23857	33 703	32.2	33.5	67.8	66.5	73.1	9.3	4.9	43.2	3.3
Jordan	4827	6 4 5 7	20.2	17.3	79.8	82.7	69.6	9.1	5.8	37.5	3.9
Lebanon	3742	4292	14.0	12.7	86.0	87.3	428.4	3.6	1.6	24.8	7.3
Sudan											
Sudan (former)	34188	45 722					19.7	60.9	49.6	40.1	3.6
Syrian Arab Republic	15 989	21118	48.1	43.9	51.9	56.1	119.6	23.8	19.2	36.9	3.9
Regional Office for Africa	668 229	898226	68.5	63.9	31.5	36.1	37.6	60.4	54.2	42.4	3.2
Regional Office for Asia and	3 640 853	4110736	50.0	47.3	50.0	52.7	81.2	34.9	30.2	25.1	7.7
the Pacific	000001	000 003	21.7	20.0	CO 3	70.4	22.5	111	7.0	17.4	144
Regional Office for Europe	866961	900803	31.7	29.6	68.3	70.4	33.5	11.1	7.8	17.4	14.4
and Central Asia	516162	597748	24.7	21.0	75.3	79.0	29.7	20.6	15.2	27.9	6.8
Regional Office for Latin America and the Caribbean	210107	397748	24.7	21.0	15.5	79.0	29.7	20.0	15.2	27.9	0.0
World	6100688	7 028 688	50.5	47.5	49.7	52.6	53.5	35.7	31.7	28.5	7.5
	0 2 0 0 0 0 0	. 020000	5 5.5	5		02.0	33.3	55.7	0 = ,		

TABLE 2: **Demographic indicators** 

IADEL 2. Demographic indicators											
		r capita		nortality		mortality	Life expectancy at birth				
	curre	nt US\$	per 1,000	live births	per 1,000	live births	to	tal			
	US\$ 2000	US\$ 2012	people 2000-01*	people 2010-12*	people 2000-01*	people 2010-12*	years 2000-01*	years 2010-12*			
Regional office for the Near East and North Africa	1966		34.6	25.6	46.1	32.7	68.5	70.6			
Gulf Cooperation Council States and Yemen	5 529		27.2	19.9	35.5	25.1	68.4	71.1			
Bahrain	10 450		10.5	8.4	12.2	9.8	74.8	76.4			
Kuwait	19290		10.9	9.6	12.7	11.1	73.4	74.3			
Oman	7 3 6 0		13.9	10.1	16.1	11.8	72.8	76.3			
Oatar			10.3	6.6	11.9	7.7	77.0	78.3			
Saudi Arabia	8 3 5 0		17.6	7.9	20.6	9.2	72.9	75.3			
United Arab Emirates			9.3	7.4	10.9	8.6	74.6	76.8			
Yemen	420	1270	67.4	47.7	92.8	62.1	60.7	62.7			
North Africa	1515		43.9	32.1	58.5	40.2	69.2	71.0			
Algeria	1540		28.2	17.8	32.8	20.8	69.1	70.8			
Libya			23.6	13.8	27.5	16.1	72.3	75.0			
Mauritania	510	1110	74.4	65.8	108.9	86.5	59.8	61.2			
Morocco	1320	2950	40.6	27.7	48.1	32.3	68.3	70.4			
Tunisia	2310	4150	23.6	14.4	28.1	16.8	72.8	74.8			
Other Near East Countries	1 362		34.5	24.6	46.5	32.4	68.2	70.3			
Egypt	1 470	3 0 0 0	33.8	18.7	41.9	22.0	68.8	70.7			
Iran (Islamic Republic of)	1620		27.0	15.7	32.6	18.4	70.0	73.4			
Iraq		5870	35.2	29.0	43.9	35.3	70.7	69.0			
Jordan	1790	4720	22.6	16.8	26.9	19.7	72.0	73.6			
Lebanon	5 470	9190	16.1	8.3	18.7	9.7	74.9	79.6			
Sudan			66.2	50.6	103.0	75.5					
Sudan (former)	330	1 450					58.3	61.7			
Syrian Arab Republic	970		19.2	12.6	22.5	14.9	73.6	74.8			
Regional Office for Africa	496	1383	86.1	63.2	140.6	96.1	50.5	55.9			
Regional Office for Asia and the Pacific	2 202	5612	44.8	30.4	58.7	38.0	68.3	70.9			
Regional Office for Europe and Central Asia	11912	24003	19.1	12.8	22.8	14.9	73.4	76.3			
Regional Office for Latin America and the Caribbean	3 847	9145	26.4	19.4	32.7	23.3	71.8	74.4			
World	5 323	10116	53.8	38.8	81.5	55.4	67.9	70.5			

