

Programme

ENHANCING THE ROLE OF SMIs
IN THE ECONOMIC AND SOCIAL
DEVELOPMENT OF THE ARAB STATES



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TABLE OF CONTENTS

LIST OF ABBREVIATIONS	5
SUMMARY	7
SECTION I: CONTEXT AND JUSTIFICATION	11
I.1 Introduction	11
I.2 Brief geo-social overview	12
I.3 Macro-economic indicators	13
I.4 Business environment.....	16
I.5 Foreign direct investments.....	19
I.6 Employment and unemployment.....	24
I.7 External trade.....	29
I.8 General education, scientific research, technical & vocational training, and professional training infrastructure	32
I.9 Quality infrastructure.....	35
I.10 Sectoral analysis.....	41
I.10.1 Agricultural sector	42
I.10.2 Industrial sector.....	44
A. <i>Extractive industries</i>	44
B. <i>Manufacturing industries</i>	45
B.1 <i>Heavy manufacturing</i>	53
B.2 <i>Light manufacturing</i>	54
C. <i>Nanotechnology industry</i>	60
D. <i>Green industries</i>	61
I.10.3 Information and Communication Technology Sector	62
A. <i>Development role of ICTs</i>	62
B. <i>Global trends in the sector</i>	63
C. <i>ICT development in the Arab world</i>	64
D. <i>Challenges of the Arab ICT sector</i>	66
I.10.4 Services to businesses	69
I.11 Manufacturing small and medium enterprises	71
I.12 Informal sector SMIs	73
I.13 Challenges and opportunities of SMIs in the region.....	75
I.13.1 Strengths and opportunities.....	75
I.13.2 Weaknesses and constraints.....	76
I.14 Problems to be addressed	77
I.15 Scope of technical programme, methodologies and UNIDO's intervention scenario	80
I.15.1 Scope of technical programme.....	80
I.15.2 Country groupings	80
I.15.3 Sectoral selection	83
I.15.4 Technical intervention scenario.....	89
I.16 UNIDO current activities in the region.....	90
I.17 AIDMO current activities in the region.....	95
SECTION II: UNIDO BROAD APPROACH	97
II.1 UNIDO's response and proposed approach	97
II.1.1 Strengthening supply-side capacities	98
II.1.2 Developing industrial agro-food value chains.....	100
II.1.3 Promoting ICT for SMI development	101
II.1.4 Promoting green industries.....	102
II.2 Potential areas of intervention.....	103
II.2.1 Business environment support.....	104
II.2.2 Upgrading of technical support institutions.....	105
II.2.3 Strengthening the Quality Infrastructure.....	106
II.2.4 Entrepreneurship promotion.....	108
II.2.5 Investment promotion and industrial partnerships.....	109
II.2.6 EDIP Programme	111

II.2.7	Business partnerships and ICT	112
II.2.8	Promotion of technology and innovation	115
II.2.9	Promoting clusters and network development	116
II.2.10	Supporting informal sector SMEs	117
II.2.11	National Cleaner Production Centers	118
SECTION III:	OBJECTIVES, COMPONENTS AND EXPECTED OUTCOMES OF THE PROGRAMME	121
III.1	Global objective	121
III.2	Specific objectives	121
III.3	International development goals	122
III.4	Analysis of objectives	122
III.5	Programme beneficiaries	123
III.6	Components and expected outcomes	124
SECTION IV:	PROGRAMME IMPLEMENTATION MODALITIES	135
SECTION V:	MONITORING, REPORTING AND EVALUATION	139
V.1	Preparation for take-off stage	139
V.2	Monitoring and reporting for phases I and II of the Programme	139
SECTION VI:	INDICATIVE BUDGET	141
SECTION VII:	EXPECTED IMPACT OF THE PROGRAMME	142
SECTION VIII:	RISKS MANAGEMENT AND SUSTAINABILITY	143
SECTION IX:	LEGAL CONTEXT	145
ANNEXES		147
ANNEX I:	POTENTIAL BENEFICIARIES OF THE PROGRAMME	149
ANNEX II:	LOGICAL FRAMEWORK ANALYSIS	154
ANNEX III:	PROGRAMME ARTICULATION BETWEEN COUNTRY GROUPS AND PRIORITY SECTORS	169
ANNEX IV:	PROGRAMME ACTIVITIES BY OUTCOMES	179
ANNEX V:	PROGRAMME IMPLEMENTATION SCHEDULE	215
ANNEX VI:	COUNTRY PROFILES	221
1.	ALGERIA	222
2.	BAHRAIN	224
3.	DJIBOUTI	226
4.	EGYPT	228
5.	IRAQ	231
6.	JORDAN	234
7.	KUWAIT	236
8.	LEBANON	238
9.	LIBYA	241
10.	MAURITANIA	243
11.	MOROCCO	245
12.	OMAN	247
13.	PALESTINIAN TERRITORY	249
14.	QATAR	251
15.	SAUDI ARABIA	253
16.	SOMALIA	256
17.	SUDAN	258
18.	SYRIA	260
19.	TUNISIA	262
20.	UNITED ARAB EMIRATES	264
21.	YEMEN	266

LIST OF ABBREVIATIONS

AFD	French Development Agency
AICTO	Arab Information and Communication Technology Organization
AIDMO	Arab Industrial Development and Mining Organization
ALO	Arab Labour Organization
ANIMA	Investment Network for the Mediterranean, EU project
Arab Fund	Arab Fund for Economic and Social Development (idem FADES)
ASEAN	Association of Southeast Asian Nations
BDS	Business Development Services
BMO	Business membership organizations
COMFAR	Computer Model for Feasibility Analysis and Reporting
CP	Cleaner Production concept
DAC	OECD Development Assistance Committee
DANIDA	Danish International Development Agency
DFID	UK Department for International Development
DHAMAN	Arab Investment and Export Credit Guarantee Corporation
EDIP	Enterprise Development and Investment Promotion Program
EIB	European Investment Bank
ESCWA	Economic and Social Commission for Western Asia
EST	Environmentally sound technologies
EU	European Union
FAO	United Nations Food and Agriculture Organization
FADES	Arab Fund for Economic and Social Development
FDI	Foreign Direct Investments
FTA	Free Trade Area
GAFTA	Great Arab Free Trade Area
GCC	Gulf Co-operation Council
GDP	Gross domestic product
GEF	Global Environment Facility
GNI	Gross National Income
GTZ	German Agency for Technical Cooperation
HDI	Human Development Index
IAF	International Accreditation Forum
ICT	Information and Communication Technologies
IDB	Islamic Development Bank
IFIs	International Financial Institutions
ILAC	International Laboratory Accreditation Cooperation

ILO	International Labour Organization
IMF	International Monetary Fund
ISET	Higher Institutes of Technological Education
ISO	International Organization for Standardization
ITFC	International Islamic Trade Finance Corporation
ITPO	Investment and Technology Promotion Offices
ITU	International Telecommunication Union
LDC	Least Developed Country
MDGs	Millennium Development Goals
MEDA	Mediterranean Economic Development Area
MENA	Middle East and North Africa
MFIs	Micro-Finance Institutions
MIPO	Mediterranean Investment Project Observatory
NAFTA	North American Free Trade Agreement
NCPC	National Cleaner Production Center
NGO	Non-governmental organisation
NIC	Newly Industrialized Country
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
PA	Palestinian Authority
PPP	Public Private Partnership
PPP	Purchasing-power-parity
QI	Quality Infrastructure
R&D	Research and Development
RECP	Resource Efficient and Cleaner Production
SCP	Sustainable Consumption and Production
SMEs	Small and medium-size enterprises
SMIs	Small and medium-size industries
TNC	Transnational companies
UAE	United Arab Emirates
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organisation
WB	World Bank
WHO	World Health Organization
WTO	World Trade Organization
WWC	World Water Council

SUMMARY

The prevailing financial crisis and the decline of the global economy have hampered the difficulties faced by manufacturing small- and medium-scale enterprises in the Arab region as a result of the decreasing demand for products, on one hand, and the increasing competition and the difficulties in accessing available funding and technical aid, on the other. Despite the efforts made by the Arab States towards the development of manufacturing industries, in particular SMIs, the contribution of the Arab manufacturing industry sector to the GDP does not exceed 10 percent. The sector does not yet satisfy the needs of the Arab region in terms of food, clothes and other industrial consumer goods, nor does it contributes effectively to bridging the gap between the Arab region and the developed regions in terms of economic and social development. Moreover, this sector still does not play an appropriate role as employment provider estimated to employ only around 15 percent of the labour force, with limited access for female population.

Private sector small- and medium-scale enterprises (SMEs) have an important role to play in employment creation for present and future economic growth in developing economies. The SME sector contributes to more equitable income distribution, competition and technical change, and therefore it is a cornerstone of the economic and social growth. As such, the creation of sufficient employment opportunities through support of manufacturing SMEs, – referred to in this report as small and medium industries SMIs¹ – requires concerted efforts by Governments, the international community, the private sector, youth themselves, and other stakeholders to generate prospects that afford a better future for young people.

Conscious of the stakes, the Arab States started devoting special attention to SMIs as a major portal towards developing the manufacturing industry sector. In this context, it is expected that development of SMIs in the Arab region will play a greater role, in particular, in the textile and food industries, thereby increasing the use of local resources, employment and the development of marginalized and rural areas. This, in turn, will break their isolation from the developed regions and minimize migration to the cities and the desire to immigrate. However, the owners of small and medium businesses, small investors and ambitious young entrepreneurs desiring to establish their own businesses often lack necessary prerequisites, including, inter alia, means of production, financial resources or technical experience, access to national and international markets and are often unable to overcome difficulties posed by competition.

The Arab States are seeking support in their efforts to prop up SMIs as an important portal toward economic and social development, and more particularly, for job creation and a better involvement of women and the youth in the economic cycle. In this context, the Arab States, through the Executive Council of the Arab Industrial Development and Mining Organization (AIDMO), have requested that an Arab

¹ The term SMIs is used to account for the commonly used Arabic reference to manufacturing small and medium enterprises as small and medium industries.

regional programme for the development of SMIs being prepared and implemented by the United Nations Industrial Development Organisation (UNIDO) in close cooperation and coordination with AIDMO. This request also complies with the recommendations of the Arab Round Table, held in December 2007 during the 12th Session of UNIDO General Conference.

Possessing a significant and successful experience in the development and implementation of regional programmes that address such issues, as industrial upgrading, development of the private sector SMIs and enhancing their competitiveness, UNIDO intends to work together with the Arab States, the AIDMO counterparts and regional financial institutions to establish an operational framework for industrial development and improving SMIs' development impact, and women and youth employment.

This program proposal addresses the global challenge of SMIs in the beneficiary Arab States – to contribute to the socio-economic growth, poverty reduction and regional economic and trade integration through enhancing regional and national capacities for employment creation, value-added generation, economic diversification and export promotion, and development of priority industrial sectors. In particular, the programme will help domestic private sector manufacturing SMEs grow and upgrade to internationally competitive levels in order to compete effectively in the domestic and intra-Arab regional markets and take advantage of the opportunities afforded by the international trade liberalization and global economic integration.

On the pilot basis, the Programme will focus on small- and medium-scale and export-oriented manufacturing enterprises operating in agro-food value chains, information and communication technologies (ICT), and green industries in 21 Arab countries – Member States of AIDMO, notably: Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestinian Territory, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen. In line with the specificities and needs of the Member States, the above three sectors of high export and job creation potential were defined by AIDMO and UNIDO as priority for the industrial development of the region.

Along with the Resolution on Industrial Development adopted by the Arab Economic and Social Summit (2009, Kuwait), and taking into account the areas of intervention identified by AIDMO and UNIDO as priority in the development of SMIs and private sector, the proposed programme will thus contribute to strengthening of supply-side capacities of the private sector SMIs and promotion of the youth and women employment through:

- i. Reform of the institutional framework, the business environment and financial instruments related to the development of small- and medium-size manufacturing enterprises.
- ii. Strengthening capacities of technical support institutions that assist SMI development, job creation and investment promotion in the Arab States.
- iii. Capacity building for AIDMO in coordinating the implementation of the Arab Standardization Strategy 2009-2013 at the regional level and in responding to the immediate needs identified for the Member States.

- iv. Supporting the process of SMI development, investment promotion and improving competitiveness of the manufacturing enterprises operating in the agro-food value chains, ICT sector and green industries of the Arab States.
- v. Increasing absorptive capacity of SMIs for technology and innovation, reducing the constraints they face on technology supply internally and externally, and facilitating transfer of industrial technologies and best product innovation practices to the private sector SMIs operating in agro-food value chains, ICT and green industry sectors.

With a significant difference in levels of development, the beneficiary Arab countries have to face common challenges and concerns when related to economic, SMIs competitiveness and industrial development. A regional approach could constitute an opportunity for the region in terms of economic complementarities, comparative advantages and would undoubtedly render the region more competitive on the international market.

However, the concerned beneficiary countries are diverse in terms of size, natural resource endowments, economic development, and, in particular, industrial background and its sectoral focus. Accordingly, some are primarily agricultural countries (e.g., Mauritania and Sudan), others are primarily energy producers (e.g., members of the Gulf Cooperation Council (GCC)), and others have an emerging industrial base (e.g., Egypt and Morocco). Taking into account strong heterogeneity between the above groups of countries, which in turn demonstrate relative internal homogeneity in terms of GDP and GNI per capita as well as by the respective levels of industrialization, the current Programme will address the Programme objectives employing selective approach in tackling specific needs of respective three groups of AIDMO countries.

Thus, the UNIDO proposal intends to respond to the changing needs and priorities of the Arab countries taking into consideration their extreme diversity, as well as building on UNIDO's programmes currently being implemented at the country level. The regional programme will be articulated in a way to avoid duplications dealing with transversal issues of relevance to the 21 countries of the region. The programme will have 4-year duration and its indicative budget is estimated at Euro 65.0 million.

The Programme on Enhancing the Role of SMIs in the Economic and Social Development of the Arab States will have a significant impact on the SMI sector and overall industrial and socio-economic performance of the region. In particular, the programme is expected to improve such key economic indicators as volume and quality of industrial production, manufacturing and national value added, inward investment flows, employment rate, export generation and revenues, expertise and professional education, environmental performance, etc.

SECTION I: CONTEXT AND JUSTIFICATION

I.1 Introduction

The Arab World has an abundance of resources – natural, human and economic. The region has been implementing a wide range of initiatives that are enhancing competitiveness and strengthening prospects for sustainable development at the same time. The initiatives at country level vary from policy, economic, social, innovation, environmental protection, business climate improvements among others.

At the regional level indicators of improved performance exist such as the observed increase in the share of Arab foreign trade in global trade from 4.4 percent in 2004 to 6.7 percent in 2008 with impressively high annual rates of growth exceeding global trade average². Also impressive is the recent creation of a functional Arab Free Trade Area (GAFTA) and many other indicators.

In spite of all efforts and achievements, the Arab world still doesn't live up to its full potential in comparison to many other regions in the world especially in the area of manufacturing industries, which have proven to be a significant vehicle for achieving growth and creating jobs such as in East Asia and Latin America and even in individual countries such as China, India, Turkey and many others.

The Arab world suffers from high unemployment rates particularly in the case of youth and women unemployment and has a natural bias towards extractive industries due to its wealth in natural resources. Productive sectors namely agriculture and manufacturing represent small shares of the Arab region's economy. The period from 1970 to 2006 shows very little change, if any, in the weight of manufacturing and even less in the status of manufacturing small and medium size enterprises – referred to in this report as small and medium industries (SMIs) – which are the backbone of manufacturing industries in most countries.

The Arab States are seeking support in their efforts to prop up those SMIs as an important portal towards economic and social development, and more particularly, for job creation and a better involvement of youth and women in the economic cycle. In this context, the Arab States, through the Executive Council of the Arab Industrial Development and Mining Organization (AIDMO), have requested that an Arab regional programme for the development of SMIs being prepared and implemented by the United Nations Industrial Development Organisation (UNIDO) in close cooperation and coordination with AIDMO. This request also complies with the recommendations of the Arab Round Table, held in December 2007 during the 12th session of UNIDO General Conference.

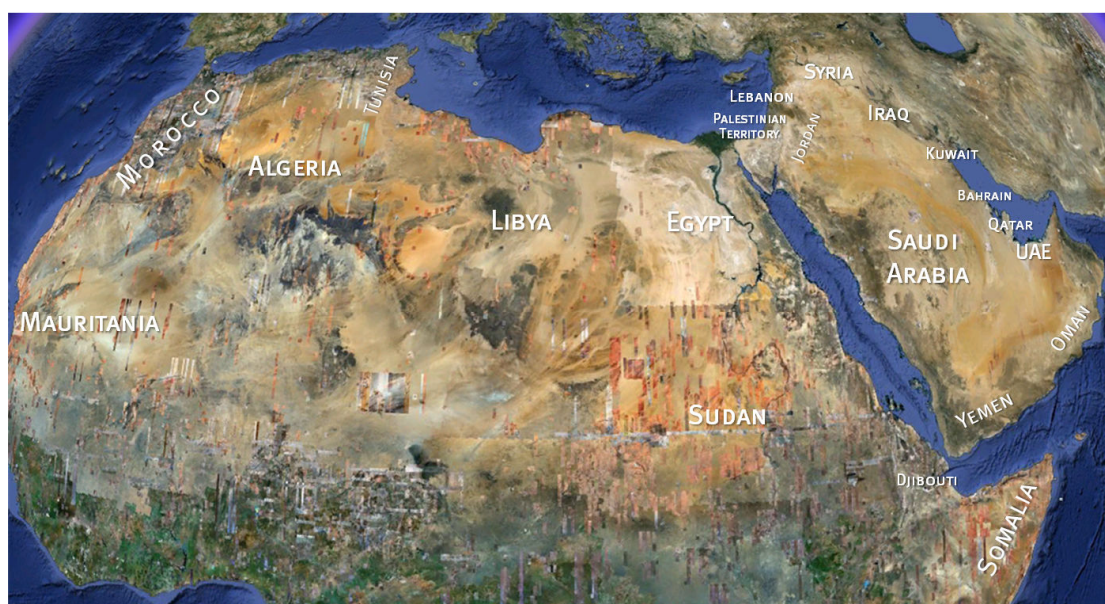
In this proposal document we present the context and justification of the technical programme (Section I), the areas where UNIDO can provide support (Section II), and all stages of the design and articulation of project (sections III through IX) plus a number of appendices.

² Source: Unified Arab Economic Report, 2009 (see analysis of external trade in Chapter I.7)

I.2 Brief geo-social overview

Geographical area of the Arab world covers a wide array of countries from Morocco in the west to Oman in the east and the Comoros islands located in the southern hemisphere. At large, it reunites 22 members of the League of Arab States: Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestinian Territory, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen. The current proposal covers 21 of the afore-listed countries (excluding Comoros), which form the Arab Industrial Development and Mining Organization (AIDMO Members). The region is comprised of a range of countries possessing common history, human and cultural heritage. At the same time, each one of these countries has strong individual characteristics, diverse social and economic backgrounds and resource base.

Figure 1. Geographic coverage of the current programme (21 AIDMO Members)



The total land area of 21 beneficiary Arab States (hereinafter, *the Arab countries/region* or *the AIDMO Member States/region*) is estimated to be about 14 million square kilometres, which is equivalent to around tenth of the world's land area. Most of the countries of the region are located in arid and semi-arid areas and therefore are water scarce. Consequently, the region is subject to land degradation and desertification, with water-related limitations to growth and associated environmental and socio-economic issues.

The total population of the Arab region was 332.9 million inhabitants in 2008, with a projection of 378.7 million inhabitants in 2014³. The percentage of those under fifteen in the AIDMO countries is very high with the highest in Iraq (58%) and Palestinian Territory (56%)⁴. Labour mobility across borders is a structural feature of the Arab

³ Source: World Economic Outlook Database, IMF, 2009

⁴ Based on 2008 data; source: Labour Statistics Database, ILO, 2009

economies, which has advanced regional integration over the past years. Moreover, this mobility to and from the Arab region is expected to grow in the next two decades.

In 2008, the gross domestic product based on purchasing-power-parity (PPP) of nineteen Arab countries (no data available for Palestine and Somalia) was estimated at around US\$1.898 trillion, equivalent to 2.74 percent of the world's total compared to 3.64-percent-contribution of Central and Eastern Europe, which is nearly half as populated with 175 million inhabitants⁵.

As seen from Table 1, the region has varied development experiences with per capita GDP of US\$93,204 in Qatar to Yemen's only US\$1,171, and human development (HDI) achievements are differing widely (from 31st to 153rd in world ranking). As to be demonstrated in the following chapters, some of the AIDMO countries achieved very modest gains in reducing poverty or increasing employment.

Table 1. Socio-demographic and human development indicators, AIDMO-21, 2008

	Surface area (‘000 sq. km)	Population, total (millions)	Population growth (annual %)	Population ages 0-14 (% of total)	GDP at current price (billion USD)	HDI 2009 rankings
	1	2	3	4	5	6
Algeria	2381.74	34.64	1.7%	41.7%	170.3	104
Bahrain	0.71	1.12	8.1%	36.1%	24.3	39
Djibouti	23.2	0.87	3.1%	30.0%	1.0	155
Egypt	1001.45	74.20	2.0%	52.2%	162.6	123
Iraq	438.32	30.58	3.0%	58.6%	110.4	n.c.
Jordan	88.78	5.85	2.2%	50.2%	21.2	96
Kuwait	17.82	3.44	3.4%	31.6%	148.2	31
Lebanon	10.4	3.97	0.6%	54.8%	29.6	83
Libya	1759.54	7.29	3.2%	47.8%	76.7	55
Mauritania	1030.7	3.20	2.4%	30.1%	3.6	154
Morocco	446.55	32.58	1.6%	47.6%	85.7	130
Oman	309.5	2.87	4.5%	44.4%	59.9	56
Palestinian Territory	6.02	n.a.	n.a.	56.3%	n.a.	110
Qatar	11	1.45	18.1%	16.2%	102.3	33
Saudi Arabia	2149.69	24.81	2.3%	45.4%	468.8	59
Somalia	637.66	10.39	1.0%	29.7%	n.a.	n.c.
Sudan	2505.81	38.19	2.6%	47.6%	61.1	150
Syria	185.18	19.64	2.5%	49.4%	52.6	107
Tunisia	163.61	10.33	1.0%	51.9%	40.9	98
United Arab Emirates	83.6	4.77	6.2%	22.4%	250.5	35
Yemen	527.97	24.31	3.6%	53.4%	28.7	140
Regional total/average	13779.25	334.50	2.4%	48.3%	1898.4	/182 classified

Note: highest and lowest are indicated in blue and red respectively; n.a.- data not available; n.c. - not classified
Sources: columns 1 - World Bank, 2009; columns 2, 3 and 5 - Unified Arab Economic Report, 2009; column 4 - ILO, 2009; column 6 - Human Development Report 2009, UNDP

I.3 Macro-economic indicators

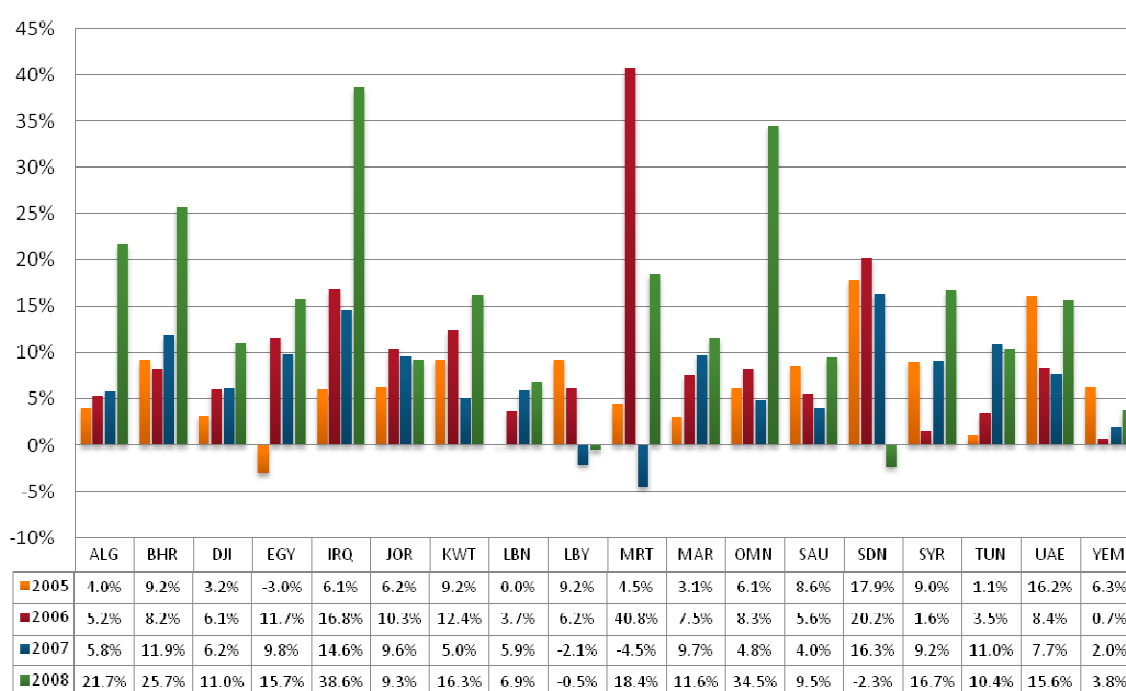
The recent economic and financial crisis has evolved into a global crisis that seems not to have spared any region or country in the world. Despite positive developments in both conventional and Islamic finance institutions, the crisis has also had a severe impact on the Arab region.

⁵ Source: IMF, 2009

However, despite the slowdown in Arab economies, almost all Arab countries are experiencing great prospects for wealth creation. For the sixth year straight, the AIDMO Member States have enjoyed a period of strong economic growth. Over the period 2003-2008, the economic growth of the region has been the strongest experienced since the 1970s. In 2008, Arab countries grew by an average of 8 percent⁶, led by the region's predominant oil exporters. However, sources of growth have evolved considerably over the last decade from being driven principally by domestic consumption to an increasing role for investment.

Another characteristic feature of growth in the region is the fluctuating nature of oil revenues, as the recent sharp decline in the international prices of oil in the midst of the current financial crisis has once again shown. Due to sharp drop of oil prices and decline in its production and non-oil GDP revenue, the International Monetary Fund (IMF) forecasts the GDP growth rate in the AIDMO countries to fall down to 4.0 percent in 2009 and slightly recover up to 6.3 percent in 2010.

Figure 2. Annual growth of real GDP in AIDMO countries, 2005-2008, %



Source: Unified Arab Economic Report, 2009

Note: Based on GDP at current price data deflated using Historical GDP Deflators of the World Bank; data for Palestine, Qatar, and Somalia is not available

Despite the generally positive development trends in the AIDMO region, there are significant differences among sub-groups and individual economies. The Arab countries' growth upturn for the most part driven by extractive activities has not been universally shared, and with rising energy use and diminished positive transmission

⁶ Annual change of the national GDPs based on PPP valuation of country GDP, IMF 2009

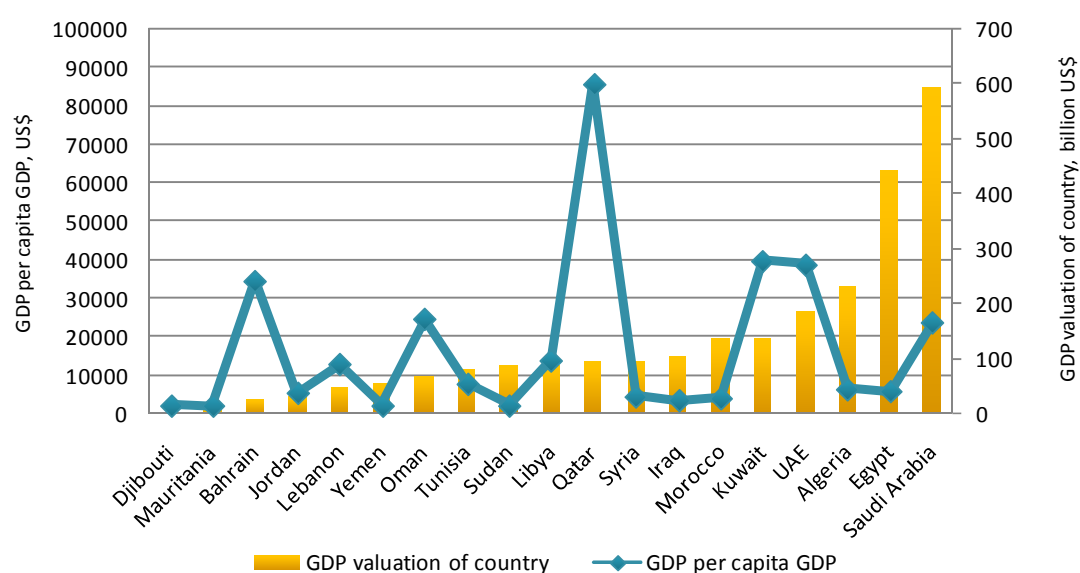
channels from the region's oil economies, resource poor economies are increasingly feeling adverse impacts from rising commodity prices and other external shocks.

As Figure 2 above shows, country-wise, the growth has been stronger in resource-rich economies of the region. Most AIDMO members except Algeria, Palestine, Somalia and Sudan have experienced a steady real GDP growth for much of the past 20 years. In contrast to the exceptionally high growth rates in 2008 for Qatar, Oman, Jordan and Lebanon, the average annual growth rates were in the range of 4-6 percent.

Similarly, the Arab States have in a different way reacted to the financial crisis. Arab countries of North Africa (Maghreb), for example, appeared to be particularly exposed to the economic downturn in Europe and the US. This is reflected in lower demand for exports, lower tourism inflows, lower remittances from nationals working in Europe, lower OECD demand for exports of both goods and services, and the deflating of property and asset price bubbles occurred, particularly, in the eastern Arab states (Mashriq), members of the Gulf Co-operation Council (GCC). Furthermore, in 2009, due to the lower oil output (as part of OPEC's efforts to support oil prices) and lower oil-related liquidity, growth has somewhat constrained also in the oil-producing Mashreq countries.

In terms of real GDP per capita, there is also a strong heterogeneity among the AIDMO Member States. With the second result worldwide of US\$93,204 recorded by Qatar in 2008 for example, the real GDP per person have been far more modest in most countries. Low real GDP per capita in Djibouti, Mauritania, Somalia, Sudan and Yemen classify these countries as least developed economies (LDCs) (see Figure 3).

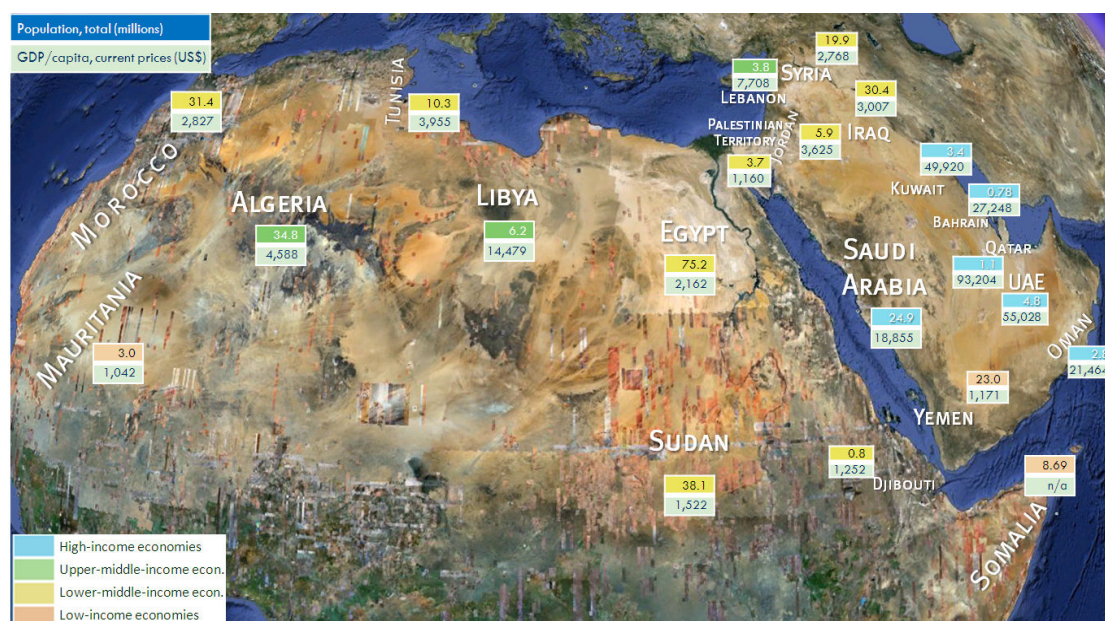
Figure 3. Valuation of country GDP and GDP per capita based on PPP, 2008



Source: World Economic Outlook Database, IMF 2009

Thus, the economic wealth is not evenly spread across the region. As seen from the following figure, the AIDMO economic area reunites countries classified as low income, lower middle, upper middle or high income economies, based on the World Bank's data on Gross National Income (GNI) per capita.

Figure 4. Development geography of the Arab region (data of 2008)



Source: IMD, World Economic Outlook Database, 2009

With regard to other basic indicators, the macroeconomic situation in the Arab region looks rather healthy. With the exception of few countries, inflation is being brought down from double digit figures of the early 1980s to a single digit by 2000s; public finances seem to be under control; and the current unemployment level is around 14 percent according to official figures⁷. All countries have opened up their economies to various degrees to market forces at internal and international levels.

These developments have taken place as a result of structural transformation of the region's key economies. These reforms have been under way for quite some time gaining political and economic credibility before internal and external investors, and the governments provide their coherent and continuous support to these reforms in a long run.

I.4 Business environment

Private sector SMIs and especially smaller firms face the standard issues of viability and legitimacy allied with the technological or technical risks and associated with the development and introduction of new activities and products. In the early stages of development – exploration of market potential and product development – this mix of uncertainty and risk may make it difficult for firms to present a robust case to

⁷ Source: AIDMO, 2010

potential finance providers. This becomes more feasible, however, once potential technological risks are reduced and the focus moves to the establishment of firms' operations, market introduction, etc. Even here, however, commercial risks are likely to be significant, particularly in situations where a firms' product is unprotected either by strategic or legal frameworks. All these factors form a business environment, – crucial regulatory, administrative, technical and financial conditions for the SMIs activities.

During the past ten years, the Arab countries have been introducing policies which, to differing degrees, contribute to the creation of a more open and more dynamic economy. The majority of the Arab countries have harnessed themselves to the modernisation of infrastructures and public services as well as those of the banking sector, the networks, transport and telecommunications.

If large areas of the economies have remained in the public sector in a large number of the Arab countries, the creation of enterprises is today open to anyone in the region. Take the example of Algeria that in three years has witnessed the creation of tens of thousands of businesses, often accompanied by the ANSEJ, the National Agency for the Employment of Young People.

The emergence of a new generation of local businessmen is a remarkable fact. They are the natural counterparts for the foreign as well as for domestic investors. And it is plain to see that the privatisation campaigns have attracted foreign direct investment in Jordan, Morocco, Tunisia and Egypt, for example, with the privatisation of the cement sector in this latter country.

The business environment in the region continues to change. Almost everywhere in the region the investors have the liberty of purchasing land, creating local companies, repatriating profits. Several countries have introduced systems for tax exemption. A number of countries have signed non-double taxation agreements and/or association agreements which play a positive role in attracting regional and foreign investments. However, some progress is required in the construction of a State of law favourable for businessmen, with transparent and efficacious procedures, for example, for the recovery of debts or arbitration.

The 2009 Doing Business in the Arab World Report⁸ highlights generally positive signs for the business environment: 13 Arab economies introduced 31 reforms, 29 of which made it easier to do business while 2 made it harder.

According to the Doing Business Report, the Middle East and North Africa were among particularly active reformers in 2008 and 2009. Competition among neighbours played an important role in motivating reforms. In 2008, sixteen of twenty one Arab economies implemented 38 reforms, up from 31 reforms in the previous year. Jordan, Algeria, Egypt and UAE were among the most active reformers.

⁸ The World Bank's report on the business regulatory environment of 20 Arab economies

Table 2. Reforming business regulation in Arab countries

Number of reforms by economy	Reforms making it:		Number of reforms by Doing Business topic	Reforms making it:	
	more difficult	easier		more difficult	easier
	to do business			to do business	
Jordan		6	Starting a business	1	8
Algeria		4	Paying taxes	1	6
Egypt		4	Dealing with construction permits		6
UAE		3	Trading across borders		6
Yemen		3	Enforcing contracts		4
Kuwait		2	Registering property		3
Lebanon		2	Getting credit		3
Oman		2	Closing a business		1
Saudi Arabia		2	Protecting investors		1
Sudan		2			
Tunisia	1	2			
Palestinian Territory	1	2			
Bahrain		1			
Djibouti		1			
Morocco		1			
Syrian AR		1			

Source: Doing Business Database, World Bank, 2010

In **Algeria**, the opening of the leading sectors of the economy, the modernisation of the fiscal system and customs as well as the progression of the banking sector show the desires of the country to open up to the rest of the world. In **Morocco**, the new policy was clearly spelt out in 2001 by the King himself: economic development is the priority; the access to credit is expanded with a new private credit bureau that started operation in March 2009, whilst in **Tunisia**, administrative formalities are increasingly carried out electronically. As a result, the manufacturing and the service sectors are currently the most buoyant in these countries.

With almost 80 million inhabitants, **Egypt** is today the largest market among the Arab countries. Its economy is open to the world and the opportunities of development are numerous here as much in the infrastructure field as in the domains of the environment, energy, and even tourism, since paradoxically, Egypt is only the world's 35th destination.

Syria managed to attract EUR7.76 bn of FDI in 2006-2008 projects by continuing to liberalise its economy following the model of its Lebanese neighbour by opening the stock exchange in Damascus, in-depth reforms of the business environment. **Jordan** presents currently an important opening as much on the offer as on the demand side in all the fields of business activities. In the **Lebanon**, the combination of the low tax rate for company profits with the privatisation of numerous public services have repositioned the country of the Cedars in the role of commercial and economic crossroads it once occupied. Moreover, the effectiveness of the Lebanese banking system has revived confidence of foreign investors, who contribute to a large extent to the renewal of the country's post-war economy.

Yemen, the World's fastest reformer in starting business in 2007/2008, continued to ease business start-up. It enhanced access to credit information and expedited trade through a new electronic document submission system and implementation of a risk based inspection system.

In the following table, the World Bank's Ease of Doing Business report classifies the Arab countries according to the various and cumulative business climate indicators.

Table 3. Business climate classification of Arab countries

Index Economy	Ease of doing business	Starting a business	Dealing with construction permits	Employing workers	Registering property	Getting credit	Protecting investors	Paying taxes	Trading across borders	Enforcing contracts	Closing a Business
Saudi Arabia	13	13	33	73	1	61	16	7	23	140	60
Bahrain	20	63	14	13	22	87	57	13	32	117	26
UAE	33	44	27	50	7	71	119	4	5	134	143
Qatar	39	68	28	68	55	135	93	2	41	95	33
Kuwait	61	137	81	24	89	87	27	11	109	113	69
Oman	65	62	130	21	20	127	93	8	123	106	66
Tunisia	69	47	107	108	59	87	73	118	40	77	34
Yemen	99	53	50	74	50	150	132	148	120	35	89
Jordan	100	125	92	51	106	127	119	26	71	124	96
Egypt	106	24	156	120	87	71	73	140	29	148	132
Lebanon	108	108	125	66	111	87	93	34	95	121	124
Morocco	128	76	99	176	123	87	165	126	72	108	67
Algeria	136	148	110	122	160	135	73	168	122	123	51
Palestine	139	176	157	135	73	167	41	28	92	111	183
Syria, AR	143	133	132	91	82	181	119	105	118	176	87
Iraq	153	175	94	59	53	167	119	53	180	139	183
Sudan	154	118	139	153	37	135	154	93	142	146	183
Djibouti	163	177	102	151	140	177	178	65	34	161	135
Mauritania	166	149	154	125	74	150	147	175	163	83	150

Source: 2009 Ease of Doing Business, World Bank

I.5 Foreign direct investments

Over the last decade, inflows of foreign direct investments (FDI) to the Arab countries, witnessed tremendous growth. Since 1998, total FDI inflows to 21 economies of the region grew by almost 18 times reaching in 2008 a record high of US\$ 96.5 billion. By the end of 2008, the share of FDI absorbed by the Arab region in the world's total FDI inflows quadrupled reaching 5.7 percent up from 1.3 percent in 1998, and similarly its share in total inward investment to developing countries reached remarkable 15.5 percent in 2008.

According to UNCTAD, the Arab region pulls foreign direct investments in huge quantities and now attracting more investment than other developing regions being ahead of Latin America's Mercosur (US\$ 56.4 bn) and entire Sub-Saharan Africa (US\$ 66.2 bn) and not far short of economies in transition (US\$ 114.3 bn). Only China individually receives more with its net inward investment worth 108 billion US dollars.

Table 4. FDI inflows to selected regions of the world, 2002-2008
(US\$ at current prices in millions)

Recipient region	2002	2003	2004	2005	2006	2007	2008
World	629,675	565,160	734,892	973,329	1,461,074	1,978,838	1,697,353
Developed economies	442,448	361,265	414,186	613,089	972,762	1,358,628	962,259
Economies in transition	11,293	19,901	30,308	30,948	54,548	90,866	114,361
Developing economies	175,935	183,994	290,397	329,292	433,764	529,344	620,733
Sub-Saharan Africa	12,894	16,995	17,196	28,292	37,445	46,820	66,247
MERCOSUR countries	18,943	12,239	22,641	21,232	26,026	42,532	56,436
China	52,740	53,505	60,630	72,406	69,468	83,521	108,312
Rest of Asia & Oceania	29,811	20,837	50,214	-23,560	43,879	78,394	82,817
21 Arab States	8,360	14,998	24,539	46,691	71,017	80,838	96,482
Of which GCC	2,734	6,134	14,145	28,318	39,324	48,209	63,400
Arab countr./World (%)	1.3	2.7	3.3	4.8	4.9	4.1	5.7
Arab countr./developing economies (%)	4.8	8.2	8.5	14.2	16.4	15.3	15.5

Source: The Arab Investment & Export Credit Guarantee Corporation based on UNCTAD Statistics, 2010

These significant funds received by the region have not been though evenly distributed among individual countries. The FDI-recipient Arab countries could be divided into three categories subject to different investment potential and performance.

- The first category comprises the largest economies and major recipient of FDI in the sub-region namely Egypt, Qatar, Saudi Arabia and UAE. More than 70 percent of FDI stock in the Arab world is concentrated in these four countries that undertook a number of reforms and invested heavily in improving their overall infrastructure.
- The second category includes smaller economies but high-performing in terms of FDI attraction and absorption. These are remaining GCC countries and most of West Asian and North African economies widely seen as favourable destination of FDI.
- The third category – lesser performing countries in terms of FDI – is mainly composed of least advanced and post-conflict Arab economies. These countries need to engage significant reforms in order to improve their investment climate and increase their inward investment flows.

With Saudi Arabia and UAE alone account for more than half of the total FDI stock absorbed by the region, countries on the lowest end of the range include Djibouti, Iraq, Kuwait, Mauritania, Palestine, Somalia, and Yemen with cumulated share at only 1.5 percent of the region's total. In the second group, Lebanon has received higher average annual net flows in the last seven years, relative to Sudan, Morocco, Libya and Tunisia. Only Somalia posted a negative average annual net outflow of US\$1m and US\$5m in 2003 and 2004, respectively.

Although most of the region has also received the bulk of their FDI inflows over the 4-5 years, in contrast to Saudi Arabia, the rest of the region has not experienced proportionally high growth rates (see the table below).

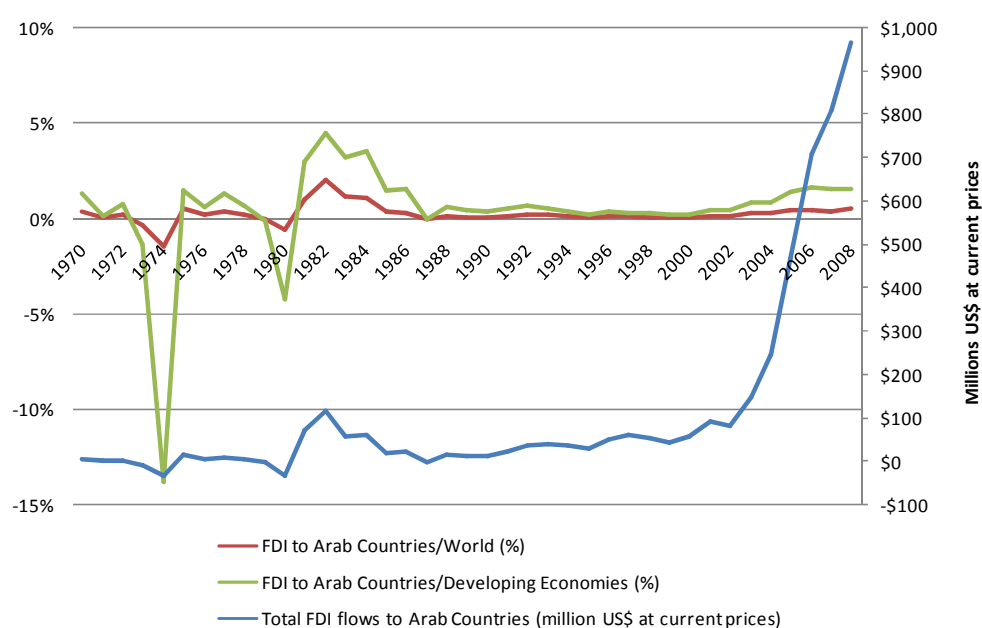
Table 5. Foreign direct investment to Arab countries, net inflows, 2002-2008 (US\$ at current prices in millions)

Recipient economy	2002	2003	2004	2005	2006	2007	2008
Algeria	1,065	634	882	1,081	1,795	1,662	2,646
Bahrain	217	517	865	1,049	2,915	1,756	1,794
Djibouti	4	14	39	59	164	195	234
Egypt	647	237	2,157	5,376	10,043	11,578	9,495
Iraq	-2	0	300	515	383	485	488
Jordan	122	443	816	1,774	3,268	1,950	1,954
Kuwait	4	-68	24	234	122	123	56
Lebanon	1,336	2,860	1,899	2,624	2,675	2,731	3,606
Libya	145	143	357	1,038	2,013	4,689	4,111
Mauritania	67	102	392	814	155	153	103
Morocco	481	2,314	895	1,653	2,450	2,803	2,388
Oman	122	26	111	1,538	1,688	3,125	2,928
Palestine	9	18	49	47	19	28	29
Qatar	624	625	1,199	2,500	3,500	4,700	6,700
Saudi Arabia	453	778	1,942	12,097	18,293	24,318	38,223
Somalia	0	-1	-5	24	96	141	87
Sudan	713	1,349	1,511	2,305	3,541	2,436	2,601
Syria	115	160	320	583	659	1,242	2,116
Tunisia	821	584	639	782	3,312	1,618	2,761
UAE	1,314	4,256	10,004	10,900	12,806	14,187	13,700
Yemen	102	6	144	-302	1,121	917	463
Total 21	8,360	14,998	24,539	46,691	71,017	80,838	96,482

Source: The Arab Investment & Export Credit Guarantee Corporation based on UNCTAD Statistics, 2010

In terms of sector distribution, the bulk of the region's FDI is directed predominantly to petroleum-related and other primary activities. Due to extensive orientation towards natural resource activities, the inflows of FDI into the region have been historically volatile due to vulnerability to commodity price changes (see Figure 5).