TABLE 3: **Economy** 

			TABLE 3: <b>E</b>	conomy				
	Gross dome	stic product	Value	added, share o	of GDP		Share of GDP	
	total cur	rent US\$	agriculture	industry	services	trade	FDI	ODA
	billion US\$	billion US\$	percent	percent	percent	percent	percent	percent
	2000	2012	2010-12*	2010-12*	2010-12*	2011-12*	2011-12*	2011
Regional office for the Near East and North Africa	818					82.0	1.4	
Gulf Cooperation Council States and Yemen	386					105.3	1.7	
Bahrain	8					123.7	2.7	
Kuwait	38					95.7	0.2	
Oman	20					94.5	1.1	
Qatar	18					96.5	-0.1	
Saudi Arabia	188	711	2.2	62.6	35.2	86.4	1.7	
United Arab Emirates	104		0.9	57.5	45.1	169.6	2.2	
Yemen	10	36	7.7	29.4	62.9		-2.2	0.0
North Africa	148					92.7	1.6	
Algeria	55	208	6.9	62.1	31.0		1.4	0.0
Libya	34							
Mauritania	1	4	15.5	50.1	34.4	152.3	1.1	0.1
Morocco	37	96	15.1	29.9	55.1	86.6	2.5	0.0
Tunisia	21	46	8.7	29.9	61.4	106.6	0.9	0.0
Other Near East Countries	284					53.0	1.0	
Egypt	100	257	13.9	36.7	49.3	44.8	-0.2	0.0
Iran (Islamic Republic of)	101						0.8	
Iraq	26	210					0.8	0.0
Jordan	8	31	3.4	29.1	67.5	119.1	5.1	0.0
Lebanon	17	43	6.3	20.5	73.2	72.9	8.7	0.0
Sudan		59						0.0
Sudan (former)	12		24.5	28.1	47.4	34.8	4.8	
Syrian Arab Republic	19	74						
Regional Office for Africa	342	1263				70.8	3.2	0.0
Regional Office for Asia and the Pacific	8 4 5 0	23671	4.9	31.4	63.7	47.6	2.3	0.0
Regional Office for Europe and Central Asia	9704	21 289	1.8	26.2	72.0	83.6	1.8	
Regional Office for Latin America and the Caribbean	2 080	5614	6.3	32.4	61.3	46.6	3.0	0.0
World	31979	69569				58.6	2.5	