Figure 5. Volatility of FDI inflows to the Arab world, 1970-2008



Source: The Arab Investment & Export Credit Guarantee Corporation based on UNCTAD Statistics, 2010

The country-level analyses confirm that for countries such as Algeria, Kuwait, Libya, Oman, Qatar, Saudi Arabia, and Yemen, the overwhelming majority of FDI is channelled to the hydrocarbon sector.

The boom in energy and raw materials has brought in oil and gas explorers but also investors in tourism, banking, telecommunications, construction, and increasingly in manufacturing. Such countries as Bahrain, Egypt, Lebanon, Morocco, and Tunisia, have witnessed FDI flows into various manufacturing sectors. Industries such as petrochemicals, fertilisers, metalworking, cement, textiles, food-stuffs and car parts continue to attract dozens of deals a year across the region.

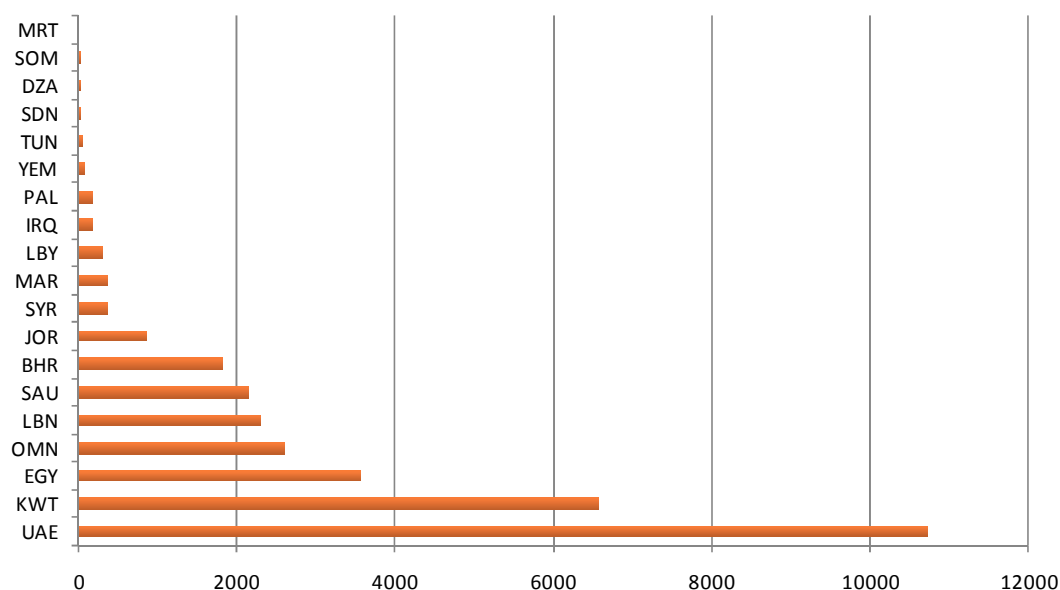
In general, the **inward investors** to the Arab region can be grouped into four types:

- The first might be called "offshore" investors. These are firms attracted by deposits of oil and gas in the GCC countries as well as in Algeria, Morocco and Tunisia. They are offshore in that they ship in all their labour, equipment and supplies. They pay the state for the resources they extract, but have little further effect on the local economy.
- The second group consists of European companies, led by the French, Spanish and Italians. These investors usually form joint ventures or buy local SMIs.
- Third comes an internal for the region group – the Gulf funds. Their billions tend to go to the huge resorts springing up along the Mediterranean, Red Sea and the Arab Gulf coasts. Investors from Dubai have a EUR10 billion project in southern Tunis, a EUR3 billion development in Algeria and EUR600 million site in Morocco.
- The fourth group, also newcomers, are perhaps the most interesting: investors from emerging markets. Several Indian companies have set up shop in the region (of those Tata, Wipro Technologies, Ranbaxy Laboratories, Gujarat State Fertilisers and Coromandel Fertilisers, etc.) with some South Korean investors investing to a car-parts factory in Tunisia and hotels in Syria. These industrial investors have no qualms about taking over local companies with thousands of employees – meaning that they are thoroughly integrated into the local economy, and their activities have a big knock-on effect.

According to the Arab Investment and Export Credit Guarantee Corporation (DHAMAN) 2008 Report on investment climate in the Arab countries, **inter-Arab direct investment** totalled US\$ 34 billion in 2008 compared to US\$ 20.7 billion received by 13 Arab countries in 2007. The largest share of inter-Arab investment was directed to Saudi Arabia with a more than 38 percent of the total inter-Arab flow, followed by Algeria, Sudan, Lebanon and Egypt.

Since 2007, intra-Arab investment values grew across the region with relatively static situation in Lebanon, Jordan and Djibouti.

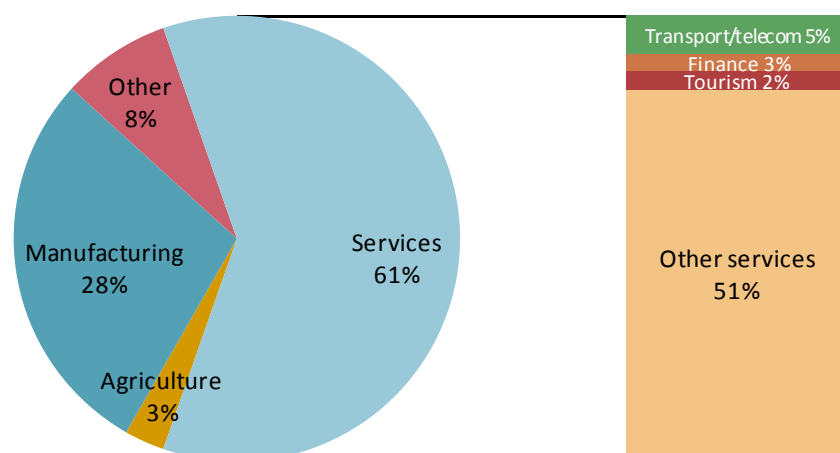
Figure 6. Inter-Arab direct investment by source county, 2007-2008



Source: DHAMAN, Investment Climate report in Arab countries, 2008

The sectoral breakdown of the intra-regional investment operations carried out in 2008 places the manufacturing sector on the second position with 28.5 percent of total intra-flows after the number-one in attracting Arab capital – services (60.8%). The report also emphasizes a rapid increase in direct investment to the agricultural sector. This is seen as a response of the Arab countries especially those of the Gulf to the recent food crisis and hectic price fluctuations for food and other basic agricultural commodities. The measure addressed an issue of food shortages and aimed at achieving self-sufficiency and food security for the Arab region in the long run.

Figure 7. Inter Arab investments breakdown, by economic sector (2008)



Source: DHAMAN, Investment Climate Report in Arab Countries, 2008

The boom in energy and raw materials should give many countries a start in building their economies up. If foreign investors do no more than harvest the oil and gas and leave, the region may simply stall again. The resource abundance of the Arab States especially in the Gulf region has made it possible to accumulate important financial resources and experience in the effective allocation of generated assets.

In the view of the common development objectives of the Arab countries with the wide variety of national specific targets and development goals, these assets could be used for the foundation of a self-sustained development of the entire region based on more intensive intra-regional economic, industrial and manufacturing cooperation led and/or backed by the local funds. This could be only achieved through a two-pronged strategy consisting of the harmonised region-wide human, productive and trade capacity building activities and closer integration of all AIDMO States, including net recipients of FDI and the source countries, in a wider Pan-Arab economy. More of the intra-Arab joint-ventures and manufacturing projects would clearly prompt the region's economy to get broadened and deepened.

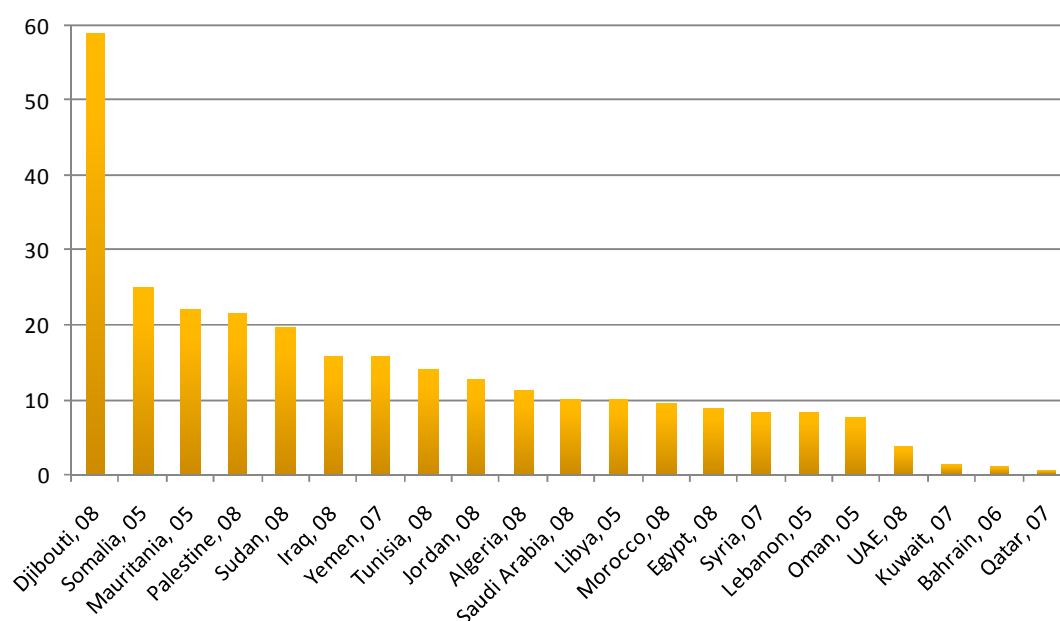
I.6 Employment and unemployment

The labour market in the Arab world has a number of unique features that can be summarized as follows:

- ✓ *The public sector's limited capacity to employ the local workforce, especially the young graduates.* The public sector currently employs nearly a third of the region's workforce, and is suffering from its large size and low productivity. The public sector contribution in the job creation is expected to decrease in light of privatization projects being carried out in many Arab countries. The locus of employment has to shift from public to private sector;
- ✓ *The limited size of private sector and its inability to create a sufficient number of work opportunities for the region's workforce;*
- ✓ *The employment patterns of the private sector tends to discriminate against youth, in particular against young women,* for reasons such as the added cost of maternity leave and child care that the companies are reluctant to bear, and the suspected limited geographic mobility of women. The private sector also complains that graduates do not have the types of skills they need;
- ✓ *The Arab countries are suffering from the lack of focus on technical aspects which are currently providing job opportunities.* The education is not compatible with the needs and priorities of the world market.
- ✓ *The Arab world is the third highest labour receiving region (after North America and Europe). This results into a continuous presence of young foreign workers in the Arab region (aged 15-39).*

The outcome is a situation that combines high population growth rates, high levels of youth unemployment and few opportunities for young women to participate in labour markets. Figure 8 presents the unemployment rates in individual Arab countries.

Figure 8. Unemployment rate in the Arab countries, % of total population



Source: Unified Arab Economic Report, 2009

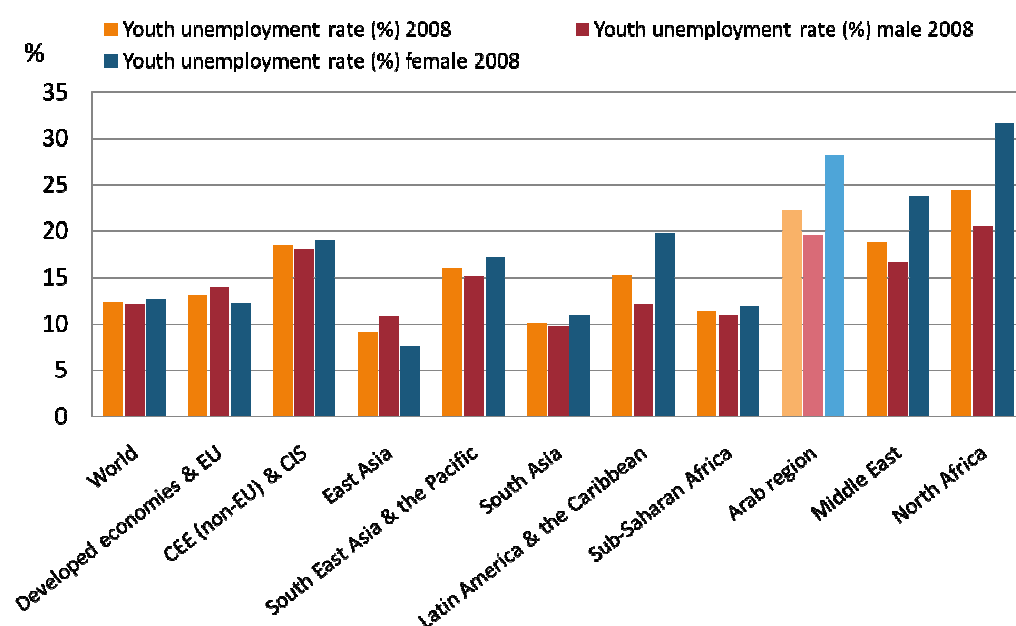
They are highest in the region's lowest income groups such as Djibouti, Mauritania as well as in countries suffering from political and socio-economic instability such as Iraq, Palestinian Territory and Somalia. In contrast, the GCC countries maintained lower unemployment rates.

The worst part of the problem of youth unemployment in the Arab world though, is that *unemployment is particularly acute among the educated*. The Unified Arab Economic Report showed that the region has the odd situation of *the illiterate having the lowest unemployment rates, while those with secondary or university education suffer from the highest levels*. For example, the educated unemployed are 10 times the number of illiterate unemployed in the case of Egypt, 5 times in the case of Morocco, and 3 times in the case of Algeria.

Despite country specificities and the intra-regional diversity within the Arab world, the above labour market outcomes are quite similar in the majority of economies in the region; and the majority of countries have not yet found solutions for the challenges.

The magnitude of the challenge becomes clear when comparing the situation of the Arab region with other regions in the world as seen in Figure 9 presenting the 2008 youth unemployment rates in the Arab world as being the highest in the world. With 22.1 percent, the youth unemployment rate is very high in the Arab region (24.4 percent in North Africa and 18.8 percent in the Middle East). The North African rate is the highest in the world. This represents a huge waste of potential especially given that the unemployed are mostly educated.

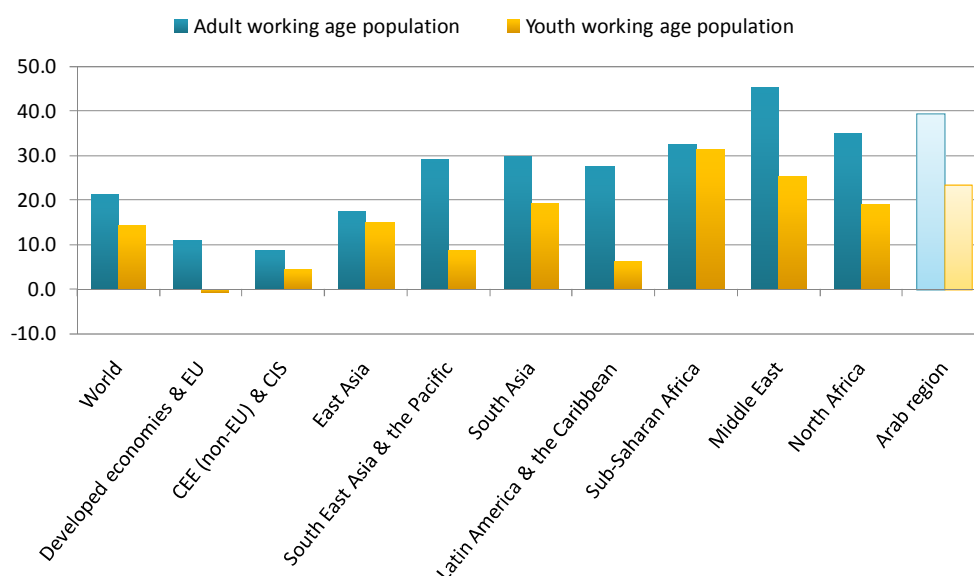
Figure 9. Youth unemployment rates in the Arab world in comparison to other regions



Source: Conference on Youth Employment, Arab Labour Organization, Algiers, 15-17 November 2009

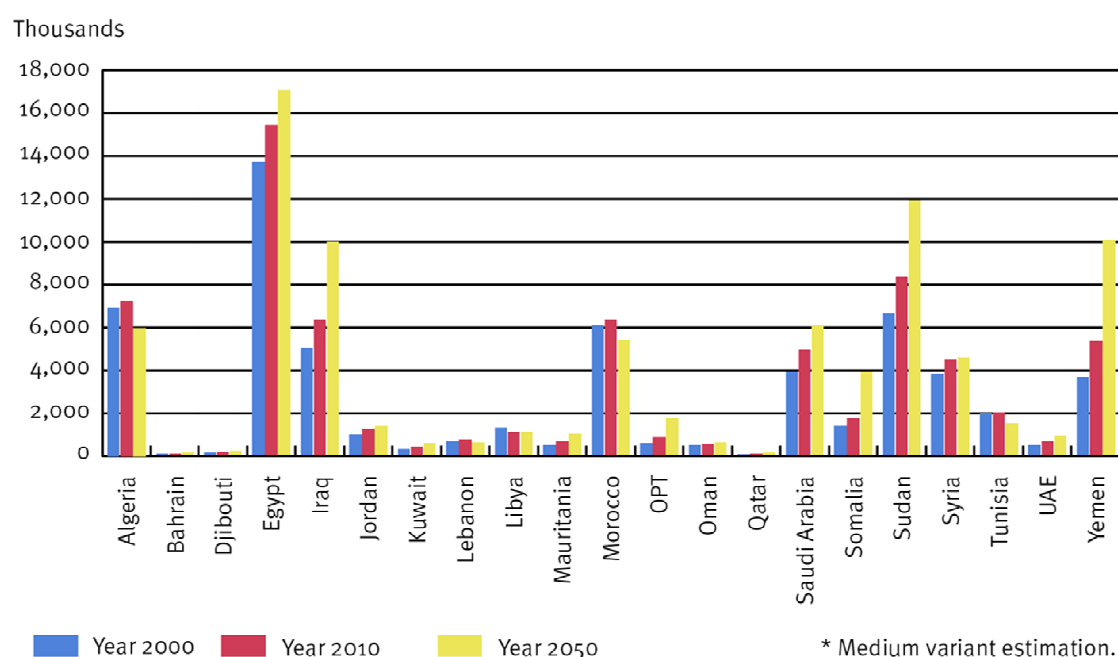
The seriousness of the problem is accentuated by the fact this it is not only a temporary problem but rather a permanent situation given past demographic trends (1998-2008) and (projections up 2050) and labour force participation rates in 2008, depicted in Figures 10, 11 and 12 respectively. Rates of growth of adult working age and youth populations in the Arab region are higher than all regions in the world except sub-Saharan Africa. At the same time, youth participation in the labour force is the lowest in the world even in comparison to Sub-Saharan African. While the job creation challenge exists in all Arab countries the highest challenges seem to exist for Egypt, Iraq, Sudan and Yemen.

Figure 10. Growth of total working age population and youth population 1998-2008



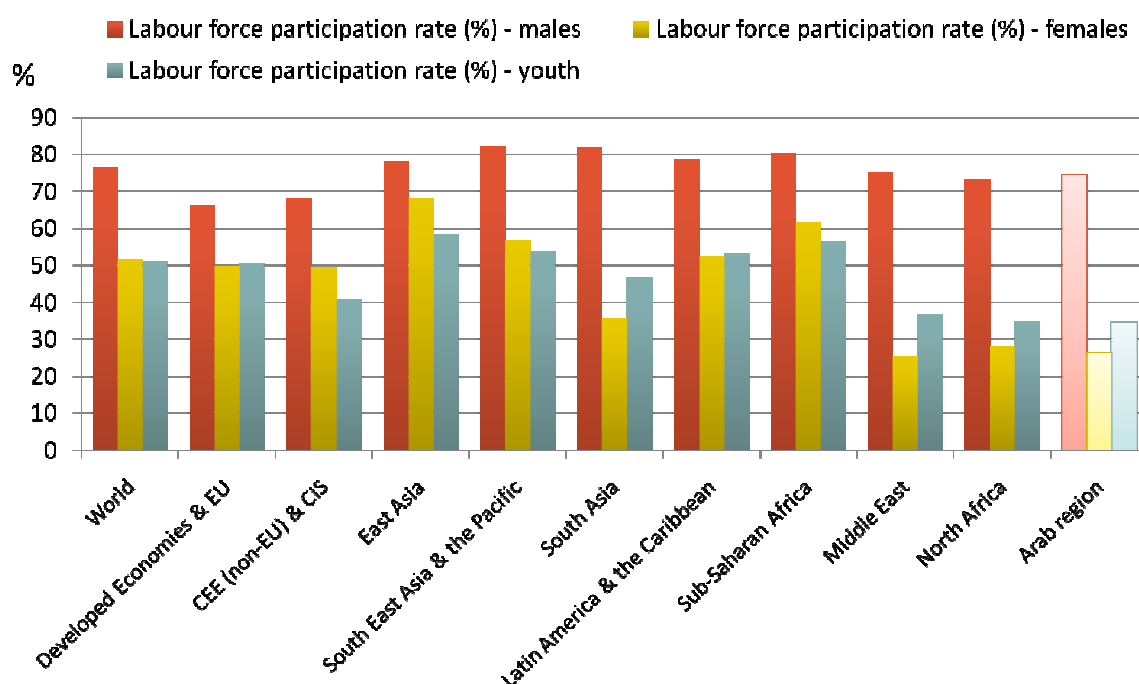
Source: Conference on Youth Employment, Arab Labour Organization, Algiers, 15-17 November 2009

Figure 11. Projected Arab Youth population (aged 15-24) up to 2050



Source: United Nations Population Division 2008

Figure 12. Labour force participation rates in the Arab world in comparison to other regions, 2008

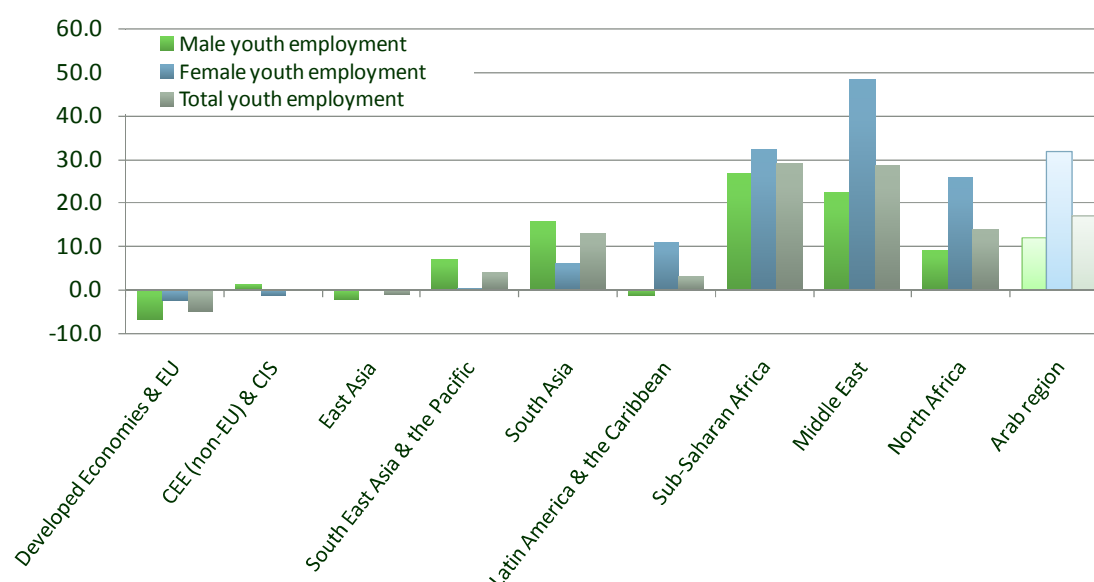


Source: Conference on Youth Employment, Arab Labour Organization, Algiers, 15-17 November 2009

As for the case of women, the lowest rate of participation in the labour force and highest unemployment rates exist in the case of the Arab world as seen in figures 9 and 12 above. Unemployment rates for women are also significantly higher than those for men. Female employment-to-population ratio continues to be the lowest in the world: out of 10 young women in the Arab region only 1.5 have a job compared to 4 out of every 10 young men.

There have been serious efforts to boost youth employment in the Arab world as seen in Figure 13. In fact, percentage change in youth, and particularly female youth, employment between 1998 and 2008 has exceeded most regions in the world yet the efforts are not enough to keep up with demand as reflected in 2008 unemployment rates.

Figure 13. Percentage changes in youth employment between 1998 and 2008



Source: Conference on Youth Employment, Arab Labour Organization, Algiers, 15-17 November 2009

While the labour force growth will stay high until 2020, the pace of growth is decelerating as a result of the demographic transition. Until then, however, the challenge of job creation will need to take account of the millions of new entrants to the labour market as both the working age population and the labour force participation rates, especially for the educated young men and women, will continue to expand.

Thus, with the existing pace, the Arab world will need to create 55-70 million jobs between now and 2020⁹ to bring the rate of unemployment to the global norm.

⁹ According to the World Bank's Economics Developments and Prospects for Middle East and North Africa Region, 2007

I.7 External trade

According to the Unified Arab Economic Report, total exports by the Arab countries in 2008 reached one trillion US dollars representing a spectacular 32.5-percent growth in annual terms. With nearly the same pace (32.2%), imports from the region grew to US\$ 0.7 trillion in the same year. The growth rate of the total Arab external trade thus exceeded the global trade expansion of 14.3 percent. Consequently, the share of the Arab countries in global trade increased from 4.7 in 2007 to 5.5 percent in 2008.

Table 6. Arab foreign trade, 2004-2008

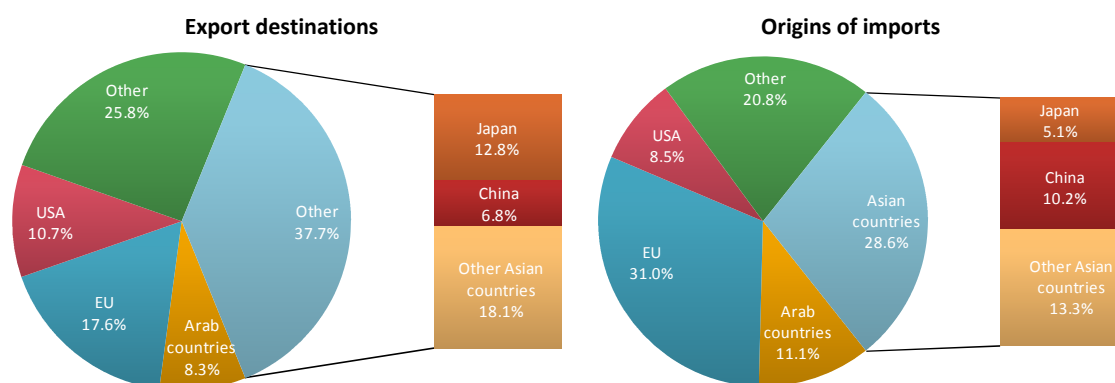
	US\$ (billion)					Annual change (%)					Aver. change 2004-08
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	
Arab Exports	403.3	559.6	681.0	792.3	1,049.8	31.9	38.7	21.7	16.3	32.5	27.0
Arab Imports	288.5	348.9	400.6	530.7	701.6	34.2	20.9	14.8	32.5	32.2	24.9
Global Exports	9,133.2	10,370.5	12,005.2	13,808.9	15,735.4	16.8	13.5	15.8	15.0	14.0	14.6
Global Imports	9,477.0	10,747.9	12,448.9	14,092.5	16,169.1	16.9	13.4	15.8	13.2	14.7	14.3
Ratio of Arab to global exports (%)	4.4	5.4	5.7	5.7	6.7						
Ratio of Arab to global imports (%)	3.0	3.2	3.2	3.8	4.3						

Source: Unified Arab Economic Report, 2009

As oil is the region's main export to the rest of the world, the significant rise in exports from the Arab world is largely attributed to historically high levels of international oil prices that the world has witnessed prior to the financial crisis. Besides, this has prompted oil producers to raise volumes of oil production and its exports. Understandably, higher import flows to the region proportionate with accelerated economic growth causing an increase in imports of industrial inputs, which was mainly fed by the increased export revenues.

The 2008 statistical data related to the geographical pattern of the region's main trade partners has registered a minor development compared to the previous year. Arab exports to China, Japan and USA continued experiencing a steady growth at 62.5%, 43.7% and 34.0% rates respectively, whilst the share of the European Union in total exports of the Arab origin dropped from 18.2 percent in 2007 to 17.6 percent in 2008.

Figure 14. Main trade partners of the Arab countries, 2008



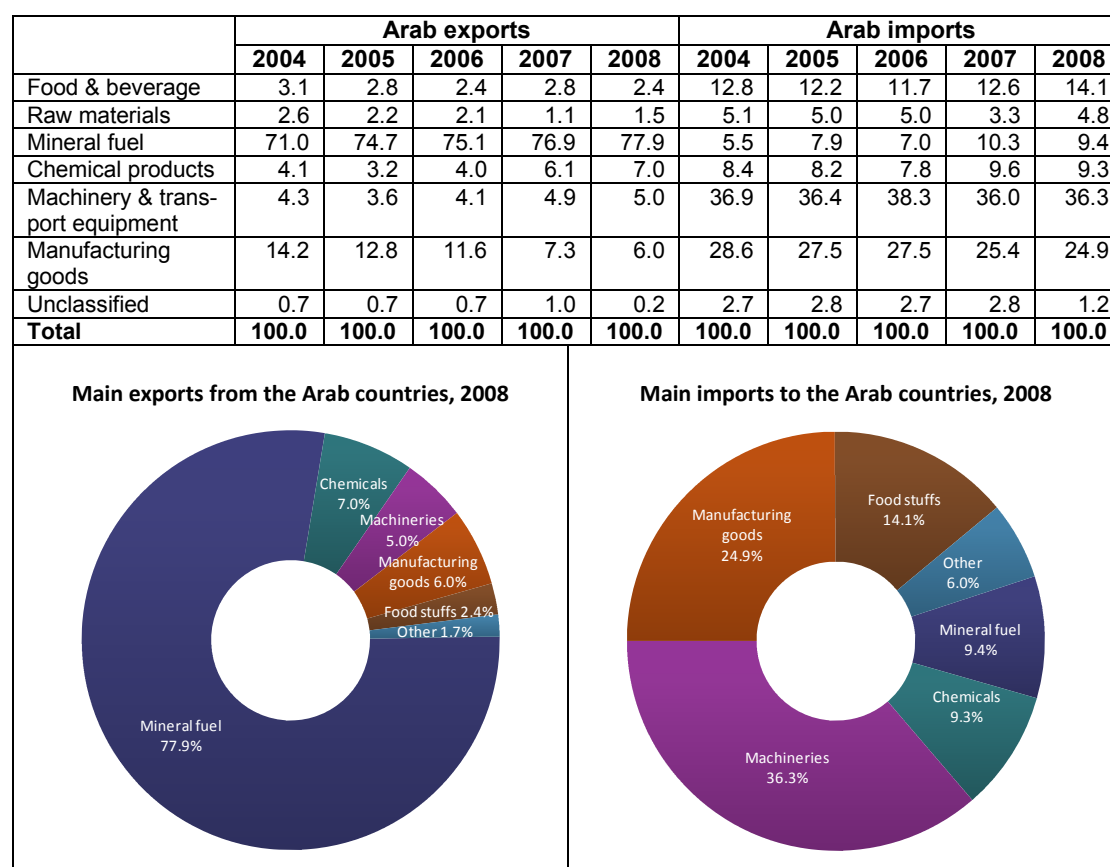
Source: Unified Arab Economic Report, 2009

As to origins of imports to the Arab countries, the EU remains the major partner being the source of almost third of total imports to the region. Western Europe, in particular has traditionally been the region's principal external trading partner as for the oil as for many non-oil goods (agriculture and industrial products). The EU is followed by increasing share of Chinese imports which doubled in value over the previous two years. The share of other Asian countries including Japan – traditionally active in the region – has recorded the same trends over the mid-term period, though it lost around 3 percent in annual terms grabbing some 18.4 percent of the total imports compared with 10.2 percent that China delivered alone.

National trade statistics show the limited diversification of industrial exports across the region. In most of the Arab States, a few major export commodities constitute nearly totality of overall exports. This however varies between countries. The average regional data, for instance, indicate the mineral fuels still generating an important source for the region's external revenue amounting to 77.9 percent of total exports in 2008. Chemical products represent the second largest (7%) commodity exported the same year to the rest of the world. The latter together with manufacturing goods, machineries, transport and equipment with a marginal contribution of food-stuffs constitute the remaining 20 percent of total Arab exports.

By contrast, machinery, transport equipment along with other manufacturing goods and foods and beverages represent three-fourth of the region's total imports in 2008 (see the table and charts below).

Table 7 and Figure 15. Composition of the Arab foreign trade, 2004-2008, in %



Source: Unified Arab Economic Report, 2009

Despite numerous attempts to promote regional integration, intra-Arab trade remains a small portion of total Arab trade. Intra-regional exports comprise some 8 percent of total exports in 2008 (Table 8). Moreover, the level of intra-Arab trade compares unfavourably with other regions. For example, intra-regional trade as a share of total trade is nearly 50 percent higher in the Andean Pact countries than in the Arab countries, and 7 times higher in the countries belonging to the European Union¹⁰. Interestingly, intra-regional trade in countries both with similar factor endowments, such as the EU, and with different factor endowment, such as the North American Free Trade Agreement (NAFTA), is higher than trade among the Arab countries.

In 2008, the value of intra-Arab trade recorded an increase of 22.5 percent reaching US\$82 billion with the positive trade balance slightly exceeding US\$10 billion. The value of intra-regional exports was US\$86.6 billion (increase by 22.9 percent); import operations within the region totalled US\$78.2 \$ billion (+22.2%).

Table 8. Value and growth of Inter-Arab trade, 2004-2008

	Value (US\$ billions)					Annual change (%)					Average change 2004-07 (%)
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	
Intra-Arab trade*	33.8	46.1	56.0	67.3	82.5	42.0	36.3	21.5	20.3	22.5	25.8
Intra-Arab exports	36.1	48.1	58.5	70.7	86.8	42.1	33.4	21.5	20.9	22.9	25.1
Intra-Arab imports	31.5	44.0	53.5	64.0	78.2	41.9	39.7	21.5	19.7	22.2	26.7

* Inter-Arab trade = (Inter-Arab exports + Inter-Arab Imports) / 2

Source: Unified Arab Economic Report, 2009

Importantly, the proportion of trade between the neighbours is significantly higher than overall intra-Arab trade. Thus, nearly two-thirds of the North-African countries' exports to the Arab countries is with other Maghreb countries. Respectively; three-fourths of GCC exports to the Arab countries is delivered to other GCC countries; and one-third of the Mashreq's intra-Arab trade is with other Mashreq countries. Consequently, most of the intra-Arab trade is also within these sub-regions, possibly suggesting that trade impediments are lower within the subgroups than for the region as a whole and that there are differences in comparative advantages even within the subgroups.

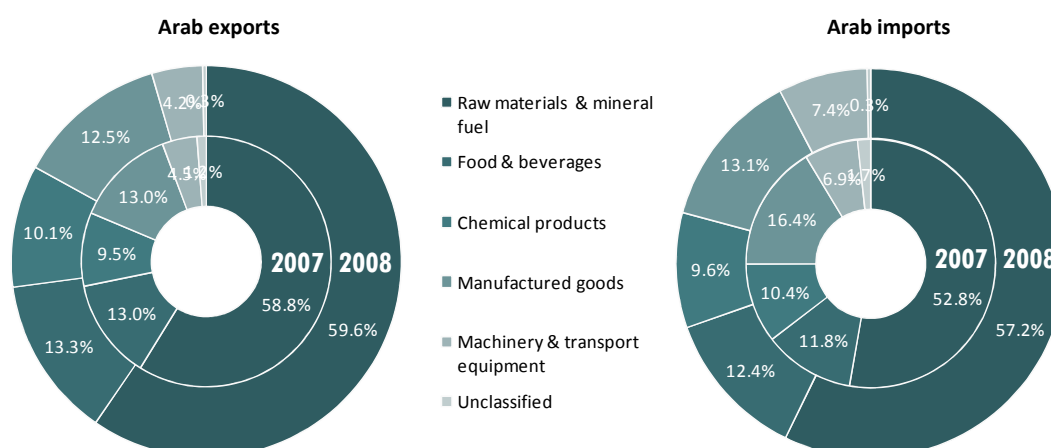
Similarly, data on intra-regional imports proofs geographical location as a major determinant for the origins of goods and services imported within the Arab world. A significant part of intra-Arab imports to Jordan and Qatar originates from Saudi Arabia; the bulk of Yemeni intra-Arab imports come from the United Arab Emirates, etc.

In contrast to extra-regional trade, non-oil products predominate in intra-regional exports (Figure 16). The very low conventional figure for Arab countries' intra-regional trade as a proportion of their total trade reflects the huge predominance of oil in the latter: if oil is excluded, intra-regional exports are a quite respectable proportion of total exports. In fact, non-oil intra-regional exports are about 19 percent of total Arab non-oil exports – a percentage comparable to intra-regional exports in Mercosur and ASEAN, although evidently far smaller in absolute amounts.

¹⁰ Sources: The IMF Direction of Statistics Yearbook

Despite some changes in the share of commodity in intra-Arab trade in 2008 compared to the previous year; the data available for the commodity structure of intra-Arab trade in 2008 show no change in the ranking of the various commodity groups. Raw materials and mineral fuels maintained the lead intra-regional exports at 59.6 percent of the total in 2008; followed by food and beverages at 13.3 percent, manufactured goods at 12.5 percent, chemical products at 10.1 percent and machinery and transport equipment at 4.2 percent.

Figure 16. Intra-Arab trade structure



Source: Unified Arab Economic Report, 2009

The same data also suggest that intra-Arab trade is undergoing positive developments with the completion of the Great Arab Free Trade Area (GAFTA) and the removal of customs duties on trade between Arab countries. This has contributed to the increase in the volume of intra-Arab Trade. On the other hand; negotiations have started between the Arab countries for the liberalization of trade in services. The GAFTA provides a suitable framework and an environment conducive to the growth of intra-Arab trade, thus making it possible to capitalize on opportunities availed in the Arab markets to increase investment flows, improve competitiveness; and create employment opportunities across the region.

I.8 General education, scientific research, technical & vocational training, and professional training infrastructure

The countries of the Arab region, where nearly half of the population is youth, increasingly integrate into the world markets and their governments recognize that it is the quality of human capital that will determine their capacity to be competitive. In this framework, Arab countries are paying a lot of attention to the areas of general education, scientific research, technical and vocational training, and the professional infrastructure.

General Education: Most Arab countries provide equal opportunities for schooling with special focus on the gender issue. In primary education, school enrolment rates in

the majority of Arab States exceed 80 percent. In secondary education, with only very few exceptions, a similar scenario is observed. The 80% enrolment is even surpassed in thirteen Arab countries. In the course of the last twenty years, the number of universities has increased dramatically from 140 in 1993 to 395 universities in 2008. University enrolment rates exceeded 30 percent in ten Arab countries (see Table 9).

Table 9. Education in Arab countries, 2006, 2008

	% of inscription (2006) ⁽¹⁾			Education expenditure as % of GDP (2006) ⁽²⁾	Number of universities (2008) ⁽³⁾
	Primary	Secondary	University		
Algeria	110.5	83.1	21.8	5.1	34
Bahrain	119.5	102.1	21.1	3.1	15
Djibouti	44.1	22.4	2.4	7.6	1
Egypt	104.7	86.2	34.7	4.1	30
Iraq	86.9	44.7	15.4	n.a.*	14
Jordan	96.7	88.7	39.9	4.3	26
Kuwait	96.4	88.7	17.6	3.4	6
Lebanon	94.3	81.4	48	2.8	38
Libya	110.4	93.5	58	n.a.	15
Mauritania	101.7	25	3.6	2.8	1
Morocco	106	49.9	11.8	6.8	29
Oman	82.5	88.6	25.5	5	5
Palestine	82.6	93.9	37.9	n.a.	11
Qatar	104.6	101.2	19.1	2.9	6
Saudi	98.14	93.92	28.6	6.7	28
Somalia	n.a.	n.a.	n.a.	n.a.	3
Sudan	66	33.8	6.2	0.8	35
Syria	126.2	69.6	n.a.	5	9
Tunisia	108.3	84.9	30.1	6.5	44
UAE	103.8	90	35	1.6	18
Yemen	87.5	47.7	9.4	5.7	27
TOTAL					395

Source: (1), (2) Unified Arab Economic Report, 2009, (3) Investment Environment in Arab Countries, 2008

* Note: n.a. = data not available

As seen in Table 9, there are profound differences among the Arab countries themselves. For example, while Algeria, Egypt, Jordan Tunisia, Libya and Gulf Countries have almost managed to provide secondary education for everyone, other countries such as Yemen, Mauritania and Djibouti performed very poorly. From the successful group, Tunisia has a special solid reputation in educational terms. The country has taken advantage of projects financed by the World Bank to back its reforms, and its approach is the most advanced in the region. Jordan has also thought long and hard about this question. The World Bank has assisted Jordan develop an educational project involving a detailed strategy of the sector's reform including changes in the governance practices, the study and teacher training programmes.

Scientific Research: According to the figures stated by the UNESCO Institute of Statistics for the year 2004, expenditure of the Arab countries on scientific research and development amounted to US\$1.7 billion or 0.3 percent of GDP, which is

relatively lower¹¹ compared to the same figures in Latin America and the Caribbean – US\$21.3 billion (0.6%), India – US\$20 billion (0.7%), and in South-East Asia – US\$48.2 billion (1.7%). In Arab countries, 97 percent of researchers are associated with public sector which indicates the weak linkage between research and the production systems. This affects negatively the region's high-tech exports as the latter does not exceed 12 percent of total exports offset by the global average of 20 percent. In 2002, under the criterion of UNESCO for the calculation of patents ratio among the resident population in each country, all the Arab countries did not fulfil a worth mentioning number of patents, despite the presence of a significant number of specialized research centers active in the technical and industrial areas.

Technical and vocational training: Most Arab states pay greater attention to the general education than to technical and vocational training. Despite the efforts exerted by most Arab countries in the development of policies on technical education and vocational training, which were called to bridge the gap between labor markets and the outputs of technical schools and vocational training centers, yet most of the Arab countries still need to improve the quality of the system's output and also the level of professional skills. Capacity building for these institutions is badly needed if they are to cope with international standards and meet labor market requirements. In its turn such improvement would help improve the employment opportunities for young graduates of colleges, technical schools and vocational training centers which also contributes to the implementation of economic and social development plans in Arab countries.

Professional training infrastructure: In most of Arab countries, the issues of education, vocational and technical training are mandated to the high-level administrative institutions mainly at the ministry level which limits their potential and flexibility of action. In contrast, in other countries these social services are covered by specialized bodies endowed with administrative and financial autonomy. Boards of education and vocational training active at the local level encompass representatives from governments, employer and labor organizations. These boards are entrusted with the role of policy making in the field of vocational training along with functions related to the policy implementation and follow-up.

The professional training system in the Arab world includes approximately 500 vocational training institutions with an average participation of 2 students in vocational school per 10000 habitants. The latter indicator varies from one country to another reaching 5 in Jordan; 3 in Iraq, Libya and Tunisia; being around regional average (up to two students) in Algeria, Syria, Egypt; and less than 1.4 in other countries of the region. The share of students following the professional training programmes in the countries' total high-education enrolment is 30 to 35 percent in Iraq, Oman and Tunisia; 20-25 percent in Algeria, Egypt, and Jordan; 15-17 percent in Syria, Palestine and UAE; 13 percent in Bahrain and Libya; and lesser in other countries of the region.

The technical training curriculum includes general theory courses, technical and professional courses, applications, and practical training. A usual technical training

¹¹ Most of the funds allocated to research in the Arab countries go for salaries to employees more than research itself

module follows basic education and has 3-year duration. Upon the completion, graduates receive a certificate of secondary vocational education or diploma of secondary technical education. This certificate provides the graduate with an access to the labor market or further to the higher education studies subject to passing certain tests.

Shortcomings of the region's technical and vocational training infrastructure

The technical and vocational training infrastructure in the Arab world is characterized by the following deficiencies:

- Lack of national strategies and policies in most Arab States, and, if in place, – not properly implemented.
- Weak synergy and absence of competition in the public sector governance.
- Poor institutional cooperation/partnerships of the private sector with public training institutions and scarce contribution to the possession and management of training centers (with the exception of Jordan, Lebanon, Morocco, and Sudan). Furthermore, most of training institutions that belong to the private sector tend to specialize in the low-wage professions. Consequently, engineering, medical or agricultural disciplines remain rare.
- Low financial contribution of the private sector to the technical and professional education either through grants or financial and material assistance, such as delivery of new technologies, appliances and equipment, or through covering the costs of training of trainers, for instance, etc.
- The training system and limited training programs implemented in favor of the field work of which the outputs are designed for more skills, are still in need of training and good trainees.
- Lack of flexibility in educational system rarely focusing on scientific research and, – if the case – not intending to interact directly with productive activities and production requirements.
- Educational systems in the Arab states led to the degraded outlook of most Arab societies to vocational education and training because this sort of education is the last resort for students who have limited educational level.

Poor practices of training the trainers and professional teachers, lack of field experience and inability to cope with recent technical and technological findings remain important challenges for the Arab countries. Furthermore, the currently applied training methods are based rather on theory than on practice – the system that was abandoned by developed countries and emerging economies of Asia in early 1990s¹².

I.9 Quality infrastructure

The current worldwide trade context is notably characterized by an increasing interdependence among national economies and the formalization of international trade in accordance with the agreements of the World Trade Organisation (WTO). In parallel, the global market is subject to increasingly strong competition resulting in a growing demand for quality while policies toward the protection of environment and the consumer become more and more stringent.

¹² Source: Conference on Youth Employment, Arab Labour Organization, Algiers, 15-17 November 2009

In fact, increasing supply capacity is essential to, but not sufficient for, gaining entry into world markets or achieving regional harmonisation and integration. Once the critical quantity is achieved the problem of reaching a certain quality requested by international and regional markets arise and the associated challenge of proving conformity with international standards and technical regulations.

Countries that rely on import for satisfying a good part of the needs of their populations in food and consumer products should establish effective systems for controlling the quality and safety of imported products. This implies establishing an effective technical regulatory regime with the necessary conformity assessment capabilities in line with the accepted rules of international trade.

This requires establishing efficient standards, testing, certification and accreditation mechanisms that conform to the requirements of the WTO SPS and TBT agreements and enjoy international recognition. Conformity assessment means evaluating and confirming features such as quality, reliability, safety, economy, efficiency and effectiveness as defined in standards and regulations. To prove compliance with quality standards and adequate quality infrastructure (QI) it is essential to face the challenges of and benefit from a changing global landscape. Standardization, for example, contributes not only to international trade but also to the basic infrastructure promoting sustainability and good regulatory practice. An adequate QI has the potential to improve the quality of products, processes and services.

It was in this scenario that AIDMO is making efforts to facilitate trade and promote economic integration between Arab countries. Important initiatives have been launched that lay down the basis for a Common Arab Market with a view to further develop the cooperation between the member countries and move it from the coordination and cooperation phase into a new phase of integration. Aware of the importance of the harmonization of standards, conformity assessment and metrology infrastructures, AIDMO has prepared the Arab Standardisation Strategy 2009 -2013 adopted by the Arab States in 2008 which addresses all the components of the Quality Infrastructure (standardisation, metrology, certification, accreditation, testing and conformity assessment) with a regional focus.

To fulfil its planned objectives of trade facilitation between the Member States, AIDMO embarked on an ambitious project of harmonization of standards, conformity assessment, accreditation and metrology infrastructures in the Arab countries.

It is understood that compliance with standards and technical regulations as well as mutual recognition of conformity assessment procedures are only one set of actions that are needed to enhance trade, but that they do constitute a major element of competitiveness of local enterprises and products. It is also acknowledged that efficient and sustainable support in the area of quality and technology support, standards, conformity assessment, in particular accreditation, are best viable and self-sustaining if carried out in regional coordination and/or undertaken at regional level. Such regional division of labour based on the estimate work load (such as for calibration services) or on the need to have a harmonized regional approach (such as for accreditation and standardization) will allow to pool scarce resources, achieve economies of scale, and more easily obtain international support and recognition. In particular, this approach will help Arab countries to work at the regional level without

having to re-create or strengthen their national levels first. Furthermore the project will allow the AIDMO Member States to have an increased and fruitful participation in international fora, meetings and seminar as well as at the WTO and ISO level.

AIDMO has taken up the challenge of further integration into the regional and international market through the development of internationally recognized standards and conformity assessment infrastructures and services. This approach will contribute in supporting AIDMO's goals. It will also facilitate the development of inter-regional trade as well as the integration of AIDMO countries into global markets, while ultimately local costs would be reduced for proving conformity of products and enterprises with international market requirements.

The typical buildings blocks of a Quality Infrastructure are listed in the following table. Also listed in the table are the typical institutions that provide the services, as well as whether they are to be found in the public or private domain. In a perfect world, each one of the building blocks would be an independent organization, but the reality in developing economies and many developed economies is that they are often combined to gain economies of scale in management and scarce human resources.

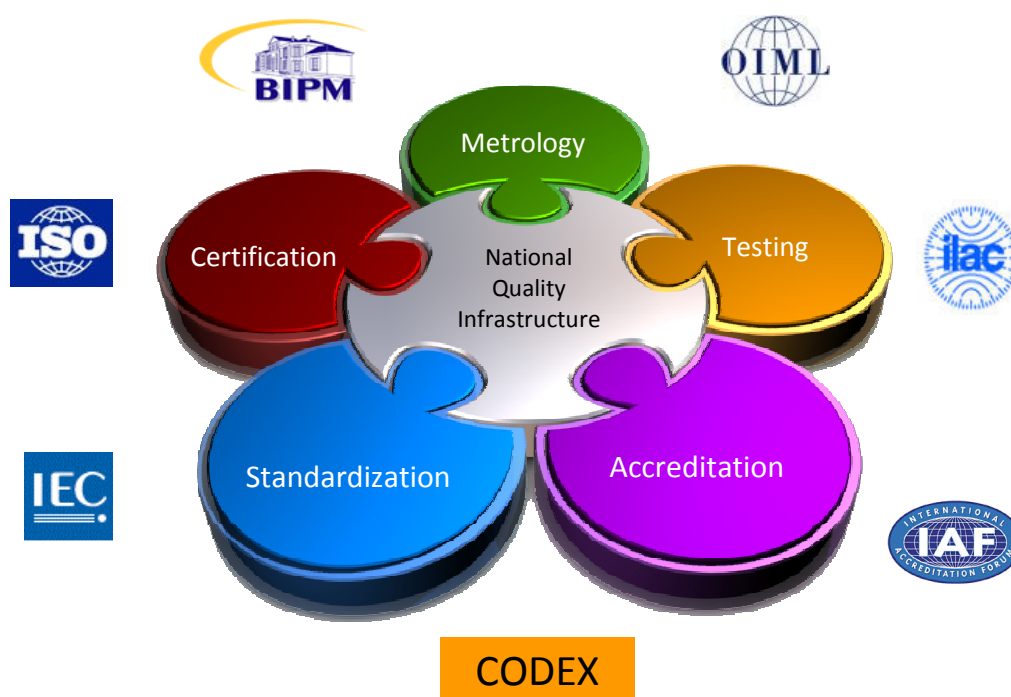
Table 10. Quality infrastructure service outputs and institutions

Domain	Description of service	Institution(s)
Standards	Publication of a formal document (standard), generally developed by consensus, containing the requirements that a product, process or service should comply with. Standards are considered essentially voluntary in themselves. Suppliers can therefore choose whether to use standards or not. It is only once they are called up in a contract, for example or referenced in technical regulation, that compliance with standards becomes a legally binding obligation.	• National Standards Body (NSB) • Sectoral Standards Development Organizations (SDO) • Industry based standards organizations
Metrology	The technology or science of measurement. Metrology can be subdivided into scientific metrology (the development and organization of the highest level of measurement standards), legal metrology (the assurance of correctness of measurements where these have an influence on the transparency of trade, law enforcement, health and safety) and industrial metrology (the satisfactory functioning of measurement instruments used in industry, production and testing).	• National Metrology Institute (NMI) • National Calibration Service • Calibration Laboratories (public or private) • Legal Metrology Department (LMD)
Accreditation	The activity providing independent attestation as to the competency of an individual or an organization to offer specified conformity assessment services (e.g. testing, inspection or certification).	• National Accreditation Organization/Body
Inspection	The examination of a product design, product, process or installation and determination of its conformity with specific requirements or, on the basis of professional judgement, with general requirements. Inspection is often conducted on consignments such as import inspection, to ensure that the whole consignment is equivalent to the product sample tested.	• Import inspection agencies • General inspection agencies
Testing	The determination of a product's characteristics against the requirements of the standard. Testing can vary from a non-destructive evaluation (e.g. X-ray, ultra sound, pressure testing, electrical, etc. where after the product is still fit for use) to a total destructive analysis (e.g. chemical,	• Test laboratories • Pathology laboratories • Environmental laboratories

Domain	Description of service	Institution(s)
	mechanical, physical, microbiological, etc. where after the product is no longer fit for use), or any combination thereof.	
Certification	The formal substantiation by a certification body after an evaluation, testing, inspection or assessment, that a product, service, organization or individual meets the requirements of a standard.	- Product certification organizations - System certification organizations

The figure below illustrates the different components of the Quality Infrastructure at national level showing also the different international organisations involved.

Figure 17. Components of Quality Infrastructure



Arab Standardization Strategy 2009-2013

AIDMO, as the regional organisation responsible for industrial development in the Arab region has the following objectives:

1. Achieve an effective regional industrial integration and coordination.
2. Contribute to the development of the Arab economy and strengthen the capacities in the fields of industry, energy, mining and standards to enhance the productivity, quality and competitiveness.
3. Plan and prepare industrial projects at national and regional levels and to promote investments in industry and mining in the Arab region.
4. Set unified Arab standards to facilitate the trade within the Arab region.

5. Encourage the technology and technical coordination between the Arab countries and the other developing and developed countries.

Responding to achieve the fourth objective, AIDMO and through its committees and councils, has prepared the Arab Standardisation Strategy 2009-2013 which has been adopted by the Arab States in 2008, the strategy covers the following components (as written in the strategy document):

Component No. 1: Axis of Arab Unified Standards and Technical Regulations:

- To develop the system of the Arab unified standards' issuance.
- To meet the market requirements and increase the contribution of the parties concerned.
- To set up and reinforce relationships as well as participation with Arab, regional and international organizations concerned.
- Compromising Arab technical regulations standards and issuing Arab standards and data to assess conformity.

Component No. 2: The Arab standardization bodies:

- Adopting an organizational structure corresponding to Arab standardization organs, including competences, assignment and legislations in agreement with the international requirements, which contribute to the achievement of the Arab Strategy for Standardization.

Component No. 3: The laboratories infrastructure:

- Getting the Arab laboratories developed, integrated and interdependent and setting up an Arab network for laboratories in order to exchange information, experiences and intensify training, and developing mechanisms of cooperation for the testing and the engagement of special approved laboratories to avoid duplication.

Component No. 4: Measurement and calibration:

- Support the founding and development of integrated measurement and calibration bodies in Arab countries through a consultative committee for metrology within the AIDMO framework with the endeavours of finding out a unified Arab system of measurement and calibration concurrent to the global system.

Component No. 5: Certificates of conformity and quality mark:

- Unification of conformity assessment procedures in line with the international data, including certificates of conformity and quality marks.
- A unified system of mutual recognition among Arab states while assessing conformity in line with the TBT agreement and international data.
- Seeking to adopt Arab Organs providing certificates according to the international requirements.
- Creating an Arab quality mark.

Component No. 6: Accreditation

Regional cooperation and unifying Arab efforts in various aspects of **Accreditation**, through:

- Unifying the process of mutual recognition agreements by certificates of conformity among Arab countries.
- Mutual recognition of certificates of conformity concerning Arab countries through bilateral agreements
- The development of Arab Accreditation Organs.
- The foundation of an Arab Coordinating Body for Accreditation
- Mutual recognition of the accreditation certificates issued by the Arab accreditation Bodies
- Access to international recognition of the Arab Coordinating Body for Accreditation.

Component No. 7: Information Centres

The improvement of information centres to provide services and joint Arab and international information products, which will be achieved through:

- Databases of standards and technical regulations, websites to be linked to the Centre for Standards and Metrology website in the Organization.
- Setting up an interactive database for Standards in AIDMO facilitating the review or proposal of Arab standards via the network.
- Exchange periodically and regularly the experiences, information and electronic versions on standards between the Standards Bodies.

Component No. 8: International Organizations Benefit

To achieve the maximum benefit of regional and international Organizations and Bodies operating in the field of standardization, through:

- Increasing the number and level of the Arab countries membership in the international Organizations and Bodies.
- Strengthening coordination among Arab countries in the working areas of those Organizations and Bodies.
- Efficient participation in the Organizations and Bodies activities and its specialized committees.
- Taking advantage of training and upgrading programs, and technical assistance provided by international organizations.

According to AIDMO, an intensive consultation process took place within the Arab countries resulted in the adoption of the Strategy by all Arab countries, in addition, specific immediate actions have been identified by AIDMO and the Arab countries as a priority for its implementation, the identification came as a result of the consultation made by AIDMO and the needs assessment carried out by AIDMO.

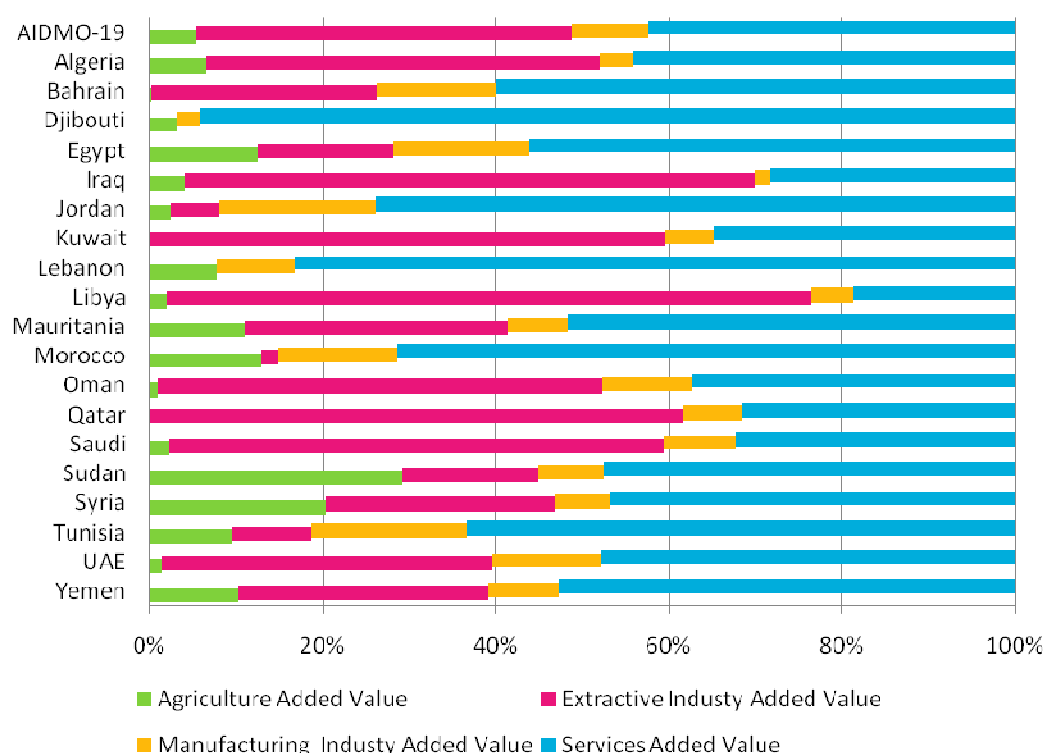
UNIDO will consider the full review of the Strategy itself through the implementation of some comprehensive surveys and needs assessment to verify and validate the specific needs for the different Arab countries which will help in the fine tune of the strategy itself with focus on three main components (technical regulations, laboratories infrastructure and measurements and calibration.

I.10 Sectoral analysis

In the Arab world, industry and service sectors have long replaced agriculture as the main source of contribution to GDP. However, the structure of output generated by these countries is still characterised by large shares originating from primary sectors. For instance, mining and agriculture play a key role in forming the national product in most of the Arab countries accounting for more than a half of the national product in 8 member states and exceeding 60 percent of GDP in 5 Arab economies. In Libya the primary sectors represent over 76.4 percent of national value added. The region's average is 48.9 percent of GDP¹³. The emerging service sector gradually gains its share in the total value added in nearly all Arab states. Its average contribution to the AIDMO's 19 country GDP reached 42.2 percent in 2008.

By contrast, manufacturing plays a modest role in the majority of the concerned countries. Over 1995-2008, its average contribution to the GDP at the pan-Arab scale has ranged between 8.9 and 11.1 percent. Among 21 beneficiary countries, only Bahrain, Egypt, Jordan, Morocco, and Tunisia possess considerable manufacturing sector whose contribution to the national product is above 13 percent (see Figure 18). The rest of the concerned Arab countries have either relatively small manufacturing sectors or are increasingly relying on mining or services, such as construction or energy supply.

Figure 18. Composition of the national value-added, AIDMO-19, 2008



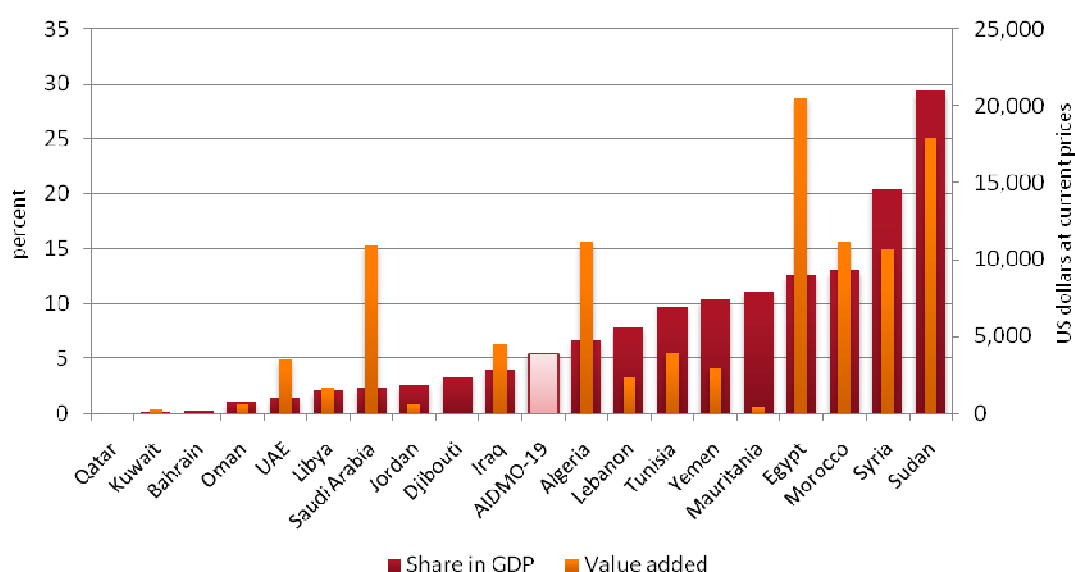
Source: Unified Arab Economic Report, 2009

¹³ Average is based on the 2008 data available only on 19 AIDMO member countries

I.10.1 Agricultural sector

By 2008 the share of agriculture in GDP in most Arab countries had dropped to less than 10 percent (in 14 out of 19 countries) with the region's average of 5.4 percent. Understandably, the region's lowest figures are concentrated around the GCC countries: Bahrain, Kuwait, Oman, Qatar and UAE, where agriculture produces below 1.5 percent of the national value-added. In 2008, the highest share of agriculture was in Sudan– 29.3 percent.

Figure 19. Agricultural value added, AIDMO-19, 2008



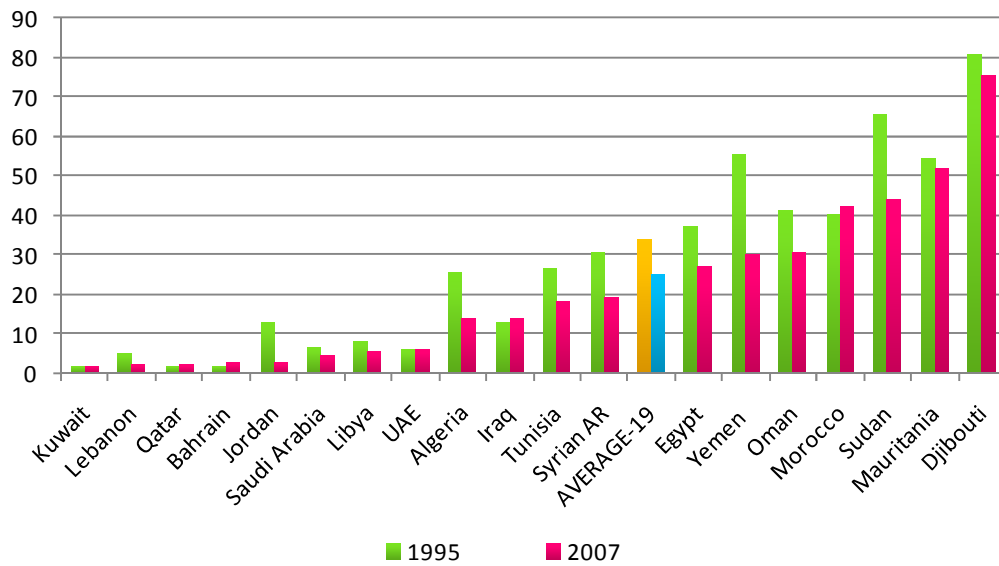
Source: Unified Arab Economic Report, 2009

Despite its low contribution to GDP of most Arab countries, agriculture employs a sizable proportion of the labour force. In Egypt, for example, about 27 percent of the labour force was employed in agriculture in 2007 (see Figure 20), whilst agriculture accounted for only 13.4 percent of GDP. The corresponding figures for Algeria were 21.0 percent (share of employment) and 9.7 percent (share of GDP) in 2003. In Syria, the figures as of 2002 are respectively 30.3 and 25.1 percent. In Jordan, agriculture accounted for only 2.4 percent of GDP in 2004 but employed 11 percent of the labour force. Among the Arab countries, Yemen has the highest disproportion in ratio of labour force working in agriculture – 54.1 percent to contribution to GDP – 10.4 percent¹⁴.

The upshot of the below figures is that a large proportion of population working in agriculture has to rely on a proportionately low share of GDP for its livelihood, and that would have implications for the incidence of poverty among the rural population. The data on poverty reveals that in most concerned countries poverty rates are higher in rural areas than in urban areas.

¹⁴ Sources: employment in agriculture – ILO, 2006; share of agriculture in GDP – World Bank, 2010

Figure 20. Share of agriculture in total employment (%), AIDMO-19, 1995 & 2007



Source: Unified Arab Economic Report, 2009

Agriculture in most North African and Middle-East Arab countries has an economic and social role that goes well beyond its primary function – serving as a supplier for agro-food value chains. The sector can play a pivotal role in response to regional and international development concerns.

Taking into account the fact that most of GCC Arab states are net importers of food, manufacturing activities across the AIDMO region based on processing of the local agricultural commodities could play an important role in the context of intra-regional integration.

Over the last decade, more attention therefore has been directed to the call for removal of environmental, technical, economic and organization barriers for the achievement of sustainable agricultural development and food security in the region. Governments have also encouraged the private sector to invest in agro-food value chains as mean for achieving food security, increased added value and protection of producers from fluctuation of commodity prices.

The main obstacles for agricultural development in the Arab region could be classified into four main categories, namely institutional, physical, technological and economic barriers. Thus, the main challenges of the agricultural sector in the AIDMO region are:

- Poor water supply facilities for irrigation purposes;
- Rigidity of the local agricultural sectors to the rapid market changes at the regional and international level;
- Inadequate knowledge and transfer of farming practices and agri-technologies to the region;
- Absence of harmonised and coherent approaches in the development and implementation of national and regional agricultural policies and development programmes;

- Insufficient capacities for marketing the locally produced and processed agricultural production;
- Low competitiveness of the Arab agro-food producers and of ready-made food stuffs at the international market-place;
- Absence of incentives to attract internal (for the region) financial resources to invest to the sector to ensure regional food security and sustainable self-sufficiency as means for securing peace and socio-economic stability of rural communities.

I.10.2 Industrial sector

In the Arab world, industrialization has long been considered the route to economic development with the reference to the experience of developed countries although there are differences of opinion as to how it should be achieved. Manufacturing is considered even more critical for development than the industrial sector as a whole which also includes extractive industries such as mining and oil. These do not necessarily require significant quantities of labour; the product can be extracted from the ground and exported without further processing. Manufacturing requires a mixture of labour, capital, technology and management expertise. It offers an opportunity to introduce modern know-how and economies of scale and to complement agricultural production. It does not guarantee development but it nevertheless fulfils an important condition.

In 2008, according to the 2009 Unified Arab Economic Report, the industrial sector contributed about 52.3 percent to the region's total GDP with the total value added of US\$ 993.3 billion. In the same year, the share of extractive industries in the cumulative regional product increased reaching US\$ 824.5 billion. The trends in oil-exporting GCC Arab states have been generally characterized by contribution of extractive industries to their respective GDP. This contribution ranged from 26.0 percent in Bahrain to 61.7 percent in Qatar with the Arab world's highest in Libya (74.3%).

A. Extractive industries

In economic terms, extractive industries are referred to as those related to mineral products such as phosphates, nitrates, iron, zinc, gold, diamonds, etc., on the one hand, and hydrocarbons represented mostly by crude oil and natural gas, on the other. The exploitation potential of the extractive resources in most of the AIDMO countries is enormous with both mineral and hydrocarbons set to become the major pillar of their respective economies.

Extractive industries form the largest part of the national product in the majority of the AIDMO countries with around or over half of GDP being generated by this sector in Algeria (45.5%), Iraq (66%), Kuwait (59.5%), Oman (51.4%), and Saudi Arabia (57.2%) with the region's highest in Libya (74.30%).

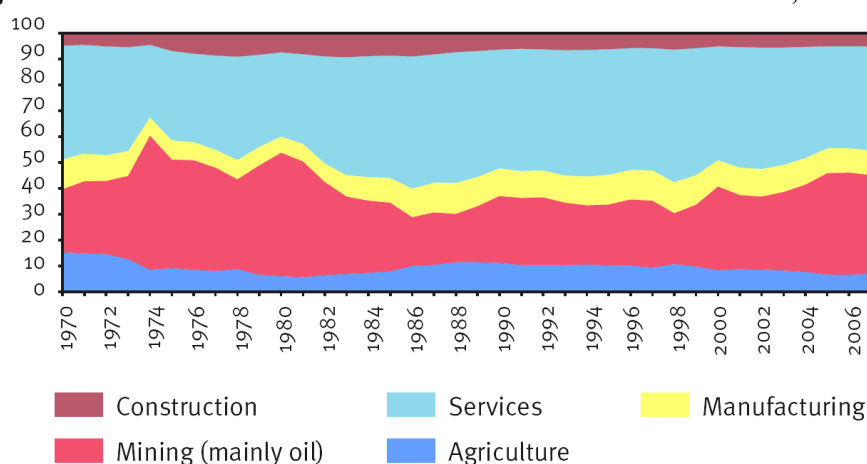
The key extractive sectors of the region, oil and gas constitute the major share of economic activities in 13 of 21 countries of the region. Mineral mining activities include iron ore, phosphate, copper and other deposits.

B. Manufacturing industries

In contrast to the extractive industries, which constitute the major source for the fiscal revenues, national value added and external trade turnover, manufacturing in the Arab world has been explored less intensively and it tends to play rather marginal economic and social roles, despite its tremendous potential for being a vehicle for achieving growth and creating jobs.

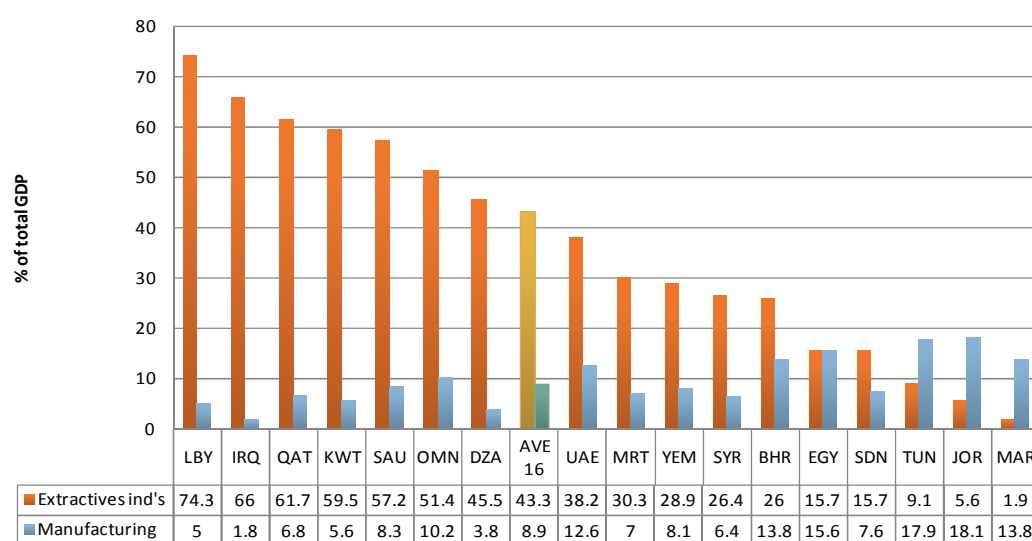
The success of manufacturing in leading the economy is seen in the experiences of East Asia and Latin America, and also in individual countries such as China, India, Turkey and many others. The Arab world has a natural bias towards extractive industries due to its wealth in natural resources as seen in figures 21 and 22. Productive sectors namely agriculture and manufacturing represent small shares of the structure of the Arab region as a whole. The period from 1970 to 2006 captured in the figure shows very little change, if any, in the weight of manufacturing.

Figure 21: The evolution of the economic structure of the Arab world, 1970-2006



Source: Arab Human Development Report, 2009

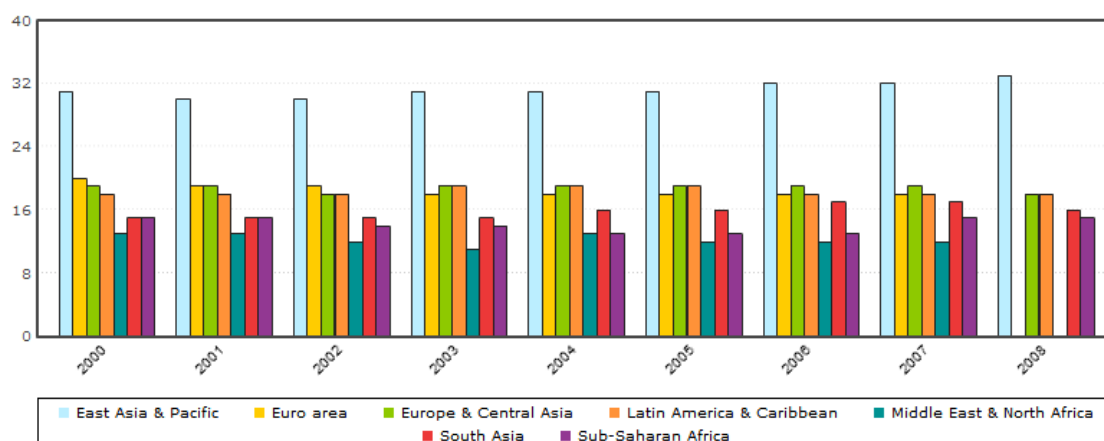
Figure 22: Share of manufacturing and extractive industries in GDP, AIDMO-16, 2008



Source: Unified Arab Economic Report, 2009

The Arab world is benchmarked against other regions in the areas of: MVA as percentage of GDP, manufactured exports as percentage of total merchandise exports, high technology as a percentage of total manufactured exports in figures 23 through 26 respectively. They all clearly show that the Arab world is still very far from reaching its potential in the domain of manufacturing industries measured against its richness in natural resources.

Figure 23: Manufacturing value added as % of GDP for all world regions, 2000-2008



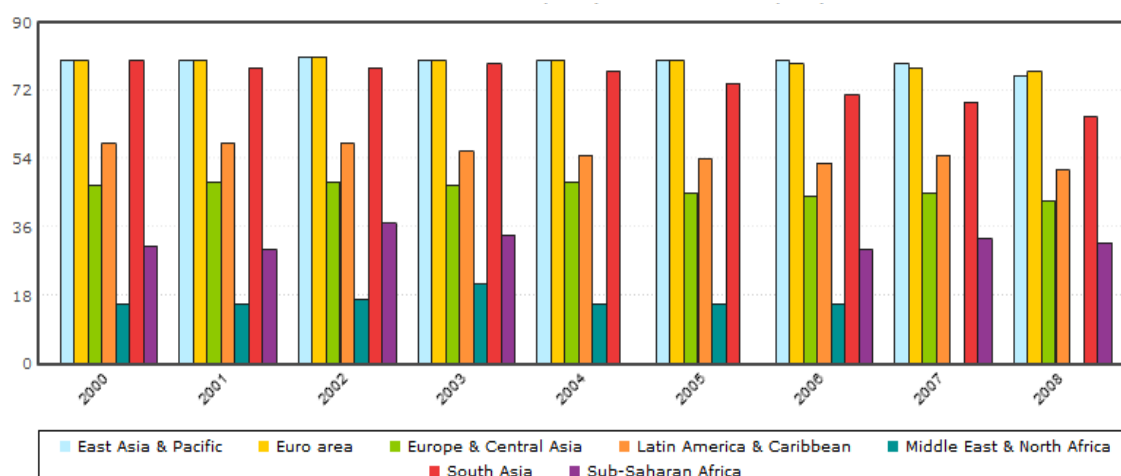
Source: World Bank

*Arab world is approximately represented by the Middle East and North Africa region.

**Non-Arab countries in North Africa and Middle East are: Iran, Malta and Israel; Arab African countries are included in Sub-Saharan Africa but since they represent a small weight in its present contribution to Arab economic status, thus the focus on North Africa and the Middle East.

The Middle East and North Africa of which most of the Arab world is part has the lowest MVA as percentage of GDP in the whole world all through the period 2000-2008 including Sub-Saharan African (South Africa included). The same argument applies to the cases of manufactured exports as percentage of total merchandise exports shown in Figure 24, as well as in the cases of high technology manufactured exports as percentage of total manufactured exports shown in figures 25 and 26.

Figure 24: Manufactured exports as percentage of total merchandise exports, 2000-2008

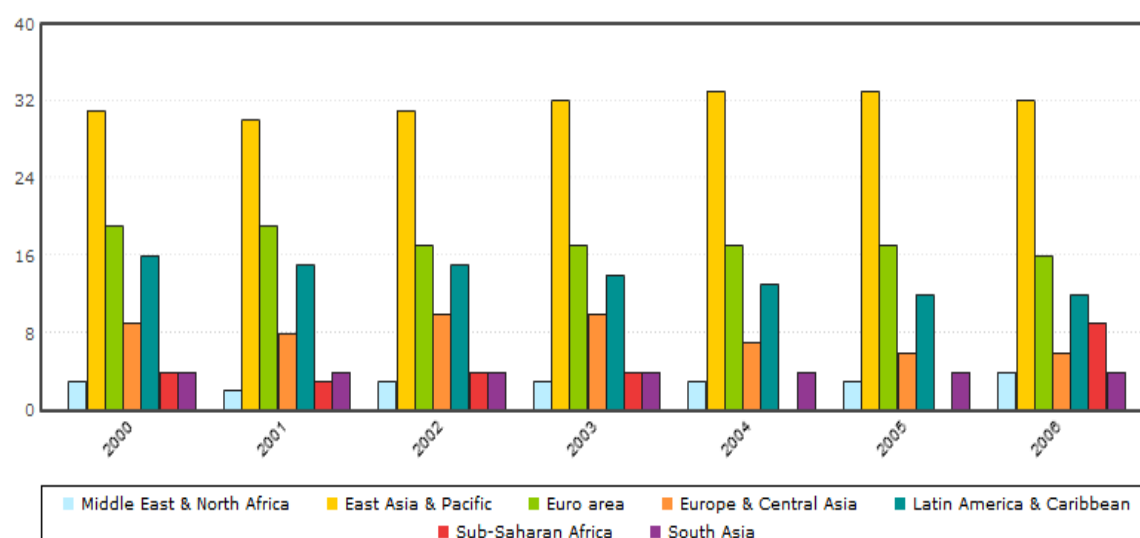


Source: World Bank

*Arab world is approximately represented by the Middle East and North Africa region.

**Some missing values in 2008

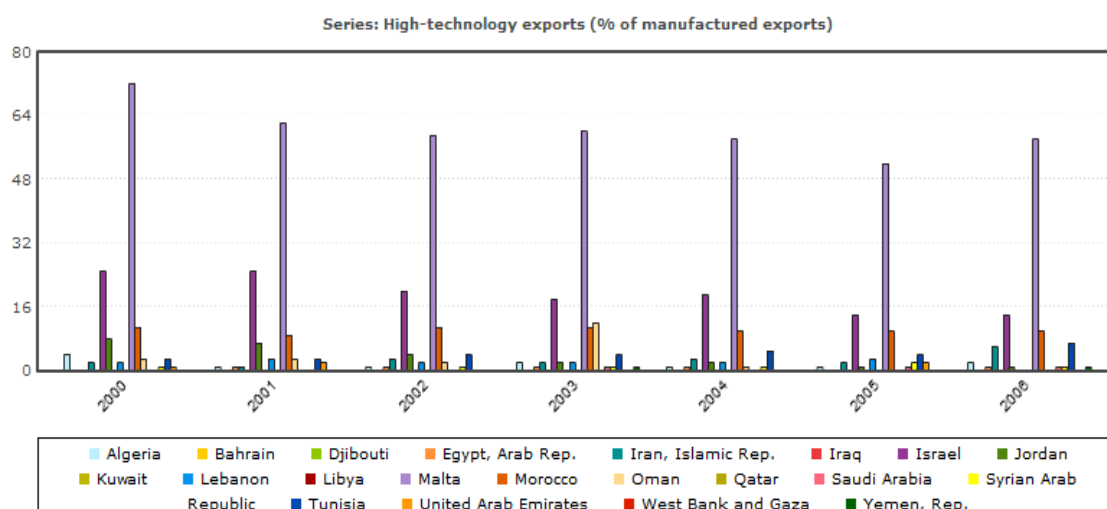
Figure 25: High technology exports as percentage of total manufactured exports in all regions of the world, 2000-2008



Source: World Bank

* Arab world captured as most of North Africa and the Middle East.

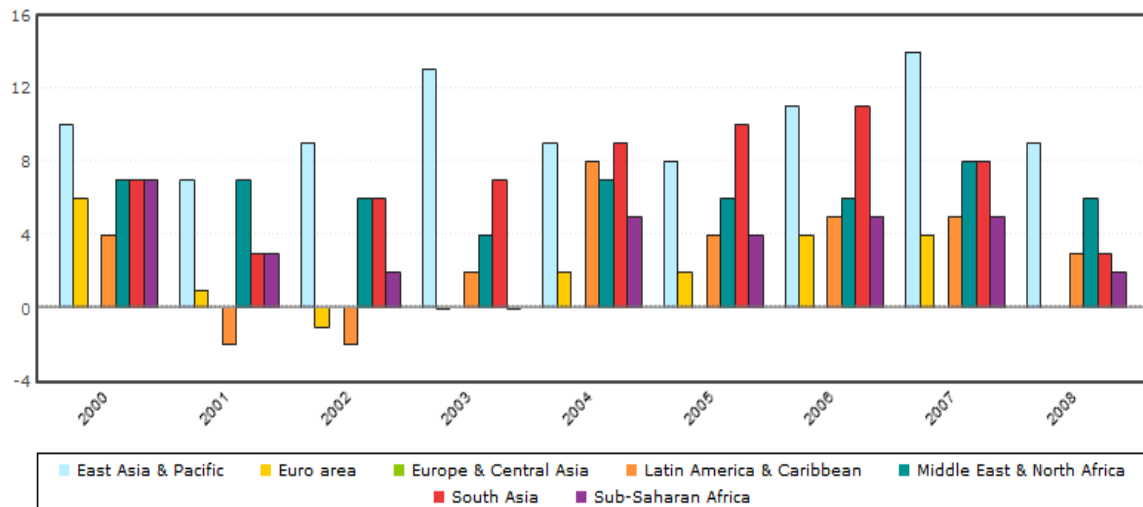
Figure 26: High technology exports as percentage of GDP in individual countries of the Middle East and North Africa Region



Source: World Bank

The above analysis implies that manufacturing industries in the Arab world are weak and poor in high technology. Figure 27 below, however, indicates that the rate of growth of manufacturing value added in the Middle East and North Africa has been growing at rates even higher than the Euro region and Latin America. This reflects the efforts within the Arab world for increasing value added and deepening manufacturing.

Figure 27: The annual rate of growth of manufacturing value added in all regions of the world, 2000-2008



Source: World Bank

* Arab world captured as most of North Africa and the Middle East

The Arab countries' efforts in promoting and deepening manufacturing are constrained, however, by weak SMIs that aren't equipped or have the enabling environment to lead growth in the manufacturing sector and create jobs, as manufacturing is mainly dominated by large-scale, capital intensive plants. Chemicals, non-metallic mineral products and basic metals accounted for about two-thirds of total manufacturing value added (MVA) in the early 1990s.

The specific status of SMIs in the Arab world – the focus of this proposal – is analyzed in sub-section I.11.

Historical overview

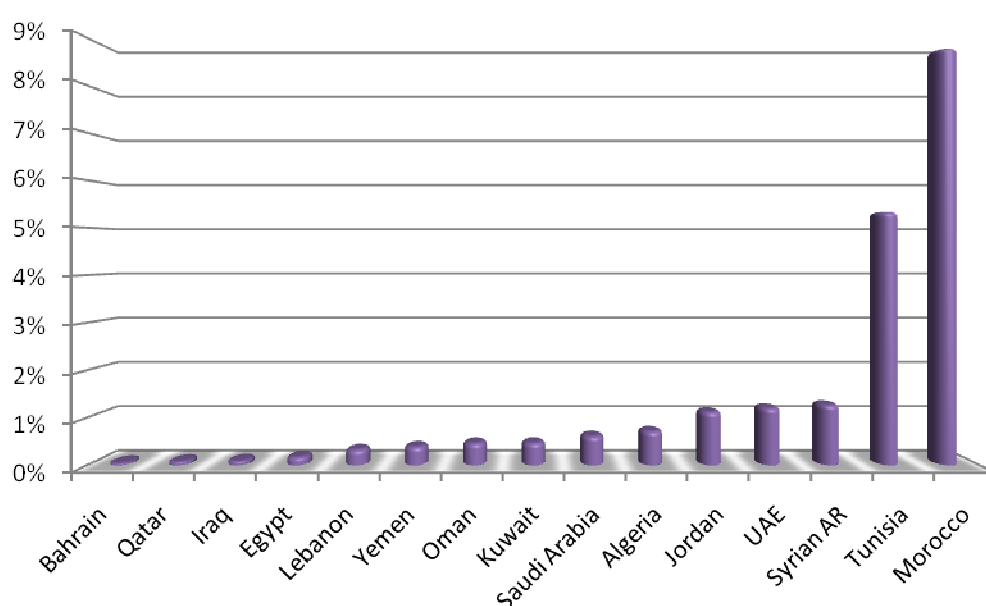
Industrial development during the **1960s** in Algeria, Egypt, Iraq, Syria and Tunisia was strongly influenced by the Soviet model. This affected the planning system and resulted in an emphasis on heavy industry, large plants, and Soviet technology. By the 1970s, these countries were all reconsidering the economic ideologies and are now at various stages of liberalization. The period of 1975-1985 was one of rapid growth in manufacturing output in many Arab countries, largely due to investments made possible by huge oil income earned in the region.

Since the **1970s**, manufacturing in West Asia and North Africa has grown faster than agriculture, services, or even GDP. Growth was dominated by the oil industry, which underwent a huge expansion in the 1970s and early 1980s.

The period of **1980s** was one of much lower oil income and of industrial consolidation. These factors do not account for all of the slowdown: the Iran-Iraq War resulting in a decline in production and value added. Many countries fared better in the second half of the 1980, notably Syria and Tunisia.

During **1990s**, petroleum refining was the largest single industry in the region. In 1994, the sector accounted for 12 percent of MVA, whereas high-tech industries accounted for only 8.2 percent of MVA that same year. The share of manufacturing investment that went to high technology in Egypt, Morocco and Tunisia was between 4 and 6 percent in the 1990s, compared to 10 percent in Turkey and even higher percentages in other developing countries. This reflected the lack of manpower, the low state of technology, and low levels of foreign investment in the region, among other factors. As a result, the region currently holds the status of net importer of high-technology goods with the exception of emerging hi-tech sub-sectors in the few countries of the Gulf and Arab Maghreb.

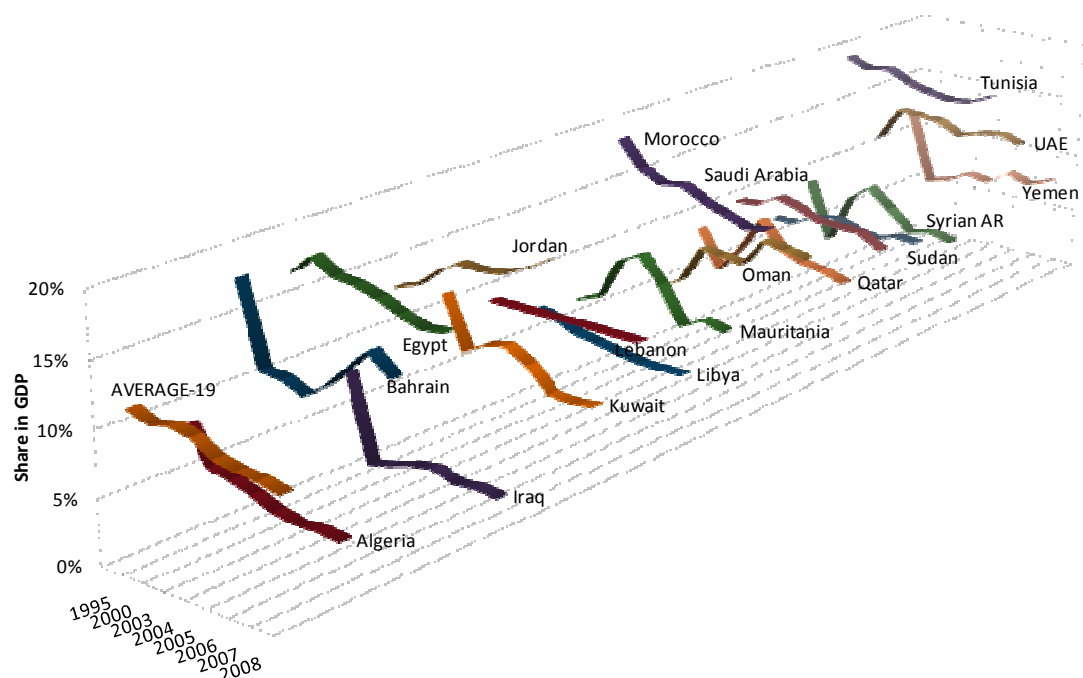
Figure 28. Current share of high-technology exports in manufactured exports, 2007



Source: World Bank, 2010

Between **2000 and 2008**, the average regional value added in manufacturing as a share of GDP has slightly contracted from 10.6 to 8.9 percent respectively. Egypt and Morocco have lost in MVA share most importantly (2.9% and 2.6% respectively). Meanwhile, Jordan along with Oman showed tremendous increase in processing industries gaining respectively 4.6 and 4.5 percent over the same period however reaching still modest 18.1 and 10.2 percent as manufacturing share in the gross value added. Djibouti, Lebanon, Mauritania, and Tunisia have registered relative stable evolution of the manufacturing contribution to the respective national GDPs (see Figure 29).

Figure 29. Evaluation of manufacturing value-added as percentage of GDP, 1995-2008



Source: Unified Arab Economic Report, 2009

In absolute terms, the value added of manufacturing industries by 2008 has increased from US\$ 140.5 billion in 2007 to US\$ 168.8 billion, which represents the highest growth rate (20.2 percent) since 2002. However, as mentioned above, this represented only 8.9 percent growth of the sector's contribution to the total GDP against the background of the generally high growth results that the region registered in 2008.

Table 11. Evaluation of extractive and manufacturing industries' share in the regional GDP, 2002-2008

Year	Extractive industries			Manufacturing industries			Total industrial Sector		
	Value added	Annual growth rate	Share in GDP	Value added	Annual growth rate	Share in GDP	Value added	Annual growth rate	Share in GDP
2002	181.9	0.5%	27%	74.8	2.4%	11.1%	256.8	1.1%	38.1%
2003	219.2	20.5%	29.1%	82.4	10.1%	11%	301.5	17.4%	40.1%
2004	293.5	33.9%	32.6%	95.9	16.4%	10.7%	389.4	29.1%	43.3%
2005	424.7	44.7%	38.6%	106.7	11.3%	9.7%	531.4	36.5%	48.3%
2006	523.3	23.2%	40%	122.3	14.6%	9.4%	645.6	21.5%	49.4%
2007	594.9	13.7%	39.5%	140.5	14.9%	9.3%	735.3	13.9%	48.9%
2008	824.5	38.6%	43.3%	168.8	20.2%	8.9%	993.3	35.1%	52.3%

Source: Unified Arab Economic Report, 2009

According to the Unified Arab Economic Report, in 2008, manufacturing industries played a historically important role in forming the national value-added in Jordan and Tunisia (18.1% and 17.9% of GDP respectively) followed by Egypt (15.60%) and Morocco (13.80%). Less important but increasingly emerging productive facilities of the region are in Bahrain (13.8%), UAE (12.60%), and in Oman (10.20%).