TABLE 4: Land

			IA	BLE 4: <b>Lan</b>	u				
		Land	area			Agricultu	ıral area		Cropland
	total	agricultural	forest	other	total	arable	pern	nanent	per capita
	million ha	percent	percent	percent	thousand ha	percent	crops percent	meadows & pastures percent	ha/cap
	2011	2011	2011	2011	2011	2011	2011	2011	2011
Regional office for the Near East and North Africa	1222	33.8	1.9	64.4	521071	13.7	1.9	85.0	0.17
Gulf Cooperation Council States and Yemen	310	64.2	0.6	35.2	199201	2.2	0.3	97.5	0.07
Bahrain	0	11.0	0.7	88.3	8	16.3	35.9	47.8	0.00
Kuwait	2	8.5	0.4	91.1	152	7.2	3.3	89.5	0.01
Oman	31	5.7	0.0	94.3	1770	1.8	2.2	96.0	0.02
Qatar	1	5.7	0.0	94.3	66	21.2	3.0	75.8	0.01
Saudi Arabia	215	80.6	0.5	18.9	173 355	1.8	0.1	98.1	0.12
United Arab Emirates	8	4.8	3.8	91.4	397	12.7	10.5	76.8	0.01
Yemen	53	44.4	1.0	54.5	23 452	5.0	1.2	93.8	0.06
North Africa	577	23.7	1.4	74.9	136855	15.0	3.5	81.5	0.28
Algeria	238	17.4	0.6	82.0	41 383	18.1	2.2	79.7	0.23
Libya	176	8.9	0.1	91.0	15 585	11.2	2.1	86.6	0.32
Mauritania	103	38.5	0.2	61.2	39711	1.1	0.0	98.8	0.13
Morocco	45	67.5	11.5	21.0	30104	26.4	3.9	69.8	0.28
Tunisia	16	64.8	6.6	28.6	10072	28.2	23.8	48.0	0.49
Other Near East Countries	334	22.8	3.8	73.3	185 015	25.1	2.3	74.1	0.15
Egypt	100	3.7	0.1	96.2	3 6 6 5	78.3	21.7		0.04
Iran (Islamic Republic of)	163	30.1	6.8	63.1	48 957	35.8	3.9	60.3	0.26
Iraq	43	18.9	1.9	79.2	8210	48.7	2.6	48.7	0.13
Jordan	9	11.3	1.1	87.6	1003	17.5	8.5	74.0	0.04
Lebanon	1	62.4	13.4	24.2	638	17.6	19.7	62.7	0.06
Sudan					108679	15.7	0.2	84.2	
Sudan (former)									
Syrian Arab Republic	18	75.5	2.7	21.8	13864	33.3	7.6	59.1	0.27
Regional Office for Africa	2126	43.6	27.9	30.2	955 135	20.3	2.6	77.8	0.25
Regional Office for Asia and the Pacific	5013	38.9	31.3	29.8	1951899	30.8	4.0	65.4	0.17
Regional Office for Europe and Central Asia	2 694	29.7	38.3	32.0	800592	41.5	2.5	56.1	0.39
Regional Office for Latin America and the Caribbean	2013	36.7	46.8	16.4	739587	22.7	2.7	74.6	0.32
World	12766	37.4	31.0	32.0	4911605	28.6	3.2	68.5	0.22

TABLE 5: Water resources per capita and irrigation

	TABLE	5: <b>Water re</b>	sources per	<sup>·</sup> capita and	irrigation		
	,	Water resource:	5			rrigation	
		per capita		potential	total area equipped	equipped area actually irrigated	
	m³/yr/cap	m³/yr/cap	m <sup>3</sup> /yr/cap	thousand ha	thousand ha	year year	share percent
	1990	2000	2010	2012	2009	1987-2012	1987-2012*
Regional office for the Near East and North Africa							
Gulf Cooperation Council							
States and Yemen							
Bahrain	235	182	92	4	4	2 000	100
Kuwait	10	10	7	25	11	2 0 0 7	82
Oman	749	618	503		59	2 0 0 4	100
Qatar	122	98	33	52	13	2001	49
Saudi Arabia	149	120	87		1731		
United Arab Emirates	83	49	20		230	2 0 0 3	100
Yemen	176	118	87		680		
North Africa							
Algeria	461	382	329	510	570	2001	80
Libya	162	134	110	40	470	2 000	67
Mauritania	5711	4313	3 2 9 5	250	45	2 0 0 4	51
Morocco	1170	1007	908	1664	1458	2004	98
Tunisia	559	486	438	560	445		
Other Near East Countries							
Egypt	1008	847	706	4420	3 6 5 0	2002	100
Iran (Islamic Republic of)	2506	2104	1859	15 000	9133	2006	77
Iraq	4352	3169	2 387	5 5 5 4	3525	1990	55
Jordan	274	194	151	85	95	2004	95
Lebanon	1527	1203	1065	178	90		
Sudan							
Sudan (former)	2 4 3 5	1887	1481	2784	1863	2000	43
Syrian Arab Republic	1363	1051	823		1238		
Regional Office for Africa							
Regional Office for Asia and							
the Pacific							
Regional Office for Europe							
and Central Asia							
Regional Office for Latin							
America and the Caribbean							
World							