Unbalanced diversification and different roads to industrialisation

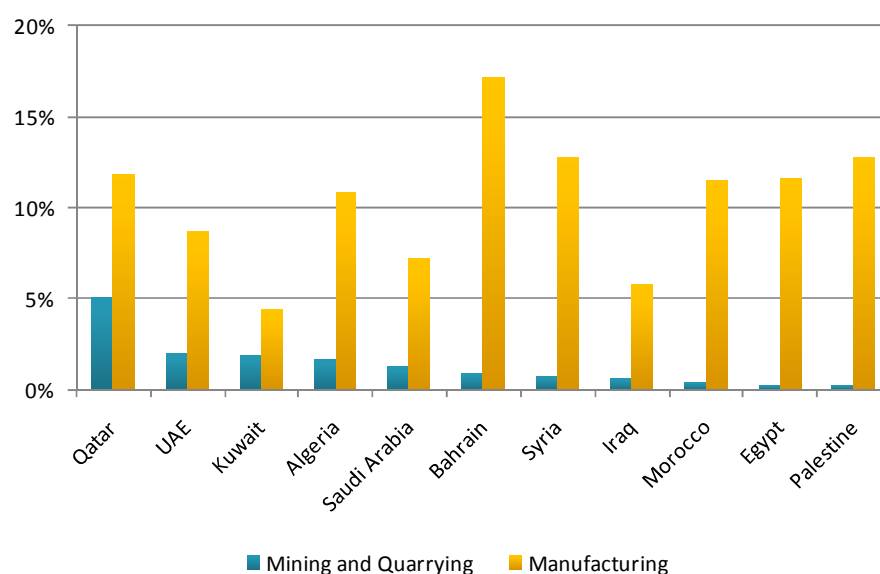
Relatively more diversified Arab countries with larger populations such as Egypt, Morocco and Algeria, see in industrialization a strategic solution in resolving their socio-economic problems. Egypt and Morocco have experienced success in employment creation as long as the industrial production has seen intensive growth. But much needs to be done in terms of legal reform, environmental protection, manpower training and export marketing.

Diversified countries with smaller populations, such as Syria and Jordan, face similar challenges, although on a smaller scale. Tunisia is in the lead in terms of industrial development, but its internal market is limited and its export markets are problematic in terms of technical requirements.

In Egypt, Jordan, Lebanon, Syria, Morocco, Tunisia and even in Iraq with its post-conflict economy, manufacturing industries have potential to produce a widely diversified pattern of goods, with food, chemicals, and textiles being relatively more important than in the Gulf Cooperation Council (GCC) states, where oil-related industries dominate.

Most GCC states develop their industries on the basis of the comparative advantages offered by huge oil and gas resources. The GCC states also have relatively small populations, and so the development of job-generating manufacturing activities was not a major objective when they began industrialization (see analysis in Figure 30).

Figure 30. Shares of manufacturing and extractive industries in total employment



Source: LABORSTA Labour Statistics Database, ILO, 2010

The attempt to diversify by adding value to natural resources – refining oil and producing petrochemicals – has been welcomed by a number of experts, even though it has been far from successful. As mentioned earlier, petrochemicals face problems in terms of selling abroad, as markets in Europe, North America and, to a lesser extent, the Far East are locally supplied.

There has also been a lack of coordination among GCC members in supplying the regional market. In 2000s, in an effort to further diversify their economies, the GCC countries invested heavily in other, more consumer-oriented manufacturing industries as well as infrastructure and services.

The existing manufacturing sector in the region's low-income countries – Djibouti, Mauritania, Somalia and Yemen – is in its embryonic stage. It is mainly centred on primary processing of the locally supplied agricultural crops and fisheries, and characterised as highly labour-intensive involving few technical and managerial skills and generating marginal value-added.

Industrial strategies in these three country groups (industrially diversified, oil-based and low-income economies) differ from each other in two important ways: First, they are designed to operate within very different resource basis. The second difference is ideological revealing structural differences in states' strategies to "go industrial":

- Strategies implemented in diversified economies were oriented towards higher employment impact, technological diffusion and professional training promoted by both governments and increasingly by the private sector investments.
- By contrast GCC states have always been conservative, using state investments, although not in a socialist context. The state traditionally played a leading role because the domestic private sector was too small and too weak to act as an intermediary with multinational companies, which were the only ones that could provide the technology and know-how to develop capital-intensive and large-scale oil refineries and petrochemical plants, as well as aluminium smelters and other energy-intensive industries.
- In the third country group, state involvement in promoting export-oriented manufacturing of higher-value-added has been largely driven by the preferential market access conditions. Therefore, the industrial development in these countries especially as far as export-oriented sectors are concerned remains vulnerable to the disappearance of these agreements.

Composition of manufacturing sector

Although there are no fixed definitions of heavy and light industries, the following overview of the current industrial facilities in the region will be divided under this sectoral classification, assuming that:

- i. Heavy manufacturing industries carry a high capital cost, high barriers to entry and low transportability. Processing industries that are typically considered heavy include: oil refinery, metal processing, non-consumer chemical and plastic production, industrial machinery and mass transit (railways, airlines, shipbuilders);

- ii. Light manufacturing industries are usually less capital intensive and are more consumer-oriented, i.e. most light industry products are produced for end users rather than as intermediates for use by other industries. Light industry facilities typically have less environmental impact than those associated with heavy industry, and zoning laws are more likely to permit light industry near residential areas.

B.1 Heavy manufacturing

In the number of Arab states, for the most part in the Gulf countries, as well as in Algeria, Libya and Sudan, the structure of industry is dominated by the production of oil. This has given these countries a comparative advantage in petroleum products and some advantage on other industries, such as aluminium, which are heavy energy consumers.

Given huge petroleum resources in GCC countries in particular, the **oil-refining industries and petrochemicals** offer opportunities to add value and partially diversify the economy. Crude oil in these countries is usually supplied to refineries at low cost because upstream costs in the GCC are the lowest in the world, and governments own and control the oil industry and can therefore direct oil where they want it. However, the fact that petroleum and gas and their primary processing are the main source of national revenues in 13 out of 21 Arab countries (see table below) and these revenues constitute the core capital for investments in the other sectors of their economies, the international oil price fluctuation make these vital revenues extremely unstable and the host economies – vulnerable to external shocks and fragile in the long run. The weakness and slow growth rates of the non-petroleum manufacturing industries are inherent features of these countries.

Table 12. The share of manufacturing sector in GDP vs. the share of oil refining in MVA of major oil-producing Arab countries, 2004

Economy	Contribution of the manufacturing sector to GDP	Share of oil refining (incl. petrochemicals) in manufacturing
Algeria	4.9%	11%
Bahrain	12.6%	15%
Kuwait	8.0%	76%
Libya	3.4%	n.a
Oman	8.1%	28%
Saudi Arabia	10.1%	38%
UAE	12.6%	51%

Source: Arab Monetary Fund (AMF), 2005

The expansion of the petrochemical industry in Saudi Arabia, Oman, and Qatar took place as a result of high petrochemical product prices in the early 1980. Large investments were made at that time; the industry is very capital-intensive, and as result are large economies of scale. Thus, Saudi Arabia's petrochemical exports increased from US\$60 million in the early 1980s to over US\$2 billion in the early 1990s and topped US\$14 billion in 2008. The jump in consumption in 2000s has driven prices higher, reversing the collapse seen in late 2008 and early 2009, when petrochemical prices fell to multi-year lows. Since January 2009, there are some signs

of recovery for the sector as the price of ethylene (used to manufacture plastic containers) has doubled; the cost of polyvinyl chloride (the plastic known as PVC) has risen 75 percent, and the price of benzene and propylene has surged 220 and 200 percent respectively. The petrochemical industry relies on two factors for its success: access to raw materials and access to markets. The most profitable locations were traditionally those that combined both of those factors. The GCC now faces tariffs on its exports of petrochemicals to the European Union and to other countries in the OECD, but these are being reduced under the multilateral World Trade Organization (WTO) agreements. The effect of the tariffs, along with high domestic taxes on oil products in the OECD, is of concern to the GCC states because it means that their main exports are at a disadvantage on international markets.

Before the end of the 20th century, the Arab region had been listed among world's main producers and exporters of **cement**. Expansion of the local cement production was closely linked to the building and construction industry, which witnessed unprecedented growth in many of the Arab countries. This resulted in higher demand for cement at 10-15%, reaching to more than 20% in Qatar. In consequence, over the past few years, most Arab countries became cement importers. The current number of active cement factories in Arab countries accounts for 138 plants, of which 118 are integrated plants (clinker and cement), 10 cement mills and 10 packaging stations and silos. These facilities are distributed as follows: 52 in the West-Asian, 46 in Maghreb and 42 in the GCC countries. Actual production registered 13.3 million tons of clinker and 154 million tons of cement in 2007, namely at 87% of design capacity of clinker and 85% of design capacity of cement¹⁵. However, this rate varies from one country to another as many of these plants have achieved, and even exceeded, their design capacities.

By 2008, **aluminium smelters** in the Arab world have been producing at about their capacity, making 515,600 metric tons of primary aluminium per year. Currently, the region's major producers consider expanding capacity of aluminium smelters with possible projects in Saudi Arabia, UAE (Umm al-Quwain), Qatar, and Iraq.

Jordan, Morocco and Tunisia are the region's largest producers of phosphates and derivative fertilizers. Along with aluminium smelters, fertilisers and other non-consumer chemicals, region's other heavy industries – iron and steel production facilities were developed in 1970s. Consequently, most of them are old and highly polluting. The situation is further complicated by the lack of financial resources and know-how to modernize the existing heavy industrial facilities, or expand into capital-intensive, high-technology and more consumer-oriented light manufacturing sectors.

B.2 Light manufacturing

Apart from the heavy industries, manufacturing plays a modest role in most of the Arab countries. Currently emerging in the region the light manufacturing industries consist mainly of food-processing, textile and garment, furniture, consumer chemical goods and pharmaceutical, mechanical, electrical and electronic equipment and tools, and other household items with their higher concentration around the Mediterranean basin.

¹⁵ Source: Arab Union for Cement and Building Materials, 2009

One economic definition states that light industry is a "manufacturing activity that uses moderate amounts of partially processed materials to produce items of relatively high value per unit weight". However, applying such criteria of light manufacturing as a high work-force intensity, generation of a higher value-added, an absence of strict zoning laws, a lesser environmental impact, and most importantly the feature of being produced for end users, the current programme will take onboard the automotive industries in the complex with all subsidiary facilities as a light manufacturing sector.

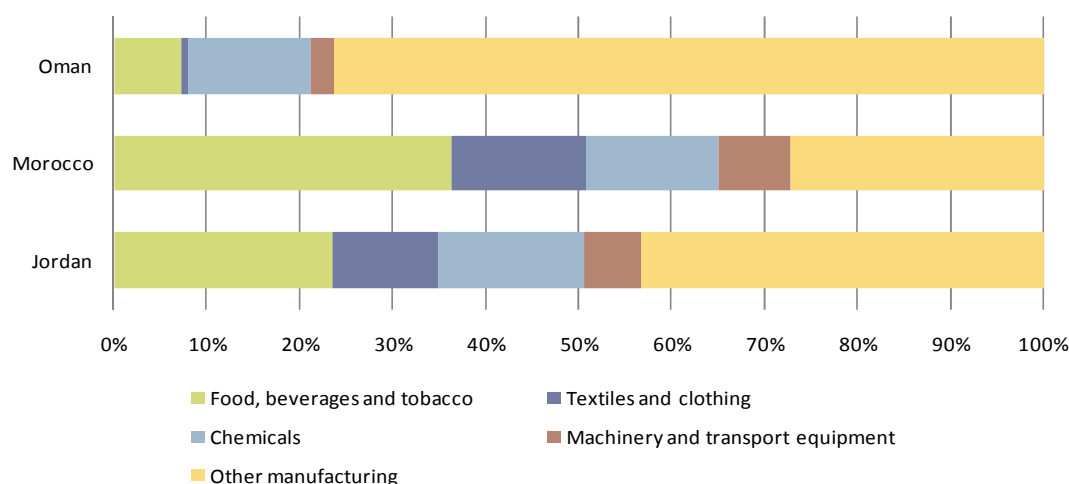
Historically, the light industries were thought to play a role of import substitution through the local resource exploitation. However, this process was mainly run centrally – by public authorities and not by the private sector, which constitutes the main feature of industrialization of **1970-1980s** in most of North African Arab countries. Labour-intensive and an increased value-added generating, light industries are an important component of the regional economy.

Although, petrochemical industries have been growing at increasing rates on average in the region, the light industries including traditional activities have experienced gradual decline over **1990s** due to lack of financial resources, political instability and impacts of trade liberalization and globalization. The joint share of traditionally present in the Arab World textiles and food industries in the total regional MVA increased from 8.4 percent in 1990 to 9.5 percent in 1995 and further to 10.06 percent in 1998. Contribution of the textile and agro-food value chains to the national GDP in the West-Asian Arab countries varied from 13.2 percent in 1990 to 11.4 percent in 1998 for Jordan, with Syria's drop from 15.4 percent in 1990 to only 8.5 percent in 1998, while in Yemen share of these two key job generating industries increased from 7.8 percent in 1990 to 12.2 percent in 1998. By 2000, the share of textiles and food industries in the GDP of the Gulf countries increased to respectively 14 and 21 percent compared to the quarter of MVA produced by the petrochemical industries only.

The World Bank figures for **the first decade of 2000s** show that only Egypt, Jordan, Tunisia and Morocco have built up considerable light manufacturing sectors producing around 15-20 percent of GDP; and their industrial performance is mostly due to the growing textile and garment sector, which benefited from the favourable export framework within Multi-fibre arrangement with the EU. Nevertheless, their national economies are gradually becoming more reliant on services. The rest of the Arab countries have either relatively small light manufacturing industry or are increasingly count on mining or services.

Figure 31 below demonstrates the contribution of different manufacturing sub-sectors to the total manufacturing value-added in Jordan, Morocco, and Oman. Respective shares of heavy industries (gas-based industries, as a part of "other manufacturing" category) in Oman, predominance of agro-food processing activities in Morocco, and relative sectoral balance registered in Jordan in 2005 eloquently characterise the sub-regional sectoral patterns established by the mid 2000s in manufacturing industries of the respective GCC, Arab Maghreb and West Asian countries.

Figure 31. Composition of the manufacturing value-added, 2005, in %



Source: World Development Indicators, World Bank, 2010

Food sector, textiles, chemicals, electric and mechanical industries add most to the value of the primary products for the local consumption as well as to regional and external markets. These sectors have a potential to largely enhance self sufficiency and import substitution, link-up suppliers within the national and sub-regional value chains thus contributing to the regional economic integration.

Agro-food value chains play a central role in most of North-African and Middle-East Arab countries. However, the sector is currently badly in need of modernisation, of better quality and greater efficacy. It also lacks specialisation and mostly oriented to the local markets. Generically, the Arab SMEs operating in agro-processing sectors currently face the following challenges:

- adapting to new market requirements, including, among others, compliance with food safety standards and norms;
- acquiring the necessary skills and knowledge;
- innovating products and processes;
- restructuring operations;
- upgrading technologies; and
- producing high quality products.

Among the above-listed, technological know-how is the biggest challenge for the sector throughout the region (with few exceptions) as could bring a drastic qualitative and quantitative change to the local output. The spread of technology, in fact, plays an essential role in increasingly competitive markets. Meanwhile, consumer agro-food goods produced locally in the region are bound to undergo considerable development, due to the low output, quality and because of the growing demographics. In particular, the agro-food sector in the region has needs in terms of cold chain systems, dairy products, irrigation and research, and also in marketing of the produced staffs at the national, regional and global markets. Distribution is a sector of the future for the AIDMO agro-food operators (hyper-markets, storage, logistics, sales networks, etc.).

Europe is the leading trade partner, especially as concerns cereals-based stuffs, dairy products, sugar and meat. On the other hand, the balance of trade is favourable to the Mediterranean countries for fresh fruits and vegetables and only primarily processed preparations based on these products.

As far as intra-regional trade of food-stuffs is concerned, it still remains marginal, except for Jordan, Lebanon and Syria. Certain countries, like Algeria, or Morocco, have undertaken a process of liberalisation of the sector. Syria together with Sudan are the only countries in the zone to boast self sufficiency in food with cereals as the main sources of production.

Today, the Arab **textile and clothing** domain experience a steady growth in the production of the ready-to-wear clothing. However, in the view of increasing price competitiveness pressure from the Asian producers, the Arab textile industry needs to be continuously upgraded to preserve the niches gained on the developed world markets.

According to the estimations of the Euro-Mediterranean Circle of Textile-Clothing Directors (CEDITH), since the beginning of the year 2008, textile and clothing imports to the Arab region's major trade partner – Europe have dropped by 4.5 percent in 2008 and should still decline by 7 percent in 2009. Egypt along with China, Vietnam is among the suppliers to Europe who scored points in 2008: respectively +4.9 percent, +3.5 percent, and +7 percent. The other Arab countries – suppliers of textile and confection – show a relative decrease: Morocco has seen its sales to Europe slip by 3.8 percent.

In Tunisia, according to official figures, textile and clothing represent 22 percent of the country's exports, and 95 percent of the production of the sector is exported, mainly to the European markets. Over the period 2005-2008, investment in the national textile/clothing sector grew by 27 percent. Of these 1000 companies – recipients of these investments, the majority are established in partnership with French (365), Italian (206), Belgian (121) and German (106) firms. Over the past five years, one fifth of all FDI absorbed by the country's manufacturing industries went to the textile/clothing sector. Currently, Tunisia together with Morocco and Egypt demonstrate the highest in the region performance in certain textile sub-sectors, and are still able to deliver higher growth in specific niches of the textile sector that have recently seen global decline in revenue.

The Arab *textile* manufacturers based mostly in the Mediterranean can, however, count upon serious assets from internal investors from their GCC partners as well as those of the major client countries.

Other segments of the industry such as *clothing* are already showing relative signs of success, such as jeans or fast fashion in general (e.g. the massive investments made by the Italian Benetton in Tunisia), the Arab textile sector mostly based around the Mediterranean basin should make the crossover to new products, by following the channel towards fibres or textiles with high added-value: industrial textiles, technical textiles, medical textiles, etc. Reactivity is not only a requirement of the fast fashion chains, which permanently renew their collections: it is also a prerequisite of retail distributors and department stores.

Meanwhile, Turkish manufacturers continue relocating part of their production south of the Mediterranean: the Egyptian-Turkish Company for Readymade Garments, for example, in 2008 inaugurated a ready-to-wear factory dedicated to export in the Kafr El Dawar industrial estate near Alexandria.

Some diversification and upstream development of *technical fibres* (based on weaving-spinning) are underway: in Tunisia, Lectra, a French specialist in software and machinery for textiles has started to develop locally in the fashion business, automobiles, industrial fabrics, aeronautics and water sports. Still in Tunisia, the Italian bedding fabric manufacturer Martinelli Ginetto has created MagiMed, a spinning and weaving plant in the El Mghira industrial estate.

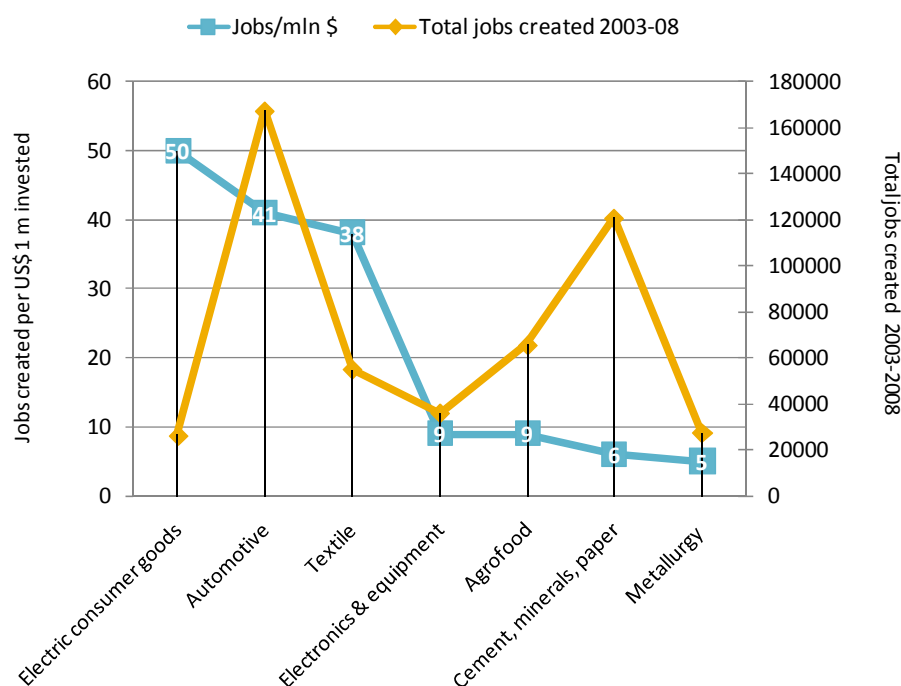
“Light” chemical activities, such as the production of household cleaning goods, cosmetics, detergents and other consumer chemicals are in the process of making a come-back in the Arab region. In Jordan and Syria, the chemicals sector under accelerated development for a number of years, still remains very fragmented. In this perspective, the installation of foreign businesses is encouraged. Other countries in the region present a development potential in mineral chemistry, thanks to numerous natural resources.

Pharmaceutical sector is in full development in the region. In 2002, a special law in Jordan enabled medicines to be more rapidly registered, their prices regulated and the issue of standards of quality control for the establishments. Membership of countries to the WHO has made the conclusion of license agreements simpler. In Jordan as in other countries (Algeria, Tunisia), the market of pharmaceutical products is very competitive and the main international groups are present on the market.

The Arab countries may count on the dynamic consumption of household **electric and electronics goods** (TV, hi-fi, etc.) across the region with its large margins of progression given the still average rates of equipment and the growth of the middle classes. However, this demand to date remains too often satisfied by imports. According to data from the Mediterranean Investment Project Observatory (MIPO), one million Euros invested in the assembly of electronic equipment would provide, on average, the creation of 50 permanent jobs, an absolute record all sectors considered (see Figure 32 below).

Micro-component production activities still remain out of reach, with a few exceptions (Siemens in Morocco, Fuba Printed Circuits in Tunisia, etc.), in particular in a global context of overcapacity and a price war between Asian and European/American producers. The activities for the assembly of sub-assemblies or finished products, rich in labour, should on the contrary move closer to the Arab markets, which are growing strongly. The region in particular has a role to play in short productions for rapid delivery including locally/regionally. Even if it means associating with local entrepreneurs, who may moreover facilitate access to local finance and make the projects more acceptable for the host economy, the large players in the sector (important brands from the developed world as challengers to the emerging economies) have a great deal to gain.

Figure 32. Direct job creation potential in major manufacturing sectors per each million euros invested



Source: MIPO estimations based on 2003-2008 data

Following this philosophy, the American group Tessera Technologies has taken 10 percent of the Morocco-based Nemotek Technology, financed by the Groupe Caisse de Dépôt et de Gestion (one of the largest investment groups in Morocco), which will produce under licence in Ifrane integrated circuits and other components used in the manufacture of miniaturised cameras intended for mobile telephones, medical imagery, scanners and even the automobile industry.

The French Prodelec, manufacturer of silk-printing screens and machines for the electronics industry is creating in Tunis a North African production and distribution subsidiary, while the Italian Indesit, in alliance with the Tunisian Poulina Group Holding, whose subsidiary FRIGAN is to produce and commercialise the ARDO range of products, and the Moroccan Kadmiri is creating a joint venture for the production of air-conditioning units. In Egypt, Intel is associating with the Egyptian Boraq for Electronics and Industries with a view to assemble its mother boards, intended for the regional market, locally.

The automotive industries are strategic for the labour-abundant countries of the region. This strategic socio-economic importance of the sector has grown in the wake of the last financial and economic crisis as the automotive industries represent labour-intensive activities, relatively well integrated in the local economic fabric (raw materials, parts, services), and which at times involve real technology transfers. The automobile and aeronautics industries emerging in the region are expected to be competitors to the major world players of the both industries. Thus, the European automobile market, main export client for the Arab automobile sector, is not likely to pick up again after the crisis before 2010. According to the estimations of the large

constructors, the car production in Europe is likely to decline by around 20 to 25 percent in 2009, against 15 percent for the world car market.

However, the causes of the increasing use of externalisation to subcontractors in the South have not disappeared in spite of the crisis: the euro remains strong, the pressure on production costs just as the imperative to right-size the industrial production capacities will accentuate. Although under severe recession, the European car and spare parts makers (with Germany in the lead), along with the challengers from the emerging countries (Chinese assembly projects in Algeria, the Brazilian bus manufacturer Marcopolo and the Russian AvtoVaz-Lada group in Egypt) continue their installation mostly in North-African countries, so as to capture local market share and move closer to European customers.

The success of the low cost models (Renault's Logan and Sandero for example) in Europe as in the developing markets elsewhere, proves that demand arbitrates in favour of the offshore plants. Thus, Renault plans a plant in Moroccan Tangiers based essentially around the Logan range with motorcars intended for the emerging countries. The upholding of local and regional demand (including the African markets) will be decisive for the automobile projects in the South.

The light aeronautical sector, despite still modest amounts, is beginning to make a place for itself in the Arab industrial landscape, as the Moroccan and Tunisian clusters continue to attract European subcontractors. In Tunisia, the Italian light aircraft manufacturer Storm Aircraft-Avionav is installing a 60 position production and assembly site at Mateur, in the north of the country, whilst Airbus announced, at the beginning of 2009, the creation through its subsidiary Aerolia of a cluster close to Tunis, which will group together around a plant for the assembly of Airbus elements, all the necessary suppliers and sub-contractors.

C. Nanotechnology industry

The Arab countries, equipped with all available means, seek to develop their industrial and technological base. They also aspire to utilize and properly invest the human and physical competitive capabilities in order to shift the Arab community onto a high-technology base. Newly industrialized countries managed to build a developed technological base which enabled them to achieve high growth rates and solve a number of social and economic problems. The industries of the future, including the nanotechnology industry of a high-tech nature and higher value-added have a vital role to play in the transition towards a knowledge-based economy. Nanotechnology technique promises a significant industrial wealth the applications of which may be utilized in all the fields of life and economy.

Nanotechnologies currently are one of the most rapidly developing technologies with many promising applications in medicine, energy, manufacturing and communication. Like any new technology, they raise ethical issues; and the possible benefits and harms are increasingly discussed, especially the risk to the environment, there are also concerns of "nano-divide", especially at the international level.

In the Arab Region, research on nanotechnologies has been conducted only in a limited number of countries and the industrial application of nanotechnologies is still

new in this region. However, aware of the impact of research on nanotechnologies and their applications, the Arab countries are keen to found a regional hub for the development of nanotechnologies.

The following industrial and social implications of the nanotechnologies are of a great interest for the region:

- A very novel way to convert heavy crude oil to light crude oil;
- An additive to decrease the consumption of petrol in the engine for at least 6 percent;
- Nano treatment solutions for air/water/soil;
- Nano air conditioning filter;
- Nano sized photo-catalysts;
- Production of nano-powders, nano-composites, and nano-concrete to be used in industrial processes and construction, etc.

In one of the recent studies¹⁶, water treatment was ranked third among the top ten nanotechnology applications most likely to benefit developing countries. Nano-membranes and nano-clays are said to be inexpensive, portable and easily cleaned systems that purify, detoxify and desalinate water more efficiently than conventional bacterial and viral filters. Carbon nano-tubes can be used as sensors to monitor water quality. Wastewater reuse systems based on titanium dioxide and magnetic nano-particles, can decompose organic pollutants and remove salts and heavy metals.

From industrial prospective, these novel phenomena and properties of matter at atomic and molecular levels could be successfully exploited in reducing the overall footprint of existing manufacturing facilities in operating environments thus helping to Arab industries go “greener”.

D. Green industries

Addressing the serious issues associated with climate change requires substantial investments in new clean and sustainable technologies, processes and services. These investments are not just desirable: they are essential. A key aspect of the development challenge for the coming decades is the immense need for new energy supplies in the Arab region.

The arguments are compelling for an economic stimulus package to revive growth focused on energy and carbon. There will be multiple benefits if these investments are targeted towards energy security, low-carbon infrastructures, sustainable development and environmental protection. In particular, the oil and gas producers – the members of the Organization of the Petroleum Exporting Countries (OPEC) – have realized the importance of further investment in clean technologies.

Next to energy issues, one of the major challenges for the region in the years to come will be the sustainable management of water resources and the protection of the environment. Investment requires finance in the form of equity, loans, insurance and

¹⁶ Salamanca-Buentello, F. et al., Nanotechnology and the developing world, 2005, PLoS Medicine

other financial instruments. Each type of finance comes with its own set of conditions, risks and rewards. Investment in green technologies is growing fast.

Even during the height of the financial crisis, venture funding in green technologies did not falter. In many ways, however, it is collectively still only a small fraction of corporate financing. At present, there is very little, if any, sustainable green or environmental financing in the Arab region.

The reasons for the lack of concessional green financing vary from country to country. They range from complete unawareness of the concept and therefore a lack of demand by clients or consumers to the lack of interest by regional or local banks owing to risk management issues.

There are many barriers to investing in clean technologies and creating awareness of the opportunities presented by investment in green business. Most barriers can be overcome through concerted action by States in cooperation with banks and international organizations to support private sector initiatives. Indeed, direct public sector involvement appears to be taking place at a steady pace in some countries.

The Arab region holds great potential to be a leader in stimulating and financing clean technologies. Supportive Governmental activities can range from creating favourable conditions for green investment, launching sound demonstration projects and stimulating research and development to initiating projects that can create the necessary critical mass for further uptake.

I.10.3 Information and Communication Technology Sector

A. Development role of ICTs

It has become an established fact today that the adoption and utilization of new ICT by the enterprise as part of its production systems has structurally transformed many technological, administrative, commercial and financial aspects of the production cycle and has enabled them, through technological innovation, to enhance their productivity, reduce their operating costs, increase their earnings and meet the expectations of their clientele.

Increased use of new technologies allows productivity gains, stimulating efforts for development-research and contributes to capacity building. Studies have been unanimous in concluding that there is a strong correlation between the ICT on the one hand, and the stimulation of economic development, employment and export on the other. The World Bank Report published a few months ago highlighted, by way of illustration only, that a 10-point increase in the percent of subscribers to the ADSL has a direct impact of 1.3 percent increase in the GDP of both industrialized and developing countries and a 10 to 14 percent increase in the job creation rate.

In terms of industrial development, these effects contribute to accelerate the transition to higher-technology manufacturing practices based on innovation and creativity promising new jobs to be created and increased export earnings. Economic evaluation reports state that over 30 percent of the improvement made in the productivity of

manufacturing enterprises and their employees' results from investment in the ICT, the spread of their uses and the exploitation of their innovative systems such as the Internet, software applications and telematic services. Direct contribution to the rise in productivity over the past decade has reached 80 percent in some industrialized countries.

Besides the purely economic impact, there is also a broad scope of social and environmental aspects of ICT employment:

- As a vector for growth and innovation, ICTs are firstly a source of job creation;
- ICT can also meet new social needs especially in terms of education, health and e-Government;
- The effective use of information and communication technology contributes to the preservation of the environment, optimizing energy consumption and reducing emissions of greenhouse gas.

Thus, next-generation technologies bring enormous advantages to nations, and the right policy choices can reap economic, social and environmental benefits of ICT implications. Therefore, there is the need to include the development of ICTs to national and regional strategies for sustainable economic growth. In this context, the public-private partnerships have very important role to play in the development of infrastructure that could support the constant changes of technologies and services in the long run.

The ICT sector represents a tremendous opportunity for growth, and not just for some countries, but for all countries. Nevertheless, for emerging economies to have a real potential for skills and innovation, their efforts in the development and implementation of ICT strategies should be assisted and scouted by the international organizations.

Sticking to UNIDO's sectoral mandate centred on the development of manufacturing and related productive activities, the current Programme will concentrate on the ICT dimension outside its telecommunication component.

B. Global trends in the sector

The recent financial crisis has affected many sectors but has failed to make a major dent in the Information and Communication Technology (ICT) sector, proving remarkably resilient consumer demand for ICT goods and services in major markets worldwide.

Conducted by the International Telecommunication Union (ITU) in 2009, the review of the impact caused by the financial crisis on the ICT sector¹⁷ not only proves that the latter was less affected by this crisis, but also witnesses about encouraging signs of recovery in the sector although some uncertainties remain about the end of the crisis. Furthermore, the ICT sector is thought to play a major role in generating economic growth and stimulating global financial recovery – across all industrial and commercial sectors.

¹⁷ Confronting the Crisis: ICT Stimulus Plans for Economic Growth, ITU, 2009

It should be also noted, that the economic juncture during the past few years has been characterized by a remarkable and continuous growth at the level of investment in this promising sector. The average annual growth rate has been 17 percent at global level over the past five-years. According to current forecasts, this growth is expected to continue during the next period particularly as regards networking and future services like those of the very high capacity fiber optic networks in which investment will grow at an accelerated annual rate of 30 percent at the global level.

Furthermore, the technological rapprochement and the integration of networks in respect of their products and contents in the areas of fixed telephones, mobile telephones, peripherals and television and multimedia products, have generated a new and promising economic space. They have also opened up vast avenues to innovation, research and creativity through software industry and its utilization, maintenance of digital equipment and systems, steering and management of local area networks (LAN) for enterprises and development of sharing networks. In purely industrial prospective, ICTs found their application in knowledge-intensive production of high-tech, nanotechnologies and generic engineering, service-based engineering industries, energy product, new materials and renewable energy, and in many other promising in terms of value-added activities.

Those activities assume vital importance as they ensure a fast development of all economic, social and cultural sectors. They also contribute to spreading the uses of electronic management, digital commerce, virtual banking, health care teleservices, e-training and e-education for the development of expertise and the upgrading of human resources.

C. ICT development in the Arab world

As derives from the previous paragraphs, investments in ICT have a major role to play in any economic development strategy or stimulus plan. Within the implementation framework of the recommendations of the World Summit on the Information Society (WSIS), the Arab States adopted a “Regional Initiative for Capacity Building on Measuring ICT Indicators”. It was one of the initiatives adopted in the Arab declaration “Towards the Activation of the Geneva Plan of Action, 2005”, and one of the major initiatives in the ***regional plan of action for Building the Information Society*** launched by the Economic and Social Commission for Western Asia (ESCWA) in 2004. This initiative is one of five Arab initiatives led and supported by ITU. During the 20th ordinary session of the Arab World Summit (Damascus, 29-30 March 2008), the Arab group responsible for formulating the Arab ICT strategy in the League of Arab States adopted the Arab Strategy for ICTs – Building the Information Society 2007-2012.

The support of Arab regional and national institutions in boosting the Information and Communication Technologies demonstrates the region’s broad recognition of the important role that ICT can play not only in building the information society, but also in stimulating the economic activity growth. ***National development strategies*** in most of the Arab States highlight the need to back up a wider ICT presence on national socio-economic and, in particular, industrial landscape. However, the today Arab world experiences uneven levels of awareness of, and importance given to ICT both in stated national strategies and demonstrated success in their implementation.

Besides, the Arab states increasingly become attractive investment targets in the ICT area as regulations under a joint WTO-WIPO TRIPS¹⁸ framework begin to be enforced. With a standardized *intellectual property rights* (IPR) protection system and the fact that in January 2005 Arab states extended product patent protection to types of products not previously patented, the region is due to witness further integration into global research and development in this area. Arab states are also drafting new laws to foster ICT growth and investor confidence at the national levels.

The *political and regulatory environment* in most of Arab countries is being adapted in accordance with world's best practices. However, the legal framework upgrade has also been uneven: the West Asian Arab States and the Maghreb have been, in general, more advanced in creating frameworks, thanks to their earlier exposure to the global legal culture. Latecomers include the Gulf States; their efforts pertaining to the upgrade of these laws have therefore been more recent.

By and large, the Arabs states display significant interest in *technology initiatives*. Materialized via technopoles and/or technology incubators, the benefits of these initiatives include providing an environment for research and development in collaboration with private initiatives, developing technology diffusion, benefiting the social and economic fabric by creating new employment possibilities, building the ecosystem for business development, and enhancing technological transfers between the public and private sectors. In all cases, private-public partnerships and universities play central roles.

The Arab states have been prolific on both the technopole and incubator fronts: most of Arab countries have at least launched a national planning process for these technology-building initiatives, with varying degrees of success in implementation. Technology-dedicated research facilities are operational components of Arab States' national strategies. In the Gulf, Kuwait, Saudi Arabia, and the UAE stand out in terms of research facilities. Initially sector-oriented (mineral and petrochemical sectors), these facilities now encompass ICT and high technology.

Middle-East and Maghreb states drafted plans for such facilities as early as the 1960s (for example, Lebanon drafted its National Council for Scientific Research in 1969 and a general framework to develop the country's scientific potential). Moroccan research and ICT involvement, led by the Centre National de la Recherche Scientifique et Technique, was inspired by leading French research institutes. Six countries operate technopoles dedicated to research and development in technology. Saudi Arabia's King Abdulaziz City for Science and Technology (KACST), for instance, has evolved from its petroleum focus to include atomic energy, astronomy and geophysics, computer and electronics, and aerospace.

Other countries, such as Jordan, with its ICT plan, have adopted a narrower focus. Technology incubators plans are ready, but we identified only three operational technology incubators of national magnitude across the area. As venture funding is still marginal in the area, most technology incubators have yet to flourish.

¹⁸ Agreement on Trade-Related Aspects of Intellectual Property Rights

Currently, there are several ongoing ***ICT-infrastructure development initiatives*** in the Arab world; they are strategically important because of the magnitude of investment, anticipated benefits, and fit with national ICT plans. Progress is measurable in network and teledensity achievements, regional and global connectivity, as well as in operational e-government facilities.

In the field of ***e-commerce development***, the Arab businesses, corporate and multinational segments are responding favourably to ICT. By building transactional and e-commerce platforms, several Arab central banks are laying the ground for operational e-banking and online payments. Despite low levels of readiness in credit card penetration rates in the area, regulations are being designed for online payments. Good examples can be found in Saudi Arabia, the UAE, Lebanon, and Jordan. More than one-fifth of banks operating in the area now offer online services.

For example, by moving some documentary credit procedures online, Lebanese banks offer escrow services to facilitate and guarantee e-commerce procedures. The UAE Central Bank has introduced SSL (Secure Sockets Layer), PKI (Public Key Infrastructure), and smart card technology to foster online banking, and payment gateways are being implemented by some of the large national players.

Private business-to-business (B2B) marketplace ventures, both Arab and foreign, are entering the market and working with corporations. Commerce One and Aregon, to name a few, are building and offering value propositions covering the whole spectrum of supply chain, enterprise resource management, and procurement. The practice of moving business operations and transactions online is spreading within the corporate sector. Tejari one of the best examples, now has more than 1,000 members within the UAE alone. The beneficial effects of these initiatives translate into large institutions changing their business habits and moving several of their functions online. The progress is uneven across sectors, with success mostly by large petrochemical groups, contractors, banks, and multinationals.

Thus, within large national corporations and multinationals, the Arab world's ability to effectively integrate and compete in ICT is largely proven. Digital marketplaces, exchanges and clearing house initiatives abound, with the large corporate players employing best practices in the field. Unfortunately, this is not true for the rest – in fact, for the vast majority of Arab businesses.

D. Challenges of the Arab ICT sector

Despite the above-mentioned regional development strategies and incentive schemes in selected Arab states, the development of the ICT sector outside telecommunications is limited by numerous factors of the macro, sectoral and micro-economic nature. In terms of the causes of the sector's underdevelopment, an immediate analysis of the current difficulties faced by the Arab ICT industries reveals that the sector is handicapped by the following internal and external constraints:

In the Arab world, most challenges in ICT adoption and usage lie in the political and regulatory environment. With ***uneven records in legal and regulatory issues***, weak ICT strategies, chronic R&D shortages, excessive reliance on foreign technology, and

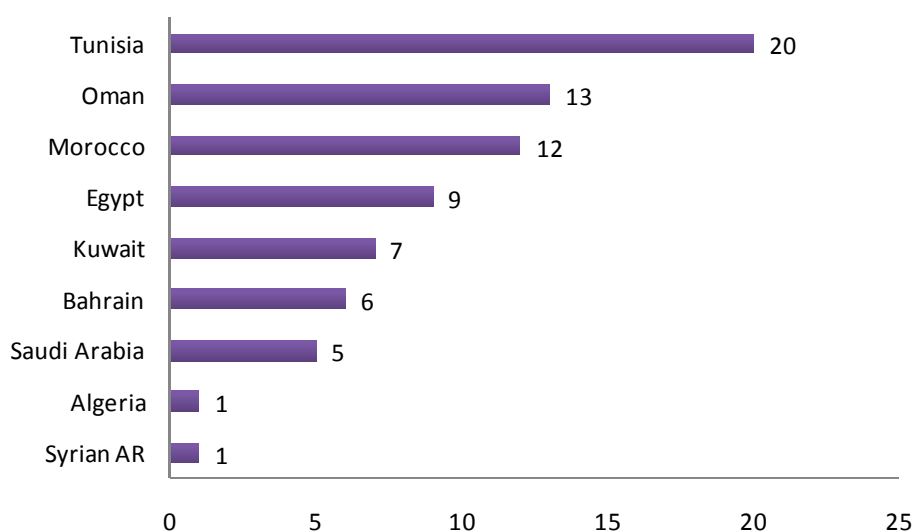
ongoing weaknesses in ICT implementation, Arab states are frequently lagging in their readiness for the networked future.

Besides, only *few countries have a “visionary” approach to ICT as an integral part of a national, social, and economic strategy*. Jordan’s 2020 vision, with its clear ICT component (REACH 1.0, 2.0, and currently, 3.0) is one of the few countries to have actually measured ICT benefits with an ongoing implementation plan. The West-Asian and Maghreb States, highly populated and with limited funding, have recognized the importance of ICT in their national development. Some national plans (such as the Lebanese plan) date back to the 1960s, but most have been articulated over the last few years. Plans include the creation of research institutes, technopoles, and incubators. Other states were late in recognizing the importance of ICT. Oman amended its original 2001-2006 Sixth Development Plan (bin Said 2001) to include ICT; the U.A.E. ICT plan dates to the late 1990s.

Furthermore, there is *no common strategic Arab plan for ICT, and little cooperation on the matter*. Although all Arab states have ICT and e-commerce on their agendas, their approaches are often competing and fragmented, replicating the divide between the Gulf and other states. The Gulf countries have powerful funding capabilities, and ICT plans are prominently included in their national programmes. Governments are taking an active role in promoting ICT and e-commerce, with variable success in implementation. Most have translated their ICT plans into research institutes, technopoles, and technology parks (Saudi Arabia’s KACST and Dubai’s Internet City are prime examples of successful planning and implementation).

Although it is a misnomer to speak of a uniform Arab business community, *traditional Arab manufacturing activities have very weak capacity to absorb new technologies*. Arab small- and medium-size industries shy away from technology despite the anticipated benefits (see Figure 33).

Figure 33. Diffusion of recent innovations, high and medium technology, 1999* (as percent of total goods exports)



Note: Data is based on the latest Technology Achievement Index (TAI) report produced in 2001
Source: UNDP

Statistics on Arab ICT procurement decisions show that ***nearly all ICT equipment is imported***. In the absence of local ICT production, Arab ICT, e-commerce, and related industries cannot be thought of as having a bright future unless local technological development plans are elaborated on and adopted, either by one champion nation, or through an inter-Arab decision.

Weaknesses in local software development capabilities increase reliance on foreign technology, especially in terms of programming, language standards definition, and software development. Most servers belong to the UNIX system family, and almost all are in the public domain. There is also incompatibility between the Arabic provided on these platforms and the commercial Internet browsers that populate the overwhelming majority of Arab PCs. The proportion of software published and translated into Arabic is low, reflecting limited Arab software development demand. The conflict between proprietary and open standards renders information available on servers only marginally displayable on proprietary platforms, and this deters Arab content developers.

By 2005, Arab states, classified as developing countries, are obliged to extend product patent protection on products not previously patented in these countries. Main provisions include standardized definitions of intellectual property, implementation of the “national treatment” and “most favoured nation” principles, the establishment of antipiracy and protection enforcement procedures, and clauses for swift dispute treatment. However, ***no Arab software company presently produces encryption technology*** or has such capabilities. With no national encryption technology at stake, Arab states do not have the same incentives as the major software producer countries in restricting encryption technology export or circulation.

There is also ***a marginal local language content***. The lack of local language content availability shuts out the Arab public from ICT and e-commerce. Most content available in the Arab world is informational (vs. transactional), offering at best online cataloguing. Whereas there are 300 million Arabic speakers in the world, ranking the language as the 6th in terms of usage, websites in the Arabic language represented less than one percent of all websites in 2001¹⁹. Despite domain name registration progress in Arab states, the inability to offer reliable, up-to-date content in local languages is an obstacle.

The ***absence of programming languages in Arabic*** (e.g., C++), and the absence of Arabic tools or protocols for data representation (e.g., Arabic HyperText Mark-up Language (HTML) and Extensible Mark-up Language (XML)) put limitations on content development, as technicians are required to master both English and Arabic²⁰.

With ***little training and poor levels of awareness***, SMIs do not benefit from access to new markets and intra-Arab trade potential. When added to the problem of standards, this human resource limitation severely restricts ICT content development. Addressing this limitation calls for major policy decisions on standards enforcement and the build-up of local content skills capabilities. A single country cannot make these decisions; this highlights the need for intra-Arab cooperation.

¹⁹ Data is based on the latest Technology Achievement Index (TAI) report produced in 2001

²⁰ Source: Global Information Technology Report 2002-2003, World Economic Forum, 2003

Although research in general is relatively strong in most of Arab countries, *the national ICT development models include little indigenous technological development* often relying on national-foreign partnerships with, in some cases, skills being acquired from foreign corporations. The Maghreb and Lebanon rely on cooperation with France, and seek technology transfer to promote indigenous research using local talent. They aim to replicate more advanced research structures and have signed effective public-private partnerships with French universities and leading research institutions such as the Centre Nationale de la Recherche Scientifique.

The Arab ICT sector experiences also *insufficient funding for research and development*. The absence of serious ICT R&D funding commitments translates into a virtual absence of national Arab ICT and software industries, intensifying reliance on foreign expertise and furthering the “brain drain”. With a share of R&D in Arab gross domestic product at a record low of 0.5 percent and high reliance on foreign technology, Arab states are structurally net importers of technology and ICT. Arab reliance on foreign technology has been researched by several sources²¹.

Besides, in the Arab world, *science and technology research has not achieved significant progress in industrial applications*. With the exception of Tunisia, all states are net importers of manufacturing technology. In 1999, Tunisia, the leading Arab exporter of “recent innovations in high and medium technology”, ranked 51st (out of 72 countries) on the UNDP’s global technology achievement index with technology exports that reached 19.7 percent of total exports. As a benchmark, technology exports represented between 50 percent and 80 percent of the total exports of world leaders Finland, the United States, and Japan (respectively 1st, 2nd, and 4th). Technology exports of most Arab states are below the 5 percent mark (see Figure 28). The consequences of this poor performance in technology are to further the “brain drain” and to accentuate the loss of sovereignty in implementing national ICT strategies. Few other Arab states (e.g., Algeria and Morocco) retain some degree of technology independence. Reliance on foreign technology could be symptomatic of a certain lack of government and business leadership and understanding of the benefits of indigenous ICT research and autonomy.

I.10.4 Services to businesses

Along with the costal line of the Mediterranean Sea, tourism together with other tertiary activities leads economies in Lebanon, Jordan, Syria, Egypt, Tunisia and Morocco with their contribution exceeding the half of the national product.

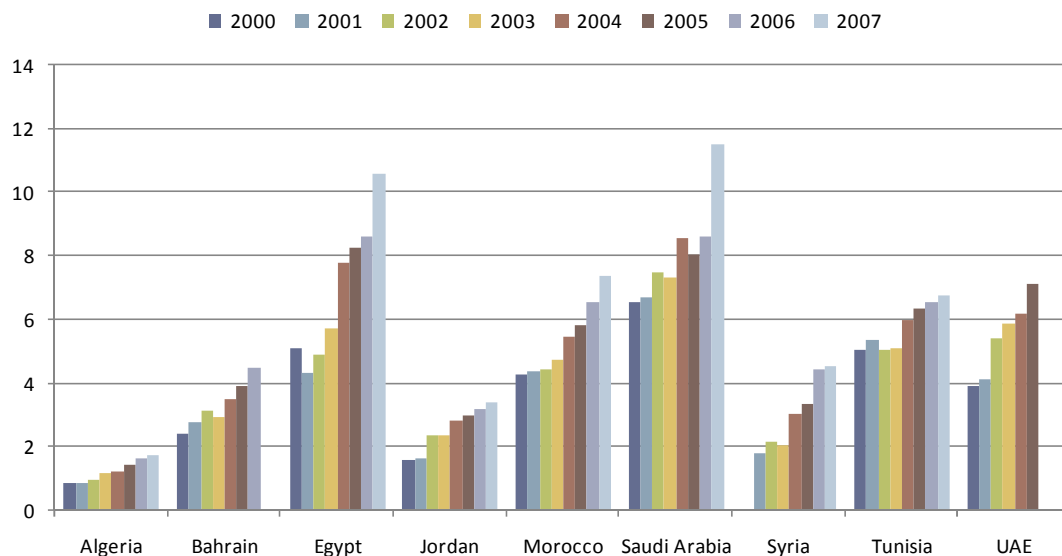
Services directly related to the productive activities, such as transport, tourism and travel play an increasingly important role in the AIDMO economies. These activities have experienced strong growth across the region and these are among the few sectors where intra-regional trade is of any significance.

Tunisia has started to provide services in areas such as aircraft repair and maintenance. Tunisia and Jordan have a budding software industry whereas Jordan and Morocco provide services to major global construction firms in architecture and

²¹ UNDP 2002; Zahlan 1999, etc.

engineering design. These are modern economy sectors that in some case correspond to an entry into entirely new areas of economic activity.

Figure 34. International tourism, 2000-2007, millions of arrivals



Source: World Development Indicators, World Bank, 2010

In the domain of tourism and related small productive activities, the opportunities remain numerous. Countries like Tunisia and UAE have shown significant progress, whilst Algeria, Syria and even Egypt are still largely under-exploited.

In the last decade, Arab countries, especially those of the Gulf, made significant progress in building a modern financial sector. The governments' programs have included deregulating, interest rates liberalization and the gradual opening up of the financial sector for foreign participation, privatization of banks and other financial institutions and increasing competition. Today UAE has the largest banking sector in the Arab World, where resident credits by its 24 national banks and 28 foreign financial institutions.

As in 2007, the United Arab Emirates are to be found among the main investors in the Arab region. The cumulative gross amounts of Emirates' projects announced in 2008 only for the countries of the Mediterranean Economic Development Area (MEDA) totalled EUR 16.8 billion; a considerable amount, once smoothed, taking account of the duration of the completion of these projects, comes down to 4.7 billion (annualised amount, i.e. probably invested from 2008).

The banking sector in the Arab world should be an attractive and growing investment opportunity for the start-up or existing private sector companies. This trend should be quite beneficial to the native industries in the Arab world, because it offers native companies a chance to get stronger in their backyards, before they start to take on the rest of the world markets.

Besides, business advisory services should be extended and become more sophisticated. Counselling, expertise, training are services likely to undergo enormous development.

I.11 Manufacturing small and medium enterprises

In the majority of the Arab countries, small and medium-size enterprises (SMEs) represent the biggest part of registered entities in nearly all activities, averaging 60 percent in number or exceeding 90 percent if the micro enterprises are also considered. Just outside gas and oil sectors, Algeria derives 75 percent of its GDP from the private sector SMEs.

Over the last decade, hundreds of thousands of micro enterprises (some only semiformal) have flourished in Arab countries in the areas of trade, services, and small industry as their economies opened. The micro enterprises in non-tradable industries have produced most of the recent employment growth²². Only a few of these firms will grow into small and medium size firms or expand to reach a market beyond their area of operations. They remain vital for two reasons. First, they provide employment, particularly for low-skilled labour. Second, those in services and trade support other parts of economy.

However, SMEs' share in the total manufacturing output and value added remain very low. This indicates that small and medium-size industries (SMIs) in the concerned Arab countries mainly operate in the labour-intensive and low-value-added sectors.

The development of SMIs in the Arab world has been hindered by the way in which the public sector was run prior to reforms and by the environment in which the private sector existed. In many Arab countries the public sector was run along politico-bureaucratic lines: managers were appointed on the basis of their political loyalty to the relevant minister, and the system of decision-making was bureaucratic as opposed to being based on market considerations. The private sector was allowed to function in areas not reserved for the public sector. The effects of uncertainty on private investment and thus on the private sector have been emphasized by the World Bank, and its recommendations have been implemented in most of considered countries.

SMIs in Arab countries include a wide variety of entities, ranging from village handicraft makers to sophisticated computer software companies. Many of them are family owned. Some are dynamic, innovative, and growth-oriented, while others are satisfied to remain small. Within this broad category, SMI fall into many different typologies, to mention just a few:

- family rural firms operating on a survival basis for the strictly local market;
- urban firms straddling the formal and informal sectors, often located in the outlying districts of metropolitan areas;
- subcontracting firms operating under the indirect command of a larger firm;

²² Source: The World Bank, 2007

- specialised firms interacting with others within clusters, industrial districts or networks;
- medium-size industries offering niche products directly on international markets.

Current conditions for SMI development are nearly similar across the region. All countries are set to further liberalize and privatize the economy. SMIs in the Arab countries are therefore exposed to increasing competition and need upgrading in terms of effectiveness, technology, quality, in order to compete effectively in the domestic market and take advantage of the opportunities offered by the integration among the Arab countries as well as in international markets.

Table 13 below, presents the contribution of SMEs to employment and manufacturing output in the Arab world benchmarked against SMEs in other regions of the world. It is clearly observed that in spite of its high representation in the manufacturing community (82.7%), their contribution to employment and output do not exceed 33 percent each which is very low in comparison to other regions of the world.

The comparison becomes even less favourable to the Arab world when comparisons take place with individual countries such as Turkey where 98 percent of exports emerged from SMEs in 2006 or SMEs in China, India, South Korea, Brazil and Chile among many others.

Table 13. Contribution of SMEs to employment and manufacturing output, average of selected countries in every region, 2006-2008

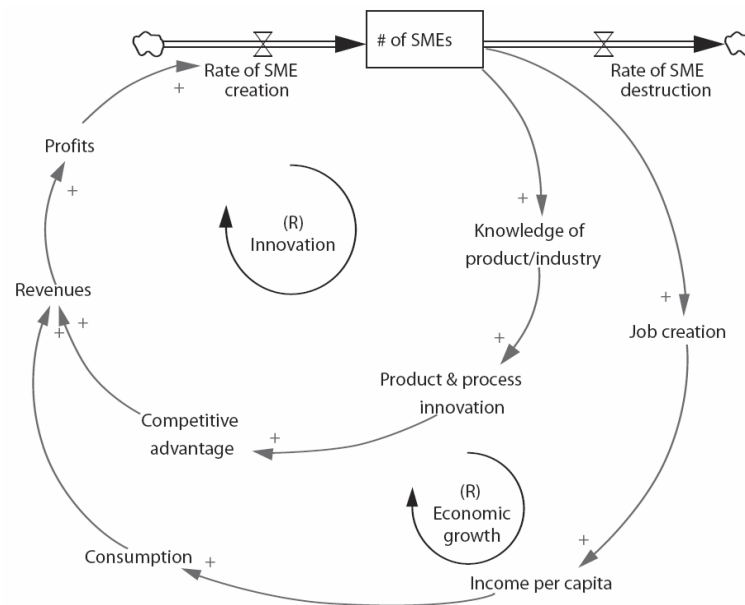
Region/Economy	Share of SMEs in total industrial units	Employment in SMEs (of total labour force)	Contribution to the manufacturing output
OECD	99.1%	61.2%	49.4%
East Asia and the Pacific	94.0%	79.2%	47.7%
Latin America and the Caribbean	92.3%	41.3%	27.8%
Arab States	82.7%	33.0%	33.0%
China	99.0%	73.0%	60.0%
India	95.0%	80.0%	40.0%
South Korea	99.7%	71.0%	47.5%
Brazil	99.2%	66.8%	60.8%
Chile	99.1%	52.7%	73.1%

Source: UN country statistic

Figure 35 illustrates how SMIs are the driver of economic growth and innovation. The total number of SMIs in the economy depends on the rate of SMI creation and rate of SMI destruction. Profitable market opportunities increase the rate of SMI creation. This increases the total number of SMIs in the country, which increases job creation and income per capita. As people become wealthier, they will increase their consumption, which in turn will open up new market opportunities that will entice the creation of more SMIs. Contrary to multinational corporations, the growth of SMIs directly benefits the country because most SMIs are domestic firms. This reinforcing

dynamic generates economic growth. The reinforcing loop of innovation also drives economic growth by upgrading existing SMIs and guaranteeing their sustainability and survival, not to mention encouraging new ones thus reinforcing the wheel of growth and job creation.

Figure 35. SMIs as drivers of economic growth and innovation



Source: UNDP Asia-Pacific Development Information Programme (UNDP-APDIP)

The governments of the Arab countries are keen to promote SMI development. Today, in every country of the region, the issue of SMI development is officially considered among the governmental priorities, and it is actively promoted with the purpose to increase economic growth, improve living standards and create employment for the young and fast growing population. To prosper, however, the private sector needs an environment that facilitates growth, including access to business-related information, technical support services, capital and access to national and international markets. These issues are the core of this proposed technical programme.

I.12 Informal sector SMIs

With few exceptions of automotive productions clusters in West-Asian and North-African states, most of the geographical clustering within the “formal” sector is centered around mining, refineries and primary agro-food processing industries. Apart from these sectors, the private sector mainly in non-GCC Arab countries has not been instrumental in creating and sustaining successful and competitive manufacturing networks within formal environment due to the numerous cost-increasing factors. Thus, the formal manufacturing sector in these countries has not developed much against the background of emerging informal sector.

Thus, the industrial base of the Arab region is characterized by SMIs operating in informal sector. Despite the absence of accurate statistics, it has been observed that the informal sector is relatively dynamic in basic transformation activities and services. Indeed, the myriad of “informal” small craftwork shops, workshops and small industries cannot be ignored. The size of the informal sector determines its impact on the economies in most of Mid-East and African Arab countries. The informal sector does not only deprive the governments of important fiscal revenues but also weaken their efforts to formulate and carry out sound structured economic and development policies.

One of the major reasons for not registering with the authorities is the fear that registration might lead to disadvantages. The registration process²³ is seen as a burden and represents an operating disadvantage. “Informal enterprises” do not have to operate under the same standards (safety, quality) and regulations and have an unfair advantage over the formal enterprises that do comply with the system’s regulations and fiscal rules.

As far as social policy reforms are due in the Arab world, another important obstacle for informal companies to shift under the formal business setting is social protection. The latter is believed to be of a significant margin to the operational costs. As a result, large parts of the informal sector labour force have no access to adequate risk management instruments and the employees in particular are vulnerable to manifold risks.

Whether in the rural or urban areas, most enterprises operating in the informal sector usually employ unskilled and uneducated workers. Also, some educated young graduates have (or will have) to enter the informal sector as the opportunities in the formal sector are limited and do not enable all graduates to find a job. This educated youth often see the informal sector as an opportunity to become entrepreneurs.

Overall, the main features of informal sector SMIs in the region could be summarized as follows:

- the majority of informal sector industries are of micro and small scale experiencing high competition among each other;
- a large number of informal operators started a business due to a lack of alternatives or other reasons, but not because of personal motivation;
- the fact of having informal competitors represents a competitiveness disadvantage for formal businesses;
- most businesses are less than 5 years old and there are no moderate start-up and closure rates;
- the employment dynamics for the informal sector SMIs are moderate: contrary to popular belief – they do not seem to be a powerful job engine;
- the usage of existing financial services among informal sector operators is fairly modest but this is mainly due to fundamental structure and character of micro- and small industries;

²³ Concerning the informal sector, the major reasons for not registering with any authority is often a lack of knowledge on how to register and the procedures involved.

- only very few businesses have business linkages and these linkages are of a very simple nature and have limited profits;
- the majority of businesses do not make use of business development services (BDS), but a large proportion uses market-related business services.

The current Programme proposal does not intend to solve all problems related to the informal sector. However, the Programme sees the informal sector as a pool of potential entrepreneurs, which can become effective businessmen. With some assistance, they could integrate into local value chains, become key actors in the fight to alleviate local poverty, contribute into the local development, especially in rural areas, ensure the modernization of the most remote areas through technology transfers and the introduction of basic standards and new techniques, and improve social security by creating sustainable activities.

I.13 Challenges and opportunities of SMIs in the region

I.13.1 Strengths and opportunities

The development of a vibrant SMI sector is a crucial objective for all Arab countries in order to attain sustained growth rates, promote an equitable and balanced economic progress, fight unemployment and foster social cohesion. It is also a primary political objective to further the integration of the Arab countries as the establishment of a dynamic SMI sector across the region will expand the market basis and ensure the dialogue and the connections between countries.

With its vast amount of natural resources, financial assets, trained manpower and a market of more than three hundred million people, the Arab region possesses a great potential to succeed in various segments of industrial value chains.

Along with economic and trade integration with the international market, an intra-regional distribution of the value chains cannot be neglected neither, as it could provide additional value-added to the region if such issues as harmonization of industrial and trade policies as well as competitive trade and manufacturing of goods are addressed. Indeed, it will not be productive for the region to depend on a limited range of products with highly fluctuating prices.

Thus, the menu of potential opportunities and comparative geo-political, socio-economic and purely industrial advantages in the majority of Arab countries includes:

- 1) An international acknowledgement of national development policies intending to the establishment of an atmosphere of law, security and political stability;
- 2) High opportunities for economies of scale as well as for the integration to the world supply chains within the growing and liberalizing intra-regional and regional markets;
- 3) Abundant financial resources available in most of the Arab countries;
- 4) The current favourable investment and overall business climate;
- 5) An active private SMI sector in almost all productive activities;

- 6) Rich primary mineral and agro-resource base (minerals, cotton, fisheries, fruits and vegetables, etc.);
- 7) Large pool of young and educated labour force;
- 8) Functioning stock exchange and banking systems;
- 9) Institutions existing in nearly all business support areas (quality, partnerships, banks), which represent an important development potential and rapid leadership of development programmes;
- 10) Existence of and large investments into the basic infrastructure (roads, ports and airports infrastructure).

I.13.2 Weaknesses and constraints

On the other hand, SMIs' potential for generating growth and job creation in Arab countries is not fully employed. The local producers in some countries of the region are still faced by a number of constraints seriously limiting expansion of SMIs, namely:

- 1) Absence of holistic regional trade and industry development approach including private sector and SMIs promotion policies;
- 2) Low level of product transformation and industrial value added, and industry dependence on imported products, resulting in a low value added ratio per capita;
- 3) High public service and other transaction costs;
- 4) Inadequate financing of SMIs despite the abundance of financial resources available in the region;
- 5) Similarly, inadequate access to investment and financial services and insufficient integration to the international capital markets;
- 6) Difficult access to technology and information and lack of the local and regional R&D institutions related to manufacturing activities;
- 7) Inadequate technical qualification of the local labour force;
- 8) Lack of the entrepreneurial culture;
- 9) Inadequate technical and advisory support infrastructure for businesses especially as far as the enterprise creation and start-up stages are concerned;
- 10) As a result, a large part of existing industries tend to be rigid and do not expand their activities, and accordingly the challenge of job creation remain not fully addressed.

I.14 Problems to be addressed

Despite existing opportunities for expansion, the above mentioned constraints seriously inhibit growth and survival of SMIs in the region. These constraints are multiple and both related to the internal structure of the firms as well as to their environment. To overcome these difficulties, the following problems should be overcome:

- The difficulty in gaining access to foreign markets, to international technology and investment is linked to the more general problem of **accessing information**. Local SMIs also have an insufficient networking capacity, in terms of co-operation with each other (for the purchase of raw materials, the sale of finished products, for addressing foreign markets, for R&D, etc.), but also with larger firms (scarce sub-contracting activity), with universities and research centres. All these aspects contribute to make local industries vulnerable with respect to external competition in the global market. SMI development as well as foreign investment and technology flows are becoming increasingly important for the economic development strategies of many countries.
- SMIs have in general restricted access to financial services through the formal financial system (high interest rates, requests for excessive collateral, lack of risk lending due to the perceptions about the repayment abilities of SMIs). The **lack of appropriate financial services** prevents investment and consequently the expansions or the development of new projects. In general, the limited dynamism of the SMI sector reduces the opportunities for attracting inflows of foreign capitals to the region, which continues to attract a low share of global investments.
- Nascent and emerging SMIs are too often considered to be high-risk ventures and very few existing funds address **challenges of investing to SMIs**. Another key issue is the fact that very few SMIs in the region experience stable growth which stands for a lower risk and attractiveness for the banking sector. This mismatch between the needs of SMIs seeking finance and the attitude of a lending institution towards SMIs' credibility (therefore "bankable projects") appears to be another reason for the lack of credit for SMIs. Besides, the lack of competition within the banking sector contributes to the reduced pressure in providing innovative financial products and services for smaller companies.
- **Investment** is also an important vehicle to acquire technology and so improve the competitiveness of the local industrial system. In the context of globalisation, technology reveals to be an important input for companies to reach international competitiveness. Particularly in developing countries there is a need to step up their efforts to attract foreign investment and provide the necessary support for technology upgrading and know-how transfer from developed countries.
- Supporting emerging entrepreneurship and the start-up of enterprises, providing them with **an environment conducive to growth**, has turned to be a major concern for many countries.

It is important to add that the problems faced by SMIs vary in type and level of acuteness between the cases of small and medium enterprises, with the former needing more support and deeper interventions. Table 14 presents a listing of the problems and its relevance to the two different sizes of enterprises.

Table 14. SMI weaknesses and degree of relevance to small- or medium-scale enterprises

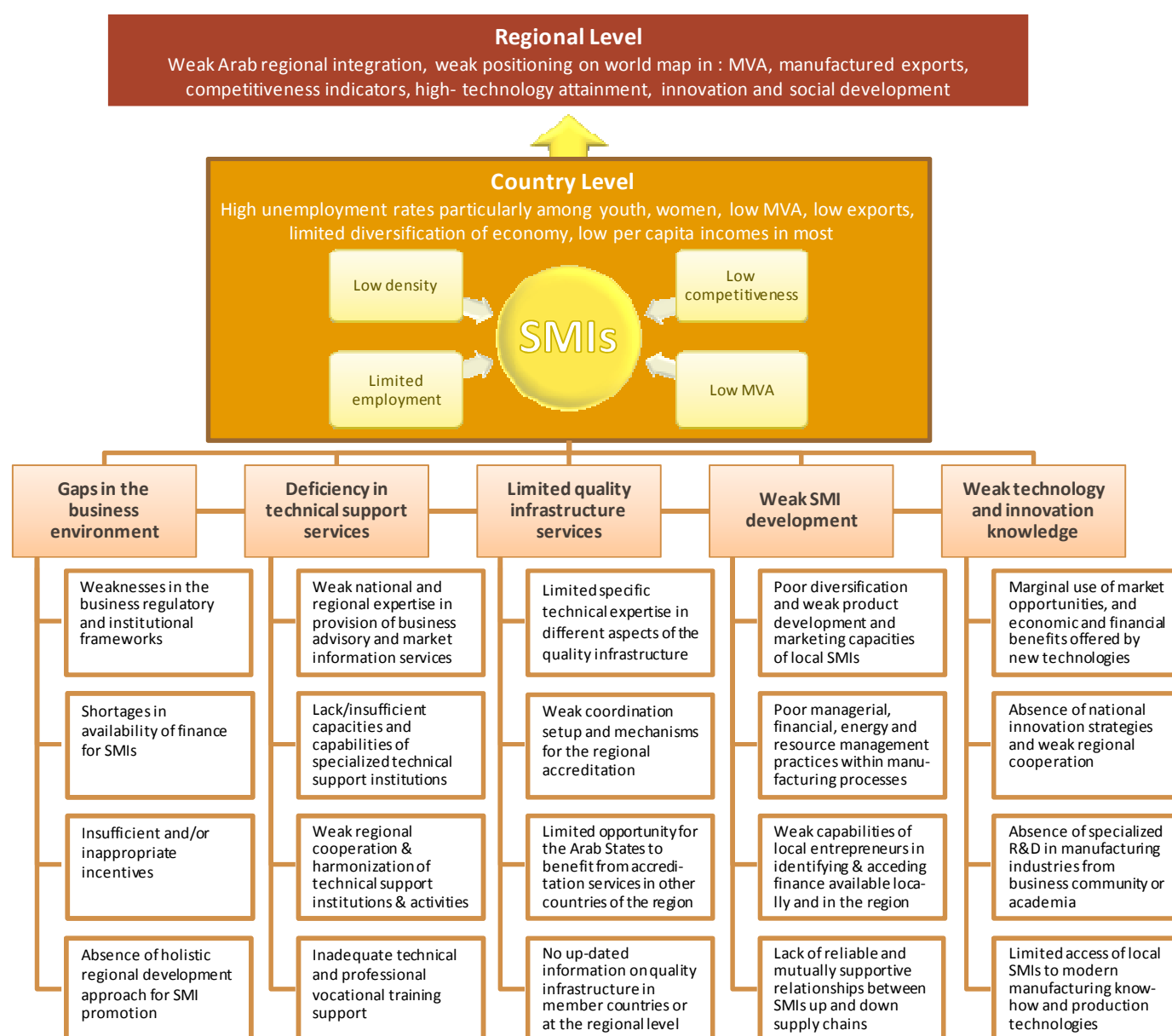
Symptoms of problem	Higher relevance to small enterprises	Higher relevance to medium enterprises
Absence or weakness of environmental protection awareness and compliance	X	X
Limited entrepreneurship by youth and women	X	
Absence or weakness of advanced management, marketing techniques and human resource management		X
Absence or weakness of basic management, marketing techniques and human resource management	X	
Absence or weakness of application of international quality standards		X
Absence or weakness of application of basic quality and hygiene standards	X	
Absence or weakness of safety engineering measures in factories		X
Absence or weakness of basic safety standards and minimum work conditions	X	
Poor application of minimum wage laws	X	
Limited absorptive capacity for ICT	X	X
Limited integration in local value chains	X	
Limited integration in global and or regional value chains	X	X
Limited manufactured exports		X
Start-up financing problems faced by new enterprises	X	
Financing problems at different stage of the lifetime of the enterprise		X

In a nutshell, SMIs in the region are exposed to increasing competition and need upgrading in terms of effectiveness, technology, quality, in order to compete effectively in the domestic market and take advantage of the opportunities offered by the GAFTA. What is needed is more of the manufacturing projects. But the real test will be whether the region's economy can be broadened and deepened.

The following analysis of problems (problem tree) was undertaken based on information presented in the previous sections and in close consultations with the Programme's key stakeholders.

The problem tree provides a summary picture of the current situation as a baseline for success indicators of the Programme's eventual implementation and its further performance evaluations. Thus, the problem tree provides a simplified but robust summary of challenges necessary to address to eventually achieve the Programme's specific goals, including the indicative means by which the global objective can be achieved.

Figure 36. Problem analysis



I.15 Scope of technical programme, methodologies and UNIDO's intervention scenario

I.15.1 Scope of technical programme

Focus of interest

The proposed programme will focus on the following two areas of interest:

- Strengthening of SMIs in the Arab world, particularly small enterprises, and
- Promotion of job creation particularly youth and women employment.

The two areas of focus are tightly linked because strengthening SMIs is a major vehicle for promoting employment.

Geographical focus

Geographically, the programme will focus on:

- Twenty one Arab States to be benefit from the proposed Programme, and
- The division of the twenty one beneficiary Arab States into three groups each having maximum level of harmony in economic, social and cultural structures.

While designed, the Programme aimed to accommodate heterogeneity of individual country members within each group to the maximum extent possible.

Sectoral focus

The Programme is to focus on three sectors:

- Agro-food value chains,
- ICT sector, and
- Green Industries.

The relevance of each of the three sectors varies from one group of countries to another.

I.15.2 Country groupings

For pragmatic and efficient implementation reasons, the proposed programme is to group the 21 Arab States into three sub-groups. The grouping is based on a UNIDO calculated index involving five economic and social indicators namely: (GDP, extractive industries as percentage of GDP, MVA as percentage of GDP, Human Development Index, and unemployment rate).

Economic and social indicators are equally weighed (50% each) to reflect the social and economic dimensions of the proposed programme. The 50%-share of economic indicators is divided into: 15% for GDP, 15% for extracting as percentage of GDP, and 20% for manufacturing as percentage of GDP. The 50%-share of social indicators is divided into: 20% for HDI, and 30% for unemployment rate.

The index is meant to allow grouping in a way that captures maximum harmony among members within each sub-group. The weighted average formula used for index calculation is presented below followed by Table 15 which shows the three sub-group titles, respective members, main common characteristics as well as sources of heterogeneity within sub-groups.

Equation 1: Weighted average formula

$WA = (0.15 * GDP) + (0.15 * EVA) + (0.20 * MVA) + (0.20 * HDI) + (0.30 * UE)$
<i>Where WA = weighted average, GDP = gross domestic product at current prices, EVA = share of extractive value added in GDP, MVA = share of manufacturing value added in GDP, HDI = UNDP's Human Development Index, and UE = unemployment rate.</i>

Table 15. The main characteristics of the three sub-groups

	Share in GDP of the whole Arab region (2007)	Group members	Development stage (based on competitiveness report 2009)	Main common characteristics within each group	Sources of heterogeneity within groups
Group 1: GCC/Oil economies	42.8%	Bahrain, Kuwait, Oman, Saudi Arabia, Qatar, UAE	Mostly innovation-driven*	- sectoral focus - political and economic systems - typology of natural resources - sociological, demographical and historical backgrounds	- level of development for each country - level of diversification of economy - geographical size - extent of involvement in manufacturing - degree of richness in natural resources - extent of global integration (manufactured exports)
Group 2: Diversified economies	50.9%	Algeria, Egypt, Iraq, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia	Ranging between factor driven and efficiency driven**		
Group 3: Primary product export economies	6.3%	Djibouti, Mauritania, Somalia, Sudan, Palestine, Yemen	All factor driven***		

* Innovation Driven Economies: Innovation sophistication factors: Business sophistication, innovation

** Efficiency Driven Economies: Efficiency enhancers: Higher education and training, goods market efficiency, labour market efficiency, financial market sophistication, technological readiness and market size

*** Factor Driven Economies: Basic requirements: Institutions, infrastructure, macro- economic stability, health and primary education

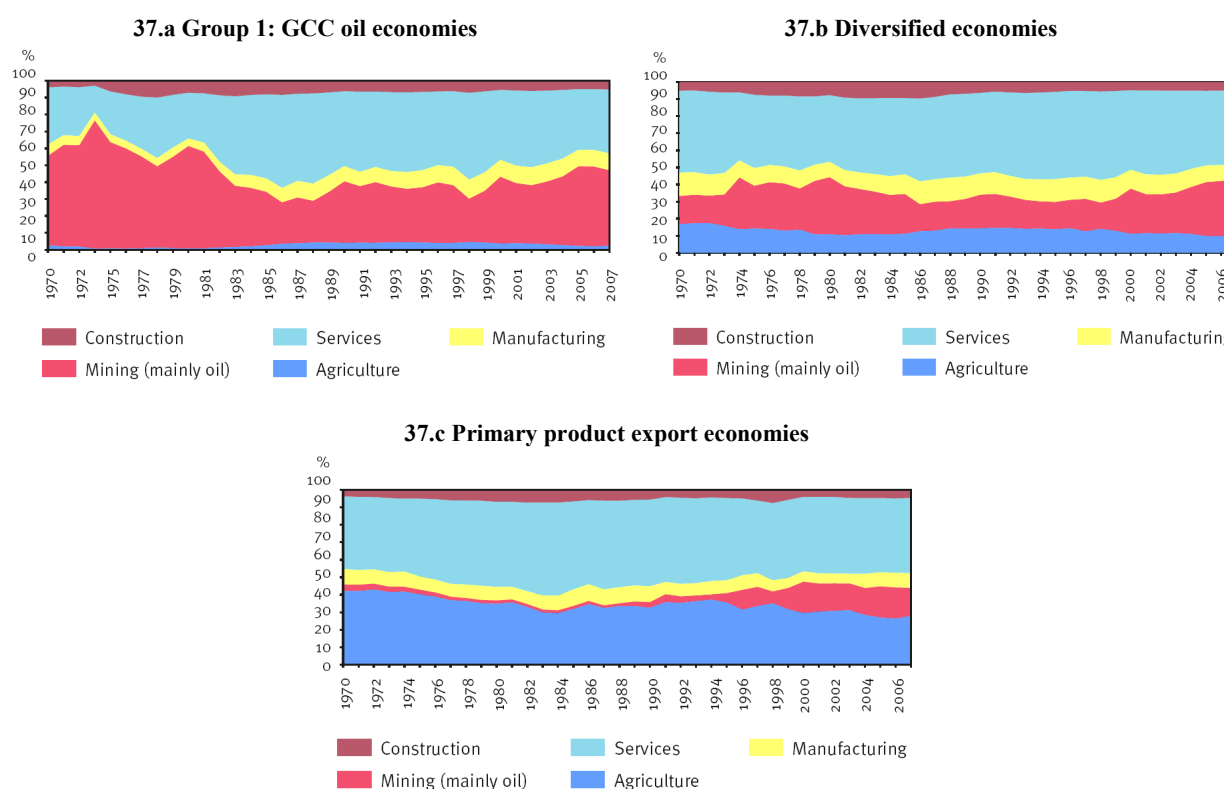
Two outliers to our grouping are Iraq and Palestine. Iraq's economic and social indicators as reflected by index place it in Group 3. Iraq has however been moved to Group 2 because its weak economic and social indicators are more a reflection of temporary instability due to war than a reflection of Iraq's original economic structure. Moreover, Iraqi economic characteristics fit more Group 2 than Group 3. Finally, since the proposed program is future-oriented, it cannot be based on temporary conditions.

Palestine's placing in Group 3 is meant to reflect the difficult challenges faced by the occupied territories particularly in creating jobs for Palestinians. Therefore in spite of

differences in geography, topography, demographics and historical roots of most Group 3 countries, Palestine has the need for heavier scale intervention, to enhance the social and economic roles of SMIs, in common with the other members in the sub-group.

Figure 37 presents the structure of the three groups of countries: oil economies, diversified economies, and primary product exporters, respectively. Oil economies in Chart 37.a have a huge extraction sector and limited manufacturing and almost absent agriculture due to their desert climate and topography. Chart 37.b has a tangible agricultural sector and less tangible manufacturing though still visible emphasis on extractive industries. Chart 37.c representing the primary product export group (the least developed group) has agriculture as the main productive sector, very limited extractive industries and a modest manufacturing share that is primitive in nature.

Figure 37 : Structure of Arab economies



Source: Arab Human Development Report, 2009

The sectoral structure has implications on the design of the proposed programme so as to conform to the specific characteristics and needs of each group. In fact it is these differences that triggered the need for country division in the first place. Addressing all the needs of the 21 countries without such division is impossible.

Table 16 below presents the main characteristics of SMIs in each group of countries. The programme design has to accommodate the very special nature of SMIs in Group 1, the wide spectrum of semi-developed SMIs in Group 2, and the more primitive ones in Group 3 with different tools and levels of interference so as to tackle their

problems at the core and achieve tangible improvements in their performance, and job creation potential.

Table 16. SMEs in the three country groups

Group 1: GCC/Oil economies	GCC region is known for strong entrepreneurial traditions and has a large size of small and medium enterprises. The sectoral structure of Gulf SMEs is skewed towards simple contracting and trading operations, other sectors particularly manufacturing (SMEs) tend to be under-represented (no more than 12%). SMEs of interest in this programme have not yet fully lived up to their potential of sustainable diversification and job creation, as they often focus on low-margin activities and employ a disproportionate share of expatriate labour.
Group 2: Diversified economies	Have a large population of SMEs with large involved in specific sectors such as agro industries and chemicals. They tend to contribute a low value added contribution to industry and limited employment. Small enterprises prevail more than medium ones and there is a huge informal sector. SMEs have very high potential with the right support as some are already exporting agro food and textiles and garments to demanding western markets.
Group 3: Primary product export economies	They have more micro enterprises than actual SMEs and need a lot of support at all levels to be upgraded to serious producing enterprises that can achieve tangible contribution to the economy especially in the creation of job opportunities.

I.15.3 Sectoral selection

The program is to focus on three specific sectors: agro-food value chains, ICT and green industries. The choice of sectors is meant to achieve three objectives for the three groups of Arab countries:

- 1) To combine existing and most promising ***manufacturing potential*** for all Arab States (agro-food value chains), with ***future aspirations*** (ICT as high technology both as an industry in itself and as an enhancer to manufacturing industries) and ***sustainable development*** concerns (protecting the environment through green industries)
- 2) To cover a wide spectrum of manufacturing industries of relevance to Arab States beyond agro-food value chains such as chemicals, construction, metals, and autos among others.
- 3) To achieve multiple impact and deeper results from the overlap of the three sectors.

The rationale behind sectoral choice is further analyzed in the following focus on each of the three sectors, their overlap and relevance to each group of countries.

Agro-food value chains

The choice of agro-food value chains has a special significance in relation to the proposed program for the following reasons:

- 1) The agro-food sector is the biggest direct employer of all manufacturing industries. Within agro-industries, agro-food value chains, particularly processed fruits and vegetables, have the highest job creation potential. The textile and clothing industries and in particular garment sector – also part of agro-industries – have a very high potential for job creation especially for women.

- 2) If indirect employment in agriculture, through backward linkages, and services supporting agro-food value chains, through forward linkages, are taken into account, the employment creation boost to the Arab world from focusing on agro-food value chains has a significant multiplier effect. It's been estimated that for each direct job in agro-food industries, at least 10 indirect jobs are created. If accounting for the whole value-chain the number could easily double.
- 3) The importance of agro-food value chains also extends to macro level social impact. There is a positive correlation between improvements in human development index for the whole country and the agro-business/agriculture ratio. The relation is even stronger with agro-food industries as job-creation potential at both the direct and indirect levels.
- 4) Collaboration and cooperation within the Arab region is to positively contribute to achieving food self-sufficiency in the Arab region.

Green industries

The future of SMIs in any region cannot be seen in the absence of environmental protection. The problem of environmental degradation is critical for the case of the Arab countries and is soon to become a serious burden if not controlled. The economic costs of unchecked environmental degradation in the Arab world in water, land, air, waste, coastal zone and global environment have been estimated and measured by the World Bank²⁴ as percentages loss in GDP. Based on the 2010 World Bank estimation, the highest loss in GDP in the Arab World exists in the case of Egypt (4.8%). Morocco, Algeria, Syria, Lebanon, Jordan and Tunisia follow with 3.7%, 3.6%, 3.5%, 3.4%, 3.1%, and 2.1% respectively. Ignoring the problem would make it worse over time, thus the interest is in green industries.

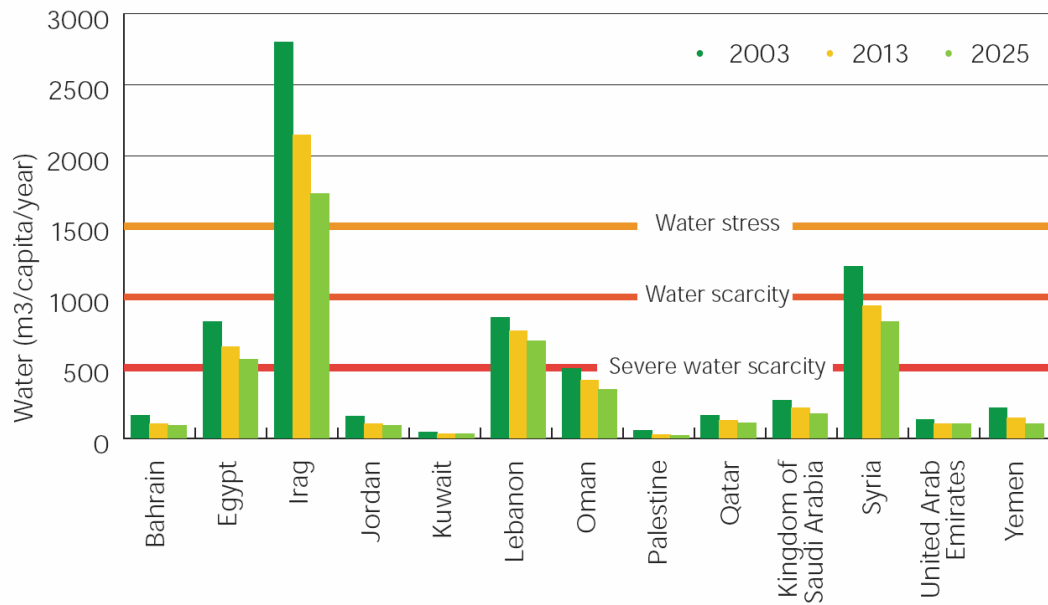
Green industries involve cleaner production processes, and the use of renewable energy in manufacturing industries. The latter requires huge initial investments but results in low operational costs and sustainability of energy sources. Given that the use of renewable energy is still new in the Arab world and is mostly associated with larger sized enterprises and foreign investments, in this programme the focus is on cleaner production processes only. This is the area most relevant to Arab domestic investments and to SMIs.

Cleaner production processes, tend to save on water use, reduce water pollution and carbon dioxide. In the Arab World, these benefits gain special significance due to two specific environmental problems: water scarcity and air pollution. The water scarcity problem is building up as a strategic threat and serious constraint to development if not survival in the Arab world. The per capita share of water is currently 1100 m³ compared to the world average of 8000 m³. It is expected to decrease to 550 m³ by 2025²⁵. The per capita share is already as low as 500 m³ in a number of Arab countries as early as 2005 as seen in Figure 38. The social repercussions of the problem are significant.

²⁴ Arab Environment Watch (www.arabenvironment.net)

²⁵ Source: Responsible competitiveness in the Arab World Report 2009

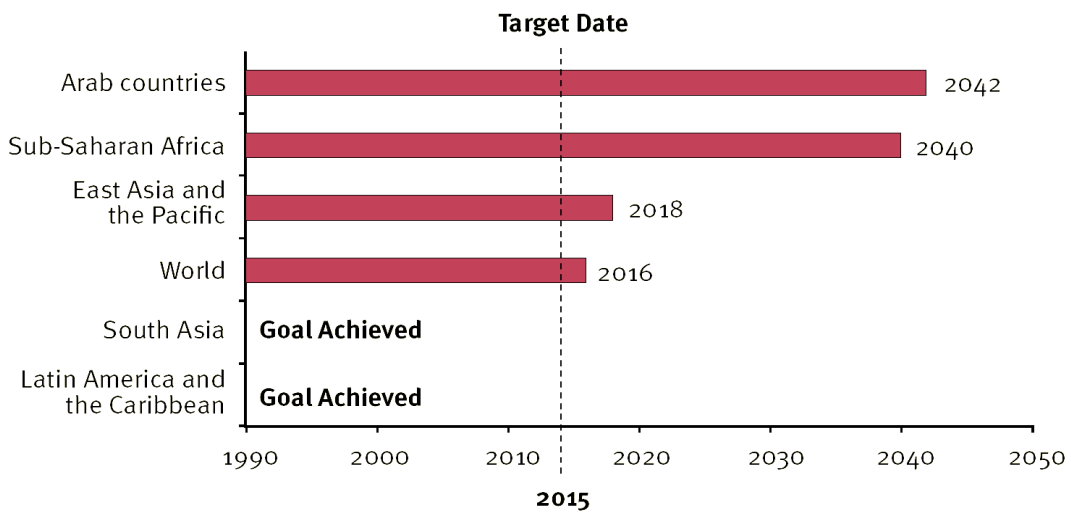
Figure 38: Water stress in selected Arab countries



Source: Responsible Competitiveness in the Arab World Report, 2009

Figure 39 features one aspect and that is missing the 2015 MDG target for access to safe drinking water by at least 27 years if it is to be achieved at all.

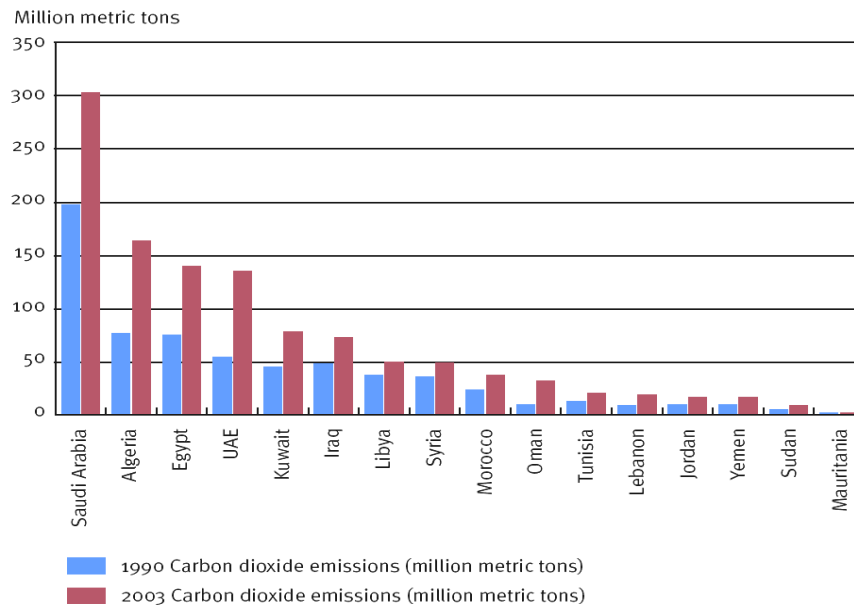
Figure 39: Repercussions for water scarcity



Source: UNDP, 2006

Of less serious survival concerns, in spite of its importance, is air pollution with rising carbon dioxide emissions as seen in Figure 40. The fast increase in emissions between 1990 and 2003 is an indicator for the rapid build-up of the problem. The issue is receiving more attention in the Arab world at the present time given the progressive migration of European polluting industries particularly chemical and construction industries.

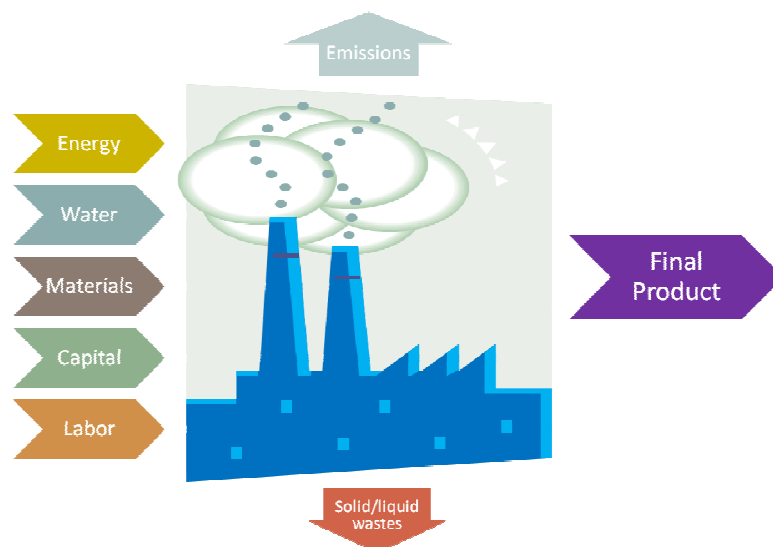
Figure 40: Rising carbon dioxide emissions in Arab countries 1990 and 2003



Source: World Bank, 2008

In addition to the improvement/preservation of the environmental condition, cleaner production is also best business practice that reduces manufacturing cost. It is an integrated strategy that aims for maximization of profits by making more efficient use of natural resources (materials, energy or water) in manufacturing industries, while minimizing the waste and emissions at source. As Figure 41 below shows, a manufacturing process uses materials, energy, water and other inputs to make the final product. All of the manufacturing inputs are either incorporated into the product or are lost as expensive and polluting process waste or emissions. When better conversion efficiency reduces manufacturing waste, the consumption of utilities, raw materials and other manufacturing inputs falls. All else being equal, a manufacturer using Clean Production is likely to be more profitable than a rival who does not.

Figure 41. Cleaner production leads to a reduction in emissions and solid and liquid wastes



Given that cleaner production is of relevance to all types of manufacturing, the choice of green industries as a sector of focus in this project allows for a wider coverage of manufacturing industries beyond agro-food value chains. Given the huge spectrum of manufacturing industries, however, there is a need to specify the extra industries to be covered by this technical programme. Light chemicals, textiles and garments are chosen as the two extra manufacturing industries of focus under the green industries umbrella. The choice of the two sectors is based on their importance and prevalence in the Arab World.