TABLE 6: Labour

			IADEL 0.					
	Emplo	yment	Empl	oyment in agricu	ulture	Labor force participation rate		Children in employment % of children ages 7-14
	female	male	share of total	female	male			
	million	million	percent	share of female employment percent	share of male employment percent	female percent	male percent	total percent
	people	people						
	2010	2010	2005-12*	2005-12*	2005-12*	2010	2010	2000-12*
Regional office for the Near East and North Africa	24	97				21.6	73.5	
Gulf Cooperation Council States and Yemen	4	20				25.8	76.6	
Bahrain	0	1				39.2	87.2	
Kuwait	0	1	2.7	0.0	3.6	43.3	82.2	
Oman	0	1				28.0	79.9	
Qatar	0	1	1.6	0.0	2.7	52.1	95.2	
Saudi Arabia	1	8	4.1	0.2	4.7	17.4	74.2	
United Arab Emirates	1	4	4.2	0.2	5.2	43.7	92.0	
Yemen	1	4				24.8	71.7	18.3
North Africa	6	20				21.7	73.2	
Algeria	2	8	11.7	6.4	12.6	14.7	71.7	
Libya	1	2				30.4	76.9	
Mauritania	0	1				28.4	79.1	21.3
Morocco	3	8	40.2	60.2	33.0	25.9	74.7	4.5
Tunisia	1	_2	17.7			25.3	69.7	
Other Near East Countries	14	57				20.5	72.8	
Egypt	5	19	28.2	45.6	28.2	23.5	74.2	7.9
Iran (Islamic Republic of)	4	19	21.2	30.6	19.3	16.1	71.8	147
Iraq	1	5	23.4	50.7	17.1	14.3	69.3	14.7
Jordan	0	1	2.0	1.0	2.2	15.3	65.4	1.0
Lebanon	0	1				22.5	70.8	12.5
Sudan	2	7				20.0	76.5	12.5 19.1
Sudan (former)	3 1	7 4	14.3	22.2	13.2	30.8 12.9	76.5 71.6	6.6
Syrian Arab Republic  Regional Office for Africa	141	169	14.3	22.2	13.2	62.8	71.6 76.4	0.0
Regional Office for Asia and	728	1168				49.4	80.0	
the Pacific								
Regional Office for Europe and Central Asia	175	213	14.1	12.5	13.5	49.9	67.3	
Regional Office for Latin America and the Caribbean	105	155	14.9	9.1	19.7	53.3	80.1	
World	1201	1820				50.6	77.3	