ICT Sector

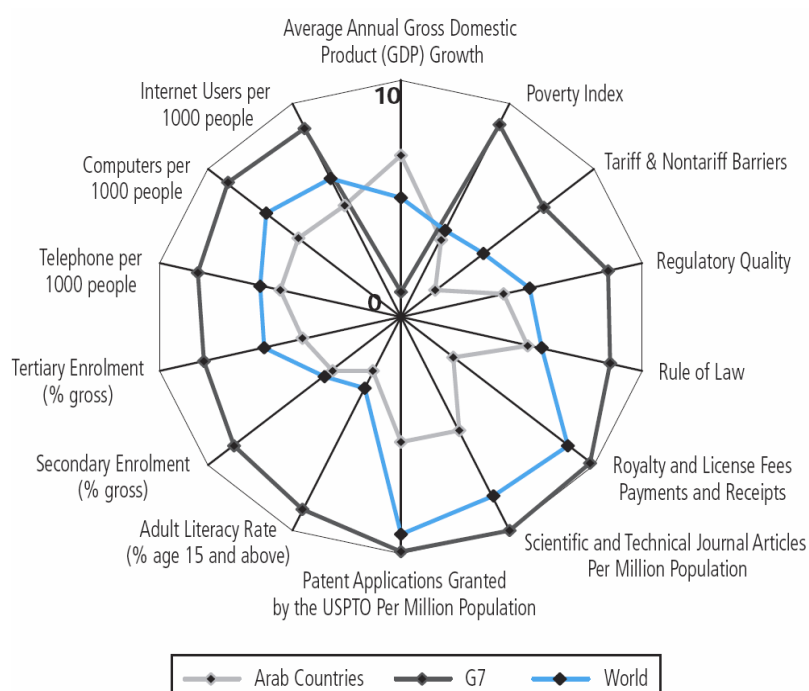
Considering the large number of benefits that ICT can bring to SMIs, it is observed that only few SMIs in the Arab world have adopted ICT. A similar situation exists in most of the developing countries. Their counterparts in developed countries, however, are using advanced ICTs. One of the main reasons behind this limited adoption is the lack of dynamism between ICT firms and SMIs outside the ICT sector. In the past, ICT firms have not provided goods and services tailored to SMIs needs because demand from SMIs has been low. However, their demand is low in part because ICT products available in the market are too complex and expensive. The result is a vicious cycle of limited supply and limited demand that ultimately excludes SMIs from the benefits of ICT. The focus on the ICT sector in this project addresses supply and demand problems that caused this situation.

ICT and the ICT sector is crucial for all economies not only because it belongs to high technology and enables higher efficiency at all stages of the value chain in the future, but also because the sector itself represents high potential for employment, particularly for the youth. Therefore, it is particularly significant for the Arab World. The potential for job creation exists at more than one level: (1) small IT companies that support SMIs by providing local high tech solutions to improve production and managerial processes; and/or (2) companies that train youth on ICT applications thus improving their entrepreneurial abilities and their chances for employment. In addition to the above ICT sector linkages with SMIs, all ICT applications in SMIs are of high relevance to this project because they increase efficiency, thus contributing to enhanced competitiveness and sustainability of the enterprise.

Needs, and hence problems with regard to ICT, of the countries in each sub group are different. Focused attention on the ICT sector in this project allows for technical support to SMIs to solve supply and demand problems associated with weak ICT penetration. Specifically, higher penetration of ICT allows SMEs to create business opportunities and increase competitiveness. Appropriate ICT can help SMEs cut costs for internal processes, improve their product through access to information on technology, markets, enhance communication with customers, and better promote and distribute their products through online presence. In fact, ICT has the potential to improve the core business of SMEs in every step of the business process.

Focus on ICT would also enable the Arab countries move towards being knowledge-based economies. As illustrated in Figure 42 which benchmarks the Arab world against the G7 countries and the whole world with respect to knowledge-economy indicators, the Arab countries have yet to reach this target. In spite of GCC known achievements in that domain the Arab world still needs a lot of support in this area.

Figure 42: Benchmarking the Arab world against the G-7 countries and the whole world in Knowledge economy indicators

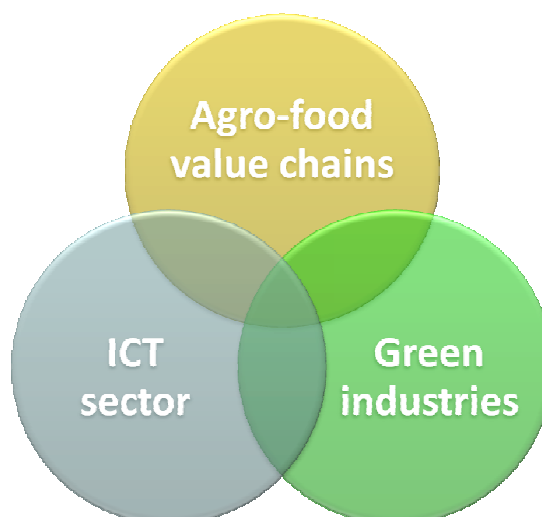


Source: World Bank (Knowledge Assessment Methodology)

Overlap between the three sectors

Obviously, there are overlaps between the three sectors. For instance, green industries directly overlap with organic food processing under agro-food value chains. Green industries also overlap with all ICT activities being environmentally friendly by definition. Agro-food industries adopting ICT overlap with ICT sector and green industries. The overlap is due to the horizontal nature of both ICT and green industries. It is intentional in this project as it allows for focused intervention with multiple impact and deep results.

Figure 43: Overlap between the three sectors



The three sectors' relevance to the three sub-groups of Arab States

Table 17 below presents the degree of relevance of the three sectors to the three groups of countries. For maximum benefits UNIDO's technical intervention is to be tailored to the needs of each sub-group. These differ between sectors and within sectors as well.

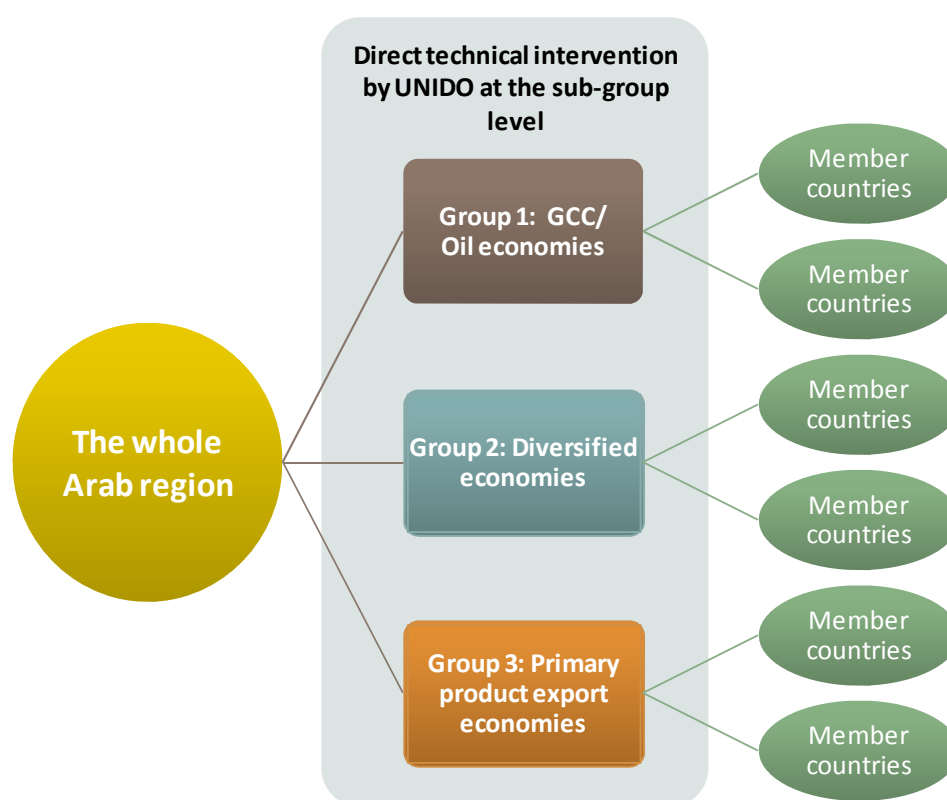
Table 17: Relevance of the three sectors to country groups

Groups	Agro-food value chains	Green Industries	ICT sector
Group 1: GCC/Oil economies	Limited relevance to the group as a whole Food industries relevant to some countries (mainly Saudi Arabia) with a limited commodities list of juices and dairy products	High relevance particularly chemical industries	High relevance with room for excelling because the group already possesses advanced ICT infrastructure
Group 2: Diversified Economies	High relevance to all countries in the group Food industries particularly processed fruits and vegetables are highly relevant to all countries within the group except Libya and Algeria	Cleaner production processes are of high relevance to all countries and all manufacturing industries especially chemicals (on-going UNIDO efforts in some countries namely Egypt, Jordan, Lebanon, Morocco, and Tunisia)	High relevance to all countries because of poor ICT adoption in SMEs Countries within group differ in sophistication of infrastructure
Group 3: Primary product export economies	High relevance to country groups because of focus on agriculture and limited processing particularly Sudan which has the highest potential	High relevance to all country groups to protect environment as manufacturing value added increases protection of environment in parallel with deepening industry efforts	High relevance to all countries, but compared to groups 1 and 2, ICT requirement is rather elementary

I.15.4 Technical intervention scenario

Given the wide spectrum of program coverage, the main challenge in UNIDO's technical intervention is to manage a systemic intervention that combines detailed custom-made direct intervention at the level of the three sub-groups of countries with outreach and linkages to the region as a whole and outreach and linkages to member countries within each sub-group as presented in the figure below. Intervention is also to be at three levels: policy and institutional (macro-) level, meso-level and micro-enterprise level.

Figure 44: Intervention approach



The benefits to the region as a whole will be through encouraging intraregional cooperation throughout the implementation of different programme components. That to individual countries will be first through the accommodation of their most important specificities in the designed programs for sub-groups and second through establishing linkages between sub-group regional institutions and their national counterparts.

UNIDO's approach aims to build a comprehensive and well-integrated system for enhancing the economic and social roles of SMIs at the regional, sub-group and country levels; a system that can continue to function beyond the four years of the proposed Programme.

This approach will use an appropriate intervention matrix (see Annex III) assigning the Programme activities by the respective group of countries in order to ensure an ad hoc and at once comprehensive and effective delivery of development activities tailored to individual needs of the respective beneficiary country.

I.16 UNIDO current activities in the region

In accordance with the DAC Guidelines on Strengthening Trade Capacity for Development (2001), the principles of the Paris Declaration of Aid Effectiveness (2005) and taking into consideration lessons learned from TRTA evaluations (2006), this programme seeks from the outset synergies with the ongoing activities in the

AIDMO region. A number of important recent and ongoing programmes of UNIDO in cooperation with multi- and bilateral development partners have the potential for linkages with the envisaged support. These linkages will need to be further defined and specified during the programme's assessment and benchmarking phase. Table 18 below includes the main projects engaging UNIDO as regards the Arab countries. The list does not claim to be exhaustive at this stage, but covers the most important UNIDO programmes.

Table 18. Overview of main related programmes and projects

Project title, budget, funding	Description, potential for synergy
ALGERIA	
Strengthening national capability in assisting Food processing SME upgrading in Algeria; US\$ 1.050.800, Italian financing	This project carries on activities from upgrading pilot project, funded by Italia and executed by UNIDO. It aims at assisting Algerian authorities to improve the productivity and the industrial competitiveness, to create jobs and to develop the private sector. It also takes into account Algeria efforts to integrate the World Trade Organization and the European Union.
Strengthening national capability in quality normalization, certification and accreditation; US\$ 1.447.000, French financing	The project joins in the frame of the former project "ALG/00/003" and aims at strengthening and widening the results obtained in the quality domain (certification, normalization, accreditation) through: Adaptation of the legal frame and assistance to the National Accreditation Council; Institutional capabilities strengthen of industry, trade, health and agriculture related institutions; Training on quality and environmental management standards; Laboratories accreditations.
EGYPT	
Industrial Energy Efficiency GEF-funded	The project will contribute to improving industrial energy efficiency in Egypt through: technical assistance in the development and promulgation of a national energy management standard consistent with ISO principals; stimulation of demand for energy efficiency goods and services by industry; capacity building of energy efficiency service providers (private/public), etc.
Egyptian National Cleaner Production Center (ENCPC)	ENCPC is particularly active and many of its activities would be applicable to UfM priority areas: Technical assistance for cleaner production including technology transfer and access to available financing packages; Technical assistance for Clean Development Mechanism (CDM) projects; Industrial waste management and recycling initiatives; Assistance for environmental labels and quality labels, Applying the new, service-oriented business model of Chemical Leasing to companies...
MED-TEST	MED-TEST is a component of the "Strategic Partnership for the Mediterranean Large Marine Ecosystem (LME)" co-financed by GEF and ongoing in Egypt, Tunisia and Morocco. The project targets industries located in coastal hot spots, discharging directly or indirectly in the Mediterranean Sea. It aims to facilitate the transfer of environmentally sound technologies (EST) to improve the environmental performance and the productivity of these enterprises. Clear link here with UfM "de-pollution of the Mediterranean".
Egyptian Traceability Centre for Agro-Industrial Exports (ETRACE)	ETRACE aims at improving the capability of Egyptian farmers, growers and pack houses along the food value chain to meet European and international food quality, safety and traceability standards. The ETRACE mission is to strengthen the Egyptian food value chain by providing technical and financial assistance to ensure that, in terms of quality, safety and traceability. The actions taken aim at improving the conditions for workers and businesses, and in generating and equitably distributing export-generated income along the food value chain, thus achieving safer jobs and safer products.

Project title, budget, funding	Description, potential for synergy
Enterprise Development and Investment Promotion (EDIP) Program	The EDIP program in Egypt called "Enterprise Egypt", was launched on June 2009 thanks to the strong commitment of UNIDO ITPO Bahrain and GAFI (General Authority for Investment and Free Zones, Egypt). On October-November 2009 it is foreseen that the 1 st training of trainers will take place in Cairo. The EDIP program, embedded by GAFI, will presumably than expanded nationwide.
JORDAN	
	No ongoing UNIDO projects related to the UFM priority actions (energy efficiency, de-pollution and SME development) are in place. Concerning UFM stakeholders, there are two ongoing projects funded by World Bank: one focusing mainly on climate change by UNDP; the other on solid waste management; by the Ministry of Environment of Jordan.
LEBANON	
Montreal Protocol	The most recent project that has been conducted was the Phase of Methyl Bromide in the Strawberry Sector, which is currently under finalization. Several projects under the Montreal Protocol have been conducted in Lebanon.
Food Safety Project	The food safety project focuses on upgrading agro-food SMEs in order to improve their national and international market access. The importance of such a project was highlighted especially with the need of the coming Food Safety Law in Lebanon.
Lebanon Cleaner Production Center	The LCPC sets out to train industry professionals on cleaner production, undertakes plant level cleaner production assessments and disseminates information on cleaner production (Awareness-raising events; In-plant demonstrations; Training and capacity building).
Market Access & Compliance for Lebanese Exports (MACLE); Funded by Switzerland	The 3-year MACLE Project, formally established on March 2007 is coordinated by the Ministry of Economy and Trade of Lebanon, and implemented by UNIDO. Its aim is to develop packaging, labelling and traceability for Lebanese industries, in order to enable them to access new markets. Since its establishment it has supported 70 Lebanese Industrial Companies in improving their packaging and labelling requirements. South-South cooperation was also the aim of this project since technical expertise was exchanged with Syria and Tunisia.
Lebanese Agro-Industry Support and Economic Recovery	Project, was formulated by Lebanese government and UNIDO, to support economic recovery and restore of industrial units in war-affected areas of Lebanon thereby generating employment and alleviate poverty in the country. LAISER assists the Government of Lebanon in the process of rehabilitating selected agro-industrial enterprises (including food, beverage, textile, furniture making, leather, etc.), enabling them to resume production, increase employment, and integrate into the global market.
Lebanese EDIP programme	The Enterprise Development and Investment Promotion Program (EDIP) for Lebanon is aimed at helping potential entrepreneurs (micro, small & medium) translate their ideas into commercial ventures in manufacturing/ service sectors. Furthermore the program aims at assisting SMEs expand and grow their existing businesses. The program aims at promoting domestic investment which would in turn leverage the flow of foreign direct investments.
IRAQ	
Rebuilding food safety and processing industry capacity in Iraq	The overall development goal of the project is to improve food safety and increase the potential of the food trade sector in Iraq. 1. Creating a coordination mechanism for a comprehensive national food safety system including the establishment and operation of a National Codex Committee. 2. Strengthening the capacity of the national institutions and their staff in food control and improving enforcement at all levels. 3. Improving the environment for the development of entrepreneurship in the food processing sector. 4. Assuring food safety improvement throughout food continuum.

Project title, budget, funding	Description, potential for synergy
Enterprise development through information and communication technology	The project is designed to encourage the establishment of Small and Medium Scale Enterprises (SMEs) in Iraq, and the creation of employment opportunities for Iraqi people through the promotion of domestic and foreign investment in the productive sectors of the economy.
Private sector development for Iraq	The Programme is conceived and designed with Iraqi stakeholders (public and private) and other international stakeholders in an effort to create and enable an effective, coherent, and comprehensive framework for private sector development in Iraq at both the national and governorate levels in three priority Governorates, as a means of achieving: I) sustainable and increased employment opportunities; II) poverty reduction; III) the enhancement of the legal and regulatory framework which will allow an increase in sustained domestic and international investment; (IV) the development of a legal and regulatory framework designed to perpetuate an overall rational, coherent, and economic environment; and, (V) the diversification the basis of future economic growth in Iraq in gender inclusive and environmentally sustainable manner.
Enterprise development and investment promotion in the SME sector in Iraq	The project aims at promoting domestic and foreign investments and generating employment. Immediate focus will be on upgrading existing enterprises and on creating new ones, as well as on strengthening institutional capabilities for sustainable development.
MOROCCO	
Projects in the domain of de-pollution	- Plan for the management and elimination of HCFCs, - CMPP (the Morocco NCPC) projects: MED TEST (transfer of Environmental Sound Technologies in Morocco, Egypt and Tunisia), Promotion and implementation of Chemical Leasing business models in industry (a regional project), E-Waste management. - The project on the elimination of PCBs.
SME development	- Export consortia, - Development of the leather sector in the city of Fez, - Women entrepreneurship and rural agro-industries development. All projects are developed with local counterparts (mainly, in the case of Morocco, with the Ministry for Industry, Commerce and new Technologies, Ministry for Energy, Mining, Water and Environment, but also Regional Development Agencies, etc.
PALESTINIAN TERRITORY	
Phase II of the UNIDO Integrated Programme to support the Palestinian Industry	Phase II of the Integrated Programme (IP) has been formulated as a result of interest shown by the Palestinian Authorities, to continue benefiting from UNIDO's expertise in encouraging and fostering a sustainable development of the Palestinian economy. UNIDO's support consists in upgrading local enterprises, public and private institutions, as well as generating employment, which lead to sustainable competitive advantage. Phase II aiming at upgrading of business performance of the Palestinian industries through capacity building consists of two main components: Strengthening the capacity building at the ministerial level, and SMEs Productivity and Competitiveness.
SYRIA	
Industrial Modernization and Upgrading Program (IMUP Syria); Funded by Italy	In May 2007, IMUP-Syria was launched as a 2-year technical cooperation program between the Italian government, UNIDO and the Syrian Ministry of Industry. The main target of this program is to enhance the competitive capability of Syrian industries and to face the challenges which emerged after the liberation of commercial exchange agreements and after opening world markets. The textile sector was chosen as a pioneer. In early June 2008, the IMUP started supplying the required technical aid for the companies giving priority to marketing, production, then to costs accounting and environment. Overall, 36 companies were able to benefit from IMUP-Syria.

Project title, budget, funding	Description, potential for synergy
Montreal Protocol	Several projects in this area are under UNIDO's implementation
TUNISIA	
Cleaner Production Programme	UNIDO Cleaner Production Program in Tunisia (project document under approval by funding government) aims at enhancing the competitiveness of industrial SMEs through two essential actions: • capacity building of National expertise in the field of environmentally sound production through transfer of know-how; • Improvement of the coordination between the various stakeholders and activities in the field of cleaner production.
The MED-TEST project: Transfer of Environmental Sound Technology in the South Mediterranean Region; Funded by GEF and Italian Government.	The MED-TEST project addresses pollution from land-based activities in priority industrial hot spots in three Mediterranean countries: Morocco, Egypt and Tunisia. Activities will lead to the following outcomes: • Capacity building of the participating countries to address industrial environmental management. • Upgrading the skills of enterprise employees in modern environmental management tools to correct negative industrial practices resulting in more efficient consumption of production inputs and reduction of pollution loads generation. • Sharing and dissemination of information on industrial best environmental practices for regional, national and local governments, environmental management practitioners, NGOs, and other stakeholders.
Entrepreneurship Development Programme (EDP) and SME Development	The programme is a part of the MDG funded "Youth Employment and Migration" Programme with total funding of US\$3 million. The global initiative sees the participation of 5 UN implementing agencies where UNIDO plays a critical role in the field of entrepreneurship development. In Tunisia, a pilot EDP programme was launched in 2006 thanks to the strong commitment of UNIDO/ITPO Bahrain, Centre des Jeunes Dirigeants, Association pour la Promotion de l'Industrie, Centre of Arab Women for Training and Research, Banque pour le financement des Petites et Moyennes Entreprises, Banque Tunisienne de Solidarité and Agfund (Arab Gulf Programme for United Nations Development Organizations). Since 2007, 6 training sessions have been completed and 75 entrepreneurs have been trained. Out of the total project carriers, 24 percent are starting up/developing their businesses and 40 percent are in the process of implementing their ideas.
MAG-TRACE	Within the framework of Invest-in-Med²⁶, the MAG-TRACE objective is to introduce the approach of ETRACE established in Egypt to the Maghreb countries, allowing Maghreb agricultural producers to comply with procedures in order to increase export to the European Market. ETRACE is assisting Algeria, Morocco and Tunisia, to assess the technical needs of their own country situations and to discern the individual needs in terms of training, technical and technological assistance.
MEDA COUNTRIES/UFM	
Enhancing SMEs , promoting employment creation and growth in the southern and eastern Mediterranean Countries	The global objective of the proposed programme is to contribute to the socio-economic growth, poverty reduction, regional integration and environmental sustainability of the Southern and Eastern Mediterranean countries through increasing regional capacities for employment creation, value-added generation, economic diversification and specialization, and development of agro-food and green industries. The programme proposal will pursue the following specific objectives: i. to support business development and employment creation for young graduates through promoting local SMEs, increasing their

²⁶ The Invest-in-Med programme aims at developing sustainable trade relationships, investments and enterprise partnerships between the two rims of the Mediterranean. Funded at 75% by the EU, it is implemented by the MedAlliance

Project title, budget, funding	Description, potential for synergy
	competitiveness, facilitating access to credit and to the regional and global markets, enhancing potential for transfer of investments and technologies, and mobilizing necessary financial resources; ii. to strengthen capacities of the technical support institutions with special focus on SMEs and employment creation; and iii. to facilitate business networking, support higher quality business linkages and promote their local, regional and international dimensions with special focus on North-South cooperation within the region.

I.17 AIDMO current activities in the region

The Arab Industrial Development and Mining Organization is an Arab world's specialized agency active in the field of industrial development, mining and standardisation. Most of its activities cover all Arab countries with special focus on providing technical assistances to the region's least developed economies: Djibouti, Mauritania, Somalia, Sudan, Palestine and Yemen.

In the area of SMI development, the AIDMO activities over the recent years have been focusing inter alia on the following themes:

Holding a biannual *Arab Meeting for the small and medium industries* aiming at assessing the current situation in the sector as well as challenges facing SMIs under the regional and international development context. Another objective of the meeting is to facilitate an exchange of Arab experiences in the field of SMIs, as well as to promote bilateral and multilateral cooperation in this area.

Focus on Industrial Incubators: Recent years have witnessed the beginning of regular meetings of officials in charge of industrial incubators in the Arab region. The meetings recommended to hold a periodical training session to promote the establishment of industrial incubators, their working systems, and identification of their role and contribution to the industrial development and job creation, taking into account an early stage of the Arab experience in the field of industrial incubator promotion compared to other regions of the world.

Besides, AIDMO has recently established an Arab Network of Industrial Incubators. The key activity of this network is to conduct surveys on Arab incubators operating in industrial sectors. It is also in charge of monitoring the successful experiences in this field and communicating thematic events and activities carried out by the Arab industrial incubators.

Development of Handicraft Industries: The emphasis is placed on the development of handicraft industries in the Arab countries with the reference to its cultural heritage and remarkable role in generating job opportunities especially in highly populated, rural and scarce resources areas. The AIDMO programme in partnership with specialized institutions has led to the development of the sector's structure. The programme has also contributed to the networking between concerned institutions in the Arab countries along with the establishment of the Arab Federation of Traditional Industries and Crafts.

Intellectual Property: This programme aims at increasing the awareness on intellectual creativity in industrial sectors, especially in the field of small and medium and handicrafts industries. The non-material production has taken an important part in the region's international trade, especially after the establishment of the World Trade Organization (WTO). The core of AIDMO's activities in the field of industrial property constitute training sessions, inter-Arab and international forums and seminars, periodical meetings of officers in charge of industrial property in the Arab countries.

Promoting Cleaner Production: AIDMO in cooperation with the United Nations Environment Programme (UNEP) and the Council of Arab Ministers in charge of environment carry out numerous activities on promoting cleaner production at the existing industrial facilities along with the establishment of Arab specialized centers for preserving environment.

Establishment of industrial Zones and Poles: Experience of many Arab countries has revealed that the establishment of industrial zones may be one of the main entrances to the development of SMIs. Therefore, the establishment of industrial zones has become an important goal to be promoted by AIDMO through providing technical assistance in elaborating feasibility studies in these areas. In recent years, the Arab countries have begun to focus their interest on the establishment of industrial poles of high-technology industries. These industrial poles are encompassing manufacturing companies as well as training institutions, research centers and project incubators. AIDMO has begun to promote the establishment of industrial poles in the Arab countries.

Modernization and Development of Existing Industries: AIDMO currently implements numerous activities aimed at modernizing the Arab industry so to enable the latter to effectively respond to technical requirements conditioned by WTO, the Great Arab Free Trade Area, Inter-Arab partnership agreements. A number of Arab countries have succeeded in implementing such programmes.

Quality Infrastructure: Since its reorganization and taking over the activities related to the unified Arab standardization, AIDMO was assigned to develop the quality infrastructure in the region. Recent years have witnessed remarkable efforts of AIDMO in the field of accreditation and mutual recognition of certificates of conformity in view of its important role in the development of laboratories and calibration.

SECTION II: UNIDO BROAD APPROACH

II.1 UNIDO's response and proposed approach

Industrial diversification is important challenge for the future of the region. The private sector plays an important role in all economies in the word and complementing efforts from government to diversify the national value-added. Strong SMIs have the potential to make a substantial contribution to economic growth and job creation and in the context of developing economies can help accelerate processes of economic restructuring.

The current economic crisis could be turned by Arab countries to the great industrial challenge, finding an original mode of economic specialization along with the deeper regional cooperation and integration which will benefit Arab countries over time. This should imply the creation of a well-rooted network of medium and small-size industries creating jobs and working together at the transnational level.

One of the priorities of the ongoing debate within AIDMO and Arab Countries is facilitating the creation and the development of SMIs through, among others, the enhancement of financial mechanisms to facilitate the mobilization of the financial resources necessary for investment projects, particularly by SMI. However, for such an initiative to be really successful in reaching the target beneficiaries and obtaining the desired development impact, it is essential that it is coupled with an articulated technical assistance programme to build the capacity of local SMIs and their intermediary institutions to take advantage of the new instruments.

This program proposal addresses the challenge for SMIs in the Arab countries to grow and upgrade to internationally competitive levels in order to compete effectively in the domestic market and take advantage of the opportunities afforded by both intra-regional and inter-regional market. It fosters a regional approach to SMI development with emphasis on youth and women employment generation as a stepping-stone to socio-economic growth, and regional and global integration.

The technical assistance proposed by UNIDO will focus on promoting competitiveness and diversification of national manufacturing sector along with improving regulatory framework and business environment, and reinforcing institutional capacities of technical and business support infrastructure through consolidating core and developing new business support services for national private sector SMIs. These three elements with special focus on agro-food industries, ICT sector together with an initiative for resource efficient and greener industries will form the core of the UNIDO's technical intervention.

The key feature of the proposed technical assistance is its three-step implementation which is built up in a comprehensive and articulated manner:

- i. the programme will first assess the current structure of SMI sector and employment, business environment, policy and regulatory framework and will include a benchmarking study;

- ii. secondly, support will be provided to reform the business environment and to strengthen capacities of the technical support institutions providing specific assistance to SMIs development and promotion of youth and women employment; and
- iii. finally, the technical assistance will focus an enhancement of SMIs' employment creation potential with special emphasis on priority sectors identified by each beneficiary country.

This platform will develop and deliver a range of enterprise-level services tailor-made to the needs of the SMI. The initiative will tackle the issue of SMI development in a systematic manner integrating the national and the regional perspectives and fostering the dialogue between institutions and private sector. It will provide a mechanism to promote industrial cooperation on a regional scale, assist local SMIs in developing viable projects, and upgrade the performance of services provided to SMIs. Moreover, it will promote institutional networking across the Arab countries, fostering the development of a common regional vision and sustaining the process of regional integration.

Hence, this Programme builds a regional technical assistance platform to support SMI development and jobs creation benefiting and capitalizing on UNIDO's previous experience and on-going programmes in the Arab countries such as Algeria, Egypt, Jordan, Lebanon, Morocco, Syria and Tunisia, Latin America, South and South-East Asia and other regions and countries across the globe. The proposed broad approach of the programme intervention is based on UNIDO's technical competence and experiences.

The proposed for this programme UNIDO's Broad Approach on supporting productive activities, increasing income and jobs generation potential for the manufacturing SMIs is based on the following four key modules: Strengthening supply-side capacities, Developing industrial agro-food value chains, Promoting ICT for SMI development, and Promoting green industries. The section below provides a detailed outline of each of the three proposed concepts.

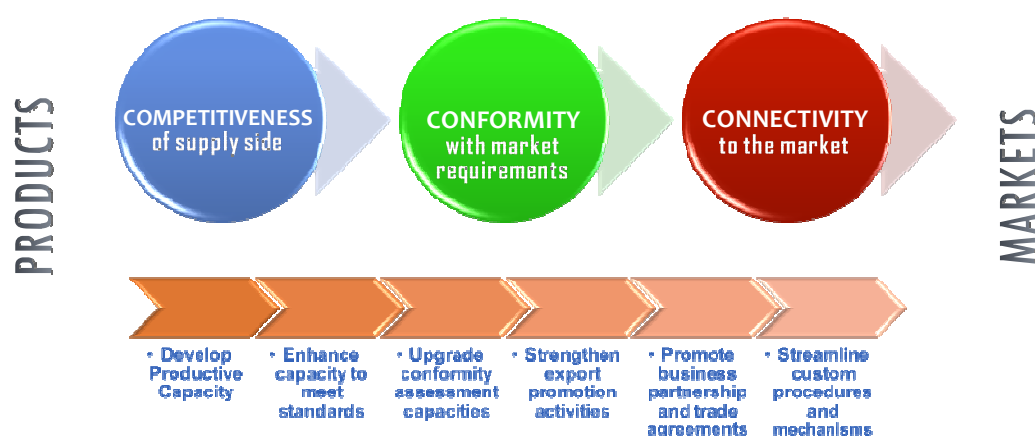
II.1.1 Strengthening supply-side capacities

The concept of Supply-Side Capacities building reflected in this Programme is based on the general notion that industries need to be able to compete, both locally and abroad, in terms of price, quality and innovation, which also implies the need to be able to follow and assimilate the development of technologies and markets. Seen within the context of the national development strategy, industries need to enhance their ability to benefit from market access by addressing supply constraints. This implies that countries/industries must have (i) marketable products to sell (*enhanced competitiveness of supply capacity*), (ii) products must meet market/client requirements (*recognized conformity with standards*) and (iii) rules for trade must be harmonized (*efficient connectivity to markets*). This is also referred to as "The Three Cs": Compete, Conform and Connect.

To meet the three C's, capacity building is typically required at three levels:

- a. regulatory and policy development (or macro) level,
- b. the business environment (or meso) level; and
- c. the enterprise (micro) level.

Figure 45. UNIDO's 3-Cs Trade Capacity Building Approach



Supportive policies that help entrepreneurs to make the best of the growing opportunities provided by globalisation are therefore crucial in the fight against poverty, including proving product conformity to relevant international standards.

As regards the enterprise level, an overall diagnosis of the market position of the manufacturing enterprise, of its financial performance, of management, organizational and process quality aspects, as well as of technical capacities pertaining to production operations, technical performance and environmental aspects, is at the basis of a supply-side development plan developed with and for the business owner(s).

Where appropriate, activities are to be conducted for groups of beneficiaries (geographical, sectoral, thematic), which will create both collective efficiencies and sow the seeds for much needed deepening of cooperation among industries, among support institutions as well as between regulatory and government bodies, support institutions and industries to address business problems and seize business opportunities.

The enterprise level support envisaged through the proposed programme also covers assistance for the implementation and monitoring of so-called 'hard' and 'soft' actions (ref. to Paragraph II.2 'Potential areas of intervention'). With respect to the 'hard' activities, the business environment, the supply-side building process will require a conducive policy and regulatory framework and specialized technical and financial support services (public and private) involving a range of specialized intermediaries. The business environment thus also requires diagnosis in order to identify constraints and opportunities for improvements. The programme is expected to be able to support, in addition to industries, specific actions aimed at improving the policy, institutional environment and technical support institutions for the selected priority products/value chains.

II.1.2 Developing industrial agro-food value chains

A value chain describes the entire range of activities undertaken to bring a product from the initial input-supply stage, through various phases of processing, to its final market destination, and it includes its disposal after use. For instance, agro-food value chains encompass activities that take place at the farm or rural level, including input supply, and continue through handling, processing, storage, packaging, and distribution. As products move successively through the various stages, transactions take place between multiple chain stakeholders, money changes hands, information is exchanged and value is progressively added. Macroeconomic conditions, policies, laws, standards, regulations and institutional support services (communications, research, innovation, finance, etc.) – which form the chain environment – are also important elements affecting the performance of value chains.

The Value Chain Development component of the UNIDO Approach offers technical cooperation and advice combined with direct interventions to build institutional support infrastructure for agro-food industries with the main purpose of improving their competitiveness, flexibility and productivity. The interventions build on commodities and the related secondary industries with emphasis on food and non-food products. Techno-economic support to pilot industries is provided, which results in smoother production flows, improved product quality, waste minimization, by-product utilization, and improved packaging.

Through the establishment of national centers of excellence in agro-processing, safety/quality control, packaging, labeling, testing standards, agro-machinery, by-products utilization, etc., support services to industries will be improved in quantity and quality, which will lead to higher productivity and efficiency, improvement in product quality with lower reject rates, higher levels of resource utilization and value addition, and reductions in post-harvest losses. As a cross-cutting service, technical cooperation is provided for developing the machinery manufacturing sector by establishing technology centers for technology transfer and appropriate repair and maintenance of basic agricultural tools and agro-processing equipment in rural areas. Thus, the value chain component impacts not only urban industries, but has a strong outreach to low-income and marginalized rural population groups.

Taking into consideration these broader relationships, UNIDO's systematic approach to value chain analysis and promotion focuses on the relevance of agro-food value chains for pro-poor growth while bearing in mind pragmatic economic parameters to ensure their sustainable development. The Organization's aim is to focus on those areas which lead to improvements in value chain performance in terms of:

- i. increasing the quantity and improving the regularity and continuity of production;
- ii. improving the quality and safety of products;
- iii. reducing the time needed to reach the customer;
- iv. minimizing transactional costs; and
- v. improving the capacity of chain actors to follow and assimilate technology and market developments.

To achieve these objectives, UNIDO's approach entails the following stages:

- Selecting and prioritizing value chains for promotion;
- Mapping value chains to obtain a clear understanding of the sequence of activities and the key actors and relationships involved in the value chain;
- Analyzing the value chain technological capacities;
- Analyzing the value chain economic performance and competitiveness;
- Formulating an upgrading strategy for the selected value chain; and
- Implementing the upgrading strategy, monitoring and impact assessment.

Thus, the UNIDO approach on the development of agro-food value chains represents a key solution to the challenges facing agro-food operators of the region searching for the productivity improvement, production expansion and access to the export markets.

II.1.3 Promoting ICT for SMI development

Information and communication technologies (ICT) have changed the world we live, work and interact in. In the context of increased regional integration and global trade liberalization, ICT are key to enhancing the manufacturing competence and competitiveness of Arab States. Although the overall impact of ICT may vary according to sectors and applications, there are unquestionably significant opportunities to improve productivity, quality and flexibility in manufacturing with regard to internal processes, logistics, customer relations, product design or traceability requirements. ICT has the potential to upgrade the performance of enterprises in every step of the business process and across all sectors.

SMIs and SMEs are the driving force of industrial development in all countries. To prosper, they need an environment that facilitates growth. Easy access to business information and ICT presents a crucial component of this process. SMIs along with other SMEs in the Arab States generally face a series of challenges when it comes to adopting ICT solutions, including limited ICT literacy, inability to integrate ICT into business processes, high costs of ICT equipment, incomplete government regulations for e-commerce, and inadequate understanding of the growing ICT related trade and customs requirements of potential markets. Moreover, ICT adoption in export industries often involves encouraging ICT adoption over an entire supply chain as enterprises are more likely to integrate ICT solutions if their peers, suppliers, and clients are adopting ICT as well. This can help increase the competitiveness of an industry as a whole, but calls equally for an integrated and an accordingly complex upgrading process.

In order to align ICT service deployments to regional integration policies and priorities, Sub-Regional ICT Promotion and Support Facilities can:

- Raise awareness of local SMIs/SMEs on the contributions of ICT solutions for increased productivity and competitiveness, with specific focus on ICT requirements for export oriented manufacturing industries,
- Identify most appropriate and contextualized ICT solutions for local manufacturing industries,

- Monitor relevant technological innovations and regional and international standards and best practices notably with regard to e-commerce, e-trade, traceability and accounting purposes,
- Pre-diagnostic and diagnostic of eligible enterprises,
- Technical assistance for the integration of ICT in enterprises, with special focus on collective interventions,
- Development of partnerships with national ICT agencies, ICT industries, academia and industry support associations,
- Development of databases with national inventories of ICT service provider,
- Facilitate linkages to local, regional and international markets,
- Provide relevant business development services.

The above-mentioned would also be conducive to a favourable investment climate. With due regard to the “horizontal” nature of ICT in the framework of industrial upgrading programmes, particular emphasis ought to be placed on a close coordination of activities with other sectoral support centres (e.g. cotton-textile, horticulture, fish related products, etc.), as well as with other relevant levels of interventions.

II.1.4 Promoting green industries

Over the past decades, rapid economic growth in the world has lifted millions of people out of poverty. But with rising population, rapid urbanization, motorization and industrialization, it has also led to increased consumption of resources and generation of waste almost beyond the limits of the planet’s ecological carrying capacity. Dramatic increases in demand for energy, water and materials have contributed to natural resource depletion, environmental degradation and higher emissions of greenhouse gases, putting at risk the social and economic gains made by countries during the past decades.

The current trajectory of growth in the world is increasingly seen as unsustainable. The coming decades will likely witness increased pressures on countries in all the regions to shift to more resource-efficient and low-carbon production processes as part of global efforts to sustain growth, conserve resources and slow down the pace of climate change. Countries and regions that successfully manage this transition will be better placed to exploit the opportunities created by the shift towards a low-carbon world economy. This has led the United Nations Environment Programme (UNEP) to launch its “Green Economy” initiative and the International Labour Organization (ILO) to call for a “Green Jobs” strategy. Complementing these approaches, UNIDO is promoting its “Green Industry Initiative”, a pattern of industrial development that is economically, environmentally and socially sustainable.

As the premier agency assisting global economies to achieve a sustainable level of industrialization, UNIDO provides technical assistance to industrialists that enable them to adopt sustainable production modes and promote green industries, while also supporting the role of the Government in facilitating direct investments in cleaner technologies. As one of UNIDO’s organization-wide strategic priority, “green

industries” intend to contribute to the much needed decoupling of resource consumption and environmental impact from economic growth, and thereby harness the opportunities arising from more productive industries, environmental awareness of consumers and new environmentally sound technologies and practices. Green Industry is a two pronged strategy to assist industries to green their operations through cleaner production and resource efficiency, and support the creation of new industries delivering environmental goods and services (i.e. recycling businesses, renewable energy companies, etc.).

The Green Industry initiative builds upon activities and achievements of past and present UNIDO activities. Since 1994, UNIDO has cooperated with UNEP to establish National Cleaner Production Centres (NCPCs). These centres provide capacity for the implementation of cleaner production and environmentally sound technologies in developing and transition countries, through in plant assessments, training, information dissemination and policy advice. The NCPC Programme was externally evaluated in 2007/2008 which confirmed success in putting Cleaner Production on the agenda, fostering implementation of in particular low and intermediate technology opportunities, training of technical staff and policy change in some countries.

Taking due consideration of the evaluation findings, UNIDO and UNEP re-designed their joint initiative into a Resource Efficient and Cleaner Production (RECP) programme for developing and transition countries. The Programme is aimed at upscaling and mainstreaming RECP methods, technologies and policies, by developing and strengthening a global network of RECP service providers, undertaking thematic projects, creating incentives through mainstreaming in policy and enterprise finance and fostering innovation in clean products and processes.

The Cleaner Production (CP) concept was first launched at the First International Advisory Seminar on Preventive Environmental Management Strategies organized by UNEP in 1990. CP is a preventive environmental strategy that can be applied to processes, products and services to prevent the generation of waste and emissions, and thereby reduce risks to humans and environment and improve the efficiency of resource use (‘eco-efficiency’).

II.2 Potential areas of intervention

The objective of the present Programme is to contribute to job creation and income generation by strengthening productive and export capacities of the domestic private sector manufacturing enterprises with focus on women and youth employment. As emphasized above, UNIDO’s approach leads not only to providing direct technical assistance to the companies but also to strengthening of institutional environment and technical support institutions, consolidation of economic data and its dissemination, and to development of specific and tailored development activities. These support activities could be of two types:

‘Soft’ or technical assistance activities: which may include training of companies’ staff, direct assistance of experts in the establishment or development of the production, sales and quality management systems, support in ISO 9001,

14000, 22000 certification, purchase of software, establishing accounting system, audit on energy management, energy saving activities, etc., and

‘Hard’ investment activities in the form of acquisition and installation of equipment.

The UNIDO Approach is based on the following services:

II.2.1 Business environment support

An environment conducive to business requires more than a narrow set of regulatory reforms: easing business registration or providing property rights, while critical, are not sufficient to foster broad development of the private sector. Other – equally or more binding – constraints hampering enterprise growth call for supplementary action in the field of entrepreneurial, technological and institutional learning. Five main areas of activity can be concerned:

- *Advisory and capacity building support to improve the overall business environment.* This is rarely offered as a stand-alone activity; it is usually part of a package of support services provided by UNIDO. The activities cover the policy, legal and regulatory dimensions of business environment reform at the cross-sectoral level, but UNIDO places particular emphasis on the improvement of the sector-specific business environment because a sub-sector focus has proved to be instrumental for the success of related industrial policy or other sector-specific initiatives.
- *Designing and implementing specific policies for SMI development.* Apart from a sound overall business environment, SMIs often need tailor-made strategies and policies for access to crucial resources such as finance and information and to encourage a geographically balanced distribution of business activities. Such strategies and policies require the adaptation of legal and/or regulatory provisions and the establishment or upgrading of SMI support institutions. UNIDO supports the creation of coherent SMI strategies linked to broader economic and social goals.
- *Public-private partnerships* are now a sine qua non of successful industrial strategy-making and implementation. UNIDO can help to set up such mechanisms at the national and local level. The presence of an “honest broker” such as UNIDO and AIDMO and their technical experts at meetings of business membership organizations (BMOs) and public institutions will often help to remove any initial reticence or distrust, create a constructive working environment and result in realistic strategies and policies to which both public and private sector institutions can contribute as equal partners.
- *Strengthening the role and capacities of BMOs.* Well-performing self-help entities of the private sector such as chambers of commerce and industry or sectoral business associations serve as providers and/or brokers of business services to their members and communicate the concerns of business to policy makers, contributing to mutually acceptable solutions. UNIDO assistance helps to bring BMO management in line with international best practices and to strengthen the institutions’ core functions. The latter may include the installation of business intelligence platforms and upgrading the capacities needed for effective participation in public-private sector dialogues.

- *Improving access to business development services (BDS).* Reflecting the international consensus that strong BDS markets are preferable to direct, subsidized - and often unsustainable - services at project level, UNIDO stimulates the provision of both cross-sectoral and sector-specific BDS by private and public institutions. This activity is often a direct result of needs assessments at sector level that identify shortcomings in sector-specific support services and institutions. The focus of the activity may be on the sub-regional rather than the national level.

II.2.2 Upgrading of technical support institutions

Upgrading of technical support institutions is a key prerequisite to improve marketing and productive capacities and competitiveness of industries. Most of manufacturing companies in the AIDMO countries suffer from considerable technology gaps mainly characterized by a lack of know-how on technical procedures and quality/safety management systems along with the absence of innovation initiatives in introducing new products and technologies. Moreover, ineffective exploitation of productive capacities and inadequacies in equipment maintenance lead to fabrication of defective goods or to the total suspension of production process.

Often overwhelmed by these technical and organizational shortages, the companies are limited in their capacities to optimize their technological process that determine their competitiveness and their place in the market. As a result, these companies are unable to produce goods that can respond to the current market needs and meet international quality standards, sanitary and safety requirements.

One of the main reasons for this appears in the weak technical skills and qualification of the technical support institutions. Their technical capacities are insufficient to satisfy the real needs of the industrial sector. R&D and training institutions, manufacturers and suppliers associations, specialized technical centers and laboratories, the controlling, auditing and certification bodies do not possess the necessary capacities to support the companies, which, in consequence, have to seek the foreign expertise that brings to the companies additional costs and thus affects their competitiveness.

It is, therefore, crucial to address capacities of technical support institutions within the present programme. The proposed approach, in particular, intends:

Step1: To assess current situation in the area of the technical support to industrial sector and priority related services. This step should identify (i) the number and list of technical support structures to be strengthened within technological upgrading activities and (ii) the nature and extent of needs in technological upgrading.

Step 2: To prepare plans for technological upgrading for each of the beneficiary structures. These plans, prepared in close cooperation with the national counterparts and Programme beneficiaries, will particularly include the first-priority 'soft' and 'hard' investments activities and appropriate action plans.

Step 3: To implement technological upgrading plans through:

‘Hard’ activities:

- Upgrading infrastructure and equipment to attain compliancy with international standards and technical requirements; and

‘Soft’ activities:

- Upgrading methodologies for operations and technological process;
- Organization of trainings in horizontal and sectoral competencies (technology, quality, safety, standards/certification, etc.);
- Direct assistance and training throughout the exploitation process.

Annex I of the document provides a tentative list of technical support institutions in the Arab countries, along with other potential beneficiaries of the Programme.

II.2.3 Strengthening the Quality Infrastructure

Taking into account of UNIDO’s experience in strengthening standards, metrology, testing, quality and conformity assessment systems in developing countries and economies in transition, AIDMO has requested UNIDO assistance to support their efforts in implementing the Arab Standardisation Strategy 2009-2013 and strengthening the Quality Infrastructure in the region, the request submitted by AIDMO on the 12th of June 2009 through the Morocco Permanent Mission in Vienna which has been presented on the 26th of June by before the 36th session of the IDB. The proposal is in line with the recommendations of the Arab round table held during the 12th General Conference of UNIDO (December 2007) to implement a regional programme for SME/SMI development and has been agreed by the Executive Council of AIDMO in his session organised in Rabat in May 2009. The Quality Infrastructure is one if the 6 major components requested by AIDMO.

Based on the discussions took place between UNIDO and AIDMO and as a result of the meeting took place between UNIDO team and AIDMO team in Rabat on the 3rd June 2009, the proposed UNIDO project will focus on the following areas only at this stage:

1. Component No. 6 related to the regional accreditation mechanism.
2. Responding to the immediate actions/requests identified by the Arab countries as part of the strategy and AIDMO needs assessment.
3. Preparatory activities to support AIDMO in the proper design of programmes for different components (1 to 6) which can be considered in a second phase of UNIDO support 3 main areas will be selected to be targeted.

UNIDO has an intensive experience in implementing similar interventions at national as well as regional levels, it enjoys partnerships with all international organisations involved in the system. The above figure explains the different partnerships and the core role of UNIDO in the process.

Figure 46. Strategic partnership for QI development



The broader objective of this proposed intervention is to support the regional efforts coordinated by AIDMO aiming at achieving regional integration, harmonization and effective coordination in the quality infrastructure ensuring compliance with international trade rules and regulations, through the establishment and or strengthening of regional support quality infrastructure for the improvement of quality, and for the delivery, along international good practice, of support services in standardization, conformity assessment and accreditation.

The specific objective is to support and strengthen the capacity of AIDMO in implementing the recently prepared Arab Strategy 2009-2013 with focus on certain components.

The UNIDO approach will follow the following main principles:

- The Arab Strategy 2009-2013 will form the main framework reference for the intervention, however, in-depth assessments (Technical feasibility) will take place prior to implementing the interventions to ensure that any intervention will be technically sound, feasible and comply with the international best practices.
- Focus will be given on the capacity building part for AIDMO, considerations will be given to ensure that AIDMO receive the needed capacity building to coordinate and implement the different interventions at regional level.
- Through its strategic partnership, UNIDO will coordinate closely with the different international organisations involved in the quality infrastructure globally such as ISO, IAF, ILAC, etc.
- UNIDO will take into consideration the ongoing UNIDO activities in the Arab countries as well as other interventions by other donors/organisations to ensure close coordination and synergy and avoid duplication and conflict.
- UNIDO will transfer its knowledge and experience gained from similar interventions and adopt the good practices and the success stories involved.

- UNIDO will utilize the existing capacities in the region through using the services of some of the existing institutions, consulting firms, technical centres and universities in the region.
- Involving, as much as possible, the private sector in the different countries in order to share their needs, proposals and recommendations.

Due to the fact that Arab countries have different levels of capacities ranging from extremely low level of quality infrastructure to moderate and slightly developed ones, UNIDO will consider possibilities for sharing the region experience and knowledge within the countries as well as the possible joint cooperation in certain areas to minimise the costs and improve the efficiency and coordination between countries.

Finally, UNIDO will study carefully the different options for regional coordination and integration and will ensure the full consensus between countries for the best possible solution; this will be achieved through using the existing consultation mechanisms available at AIDMO such as the consulting committees on accreditation and standardisation.

AIDMO's role will be crucial in ensuring the smooth implementation of the project; they are the central coordinating body between all countries and need to be aware of the UNIDO methodology from the very beginning.

II.2.4 Entrepreneurship promotion

Dynamic entrepreneurship is an essential for creating wealth, employment and income through growth-oriented micro-, small- and medium-scale industries. The entrepreneurship development service focuses on the participation of women and young people in competitive productive activities.

The service is built on two pillars:

- Entrepreneurial human resource development as the foundation for private sector development, and
- Building up competencies in public administrations for the creation of a stimulating business environment.

The activities of this support service focus on:

- *Youth entrepreneurship: start-ups and expansion.* In the past and presently, one of the major obstacles for successful entrepreneurship creation and expansion by youth is the difficulty of access to finance²⁷. This is due to them being perceived by financial institutions as high risk and weak borrowing capacity. The financial sector mostly serves wealthier, higher margin enterprises and persons with guaranteed salaries while business start-ups are perceived high risk per se are

²⁷ Despite the general availability of potential funding in the majority of Arab States, difficulties related to the access to finance in these countries may include weak borrowing capacity, insufficient financial literacy, high-risk attributable to the business start-up and expansion especially for youth and women, as well as the lack of financial and non-financial services and incentives offered by the crediting institutions and authorities which could reduce the credit risk and increase borrowing capacity towards financial institutions

rarely served. National and/or sub-regional funding mechanisms targeting youth business start-up and expansion and youth social entrepreneurship hardly exist. Therefore, it is essential to improve the financial literacy and entrepreneurial capabilities of the youth to reduce the credit risk and increase their borrowing capacity towards financial institutions. Through the “financial incubation model”, for instance, youth categorized as high-risk borrowers would receive a loan either to start up or expand their businesses.

- *Industrial culture and entrepreneurial skills development.* Improving abilities of entrepreneurs, institutions delivering relevant training courses and awareness programmes receives assistance for developing appropriate programmes and training the trainers. The focus is on cross-sectoral technical-entrepreneurial skills based on the principles of total quality management and industrial engineering.
- *Small business advisory services and non-financial services.* Advisors of business membership organizations, private sector associations and NGOs are trained to stimulate productivity improvements, business performance and collective self-help solutions of small industries as well as to improve the management of their associations. Non-financial services focus on the creation of a network of youth entrepreneurship trainers to run training modules and advisory services such as: Business environment, entrepreneurial competencies; Scanning the environment for business opportunities, savings and investment, business plan preparation; Management basics, production process, quality concepts; and Organization and management of joint projects for collective efficiency.
- *Improving the administrative and regulatory environment for business.* National and local initiatives to improve the regulatory and administrative environment for entrepreneurial activities are supported, focusing on the role of public sector bodies in facilitating the transition of manufacturing enterprises from the informal to the formal sector. Assistance includes organizing a public-private dialogue on the streamlining of business regulations and capacity building in local and national administrations for the implementation and enforcement of the streamlined regulations.
- *Gender mainstreaming in entrepreneurship development.* The aim is to empower women by increasing women’s participation in entrepreneurial activities based on the principle of equal opportunities for those with equal capabilities and interests. This is achieved through a multi-dimensional bottom-up approach promoting gender-neutral business practices and regulations as well as entrepreneurial development of women.

II.2.5 Investment promotion and industrial partnerships

Quality foreign investors bring in new skills, know-how and technology. Through supplier relationships, sub-contracting and other forms of collaboration, they enable local firms to gain access to global supply chains and international markets. The quality that they expect of local suppliers and the world-class standards they introduce encourage the learning, technology upgrading and innovation that these firms need if they are to become competitive in world markets.

Transnational companies (TNCs) are seeking to drive down costs and improve services by outsourcing non-core activities, services and production, a trend that can benefit developing countries. At the same time, however, they are continually looking for ways to rationalize their supply networks by reducing the number of suppliers they work with and switching to long-term supply contracts. And while they may now be more flexible about where they source from, they insist on an exacting level of product quality, scalability standards and delivery schedules.

Developing countries are fully aware of both the opportunities and the competitive challenges of FDI. Many have liberalized their regulatory regimes and introduced investment incentives and trade reform. But not all have been equally successful in attracting FDI or in seeing the development benefits expected from it. And even those that have succeeded have often created strong growth areas in a few locations, giving an unequal distribution of its benefits. Rapid economic growth and social progress have come to these locations but are only slowly being diffused elsewhere in the country.

Nor do all forms of FDI strengthen domestic industries and generate sustainable economic growth and social development. In many countries, for example in Sub-Saharan Africa, FDI is growing strongly in the extractive sectors (oil, gas and mining) and capital-intensive infrastructure (telecommunications, power generation, etc.), but while the former generates foreign reserves and the latter builds essential infrastructure that improves the business climate, these sectors have a poor record of forming linkages with domestic suppliers and stimulating their development. FDI that stimulates activity in the productive sectors, such as manufacturing and industrial and other services, can make a more effective contribution to a country's development.

Investment and technology promotion is one of the most efficient ways to ensure SMIs' development, acquire advanced experience and capacities and to gain access to new markets. This is especially pertinent to the SMIs in developing countries where imperfections in business environment largely affect the companies' growth. The partnership with similar companies or being a part of the global supply chain can be used as a "strategic arms" promising the quick solutions to the market access or productivity-related problems. The more the companies are homogeneous, the more relations are facilitated among them and the stronger is partnership.

After initial assessment of existing companies, the original methodology of technological and managerial upgrading will promote the volunteer partnership among the participating companies. This methodology pursues favouring development of international (including intraregional) cooperation through experience exchange between entrepreneurs in the Arab countries, European Union and international partners, conducting industrial coaching missions, etc. It is also intended to establish a network of support institutions for private sector development in order to ensure sustainable contribution to the partnership promotion.

These activities would be carried out through and by UNIDO's Investment and Technology Promotion Offices (ITPO) and the support institutions and investment promotion agencies of beneficiary countries. As seen from the below-listed activities, this module focuses on the 'soft' investments, notably on:

- scouting of investment opportunities of large, medium and small scale industries;
- providing information on available technologies and related expertise in ITPO host countries;
- design of innovative business models to promote transfer of technologies from developed to developing countries to promote technology based on UNIDO EDIP (Entrepreneurship Development and Investment Promotion) programme;
- identification of investment needs at company level;
- formulation of a project portfolio of investment opportunities;
- capacity building for responsible business partnerships and investments (this will imply capacity building both in developed and developing countries based on UNIDO products and training tool kit Responsible Entrepreneurship Assistance Programme, REAP);
- providing entrepreneurial, technical, quality and market related training to selected to-be or existing entrepreneurs through the Enterprise Development and Investment Promotion (EDIP) Programme and preparation of business plans;
- assessment of business plans and providing advice on financial performance and investment strategies of the selected companies through COMFAR and other ITPO methodological tools;
- assistance to selected companies in the identification and access to financial mechanisms such as credit lines, mutual guarantee schemes, private equity and others available locally and abroad;
- assistance on investment promotion of selected investment opportunities to international markets through the UNIDO ITPO network as well as through the participation in specialized fairs, B2B, round-tables and during the negotiations of industrial cooperation agreements with foreign partners;
- advisory services to prepare investment programme to upscale technical cooperation inputs and sustainability.
- building industrial partnerships to facilitate access to financial and technological resources and markets.

II.2.6 EDIP Programme

Facilitating the emergence of new enterprises in manufacturing as well as growth or expansion of existing SMIs are the objectives of the Enterprise Development and Investment Promotion (EDIP) Programme of UNIDO. The thrust of the programme is on promoting domestic investments and facilitating international partnerships for enterprise creation and enterprise growth. The programme triggers entrepreneurial vigour as well as provides a variety of investment and technology promotion support (marketing, technology selection and tie-ups, business plan preparation, access to finance, project implementation support and continuous mentoring services to potential and existing entrepreneurs) in order to realize enterprise creation and growth.

The EDIP programme is based upon the conceptual underpinning that development of a strong investor base is as important as investment promotion services and vice versa. The expected results of the programme are emerging industries producing

goods and services for trade, providing employment and income for people and thus contributing to poverty alleviation and to overall economic growth. The programme also puts due emphasis on the operational environment in beneficiary states and the special needs of local entrepreneurs and potential investors. The programme calls for:

- availability of trained human resources to act as trainers and advisors/counselors,
- helping and guiding potential entrepreneurs,
- networking with support institutions involved in facilitating SMI development,
- capacity building in providing sustainability to the EDIP programme.

The EDIP programme is predominantly oriented towards domestic investment promotion, but is intrinsically linked to FDI promotion due to the need for foreign partnerships (technology, market access, etc.) inherent in domestic investments. The Enterprise Development and Investment Promotion Programme has two components:

- (1) Enterprise Creation and
- (2) Enterprise Growth.

It is overarched by a third component dealing with institutional capacity building and building strong networks to ensure sustainability of the programme. Implementation of the EDIP Programme is based mainly on technical assistance ('soft' activities), but also includes purchase and installation of equipment.

II.2.7 Business partnerships and ICT

Business partnerships between SMIs (and their networks) and larger companies (often transnational corporations - TNCs) help to increase SMIs access to skills, knowledge, technology and resources to face global competition, and facilitate the integration of SMIs in global production networks. ICT knowledge and services have become indispensable for business linkages, facilitating access to crucial information and coordination with global buyers.

Drawing on the expertise, know-how and resources of major private-sector companies, the service is covering the following activities:

- *Development of public-private partnerships with emphasis on ICT and innovative poverty-reducing including business models.* This includes technical cooperation for the establishment of (rural) business information centres (BICs - serving as a central access point for ICT services for SMIs, which enables more vulnerable groups to be integrated in the modern economy), the development of environmentally friendly computer refurbishment centres of excellence, the promotion of local software industries and youth entrepreneurship development programmes based on ICT. In addition, this activity covers dissemination of best practices, development of methodologies, and transfer of skill and innovative business models.
- *Support to the establishment of linkages between large corporations and small suppliers, to facilitate their integration into national and global value chains.* UNIDO has established strategic business partnerships with transnational corporations (TNCs - manufacturers and retailers) to form effective linkages and broader partnerships for development.

Related activities encompass the development of supplier capacities to comply with value-chain specific standards and the development of capacities of SMI support institutions, such as industry associations, for initiating business partnerships.

Information and Communication Technologies (ICT) have become crucial engines for economic growth and productivity and play a critical role in sustainable development and poverty eradication. Modern ICT is presents a crucial tool to acquire, store, process and disseminate information and to generate further knowledge from information. Moreover, the innovative use of ICT can contribute significantly to the enhancement of production efficiency. However, the existence of the ‘digital divide’ in developing countries (DCs) is a crucial hurdle to overcome. Addressing ICT related needs of SMIs and SMEs offers several unprecedented and significant opportunities, including:

1. *Fostering regional integration:* dissemination of common standards and interoperable solutions in areas such as e-trade, e-customs and accounting.
2. *Exploiting economies of scale:* addressing ICT needs of a large constituency allows reducing costs per intervention and increases outreach as well as effectiveness with regard to diagnostic and upgrading processes.
3. *Facilitating the development of integrated ICT service package for industries:* the programme addresses ICT as part of an overall upgrading approach, hence integrates ICT into optimized business processes.
4. *Engaging multinational enterprises (MNEs)* as participants and investors and form effective linkages to overcome the ‘digital divide’.
5. *Contributing to further developing local IT service industries,* notably as executors of enterprise upgrading processes.

As part of its overall mandate, UNIDO technical assistance focuses on building and strengthening local capacities through the use of ICT and promotes ICT as an industrial development enabler for creating dynamic bottom-up processes to enhance productivity and competitiveness as well as accelerate technological innovation. Further, UNIDO is engaged in public-private partnerships to promote the transfer of knowledge and expertise of leading global IT corporations to SMEs in developing countries. In this context UNIDO has launched partnership programmes with Microsoft and Hewlett Packard in Africa and the Middle East to harness ICT and relevant business services for rural SMIs and SMEs, thereby promoting their productivity for increased competitiveness, and enhancing their industrial innovation and employment generation capacities.

Thus, UNIDO’s core ICT programmes are:

Business Information Centres (BIC) Programme

BICs provide business advisory services, information access and training to entrepreneurs, SMIs and SMEs. UNIDO established the BIC Programme as an impact-oriented, pro-poor initiative that caters to the needs of rural entrepreneurs. It builds on ICT and business development services as a tool to enhance the productive capacity and competitiveness of SMEs, particularly in rural areas where access to business information is a challenge. The BICs provide ICT-based information,

training and Internet access to SMEs on a demand-driven basis. Other major benefits for rural entrepreneurs are ICT support, entrepreneurial advice and unprecedented access to new markets, technologies and services. The BIC model incorporates into its service portfolio other UNIDO methodologies and programmes relevant to entrepreneurship development, such as the preparation of business plans including project preparation and appraisal (COMFAR). In recognition of its achievements, the BIC programme in Uganda received the “Africa Investor Award 2007” in the category ‘Best SME Development Initiative’.

Refurbished Computer and Electronic Waste Programme

In 2008, within the framework of its partnership with Microsoft, UNIDO launched the computer refurbishment programme which offers affordable quality computers to consumers at the bottom of the economic pyramid. The main goal of the refurbished programme is to provide affordable technology solutions for rural entrepreneurs, create domestic job opportunities and enhance ICT skills. The programme also includes responsible take-back solutions of hardware at the end of its life-cycle. In line with UNIDO’s ‘green strategy’, the project contains a full life-cycle solution and takes care of the electronic e-waste in an environmentally safe way. Thus, the project harnesses ICT to generate wealth in a manner that is socially and environmentally responsible and sustainable.

Local software initiative

UNIDO and Microsoft have launched the local software industry initiative that provides opportunities for ICT graduates to be employed in the information economies, as well as to spur innovative software solutions in local languages tailored to the local needs. Stimulated local software industry can bring new opportunities for innovation, business process outsourcing services, and industrial development. To this end, in 2010 it is planned to establish the first local software development centre in East Africa in Uganda to act as a centre of excellence and incubator involving academia, industrial associations, the private sector and relevant public institutions.

Youth entrepreneurship and IT training programme

In May 2008, UNIDO and Hewlett-Packard (HP) launched HP’s Graduate Entrepreneurship Training through IT (GET-IT) programme in Africa and the Middle East. The GET-IT training programme provides young un- or under-employed people aged 16 to 25 the basics of entrepreneurship with practical hands-on experience in the use of computer technology. The training programme empowers young people to establish and run their own business or to get employed. The GET-IT courses equip them with IT solutions for daily business challenges in the areas of management and operations, finance, marketing, communication and technology management. The GET-IT training is made available through local partner organizations which receive a grant package comprising a classroom set of HP technology, the training curriculum, materials needed to deliver the courses in local languages and a cash donation. So far, the UNIDO-HP partnership programme has set up 33 GET-IT centres in 10 countries, certified 143 GET-IT trainers and trained more than 15,000 students through face-to-face training in Africa and the Middle East. The 10 participating countries include Algeria, Egypt, Kenya, Morocco, Nigeria, Saudi Arabia, South Africa, Tunisia, Uganda and United Arab Emirates. During the implementation year 2010/11, the

network will be further strengthened in Africa and the Middle East and expanded to Asia and Latin America to further enhance the outreach of the collaboration to a global partnership programme.

II.2.8 Promotion of technology and innovation

Sustained economic growth is absolutely essential for reducing poverty. However, sustenance requires that growth be driven by technological change, which, in turn, requires investment in innovative activities such as imitation, adoption and adaptation, or even the creation of new products and processes. Ideas and technological knowledge can, thus, be created within the domestic economy and/or be imported from outside the country.

Common means of transferring technology include engagement in international trade, foreign direct investment and other activities that require human interaction. The most vibrant sector for technological change is manufacturing, which explains why countries' aggregate productivity growth attains its highest levels during periods of industrialization. As has been shown by UNIDO research, it also explains why some countries are rich, while most are still trying to catch up or are even trapped in poverty.

Having stated the centrality of technology and innovation in manufacturing for growth and poverty reduction, one would expect that countries devote a large share of its resources to monitoring its own performance. However, this does not seem to be the case, but this is not because they do not want to. In fact, most developing countries find it difficult to gauge and understand their own performance, especially relative to competing industries. It follows that awareness, diagnosing problems, establishing infrastructure and institutions in support of innovation and that drive technological progress, and designing appropriate policies for creating incentives and nurturing technological development may falter as well.

This program component aims to address all steps from knowing a sector's or country's own performance to policy making for innovation and productivity growth by providing the following services:

- Training on productivity, technology and innovation measurement, conceptual understanding, country/regional performance comparisons, technology transfer/acquisition and policy implications.
- Survey of SMIs in agro-industry, ICT and green industries in AIDMO countries to obtain a picture of technology acquisition, kinds of technologies acquired and the demands of firms in terms of incentives and loosening of constraints.
- Examination of the legislative framework, incentives and training, as well as comparison with success cases.
- Linking of industry to Government and academia by way of innovation systems.
- Linking industries to the UNCHAIN twinning program as well as to South-South cooperation initiatives, such as UNIDO International Technology

Centres, with an aim to identify appropriate technologies, support complete technology transfer and set up pilot programs.

- Examination of the existing legislative framework, incentives and training, as well as comparison with success cases.
- Training of relevant innovation and technology institutions on best-practice product and process innovation, including their adaptation to different contexts and conditions.
- Identification of technology and innovation institutions in industrialized developing and developed countries with a view to improve and create an innovation-conducive infrastructure for product and process innovation.
- Development, adoption, implementation and evaluation of action-plans pertaining to the above activities.

II.2.9 Promoting clusters and network development

This support service provides technical cooperation in the formulation and implementation of cluster development projects. These have a strong inclusive nature. It also promotes regional or national policies for cluster development based on the lessons learned at the micro level, to facilitate the replication of cluster initiatives through capacity building in meso-level institutions and reforms of incentive systems at the meso- and macro-levels.

The following activities are undertaken as part of this service:

- *Cluster mapping* to create a database of existing clusters in a given region or country;
- *Awareness raising initiatives* to sensitize promoters of cluster development;
- *Policy advice* for policy makers at the national and at the local level;
- *Skill development* for policy makers, project managers and policy advisors involved in cluster development. Training is not limited to the beneficiary countries, but also takes place at the regional and global level; courses last from a few days to several months;
- *Technical cooperation with pilot clusters* which demonstrates the practical benefits of the approach and facilitates the dissemination of good practices. Technical cooperation includes capacity building for cluster firms and local institutions in areas such as marketing, technological upgrading, skills development, BDS, etc.; brokering to increase firms' access to service providers and link them to business partners; and stimulating interaction among firms through dialogue, trust building, information sharing and mutual learning;
- *Study tours* exposing participating firms and institutions to the organizational structures, policies, institutional arrangements and technologies adopted by one or more dynamic clusters;
- Development of horizontal and vertical *networks* and export consortia within clusters;

- *Cluster twinning* initiatives, including business-to-business networks, inter-institutional partnerships and alliances between cluster associations;
- *Monitoring and evaluation* of networks and cluster development programmes. This can have different levels of intensity, ranging from the appointment of a full time cluster development advisor, to regular monitoring missions by UNIDO experts;
- Training and support for the implementation of *corporate social responsibility* practices within clusters.

II.2.10 Supporting informal sector SMIs

As depicted in Paragraph I.11, an important part of industrial sector in the non-GCC is dominated by the small- and medium-size industries operating mostly in informal sector, which is seen as a product of rational behaviour of entrepreneurs that desire to escape formal regulations. Information on these companies is thus rare and nearly absent although the sector represents a great interest as a base for the socio-economic development of the region.

In order to overcome the constraints of this sector and to take advantage of its opportunities, the current Programme intends to assist the companies of informal sector as well as to undertake various activities (awareness raising, technical assistance and development programmes) to involve and integrate the local companies into the formal economic environment.

These actions will include, most notably:

- Undertaking studies of the informal sector in each Arab country where such a study has not been carried out in the last five years;
- Awareness raising among informal sector SMIs on the benefits of joining the formal sector (access to financing, security, visibility, etc.);
- Industrial coaching for groups of craftsmen;
- Modernizing the methodologies of the products design to ensure conformity with the modern hygiene and safety standards;
- Improving conditioning and packaging of production to facilitate its preservation and sales;
- Providing premises for companies and purchase of small equipment;
- Technical assistance in searching and acquisition of modern equipment more adapted to the local conditions and of better performance;
- Assistance in the field of manufacturing methods and in development of the new products;
- Providing basic accounting and technical trainings;
- Assistance on formulation of the requests for funding;
- Assistance in establishing the labour unions and/or associations of suppliers and retailers to facilitate access to funding and to improve availability of the raw materials.

II.2.11 National Cleaner Production Centers

The objective of the NCPC Programme is to increase the competitiveness and productive capacity of industries and, particularly small- and medium-size productive units, through the implementation of the CP concept as well as via application, adaptation and diffusion of Environmentally Sound Technologies (ESTs).

A network of NCPCs currently operational in more than 40 countries in Africa, Asia, Latin America and Eastern Europe have provided valuable contributions to the promotion of more resource-efficient and environmentally-sound industrial production processes through diverse services, notably:

- *Awareness-Raising*: Promoting the concept of CP and its benefits to business community (industrialists, industrial associations, consultants, government, the financial institutions, institutes of higher education, NGOs, etc.);
- *Information Dissemination*: Providing relevant information on CP and related topics to companies, governments and other interested parties;
- *Training*: Building CP capacity, primarily in industry, but also in industry associations, government, research institutes, financial institutions, universities and consultants;
- *In-plant demonstrations* form an important element of technical training and awareness raising, showing successful CP applications in different industries;
- *Technical Assistance*: Assisting industries to identify and implement CP solutions and support them with implementation of Environmental Management Systems (EMS, including ISO 14001) as well as other CP-related approaches;
- *CP Technology Investments*: Creating capacity for transferring CP technologies and promoting CP investments and financing thereof in particular in SMIs; and
- *Policy Advice*: Assisting policy-makers to develop and implement policies, which promote voluntary engagement of industries on environmental performance improvements through implementation of CP programmes.

Besides the significant results achieved at the countries' level, an ***International NCPC Programme*** supports the establishment of several regional and international knowledge networks rich in acquired technical information and expertise on possible CP concept application in various industries. The recent UNIDO/UNEP joint evaluation uncovered significant experience and expertise of NCPCs' activities and confirmed that progress had been made in putting CP on the agenda of the public and private sectors, policy making authorities, academia and training programmes for technical staff with particular accent on the implementation of low and intermediate technology options.

Resource Efficient and Cleaner Production (RECP) is the continuous application of an integrated preventive environmental strategy to processes, products and services to increase efficiency and reduce risks to humans and the environment. It specifically works to advance the three dimensions of sustainable development in an integrated manner, by catalyzing:

- *Production Efficiency* through optimization of the productive use of natural resources (materials, energy and water) by industries and other organizations;
- *Environmental Management*; through minimization of the impact on environment and nature, by preventing the generation of waste and emissions and improving the use of chemicals in industries and other organizations; and
- *Safe and Responsible Production* through minimization of risks to people and communities from industries and other organizations and supporting their own development.”

RECP is in principle applied at the enterprise level to reduce the intensities of natural resource use and waste and emission generation per unit of industrial output. A reduced level of waste and emission generation remains at enterprise-level after implementation of RECP. The geographic proximity of comparable enterprises in industrial clusters, offers a further specific opportunity for collective treatment of solid wastes and effluents, including where appropriate recovery of valuable by-products, materials recycling, energy recovery, etc. In the present project, RECP will be extended to cover environmentally sound management of remaining solid wastes and emissions, through collective environmental facilities/infrastructure.

The objective of *the Global UNIDO-UNEP RECP* Programme is to improve resource productivity and environmental performance of businesses and other organizations and thereby contribute to the promotion of sustainable industrial development and Sustainable Consumption and Production (SCP) in the participating countries. The Programme includes four intermediate outcome categories each of which contribute towards the overarching outcome, both individually as well as synergistically. These are:

1. *RECP Service Delivery Network*: RECP services delivery capacity enhanced, through NCPCs/NCPPs and other RECP service delivery mechanisms, leading to effective networking and peer learning amongst a network of competent nationally-directed initiatives that deliver quality and value-adding RECP services which respond to the needs of industries and other organizations;
2. *Thematic RECP Applications*: Implementation of RECP by businesses and other organizations with verified resource use, environmental, economic and other societal benefits;
3. *RECP Incentives*: Mainstreaming of RECP in relevant government policy, regulations and enterprise finance, leading to an effective enabling environment for businesses to implement RECP; and
4. *Innovation Capacity*: Strengthening of national capacities for implementation of ESTs and sustainable product developments.

Since 1994, UNIDO and UNEP have supported the establishment and operation of 4 NCPCs in the Arab World. The existing centres in Egypt, Lebanon, Morocco, and Tunisia have been successful in RECP implementation in selected companies. However, the CP activities have not yet reached the national scale.

Figure 47. Location of existing NCPCs (status December 2008)



Furthermore, the UNIDO-UNEP CP Programme has made an important contribution to the development of the international CP community by bringing together experts on CP from all over the world and by facilitating multilateral experience exchange. The technical part of the Programme was mainly provided by qualified institutions operating in different fields of CP from Austria, Czech Republic, Denmark, Netherlands, Norway, Slovakia, and Switzerland.

SECTION III: OBJECTIVES, COMPONENTS AND EXPECTED OUTCOMES OF THE PROGRAMME

III.1 Global objective

The global objective of the proposed programme is to contribute to the socio-economic growth, poverty reduction and regional economic and trade integration through enhancing regional and national capacities for employment creation, value-added generation, economic diversification and export promotion, and development of priority industrial sectors.

In particular, the Programme will help domestic manufacturing small and medium enterprises (referred to here as small and medium industries (SMIs) grow and upgrade to internationally competitive levels in order to compete effectively in the domestic and intra-Arab regional markets and take advantage of the opportunities afforded by the international trade liberalization and global economic integration as well as of development opportunities offered by the Arab and Islamic institutions.

III.2 Specific objectives

Under this global development framework and along with the Resolution on Industrial Development adopted by the Arab Economic Summit (Kuwait, 2009), and taking into account the areas of intervention identified by AIDMO as priority in the development of SMIs and private sector, the proposed Programme will contribute to strengthening of supply-side and trade capacities of the private sector SMIs and promotion of the youth and women employment by addressing some of the existing constraints to the private sector's growth, including SMI's access to technologies, innovation, FDI, financial and quality services, business information and environment, and regulatory framework favourable for expanding private sector productive and trade activities. Accordingly, the programme proposal will pursue the following specific objectives:

- i. To render macroeconomic, institutional and regulatory framework favourable and conducive to the development and improvement of competitiveness of the domestic small and medium-size producers;
- ii. To establish/strengthen capacities of the national and regional technical support and business advisory infrastructure with special focus on SMI creation and development;
- iii. To strengthen the quality infrastructure in the Arab world through enhancing the capacities of AIDMO in implementing the Arab Standardization Strategy 2009-2013 with focus on certain components.
- iv. To develop and improve productivity and competitiveness of the local manufacturing enterprises through enhancing investment, export and employment opportunities of selected private sector enterprises operating along the pilot priority areas (agro-food value chains, ICT and green industries);
- v. To facilitate scientific, technical and business transfer of modern technologies and product innovation practices and their industrial application in the Arab states, and to promote exchange, collaboration and partnerships in this area with emerging and developed industrialized countries.

III.3 International development goals

Through its general and specific objectives the proposed current programme contributes to the implementation of the following Millennium Development Goals:

- MDG 1: Poverty eradication;
- MDG 3: Promote gender equality and empower women;
- MDG 7: Ensure environmental sustainability; and
- MDG 8: Global partnerships for development.

The current programme addresses the following UNIDO thematic areas: Poverty Reduction through Productive Activities (PRP), Trade Capacity Building (TCB) and Energy and Environment (ENE). The UNIDO result-based-management (RBM) codes identified as operational for this programme are:

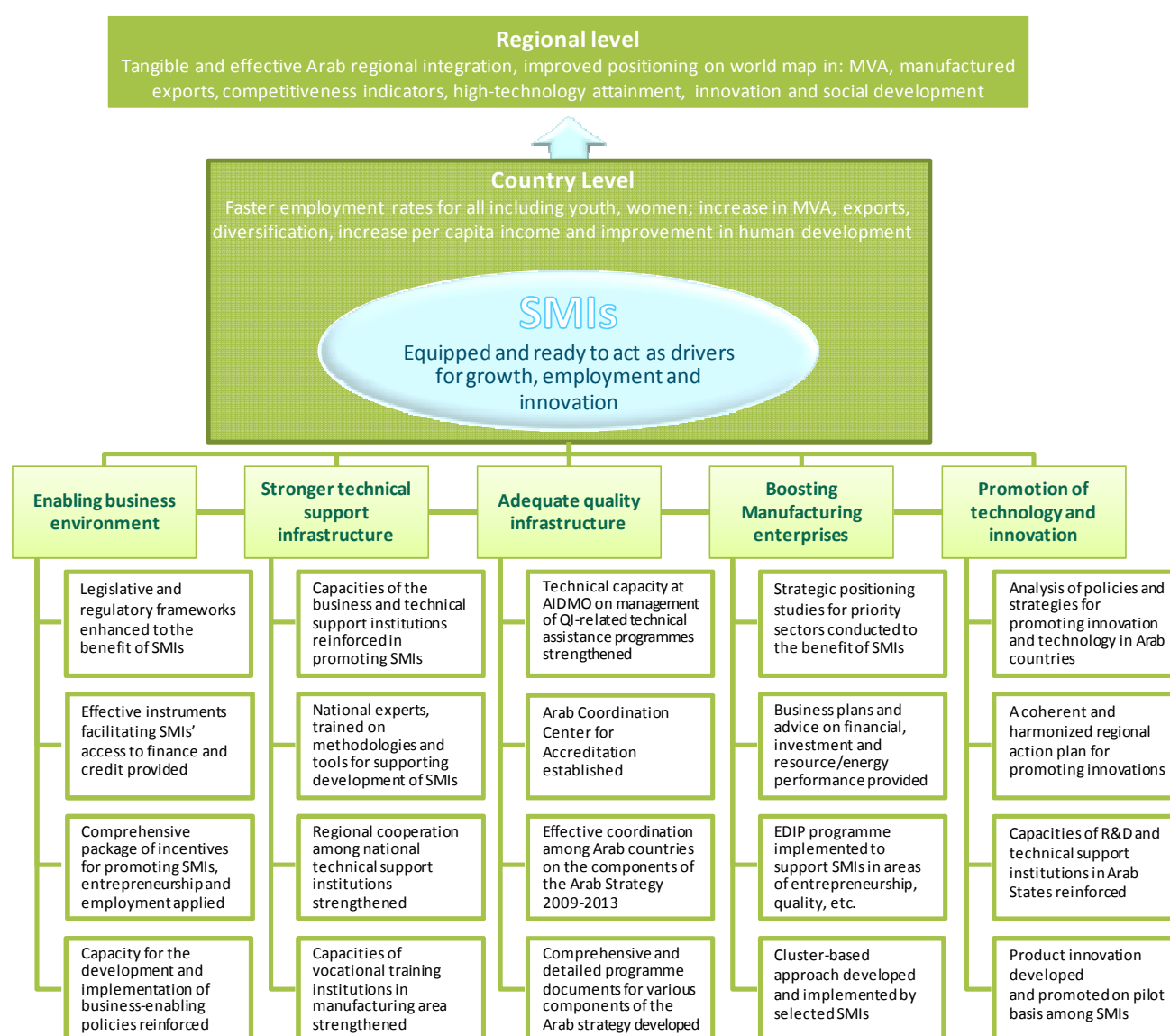
RBM codes (2010-2011)	Description operational RBM codes
DC12	Industrial strategy and business environment
DC13	Investment and technology promotion
DC14	SME cluster and agro-value chain development
DC15	Rural, women and youth entrepreneurship development
DD12	Competitive productive capacities for international trade
DD13	Quality and compliance infrastructure
DE12	Resource-efficient and low-carbon industrial production
DF21	Partnership with IFI and the private sector
DF22	South-South cooperation
DF23	Least developed countries
DF30	Regional programmes and country-level and regional coherence

III.4 Analysis of objectives

Analysis of objectives schematically presented below has been conducted on the basis of the information previously gained for the development of the problem tree (see sub-section I.14) in close consultations with key stakeholders and main groups of beneficiaries of the programme.

The presented hierarchy of objectives constitutes a summary of the proposed future situation as a result of the current Programme implementation. Similarly to the problem tree, the objective analysis or “tree of solutions” comprises simplified but consistent actions necessary to achieve the above-mentioned five specific objectives of the Programme. In addition, it includes the means by which the indicative overall objective of accelerating economic growth and poverty reduction in the region can be achieved.

Figure 48. Tree of solutions



The Programme's Logical Framework Analysis (presented in Annex II) and an overview of the programme outcomes and activities (Annex IV) have been prepared on the basis of the key problems and their expected solutions which have been clearly identified by the respective hierarchical analysis.

III.5 Programme beneficiaries

The proposed technical assistance will have two levels of beneficiaries:

- On the one hand, it targets domestic private sector SMIs operating in the three selected sectors with the comprehensive objective of providing effective instruments to grow and expand trade in a regional context and to generate jobs with special focus on youth and women employment.

- At the institutional level, it aims at supporting local and regional agencies, quality and technical support infrastructure and financial institutions dealing with SMIs of the three selected sectors and employment creation, so as to enable them to provide better services to local SMIs and particularly to attract foreign investment and technology. A list of potential beneficiaries is presented in Annex I.

III.6 Components and expected outcomes

The proposed programme will have the following five integrated components with specific focus on the agro-food value chains, ICT and green industries:

<i>Component I: Enabling business environment</i>
Reform of the institutional framework, the business environment and financial instruments related to the development of small- and medium-size manufacturing enterprises.
<i>Component II: Technical and advisory support infrastructure</i>
Strengthen capacities and capabilities of technical and advisory support institutions providing assistance to SMI development, job creation and investment promotion in Arab States.
<i>Component III: Strengthening quality infrastructure</i>
Strengthen the quality infrastructure in the Arab world through enhancing AIDMO's capacities in coordinating the regional implementation of the Arab Standardization Strategy 2009-2013 and respond to the immediate needs identified by the Member States
<i>Component IV: Boosting industrial enterprises</i>
Support the process of SMI development, investment promotion and enhance productive and trade capacities of the manufacturing enterprises operating in agro-food value chains, ICT and green industries of the Arab States.
<i>Component V: Promotion of technology and innovation</i>
Increase the absorptive capacity of SMIs for technology and innovation, reduce the constraints they face on technology supply internally and externally, and facilitate transfer of industrial technologies and best product innovation practices to the private sector SMIs operating in agro-food value chains, ICT sector and green industries.

The proposal will build on UNIDO's programmes implemented over the years in the region, integrating their different components so as to conduct a thorough assessment of the current business situation and industrial trends in the region, and base thereupon, to address in a comprehensive and articulated manner most of the existing

constraints to SMI growth at the macro-economic, business environment-related, and direct enterprise-oriented levels. The programme will ultimately aim at improving SMIs' access to technologies and product innovation practices, financial services and information, and at contributing to the building of a regional pro-private business/regulatory framework. The programme will also encourage intraregional cooperation in the concerned areas.

The following programme intervention framework takes into account the results and recommendations of data surveys, studies, information reports, assessment and project evaluation studies previously conducted by AIDMO in the Arab region and by UNIDO in the North-African, Middle-East and the Gulf countries as well as in the South European region.

The below-listed outcomes will be measured through the achievement of the outcomes, each of which has a set of contributing activities that will be planned, implemented, monitored and reported jointly by the programme's major stakeholders.

Component I: Enabling Business Environment	
Reform of the institutional framework, the business environment and financial instruments related to the development of small- and medium-size manufacturing enterprises	
This component aims to provide assistance to the Arab states in reforming and harmonizing the institutional and regulatory framework, business environment, and financial instruments related to SMI development with emphasis on women and youth employment in the beneficiary region. Assistance will also include the facilitation of experience exchange and transfer of ideas between the beneficiary countries as well as with other developed and developing countries of the world.	
Immediate objective	Render institutional, financial and regulatory frameworks favourable and conducive to the development and improvement of competitiveness of the domestic SMIs and their ability to create jobs
Problems to be solved	➤ Weaknesses in the business environment, regulatory and institutional frameworks governing the creation, operation, development and sustainability of SMIs, resulting in poor performance of the national productive sector; ➤ Shortages in availability of finance (amounts, duration, and variety of instruments) for SMI needs at their different stages of development particularly entrepreneurial stage and start-ups, and particularly for the cases of youth and women. ➤ Insufficient and or inappropriate incentives for promoting entrepreneurship, employment and competitive advantage in priority manufacturing areas; ➤ Absence of holistic regional development approach for SMI promotion and employment creation for youth and women; ➤ Insufficient human and technical resources for the development and implementation of the above approaches/policies.
Expected outcomes	
Outcome I.1	Specific constraints on SMIs in the present institutional, regulatory, business and financial frameworks identified in the areas of SMI creation, operation, innovation, export promotion, green orientation, and employment of youth and women
Outcome I.2	Action plans developed for upgrading and improving the present frameworks to the benefit of SMIs in the areas and sectors specified in Outcome I.1
Outcome I.3	A handbook entitled “Arab SMIs Policy Framework” including all actual policies/incentives common to each sub-group and specificities of individual countries plus new improved policies proposed by UNIDO
Outcome I.4	The initiative undertaken by UNIDO to create a new “Arab SMI Enhancer Indicator” (ASEI) in order to rank sub-groups and individual countries as per implementation status of needed reforms listed in handbook. Indicators to be measured by yearly and promoted worldwide
Outcome I.5	Modules for improved financing packages for SMIs at their different stages of development prepared and tested

Component II: Technical and Advisory Support Infrastructure	
Strengthen capacities and capabilities of technical and advisory support institutions providing assistance to SMI development, job creation and investment promotion in Arab States	
This component aims to strengthen the national capacity and capability of public and private technical support institutions with focus on SMIs especially those active in this Programme's priority sectors. It also intends to accumulate regional technical expertise on all aspects of SMIs development, investment promotion, employment generation, and to build up a vocational training infrastructure.	
Immediate objective	Strengthen capacities of technical and advisory support institutions providing assistance to SMIs at their different stages of development (creation, expansion, innovation, and export); as well as the capacities of employment and vocational training institutions especially the ones specialized in employment of youth and women.
Problems to be solved	➤ Observed gaps in marketing and business information capacities, to support the growth of SMI business sector; ➤ Lack/insufficient capacities and capabilities of specialized technical support institutions to provide technical/business assistance to SMIs; ➤ Weak regional cooperation and harmonisation of technical support institutions and activities across the business support network; ➤ Inadequate technical and professional vocational training support from related public and private sector institutions; ➤ Weak national and regional expertise in provision of business advisory and market information services to manufacturing and exporting firms.
Expected outcomes	
Outcome II.1	A handbook entitled “Arab SMIs Supporting Institutions” including a listing of all existing technical and advisory support institutions at the country, sub-group and regional levels along with types of support and eligibility criteria
Outcome II.2	Diagnostic studies conducted and action plans developed for upgrading selected technical, advisory, employment and vocational training support institutions (4 institutions per country; on the basis of Outcome II.1)
Outcome II.3	Capacities and capabilities of selected technical and advisory support institutions reinforced through training, study tours, software, small equipment, documentation, etc. (3 institutions per country; on the basis of outcomes II.1 and II.2)
Outcome II.4	Capacity of selected employment and vocational training centers operating in agro-food value chains, ICT sector and green industries strengthened (one center per country; on the basis of relevant parts in outcomes II.1 and II.2)
Outcome II.5	Training provided for 800 national experts, trainers, engineers and technicians plus special training for 200 regional and sub-regional experts (50 experts per sub- group (total 150) and 50 regional experts) ²⁸
Outcome II.6	Assistance provided in the development and creation of pilot incubators in the beneficiary countries (one per beneficiary country)

²⁸ Training to be conducted on approaches and methodologies in the project formulation and appraisal, development and creations of SMIs, entrepreneurship promotion, IT communication and e-learning, all with focus on women and youth employment in agro-industries, ICT and green industries (on the basis of Outcome II.1, II.2)

Component III: Strengthening Quality Infrastructure	
Strengthen the quality infrastructure in the Arab world through enhancing AIDMO's capacities in coordinating the regional implementation of the Arab Standardization Strategy 2009-2013 and respond to the immediate needs identified by the Member States	
This component intends to support the regional efforts coordinated by AIDMO aiming at achieving regional integration, harmonization and effective coordination in the field of quality infrastructure ensuring compliance with international trade rules and regulations, through the establishment and or strengthening of regional support quality infrastructure for the improvement of quality, and for the delivery, along international good practice, of support services in standardization, conformity assessment and accreditation.	
Immediate objective	Strengthen the quality infrastructure in the Arab world through supporting and strengthening the capacity of AIDMO in implementing the recently prepared Arab Strategy 2009-2013 with focus on certain components
Problems to be solved	➤ Limited specific technical expertise in quality infrastructure (standardisation, accreditation and metrology); ➤ Weak coordination setup and mechanisms for regional accreditation resulting in wasting resources at country and regional levels; ➤ Limited opportunity for the Member States to make use of the accreditation services provided by other developed countries in the region; ➤ Apart from the generic Arab Standardisation Strategy, there is no detailed and comprehensive program documents in place for the different components of the Quality Infrastructure; ➤ Lack of up-to-date data and information on the status of quality infrastructure in different Arab countries.
Expected outcomes	
Outcome III.1	Critical and technical review conducted to validate the Arab Standardization Strategy 2009-2013 and to ensure its harmonization and compatibility with international standards and best practices
Outcome III.2	Situation analysis survey on all AIDMO Member States conducted to map the quality infrastructure status and to indentify its needs in both 'soft' and 'hard' interventions at country and regional levels
Outcome III.3	Series of 'soft' technical interventions at regional level to respond to the needs identified by AIDMO members and those identified in the situation analysis as common and immediate interventions carried out (based on Outcome III.1)
Outcome III.4	Three full-fledged programmes for three main components of the strategy formulated and support to AIDMO in raising necessary funds for its implementation provided
Outcome III.5	Technical capacities of AIDMO in coordinating and managing the regional implementation of the strategy components with its members reinforced
Outcome III.6	Detailed situation assessment conducted and the existing AIDMO survey on the regional accreditation status and countries mapping based on their accreditation capacities and status updated (based on Outcome III.1)

Expected outcomes	
Outcome III.7	Consultation roundtables supported and coordinated with the members of AIDMO and consensus and agreement on the best possible operational model and structure for the Arab Coordination Center for Accreditation achieved
Outcome III.8	Arab Coordination Center for Accreditation at AIDMO established and its technical and human capacities strengthened to be able to coordinate the regional accreditation setup with all members; its recognition at regional and international levels supported (based on outcomes III.1 and III.6)
Outcome III.9	Selected technical interventions implemented within the region to coordinate and support the regional accreditation efforts within the countries (the interventions will be defined based on the outcomes of the mapping exercise of the region; based on Outcome III.1)

Component IV: Boosting Industrial Enterprises	
Support the process of SMI development, investment promotion and enhance productive and trade capacities of the manufacturing enterprises operating in agro-food value chains, ICT and green industries of the Arab States	
This component covers activities on enhancing investment, export and employment opportunities of selected private sector manufacturing enterprises operating along the priority value chains (agro-food value chains, ICT sector and green industries). The companies will benefit, inter alia, from the UNIDO Enterprise Development and Investment Promotion (EDIP) Programme which supports the strengthening productive capacities to the extent that developing countries are eventually able to rely on their own domestic resources to finance their growth and to become more attractive for capital inflows that can further accelerate the expansion process.	
Immediate objective	Equip SMIs to become drivers of growth, innovation and employment.
Problems to be solved	➤ Poor diversification, productivity, competitiveness, low manufactured exports and low attractiveness of the local manufacturing sectors at both national and international levels; ➤ Weak internal managerial, technical and financial capacities of local SMIs; ➤ Lack of marketing activities and weak distribution networks; ➤ High factor costs and poor energy and resource management practices within manufacturing processes; ➤ Prevalence of polluting techniques of production among SMIs; ➤ Lack of reliable and mutually supportive relationships up and down industrial supply chains; ➤ Insufficient capabilities of local entrepreneurs particularly youth and women; ➤ Specific weakness of youth, women, entrepreneurs and SMIs in general in the identification and access to financial mechanisms available locally and within the Arab region.
Expected outcomes	
Outcome IV.1	20 strategic positioning studies conducted for selected niches in agro-food value chains, ICT sector and green industry for member countries
Outcome IV.2	Entrepreneurial, entrepreneurial combined with IT, technical, quality and market related training provided to at least 100 selected to-be or existing entrepreneurs in each country through the EDIP programme and preparation of bankable business plans with special attention to youth and women entrepreneurs
Outcome IV.3	Diagnostics and upgrading plans based on cluster approach developed and implemented by selected private sector SMIs operating in agro-food value chains, ICT sector and green industries (15 per country on pilot basis; based on Outcome IV.1)
Outcome IV.4	Investment needs at company level identified, a project portfolio formulated and scouting of investment opportunities provided for at least 15 medium and small-scale enterprises in each recipient country (based on Outcome IV.1)
Outcome IV.5	Selected companies assisted in the identification and access to financial mechanisms such as credit lines, mutual guarantee schemes, private equity, financial incubator models for youth and others available locally and abroad (to link with Outcome I.4)

Expected outcomes	
Outcome IV.6	Services of existing NCPCs extended to selected groups of enterprises to improve cleaner production in member countries and further spread the cleaner production knowledge
Outcome IV.7	Assistance on export promotion provided by creating export opportunities in international markets through the UNIDO ITPO network, participation to specialized fairs, B2B, round-tables, and during the negotiations of industrial cooperation agreements with foreign partners (based on Outcome IV.1)

Component V: Promotion of Technology and Innovation	
Facilitate transfer of industrial technologies and best product and process innovation practices to the private sector SMIs operating in the priority agro-food value chains, ICT sector and green industries	
This component has three objectives. Firstly, it aims at strengthening the access of SMIs to high technology and innovation techniques to improve their competitiveness and increase the potential for new SMI creation. Secondly, it aims to assist local companies to enable them to analyze their current performance and operations, identify potential strengths and benefits of applying modern technologies, as well as identify appropriate technologies with a focus on agro-industries, ICT and green industries. Finally, it intends to strengthen the capacities and capabilities of institutions involved in R&D and innovation, and more generally, technological progress in Arab countries.	
Immediate objective	Facilitate transfer of modern scientific, technical and business technologies as well as modern product and process innovation practices and their industrial applications to the Arab states; and promote exchange, collaboration and partnerships in these areas with industrialized developing and developed countries
Problems to be solved	➤ Marginal use of market opportunities, and economic and financial benefits offered by new technologies and best product innovation practices; ➤ Insufficient analytical capabilities to assess performance over time and relative to other countries and attendant needs; ➤ Weak cooperation and harmonisation of national industry-related innovation and technology development policies/strategies across the Arab region; ➤ Lack/insufficient capacities of the specialized R&D and technical support institutions to provide technical assistance to SMIs in obtaining and industrial application of modern technologies; ➤ Limited access of local SMIs to modern manufacturing know-how and production technologies.
Expected outcomes	
Outcome V.1	Capability of Arab countries to analyze, gauge and understand current economic performance reinforced with a view to strengthen the ability to identify profitable sources of growth in competing industries , such as fruitful innovation and the adoption and creation of appropriate technologies for the individual country and industry context
Outcome V.2	Capacity reinforced to analyze past policies and strategies carried out for promoting innovation and technology in Arab countries , including benchmarking against innovation policies implemented in some developed countries and emerging economies (France, Italy, Malaysia, Spain, Turkey) conducted
Outcome V.3	Improved system for the facilitation of technology transfer to the Arab world
Outcome V.4	A coherent and harmonized regional action-plan for promoting innovations (e.g., innovation policies, legislative framework, incentives, information campaigns and training on innovation) developed for the Arab countries (based on outcomes V.1-3)
Outcome V.5	Capacities of R&D and technical support institutions in Arab states reinforced for promoting technologies and innovation, as well as facilitating technology transfer through partnerships with similar institutions in industrialized developing and developed countries

Expected outcomes	
Outcome V.6	Infrastructure for product and process innovation developed and promoted on pilot basis among SMIs operating in priority sectors (agro-industries, ICT and green industries)

Annex III of the document elaborates more on the above-listed components and outcomes distributing them among the three groups of beneficiary countries by level of relevance (0 = no relevance; 1 = low relevance; 2 = high relevance). Merged cells within the matrix mean common intervention initiative while separate cells represent the need for separate interventions because of different nature of problems between sectors or groups.