TABLE 7: Inputs

	IADI	_E /: inputs	1					
	Agricul-	Pesticides	Fertilizers consumption					
	tural	use						
	tractors							
	total	per ha of	per ha of arable land and permanent crop					
	totat	arable	per na or arable tana ana permanent crop					
		land and						
		permanent						
		crops						
			nitrogen	phosphate	potash			
	tractors	kg/ha 2008-12*	kg/ha	kg/ha	kg/ha			
De la Constantina	2000-12*	2006-12	2011 35.94	2011	2011			
Regional office for the Near	651197		35.94	26.59	3.66			
East and North Africa	7.006		02.00	40.24	2.70			
Gulf Cooperation Council	7 086		93.89	40.24	3.79			
States and Yemen								
Bahrain	15	1.87	122.71	17.20	292.43			
Kuwait	89		316.25	0.00	244.12			
Oman	180	2.20	246.24	19.67	76.18			
Qatar	82		8 941.25	0.00	75.00			
Saudi Arabia			79.18	58.68	1.79			
United Arab Emirates	380		266.20	33.80	6.50			
Yemen	6340	0.08	9.50	0.00	0.41			
North Africa	168530		17.06	47.99	2.35			
Algeria	104529	0.50	7.52	3.84	3.74			
Libya	39733		29.31	15.22	0.00			
Mauritania	390	0.03						
Morocco			26.44	34.69	2.30			
Tunisia	40 438	0.43	11.23	155.22	1.14			
Other Near East Countries	475 581	05	39.65	14.56	4.30			
Egypt	103 188		366.98	85.51	7.57			
Iran (Islamic Republic of)	228 000	0.45	13.24	8.34	2.08			
Iraq	46 078	0.45	32.86	5.79	1.28			
Jordan	5732	4.21	125.89	162.04	487.06			
Lebanon	3732	7.21	71.01	107.87	35.99			
Sudan			5.08	4.01	0.22			
	25 5 6 4		5.08	4.01	0.22			
Sudan (former)			22.20	17.02	0.01			
Syrian Arab Republic	97 660		23.29	17.82	0.91			
Regional Office for Africa			6.87	3.24	1.55			
Regional Office for Asia and the Pacific			106.76	35.62	22.36			
Regional Office for Europe and Central Asia	11467067		45.08	11.69	12.29			
Regional Office for Latin America and the Caribbean			45.66	32.58	32.64			
World			73.34	26.83	19.82			

TABLE 8: Agricultural capital stock

	Gross capital stock										
		total		share							
		p.a. gro	wth	land development	plantation crops	livestock fixed assets	livestock inventory	structures for livestock	machinery & equipment		
	million US\$	percent	percent	percent	percent	percent	percent	percent	percent		
	2007	1990-2000	2000-07	2007	2007	2007	2007	2007	2007		
Regional office for the Near East and North Africa	335 938	1.9	1.2	61.9	3.3	21.9	3.9	2.3	6.7		
Gulf Cooperation Council	41163	2.5	1.4	78.2	3.3	13.7	2.4	1.0	1.4		
States and Yemen	41103	2.5	1.4	70.2	5.5	13.7	2.4	1.0	1.4		
Bahrain	58	3.7	-0.1	62.3	7.1	24.0	4.2	1.8	0.6		
Kuwait	310	6.2	3.9	26.4	1.6	58.1	10.2	1.4	2.2		
Oman	1329	2.9	0.5	42.3	4.2	41.2	7.3	3.7	1.3		
Qatar	192	6.9	-1.5	63.6	2.2	26.6	4.7	2.1	0.8		
Saudi Arabia	23710	0.8	0.1	87.5	1.7	7.9	1.4	0.3	1.2		
United Arab Emirates	3747	12.4	1.5	75.6	10.0	11.0	1.9	1.1	0.4		
Yemen	11815	2.8	4.0	66.0	4.4	21.7	3.8	1.9	2.2		
North Africa	62717	1.0	0.6	51.0	8.5	26.1	4.6	1.5	8.3		
Algeria	14545	1.0	1.2	42.0	6.9	28.8	5.1	1.4	15.8		
Libya	7531	-0.1	0.7	64.6	5.6	15.4	2.7	0.5	11.1		
Mauritania	4331	3.1	1.2	8.9	0.3	70.9	12.5	6.6	0.7		
Morocco	26006	0.7	0.0	63.2	4.9	22.9	4.0	1.2	3.7		
Tunisia	10304	1.8	0.8	40.5	25.5	19.2	3.4	0.9	10.5		
Other Near East Countries	232 058	2.1	1.4	61.9	1.9	22.2	3.9	2.8	7.2		
Egypt	36793	2.3	1.5	73.6	2.3	15.1	2.7	2.3	4.0		
Iran (Islamic Republic of)	85 173	1.0	1.6	63.5	1.7	17.9	3.2	1.2	12.6		
Iraq	31881	-0.0	0.2	83.2	0.9	8.8	1.5	0.5	5.1		
Jordan	1530	1.8	1.1	51.1	7.4	27.1	4.8	0.9	8.8		
Lebanon	2 8 4 5	0.6	0.1	73.2	16.8	6.5	1.1	0.4	2.0		
Sudan	40106	4.5	1.4	20.4	0.4	F0.0	0.0	0.0	1.2		
Sudan (former)	48 106	4.5	1.4	29.4	0.4	50.9 11.2	9.0	9.0	1.3		
Syrian Arab Republic	25 731 430 811	4.1 1.8	2.4	73.9 25.5	4.2 7.3	48.0	2.0 8.5	0.5 7.7	8.3 3.0		
Regional Office for Africa	1719508	0.9	0.7	32.5	10.2	25.9	6.5 4.6	4.1	22.6		
Regional Office for Asia and the Pacific	1719506	0.9	0.7	32.5	10.2	25.9	4.0	4.1	22.0		
Regional Office for Europe and Central Asia	1239351		-0.4	35.2	5.8	16.5	2.9	4.3	35.3		
Regional Office for Latin America and the Caribbean	725 911	0.5	0.9	24.3	6.9	47.1	8.3	5.2	8.1		
World	4797327	0.6	0.6	31.0	7.6	26.8	4.7	5.4	24.5		

TABLE 9: Foreign direct investment and official development assistance

	FDI, inward flows					ODA					
	agriculture, hunting, forestry, fishing		food, bevera	iges, tobacco	total	receipts	agriculture	forestry	fishery		
				<u> </u>			share of total	share of total	share of total		
	thousand US\$ 2000-01*	thousand US\$ 2009-12*	thousand US\$ 2000-01*	thousand US\$ 2009-12*	million US\$ 2000	million US\$ 2010	percent 2010	percent 2010	percent 2010		
Regional office for the Near	2000-01	2009-12	2000-01	2009-12	6 2 0 5	11726	3,9	0.0	0.7		
East and North Africa					0203	11720	5.9	0.0	0.7		
Gulf Cooperation Council					688	958	2.7	0.0	2.4		
States and Yemen					000	330	,	0.0			
Bahrain					0	0					
Kuwait					0	0					
Oman		0		0	11	21	0.3	0.0	0.0		
Oatar		0		0	0	0					
Saudi Arabia		6000	0	177 000	3	0					
United Arab Emirates					0	0					
Yemen					673	937	2.7	0.0	2.4		
North Africa					2244	3 6 7 6	4.2	0.0	1.6		
Algeria					225	294	0.4	0.0	2.8		
Libya					0	46	0.1	0.0	0.0		
Mauritania	0				277	379	1.0	0.0	2.5		
Morocco	6150	9720	0	0	996	2138	6.8	0.0	1.9		
Tunisia	6190	0	12440	0	746	818	0.5	0.0	0.1		
Other Near East Countries					3273	7 0 9 2	3.9	0.0	0.0		
Egypt	15860	30400	35 740	0	1970	2531	6.0	0.0	0.0		
Iran (Islamic Republic of)			42500		182	128	1.4	0.3	0.0		
Iraq					136	2 3 3 7	2.5	0.0	0.0		
Jordan	4620		0		709	1113	0.2	0.0	0.0		
Lebanon					133	490	6.2	0.2	0.0		
Sudan					0	0					
Sudan (former)					1.10	404	7.3	0.1	0.0		
Syrian Arab Republic					143	494	6.1	0.0	0.0		
Regional Office for Africa					24913	42 252	6.6	0.5	0.3		
Regional Office for Asia and the Pacific					22 256	43802	4.3	0.4	0.1		
Regional Office for Europe and Central Asia					5 636	8877					
Regional Office for Latin America and the Caribbean					8 6 3 3	13085	5.6	2.5	0.4		
World					68 583	123943					

TABLE 10: Government expenditures

	Agric	ulture, forestry,	Environmental Protection			
	% of tota	al outlays	% of agricu	ıltural GDP	% of tota	ıl outlays
	cash	non-cash	cash	non-cash	cash	non-cash
	percent 2009-12*	percent 2009-12*	percent 2009-12*	percent 2009-12*	percent 2009-12*	percent 2009-12*
Regional office for the Near						
East and North Africa						
Gulf Cooperation Council						
States and Yemen						
Bahrain						0.4
Kuwait	0.0				0.0	
Oman	0.8					
Qatar					0.5	
Saudi Arabia						
United Arab Emirates						
Yemen	0.3		1.2		0.9	
North Africa						
Algeria		3.6		23.4		0.3
Libya						
Mauritania						
Morocco						
Tunisia	5.5		17.3		1.6	
Other Near East Countries						
Egypt	1.9		4.3		0.4	
Iran (Islamic Republic of)	1.4				0.1	
Iraq						
Jordan	0.8		8.4		0.1	
Lebanon		0.2		1.5		0.0
Sudan						
Sudan (former)						
Syrian Arab Republic	4.4		6.0			
Regional Office for Africa						
Regional Office for Asia and						
the Pacific						
Regional Office for Europe						
and Central Asia						
Regional Office for Latin						
America and the Caribbean						
World						

		TABLE	11: Innovati	ion			
	Agricultural R&D spending		Total public agric. research	Fixed broadband Internet	Mobile cellulars	Telephone lines	CPIA business regulatory environment
			expenditures	per 100 people	per 100 people	per 100 people	rating
	million 2005 PPP US\$	million 2005 PPP US\$	share of GDP percent	subscribers	subscriptions	lines	(1=low to 6=high) rating
	2000	2008	2008	2011	2011	2011	2012
Regional office for the Near	1541	1731		2.3	94.9	14.7	
East and North Africa Gulf Cooperation Council States and Yemen	214	187		4.3	130.5	12.8	
Bahrain	1	2		13.8	128.0	20.9	
Kuwait	2	4		1.7	175.1	18.3	
Oman	18	25		1.8	169.0	10.1	
Qatar	5	8		8.7	123.1	16.5	
Saudi Arabia	132	84		5.6	191.2	16.5	
United Arab Emirates	31	18		11.0	148.6	23.1	
Yemen	25	46		0.4	47.0	4.3	3.0
North Africa	280	289		2.5	110.2	10.0	
Algeria	102	112		2.8	99.0	8.5	
Libya	23	11	1.2	1.1	155.7	15.6	2.0
Mauritania	6 104	6 96	1.2 0.6	0.2 1.8	93.6 113.3	2.0 11.0	3.0
Morocco Tunisia	46	63	0.6	5.1	116.9	11.5	
Other Near East Countries	1047	1255		1.8	80.5	16.7	
Egypt	298	293		2.2	101.1	10.7	
Iran (Islamic Republic of)	574	731	1.0	2.4	74.9	37.1	
Iraq	40	69	1.0	2.7	78.1	5.5	
Jordan	13	18	1.6	3.2	118.2	7.4	
Lebanon	13	18	2.0	4.9	79.5	20.3	
Sudan							2.5
Sudan (former)	38	52	0.3	0.0	56.1	1.1	
Syrian Arab Republic	71	74	0.4	0.6	63.2	20.9	
Regional Office for Africa	1317	1748		0.2	53.2	1.4	
Regional Office for Asia and	9942	13454		6.5	81.0	14.1	
the Pacific							
Regional Office for Europe and Central Asia	6267	7315		20.0	128.7	36.9	
Regional Office for Latin America and the Caribbean	2826	3 3 0 2		7.7	105.3	18.1	
World	26053	31744		8.5	85.4	17.0	