Annex IV represents a combination of intervention activities that are most likely to achieve the expected outcomes and which are necessary to ensure sustainability of the proposed Programme. Annex V presents a time-table for the implementation of these activities.

SECTION IV: PROGRAMME IMPLEMENTATION MODALITIES

The draft proposal has been prepared by UNIDO at the request of the AIDMO Secretariat in close cooperation with the UNIDO representatives in the region, representatives of AIDMO and the Member States. Following approval of the current proposal, the detailed programming phase will explore options to ensure broad-based technical and institutional support to the proposed interventions.

The programme has a four-year duration divided into three phases as indicated in the following table:

Table 19. Programme phasing

Phase	Title	Duration
One	Preparation for take-off (at regional and national levels)	6 months
Two	Pilot implementation of technical Programme	21 months
Three	Advanced implementation of technical Programme	21 months
All phases	Completed Programme	48 months (4 years)

An integrated work-plan will be established, detailing outcomes and their activities, contributions and roles of each stakeholder in the achievement of the stated objectives. The activities would focus on developing the capacities SMI sector-based industrial support institutions and manufacturing SMEs in areas relevant to their respective roles.

The sustainability of the project is guaranteed at four levels:

- Firstly, the proposal is in tune with the AIDMO objectives focusing on SMI promotion as a major portal towards the development of manufacturing industries, value added and employment generation.
- Secondly, the project will develop strong partnership with national stakeholders.
- Thirdly, the proposed programme will strengthen capacities of technical support institutions, local manufacturers and increase their participation in the supply chain with quantifiable benefits.
- And, finally, the programme will build regional and national expertise through training and maximal use of local experts.

The approach to be applied for Programme management and coordination should be based on:

- the necessary complementarities of the regional and national management mechanisms and structures;
- the Programme presentation to the development partners as complementary to and coherent with the national programmes initiated and carried out in the Member States taking into consideration the national specificities of each country.

The institutional mechanisms will be established in a progressive way ensuring an overall support from the national level to the regional extent. The institutional mechanisms are composed by the steering structures described hereafter.

The AIDMO Secretariat, which will act according to its regulations and those of its authorized organs in all issues concerning the budget allocation as well as to other legislative or conventional texts, will define the conditions of retrocession for the funds provided by development partners and will be responsible for:

- mobilization of financial resources;
- developing Programme funding policy at regional level;
- defining Programme implementation framework: strategic plan, general and specific objectives, intervention framework, etc.;
- establishment of institutions in charge of Programme implementation at the regional level; and
- maintaining relations with development partners.

The financial resources brought by international development partners will contribute to backing grants and technical assistance necessary for development of industries and technical support institutions, and employment creation.

The ***Member States*** are expected to play a role similar to that of the AIDMO Secretariat concerning the coordination, management and fund-raising activities. The political goodwill and commitments of the Member States are expected to serve as a key tool in mobilizing other potential actors. The Member States must ensure the transparency and accomplishment of the Programme objectives at the national level.

The Programme will have an ***Arab Regional Steering Committee (ASC)*** responsible for overall decisions related to the programme and, where necessary, for resolving any emerging issues at the regional level. It will provide assistance to the AIDMO Secretariat in overall coordination and management of the Programme, in defining financial strategy for the Programme, carrying out fundraising activities and Programme implementation. The Committee performs as a final decision-making institution/authority. The ASC will be composed by the representatives of the AIDMO Executive Council, Member States, regional banks, donors and other major stakeholders. It will meet at least once every six months.

Three Sub-Group Technical Coordination Units (SG-TCUs) – one unit established for each group of beneficiary countries identified by the Programme (see Chapter I.15.2) – will be responsible for the Programme implementation, communication and management within the respective country group. Under the supervision of UNIDO and AIDMO and in close cooperation with the main stakeholders, the SG-TCUs will

be responsible for carrying out the Programme activities at the sub-regional level and therefore will possess all means necessary to ensure dialogue with national authorities and monitoring of activities being implemented at the country level. SG-TCUs will provide technical support to the national steering committees and national technical coordinators.

Besides, the three Sub-Group Technical Coordination Units will seek an effective integration and harmonization of all available technical and human resources (establishment of the regional database of service providers by fields of intervention, etc.) and will carry out all other tasks assigned by the AIDMO Secretariat, the regional and national steering committees. SG-TCUs could be autonomous structures or attached to regional, sub-regional or national institution determined by the AIDMO Secretariat. Each SG-TCU will be composed of 3 international experts.

The role of the *Technical Assistance* would consist in providing institutional and technical support to ASC and SG-TCUs, in particular within the following stages:

- Programme identification and design of its structure;
- preparation of the terms of reference for financial and operational management;
- capacity building activities for the main actors of the Programme;
- identification, recruitment and management of international and national experts for implementation of Programme activities;
- management review of the experts' activities.

Once the Arab Regional Steering Committee makes a decision, the responsibility of its local application is attributed to *National Steering Committees (NSCs)*. The latter will be in charge with Programme promotion activities and follow-up of its implementation at the national level. NSCs will serve as communication centers channelling information necessary to identify appropriate policies (granting policies implemented at the national level, census of the existing support institutions, consultants to be included to the regional file, technical centers to be promoted, information providing the choice of companies).

The NSCs will be composed of representatives from the national counterparts (agencies in charge of SMEs and employment creation, etc.) national banking system, public and private sector and professional associations. Based on the experience of UNIDO in implementing similar national and sub-regional initiatives, and in order to facilitate the mid-term sustainability of the Programme, it is strongly recommended to involve key stakeholders to the management and coordination of Programme implementation by the membership and active participation in the National Steering Committees.

Being as such for the current initiative, *technical support institutions or SMI promotion agencies or associations*, are expected to play a role of the *national coordination units* and intervene in the following activities of the Programme implementation:

- conducting promotional and communication activities at the national level;

- identification of potential manufacturing enterprises according to predefined criteria of eligibility at the regional level;
- review of the assessment and benchmarking studies;
- ensure the follow-up of the Programme implementation;
- assessment of the Programme's impact on beneficiary companies.

Specially designated technical teams within these institutions will perform as operational centers for management and coordination of implementation of the country components of the regional programme. The members of the technical teams should be highly qualified and possess a significant experience in SMIs or/and industrial development. These teams will be assisted by **National Technical Coordinators (NTCs)** whose role will be to assist national technical support institutions, SME promotion agencies or associations in their role of national technical teams facilitating the programme implementation. Twenty one NTCs recruited by the Programme (one per each beneficiary country) will:

- to support and provide technical advice to the respective technical teams;
- to represent the secretariat of the NSCs;
- to coordinate programme activities jointly with all public and private counterparties, and
- to provide an assistance in selecting research centers and consultants.

As a result, the management and coordination framework for the proposed programme will be based on horizontal and vertical interactions among the above-described programme coordination units as depicted in the following figure.

Figure 49: Programme implementation mechanism



SECTION V: MONITORING, REPORTING AND EVALUATION

Monitoring and evaluation of this programme will be carried out in accordance with the UNIDO monitoring and evaluation plan. Monitoring, reporting and evaluation will be conducted in coordination with the AIDMO Secretariat and donors in a participatory and systematic way that maximizes chances for early detection of implementation problems. For effective and efficient interventions within the programme, internal and external monitoring will take place. UNIDO's Evaluation Group, together with appropriate services of the AIDMO Secretariat and donors, will participate in the annual reviews and evaluations of the Programme.

V.1 Preparation for take-off stage

A blueprint/inception report will be prepared for this important initial stage of the Programme. Its aim is to set the basis for a successful implementation of the Programme at both regional and national levels as well as shape the programme's implementation mechanism and monitoring procedures to the specificities of each technical component.

This inception report requires heavy collaboration between UNIDO, AIDMO, member countries and donors, and is considered the pre-condition for success of the whole Programme.

The following specific issues are to be addressed in the report:

- A common definition for SMIs through the whole Arab world;
- Specification of areas of focus within each of the three sectors for each group of countries and for each country within;
- Shaping of the implementation mechanism to the needs of each component (such as identification of national institutions to collaborate with UNIDO in areas of intervention for each component, and choice of national coordinators suitable for each component among others);
- Choosing managerial and monitoring committee members;
- Formulation of a manual of procedures for all foreseen activities and financial interactions;
- Setting of criteria for choice of enterprises for technical support for each group;
- Specifications of number of beneficiary enterprises for each phase per group of countries and per country;
- Setting the limits of program to avoid overlaps with on-going programs by UNIDO and other institutions;
- Address the issue of sustainability of technical support delivery after end of the four year project.

V.2 Monitoring and reporting for phases I and II of the Programme

Clear performance indicators will be developed to guide monitoring, reporting and evaluation of the Programme implementation. The Steering Committee will elaborate criteria to evaluate results and to measure the progress in achieving the Programme's

objectives. These criteria may be quantitative (evaluation of statistical data) and/or qualitative (appraisal and perception resulting from a subjective analysis). The detailed criteria will be specified in operational plans.

The Regional Technical Coordination Unit, in cooperation with UNIDO, will prepare technical and financial progress reports and submit them quarterly to the AIDMO Secretariat, donors and SC. A final report will conclude the programme implementation. These reports will consist of a descriptive technical section and a financial section, which will cover the entire Programme.

Each report should provide a complete picture of all aspects of Programme implementation over the reporting period. The structure of these reports will allow a comparison between the objectives and the scheduled or already implemented activities (including all expenditures carried by UNIDO), the anticipated results and those obtained, as well as the budget of the Programme. The structure of each report should correspond to the Programme's detailed description and budget breakdown.

The descriptive technical section of the report will contain the following elements:

- Summary and context of the Programme;
- Activities carried out over the reporting period (directly related to the Programme description and activities scheduled within it);
- Problems encountered and measures applied to overcome them;
- Adjustments made in the Programme implementation;
- Assessment of obtained results using the predetermined success indicators;
- Work-plan for the next period containing a definition of objectives and related performance indicators. If the report is submitted after the end of the reporting period, a new work-plan, albeit provisional, should always be prepared before that date.

The final report will include the above elements (except final bullet) covering the entire Programme implementation period, as well as information on the measures carried out to ensure the visibility of financing by the donor organizations.

Evaluation missions should be scheduled and completed in a spirit of collaboration between staff and representatives of all stakeholders and donors, keeping in mind the commitment of all major counterparts to implement the current Programme in effective and efficient manner. These missions should be scheduled in advance and all procedural issues should be resolved jointly.

A detailed Annual Work Plan and a Monitoring and Evaluation plan will be developed during the first month of the project life. Project outcomes will be discussed and reviewed, taking into account the relevant stakeholders' comments and feedback all along the process. The first work-plan should incorporate the elements of the preliminary operational work-plan, report on the on-going activities scheduled for the current year and specify their implementation modalities.

An overall operational plan will include a critical analysis of the Programme in all its dimensions - in relation to the organizational evolution and missions of various beneficiaries. This report offers the final organizational structure of the Programme in all its aspects. The annual operational plans will be designed for the calendar year.

SECTION VI: INDICATIVE BUDGET

First budget estimations for the proposed programme set out the figures for the indicative budget by Programme component, and management, coordination and follow-up costs. Estimation of the programme budget takes into account UNIDO's experience in implementing technical assistance programmes on the promotion and development of the private sector industrial SMEs in other developing and emerging countries.

The indicative budget of the 4-year Programme is estimated at **€65.0 million** including management costs. A summary of the estimated programme budget is provided in Table 20. The following breakdown sets out the figures for the indicative budget by Programme component and management costs, as well as by regional and national shares under each sub-regional country group.

Table 20. Estimated indicative budget of the Programme, in Euro

# of outcome	OUTCOMES	TOTAL BUDGET IN EURO	BUDGET BREAK-DOWN: REGIONAL AND NATIONAL SHARES IN THE PROGRAMME'S TOTAL							
			TOTAL REGIONAL BUDGET	TOTAL NATIONAL BUDGET	Sub-Group 1: GCC oil economies		Sub-Group 2: Diversified economies		Sub-Group 3: Primary product export ec.	
					Sub-total regional SG1	Sub-total national SG1	Sub-total regional SG2	Sub-total national SG2	Sub-total regional SG3	Sub-total national SG3
	SUBTOTAL FOR COMPONENT I	2,500,000.00	650,000.00	1,850,000.00	187,166.67	532,000.00	275,666.67	786,000.00	187,166.67	532,000.00
	SUBTOTAL FOR COMPONENT II	15,000,000.00	900,000.00	14,100,000.00	257,000.00	4,028,000.00	386,000.00	6,044,000.00	257,000.00	4,028,000.00
	SUBTOTAL FOR COMPONENT III	5,000,000.00	2,000,000.00	3,000,000.00	571,100.00	856,650.00	857,800.00	1,286,700.00	571,100.00	856,650.00
	SUBTOTAL FOR COMPONENT IV	18,275,000.00	3,982,500.00	14,292,500.00	1,140,000.00	4,085,000.00	1,702,500.00	6,122,500.00	1,140,000.00	4,085,000.00
	SUBTOTAL FOR COMPONENT V	10,575,000.00	2,115,000.00	8,460,000.00	604,000.00	2,416,000.00	907,000.00	3,628,000.00	604,000.00	2,416,000.00
PROGRAMME MANAGEMENT COSTS										
	3 Regional Technical Coordination Units	4,800,000.00	4,800,000.00	0.00	1,370,000.00	0.00	2,060,000.00	0.00	1,370,000.00	0.00
	Contribution to national project management units inc. costs of National Technical Coordinators	2,835,000.00	0.00	2,835,000.00	0.00	810,000.00	0.00	1,215,000.00	0.00	810,000.00
	Technical Expertise	1,200,000.00	0.00	1,200,000.00	0.00	340,000.00	0.00	520,000.00	0.00	340,000.00
	Monitoring and Follow-up	600,000.00	240,000.00	360,000.00	68,000.00	102,000.00	104,000.00	156,000.00	68,000.00	102,000.00
	SUBTOTAL PROGRAMME MANAGEMENT COSTS	9,435,000.00	5,040,000.00	4,395,000.00	1,438,000.00	1,252,000.00	2,164,000.00	1,891,000.00	1,438,000.00	1,252,000.00
	TOTAL	60,785,000.00	14,687,500.00	46,097,500.00	4,197,266.67	13,169,650.00	6,292,966.67	19,758,200.00	4,197,266.67	13,169,650.00
	UNIDO management costs (7%)	4,254,950.00								
GRAND TOTAL:		65,039,950.00								

The detailed breakdown of the indicative budget by year of implementation, Programme component, outcomes and the management, coordination and follow-up costs are to be provided in the full-fledged Programme Document. In addition to the above depicted programme budget, UNIDO would bring its co-financing with ongoing activities and pipeline activities already negotiated (technical assistance, data-base, information, analyses, inputs from governments (as member states) etc.).

The proposed programme also considers an in-kind contribution of each beneficiary country into the total budget funding. Such contribution usually includes delivery by the national counterpart of the office premises, office furniture and basic equipment, recruitment of the national focal point in charge of the national programme monitoring, an assistant and a driver, as well as communication, office and office vehicle maintenance costs, fuel, and other operation and local travel costs. The national contribution to the global programme costs is roughly estimated at €300 000 per country.

EXPECTED IMPACT OF THE PROGRAMME

The examples of developing countries, which have already implemented similar programmes allow the following estimations of the Programme's potential impact to the economies of Arab States and to their SMI sector, in particular.

The Programme on Enhancing the Role of SMIs in the Economic and Social Development of the Arab States will have a significant impact on the SMI sector and overall industrial and economic performance of the region. More specifically, the Programme will contribute to the regional development by:

- Increased diversification of industrial value-added and of the export pattern;
- Improved competitiveness of SMIs and national economies as a whole;
- Intraregional and international trade increased in volume and streamlined socio-economic integration of the Arab region;
- Harmonisation of policies, strategies and business climate regarding SMI activities and employment in the Arab region;
- Improving investment and overall business environment;
- Strengthening institutional and policy management capacities of the major stakeholders;
- Development and strengthening of the local expertise in order to extend its services to other sectors not directly addressed by the Programme (target: 1000 trainers and engineers);
- Building capacities of the technical support institutions, business advice and consultancy centers (target: 84 in the region);
- Strengthening capacities of the existing SMIs and encouraged emergence of new small- and medium-scale manufacturing units operating in agro-food value chains, ICT and green industries (target 300 pilot SMIs);
- Increasing employment opportunities for young graduates directly in the SMI sector and related services (target: 2100);
- Investment project portfolio formulated and scouted for around 300 SMIs in the region;
- Mastering the resource and energy efficiency and cutting down the production costs;
- Regional and national policies and strategies promoting product innovation and advanced technologies formulated and implemented in partnership with the world's leaders in these sectors.

SECTION VII: RISKS MANAGEMENT AND SUSTAINABILITY

Potential risks to achieving Programme objectives relate to both internal and external economic and geopolitical factors that may partly divert the attention of policy- and decision-makers from the private sector development issues. Political changes, staff turnover and slowdown of economic growth may also affect the implementation of the Programme. It is expected that the Member States will ensure job tenure of civil servants, particularly those involved in the implementation of the regional programme.

Thus, the success of the current Programme is largely dependent on:

- the political goodwill of AIDMO, partner institutions, donors and the Member States and their commitment to finance the Programme;
- commitment of individual countries to contribute to the Programme funding;
- commitment of individual countries to execute actions recommended by the Programme on improving business climate and infrastructure;
- moral and financial commitment of companies' management to upgrade their productive capacities and thereby to improve their competitiveness;
- commitments of the regional and local banking sector institutions to contribute, in particular, to financing 'hard' investments activities;
- the implementation of the Programme as a comprehensive package and in a coordinated manner for best results;
- maximum collaboration between countries and UNIDO the implementing agency for the Programme.

The major risks are:

- Needed funds for implementation of proposed programme are not available, or not enough. In such case expected outcomes will not be achieved or will be subject to delays;
- This applies particularly in the case of funding 'hard' investment activities, proposed by this Programme;
- One or more countries do not succeed in contributing to the establishment of operational national institutions for Programme implementation (NTCs, etc.);
- Member Arab States are not willing to adopt measures for improvement of business environment relevant to SMIs. In such case, expected outcomes from other components might not be realized;
- Individual countries do not actively collaborate with UNIDO through the different stages of the Programme.

The above-listed are few important risks for accomplishing the expected results notably related to the implementation of 'soft' and 'hard' investments activities.

These assumptions and risks are unlikely due to the strong commitments and interest shown by the AIDMO Secretariat and the Member States. Various actors of the region, including the Islamic Development Bank (IDB) and the Arab Fund for

Economic and Social Development (The Arab Fund or FADES), have expressed their interest in contributing to the Programme's success in close cooperation with UNIDO.

In order to minimize these risks, it is important to ensure the strong ownership of the Member States to the envisaged outcomes and activities as primary means to achieve sustainability. The commitment to advance reforms is central to the overall success of the Programme. In addition, the capacity building strategy of the Programme requires a commitment of central and local government to a) make human resources available to implement the Programme, and b) take the necessary steps to minimize civil servants turnover in the short and medium term.

Finally, it is of the utmost importance that the Programme is implemented in a transparent manner and on the basis of pre-established criteria that are developed through consensus of all parties involved in or affected by the Programme. Finally, sustainability will be enhanced by linking the Programme to other initiatives being implemented by UNIDO and other development partners in the private sector development.

SECTION VIII: LEGAL CONTEXT

The present Programme will be carried out under established UN basic assistance agreements in force for all Arab States – beneficiaries of the current Programme.

Each Party involved will carry out the current Programme activities in accordance with the regulations, rules, directives and procedures applicable to it. Accordingly, personnel shall be engaged and administered, equipment, supplies and services purchased, and contracts undertaken, in accordance with the provisions of such regulations, rules, directives and procedures.

On the termination of this Programme, the matter of ownership shall be determined in accordance with the regulations, rules, directives and procedures applicable to the Parties involved, including, where applicable, UN basic assistance agreement with respective Member States.

ANNEXES

ANNEX I: POTENTIAL BENEFICIARIES OF THE PROGRAMME²⁹

Country/ Region	Institution in charge of SMI development	Employment promotion	Investment promotion	Financial institution	Chamber of commerce and industry	Cleaner production center
Algeria	- Agence Nationale de Développement de la PME (ANDPME)	- Agence Nationale de l'Emploi (ANEM)	- Agence Nationale de Développement de l'Investissement (ANDI)	- Fonds de garantie des crédits aux petites et moyennes entreprises (FGAR) - Caisse de garantie des crédits d'investissements-PME (CGCI-PME)	- Chambre Algérienne de, Commerce & d'Industrie (CACI)	- None
Bahrain	- Small Industry and Craft Directorate of the Bahrain Ministry of Industry and Commerce - Arab Regional Center for Training on Entrepreneurship and Investment	- Labor Fund (LF) - Labor Market Regulation Authority (LMRA) - Bahrain Training Institute	- Bahrain Investor Center - Bahrain International Investment Park	- Bahrain Development Bank - Innovation Bank	- Bahrain Chamber of Commerce and Industry (BCCI)	- None
Djibouti	- Ministre du Commerce et de l'Industrie (MCI)	- Association des Employeurs de Djibouti	- Agence Nationale pour la Promotion des Investissements (ANPI)	- Fonds de Développement Economique de Djibouti (FDED)	- Chambre de Commerce de Djibouti	- None
Egypt	- Social Fund for Development (SFD) - Industrial Development Authority (IDA), Ministry of Trade and Industry - Industrial Modernization Center (IMC), Ministry of Trade and Industry	- Social Fund for Development (SFD) - Ministry of Manpower	- General Authority for Investment (GAFI), Ministry of Investment	- Social Fund for Development (SFD) - National Bank of Egypt - Social Fund for Development - Industrial Modernization Center	- Federation of Egyptian Industries (FEI)	- Egypt National Cleaner Production Center

²⁹ The list is to be further enriched with information from member countries

Country/ Region	Institution in charge of SMI development	Employment promotion	Investment promotion	Financial institution	Chamber of commerce and industry	Cleaner production center
Iraq	- Small Business Development Center (SBDC) - USAID: Tijara Provincial Economic Growth Program	- IZDIHAR Private Sector Growth and Employment Generation Programme (USAID)	- Iraq Investment Promotion Agency	- Industrial Bank - Agricultural Cooperative Bank	- Federation of Iraqi Chambers of Commerce	- None
Jordan	- Jordan Enterprise Development Corporation (JEDCO) - ERADAH Program on entrepreneurship promotion affiliated to Ministry of Planning	- Employment fund to promote and create self job opportunities.	- Jordan Investment Board	- Industrial Development Bank - Agriculture Credit Corporation (for agro-food enterprises) - Jordan corporation for loan guarantee	- Federation of Jordan Chambers of Commerce	- None (there is an interest to establish a national center) - Cleaner Production Unit (Jordan-Swiss initiative)
Kuwait	-	-	- Kuwait Investment Authority - Kuwait Foreign Investment Bureau	- Bank of Kuwait and the Middle East	- Kuwaiti Chambers of Commerce and Industry - Indo-Arab Chamber of Commerce and Industry	- None
Lebanon	- Euro Lebanese Center for Industrial Modernization (ELCIM) - Business Incubation Association of Tripoli (BIAT) - BADER Young Entrepreneurs Program - BERYTECH, entrepreneurs support facility	- National Employment Office (NEO)	- Investment Development Authority of Lebanon (IDAL)	- Kafalat, fund providing financing for SMEs - Commercial Banks - Subsidiary Scheme of the Bank of Lebanon	- Federation of Lebanese Chambers of Commerce, Industry & Agriculture	- Lebanese Cleaner Production Centre (LCPC)
Libya	-	-	- Libyan Investment Authority (LIA) - Libyan-Arab Foreign Investment Company (LAFICO)	- Central Bank of Libya	- Federation of Chambers of Commerce, Industry and Agriculture	- None

Country/ Region	Institution in charge of SMI development	Employment promotion	Investment promotion	Financial institution	Chamber of commerce and industry	Cleaner production center
Mauritania	- Société nationale des industries et des mines - AMEXTIPE→	- Agence mauritanienne d'exécution des travaux d'intérêt public pour l'emploi (AMEXTIPE)	- Commissariat à la promotion des investissements (CPI)	- Banque Alwava Mauritanienne Islamique (BAMIS)	- Chambre de commerce, d'industrie et d'agriculture de Mauritanie (CCIAM)	- None
Morocco	- Agence nationale pour la promotion de la petite et moyenne entreprise (ANPME)	- Agence nationale pour la promotion de l'emploi et de la compétitivité (ANAPEC)	- Commission de promotion des investissements - Agence marocaine de développement des investissements (AMDI)	- AlterMed Maghreb, the EIB compartment for Morocco	- Confédération Générale des Entreprises Marocaines (CGEM)	- Moroccan Cleaner Production Centre (CMPP)
Oman	-	-	- Omani Center for Investment Promotion and Export Development (OCIPE)	- Oman Development Bank - Oman Housing Bank	- Oman Chamber of Commerce and Industry	- None
Palestinian Territory	- Palestinian Federation of Industries (PFI) - Palestine Trade Center (PALTRADE) - Ministry of National Economy	- Ministry of Labour (MOL)	- Palestine Investment Promotion Agency (PIPA)	- AlKofah Bank	- Federation of Chambers of Commerce, Industry and Agriculture	- None
Qatar	- SME Development Project of the General Secretariat for Development planning (GSDP)	- Social Development Department, GSDP	- Qatar Investment Promotion Department	- Qatar Islamic Bank	- Qatar Chamber of Commerce and Industry	- None
Saudi Arabia	- Special Fund for SMEs under the Saudi Industrial Development Fund (SIDF) of the Ministry of Finance	- Ministry of Social Affairs and Labour (MOSAL)	- Saudi Arabia General Investment Authority (SAGIA)	- Saudi Credit Bank - Saudi Fund for Development - Saudi Industrial Development Fund	- Saudi Chamber of Commerce and Industry	- None

Country/ Region	Institution in charge of SMI development	Employment promotion	Investment promotion	Financial institution	Chamber of commerce and industry	Cleaner production center
Somalia	-	-	-	- Somali National Bank - Somali Savings and Credit Bank	- Somalia Chamber of Commerce, Industry, Agriculture and Fisheries	- None
Sudan	- Ministry of Industry	-	- Ministry of Investment	- Central Bank of Sudan	- Sudanese Chambers of Industries Association	- None
Syria	- Directorate of small and medium enterprises in the Ministry of Economy and Trade - Syrian Enterprise and Business Centre (SEBC) - General Commission of competition and intellectual property protection	- General Commission for the operation and developing projects	- Syrian Investment Commission	- Unit for Micro-Finance under the State Planning Commission - Agha Khan Foundation (providing finance, economic and social support) - Syrian Industrial Bank - European Finance Unit, Commercial Bank of Syria	- Federation of the Syrian Chambers of Commerce	- None (there is an interest to establish a national center)
Tunisia	- Industry Promotion Agency (API) - Direction générale de la PME	- ANETI, Agence Nationale pour l'Emploi et le Travail Indépendant - Fonds National de l'Emploi 21-21(National employment fund)	- Investment Promotion Agency (API) - Foreign Investment Promotion Agency (FIPA) - Agricultural Investment Promotion Agency (APIA)	- Banque de financement des petites et moyennes entreprises (BFPME) - Fonds d'Accès aux Marchés d'Exportation (FAMEX) - Société d'Investissement à Capital Risque (SICAR) - Tunisian Guarantee Company (SOTUGAR) - Guarantee Export Credit Funds (GFCE) - Guarantee Funds of Energy Efficiency (GFEE)	- Tunisian Chamber of Commerce and Industry	- Tunis International Center for Environmental Technologies (CITET) (the process of launching)

Country/ Region	Institution in charge of SMI development	Employment promotion	Investment promotion	Financial institution	Chamber of commerce and industry	Cleaner production center
UAE	-	- Ministry of Labor	-	- Central Bank of the United Arab Emirates	- Abu Dhabi Chamber of Commerce and Industry	- None
Yemen	- Ministry of Industry and Trade - Yemeni Industrialists Association	-	- Economic and Commercial Office	- National Bank of Yemen	- Federation of Yemen Chambers of Commerce and Industry - Indo-Arab Chamber of Commerce and Industry	- None
Regional institutions	- Arab Industrial Development and Mining Organization (AIDMO)	- Arab Labour Organization (ALO) - Network of Young Entrepreneurs Associations from Mediterranean, Africa and the Middle East, MAME YE	- Arab Investment & Export Credit Guarantee Corporation (DHAMAN)	- Islamic Development Bank (IDB) - Arab Fund for Economic and Social Development (FADES)	- The Arab Chamber of Commerce and Industry (ArabCCI)	-

ANNEX II: LOGICAL FRAMEWORK ANALYSIS

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
Development goal/impact			
To contribute to the socio-economic growth, poverty reduction and regional economic and trade integration through enhancing regional and national capacities for employment creation, value-added generation, economic diversification and export promotion, and development of priority industrial sectors	Evolution of economic growth (Gross Domestic Product) Evolution and diversification of intra-Arab and international trade of the Arab States Human, socio-economic, poverty reduction, gender and environmental development indicators Evolution of manufacturing sector's and, in particular, SMLs' contribution to the national and regional product	National bureaus of statistics of the Arab counties Development statistics from the UN System agencies (UNIDO, WB, UNDP, UNEP, FAO, UNCTAD, WTO, IMF) Reports on macroeconomic and sectoral situation (AIDMO, governments, donors, development agencies...)	
Immediate Objectives			
i. To render macroeconomic, institutional and regulatory framework favourable and conducive to the development and improvement of competitiveness of the domestic small and medium-size producers; ii. To establish/strengthen capacities of the national and regional technical support and business advisory infrastructure with special focus on SMI creation and development;	General business climate indicators (regulatory, financial, administrative environment) and international and regional competitiveness rankings of the Arab economies Degree of SMLs' satisfaction with the/and scope and quality of services provided by support institutions	Mid-term and final evaluation reports of the current Programme implementation Annual reports of UNIDO, AIDMO, ITFC, WTO, Breton Wood Institutions, World Economic Forum, Ease of Doing Business, UNEP, etc. National reports on macro-economic situation	AIDMO and the Arab States remain involved into the process of trade integration and liberalization Political goodwill to implement continuously structural reforms and other arrangements related to the trade liberalization, economic diversification, private sector development, women and youth employment creation, and promotion of sustainable growth Commitments of all involved actors to ensure success of the Programme

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
iii. To strengthen the quality infrastructure in the Arab world through enhancing the capacities of AIDMO in implementing the Arab Standardization Strategy 2009-2013 with focus on certain components. iv. To develop and improve productivity and competitiveness of the local manufacturing enterprises through enhancing investment, export and employment opportunities of selected private sector enterprises operating along the pilot priority areas (agro-food value chains, ICT and green industries); v. To facilitate scientific, technical and business transfer of modern technologies and product innovation practices and their industrial application in the Arab states, and to promote exchange, collaboration and partnerships in this area with emerging and developed industrialized countries.	Market share (at the local/regional/ international levels) of the concerned national industries Increased share of local SMIs operating in agro-food, ICT and green industries and number of jobs created in these sectors Mastered resource and energy efficiency and production costs cut down Number of tangible technology acquisition projects and partnership agreements (including South-South cooperation) in the area of innovation and systems of innovation		

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
Immediate Objectives and Activities			
COMPONENT I: Reform of the institutional framework, the business environment and financial instruments related to the development of small- and medium-size manufacturing enterprises			
I.1 Specific constraints on SMLs in the present institutional, regulatory, business and financial frameworks identified in the areas of SML creation, operation, innovation, export promotion, green orientation, and employment of youth and women	Action plan carrying amendments to the institutional, regulatory, business and financial framework developed and approved	National action plans, reports on Programme activities implementation and monitoring	Commitment and involvement of the public sector to structural reforms and the Programme implementation
<i>I.1.a Collect information on studies carried out in the area of SMLs and women and youth employment in the beneficiary countries</i> <i>I.1.b Consultants in individual countries to prepare short legal studies stating exact policies and actions of relevance to SML creation, operation, innovation, exit and employment of youth and women. Studies are prepared on the basis of a specific set of questions for all 21 countries (same format)</i> <i>I.1.c A survey for a small selected sample of SMLs in agro food value chains, green industries and ICT enquiring on institutional, regulatory, business and financial constraints faced by them at the policy and institutional levels in the areas identified (same format for all countries)</i> <i>I.1.d Analyze existing national legislation, institutional framework and financial mechanisms related to the promotion of SMLs and employment in the beneficiary countries and produce a report for each sub-group of countries with 1) listing of problems for the countries within the group for all constraints of relevance to agro-food value chain, ICT sector and green industries; 2)collection of common problems in the sub-group; 3)identification of country specificities</i> <i>I.1.e Based on results of the analysis and the experience of selected Arab and other developing and developed states and in consultations with concerned national bodies, propose an action plan detailing amendments to the existing regulations, fiscal, financial and other administrative mechanisms for SMLs and employment promotion</i> <i>I.1.f Organize a series of validation workshops to discuss and adopt the amendments to the legislative and institutional framework favourable for the business environment (including financial instruments)</i>			
I.2 Action plans developed for upgrading and improving the present frameworks to the benefit of SMLs in the areas and sectors specified in Outcome I.1	Policy paper and documents carrying procedures favouring the local private sector SML development and employment creation available	Media, Programme progress reports and reports on national programmes.	Political commitment to structural reforms, all involved stakeholders and beneficiaries support the Programme implementation
<i>I.2.a Assist national governments in implementing the proposed amendments to the legislative and institutional framework (see Outcome I.1)</i> <i>I.2.b Develop guidelines on regulatory and administrative procedures and define advantages of the new legislative framework proposed by the Programme</i> <i>I.2.c Prepare information and training programmes on new administrative procedures</i> <i>I.2.d Conduct a training seminar on the new regulations for SMLs and the staff of concerned ministries, institutions, banks, employment support institutions and sectoral associations and employment related institutions</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
I.3 A handbook entitled "Arab SMIs Policy Framework" including all actual policies/incentives common to each sub-group and specificities of individual countries plus new improved policies proposed by UNIDO	Handbook produced and promoted at the national, sub group, regional and international levels	National, regional and international development reports and media, Programme progress reports.	Concerned regional and national authorities, support institutions and other stakeholders cooperate effectively
<i>I.3.a Put the information in I.2 in a handbook format for stakeholders</i> <i>I.3.b Promote the handbook at the national, sub group, regional and international levels</i>			
I.4 The initiative undertaken by UNIDO to create a new "Arab SMI Enhancer Indicator" (ASEI) in order to rank sub-groups and individual countries as per implementation status of needed reforms listed in handbook. Indicators to be measured by yearly and promoted worldwide	ASEI established and promoted internationally	National, regional and international development reports and media, Programme progress reports.	Concerned regional and national authorities, support institutions and other stakeholders cooperate effectively
<i>I.4.a Prepare the blueprints for survey format and questionnaire needed for measurement of indicators and ranking of countries</i> <i>I.4.b Wide promotion campaign for the idea of the indicator to create competition among governments for implementation of policies</i> <i>I.4.c Negotiate with international donor agencies financing SMI projects in individual countries on basis of indicators results</i>			
I.5 Modules for improved financing packages for SMIs at their different stages of development prepared and tested	New financial products, mechanism and tools facilitating SMIs' funding approved and available locally	Questionnaires at the companies, reports of funding banks/financial institutions	Cooperation of banking sector and adherence of companies' management to the development process
<i>I.5.a Assess the needs of local companies in self-development activities and investments, and analyze existing obstacles to access financing</i> <i>I.5.b Identify five financial institutions providing finance to SMIs (three national institutions, one from each sub group plus two regional on the basis of clearly identified criteria: size of operation, degree of success in financing projects etc.)</i> <i>I.5.c Carry out a study on existing financial products, assess their impact on industrial SMIs' activities in the region and identify problem areas and suggested solutions from institutions themselves</i> <i>I.5.d Carry out a feasibility study on the better utilizing of the financial tools available in the region and the development of various new financial products to finance business activities using best practices and existing models</i> <i>I.5.e Explore and propose various options to develop the Programme's performance and its role as an instrument to mobilize the financial support of financial services sector</i> <i>I.5.f Design a proposal on the architecture of such financial products (sources of financial injections, organization of operations, management scheme, financial incubators and long term borrowing)</i> <i>I.5.g Promote partnership with regional and international financial institutions</i> <i>I.5.h Conduct awareness raising and training programmes on management and claim procedures for the national and regional financial institutions</i> <i>I.5.i Promote a common methodology (both national and regional) in risk assessment and analysis of applications for funding</i> <i>I.5.g Encourage dialogue and exchange of information between local companies and financial institutions</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
COMPONENT II: Strengthen capacities and capabilities of technical and advisory support institutions providing assistance to SMI development, job creation and investment promotion in Arab States			
II.1 A handbook "Arab SMIs Supporting Institutions" including a listing of all existing technical and advisory support institutions at country, sub-group and regional levels along with types of support and eligibility criteria	Handbook produced and promoted among support institutions across the region	Programme progress reports, Media	Concerned regional and national authorities, support institutions and other stakeholders cooperate effectively
<i>II.1.a General mapping of all existing technical support, advisory, employment and training institutions at country, sub-group and regional levels if relevant</i> <i>II.1.b Produce a handbook for all supporting technical and advisory support institutions in the individual countries, sub-group level and regional level with services offered by each</i> <i>II.1.c Handbook to be updated every four years</i> <i>II.1.d Promote handbook jointly with 'Arab SMIs policy framework' as a package or 'survival kit for an Arab SMI'</i>			
II.2 Diagnostic studies conducted and action plans developed for upgrading selected technical, advisory, employment and vocational training support institutions (4 per country)	Upgrading plans for the technical support institutions developed and approved	Study reports (results of mapping), reports on Programme activities implementation and monitoring	Willingness of the public sector institutions to create an environment able to meet national business development challenges
<i>II.2.a Assess current situation in existing technical support institutions (questionnaires, on-site visits, etc.) through diagnostics studies</i> <i>II.2.b Identify the needs in strengthening institutional and technical capacities and prepare upgrading plans for selected institutions</i> <i>II.2.c Elaborate detailed action plans for every institution on the basis of diagnostics on upgrading</i> <i>II.2.d Organize a validation workshop to adopt the upgrading plans</i> <i>II.2.e Elaborate the terms of reference and identify consultants to develop and implement these activities</i>			
II.3 Capacities and capabilities of selected technical and advisory support institutions reinforced through training, study tours, software, small equipment, documentation, etc. (3 per country)	Post-upgrading performance and satisfaction degree of the client companies	Reports on Programme activities and inquiry among SMIs and young entrepreneurs	Governments' commitment to contribute to the establishment of business support infrastructure
<i>II.3.a Assist in the implementation of the approved action plans for upgrading of the selected technical support institutions (see Outcome II.2)</i> <i>II.3.b Assist technical support institutions in developing new services, which are better adapted to the needs of the local industries</i> <i>II.3.c Purchase and deliver small equipment, documentation, and software tools to reinforce the programme implementation capacities of the concerned institutions</i> <i>II.3.d Organize trainings and information seminars for the staff of the beneficiary ministries, banks, and institutions in charge of SMI development and employment promotion</i> <i>II.3.e Develop joint activities and establish a regional infrastructure aiming at strengthening coordination and partnership between the beneficiary support institutions</i> <i>II.3.f Organize study tours for selected staff members of the concerned national institutions to learn best practices and experience of similar centers throughout the region and in other developing and developed countries</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
II.4 Capacity of selected employment and vocational training centers operating in agro-food value chains, ICT sector and green industries strengthened (1 center per country)	Number of persons equipped with state-of-the-art skills and quality of the technical and professional training programmes	Post-training evaluation, Programme evaluation reports	Commitment of training institutions to contribute to the Programme activities
<i>II.4.a Take stock of existing national programmes and curricula in the area of professional and vocational training in all beneficiary countries</i> <i>II.4.b Identify and proceed to analysis of the needs and supply capacities (with special focus on weaknesses in labor skills of women and youth) in providing technical and professional training programmes for selected vocational training centers operating in agro-food, ICT and green industries</i> <i>II.4.c Design upgrading plans to enhance the supply of selected vocational training institutions in terms of quality and number of young professionals</i> <i>II.4.d Organize a validation workshop to discuss and adopt the proposed upgrading plans</i> <i>II.4.e Assist in the implementation of the approved upgrading plans comprising 'soft' and 'hard' activities</i> <i>II.4.f Develop training materials and manuals adapted to the national specificities</i> <i>II.4.g Reinforce capacities of the concerned professional training institutions through delivery of computer equipment and training kits</i> <i>II.4.h Organize training-of-trainers sessions</i>			
II.5 Training provided for 800 national experts, trainers, engineers and technicians plus special training for 200 regional and sub-regional experts (50 experts per sub-group (total 150) and 50 regional experts)	Number of experts, trainers, engineers and technicians certified and number of national consultants involved into the Programme activities	Reports on training seminars, Programme reports, reports of chambers of consultants and professional associations	Qualified staff and consultants available, and willingness of the public institutions and private sector to create a national and regional technical expertise on SMLs development
<i>II.5.a Identify national needs in capacity building for the local technical expertise (technicians, engineers, trainers, etc.) on approaches and methodologies in the project formulation and appraisal, development and creations of SMLs in entrepreneurship, promoting youth and women employment, agro-food, ICT and green industries</i> <i>II.5.b Prepare an action plan for capacity building and select trainers and trainees</i> <i>II.5.c Organize a validation workshop with the participation of representatives from consulting companies, SMI and SME agencies, employment associations and chambers of industry and commerce to discuss and adopt the proposed action plans</i> <i>II.5.d Provide assistance in the implementation of the programmed training activities for 800 national experts, trainers, engineers and technicians plus special training for 200 regional and sub-regional experts (50 experts per sub-group (total 150) and 50 regional experts)</i>			
II.6 Assistance provided in the development and creation of pilot incubators in the beneficiary countries (1 per beneficiary country)	Pilot incubators established and operational in each beneficiary country and number of entrepreneurs/businesses involved	Media, Programme progress reports, reports of chambers of commerce and industry	Enterprises are motivated and involved to the Programme
<i>II.6.a Analysis and identification of most competitive and high-growth sectors, as identified by the programme, as well as of entrepreneurs' market potentials, specially related to academic, research and technical institutions, suitable location and all background conditions for the set-up of the pilot incubator in the country.</i> <i>II.6.b Business planning to determine costs, benefits and sustainable conditions of the incubator.</i> <i>II.6.c Establishment of the planned incubator at sustainable conditions, including the development of management, training & monitoring of operations and set-up of international linkages with incubator networks in Europe (EBN) and Worldwide (InfoDev networks).</i> <i>II.6.d Development of guideless and tools for the efficient management and monitoring of the incubator technical and financial operations</i> <i>II.6.e Assistance for the creation of a high-growth start-ups pool, which could access venture capital funds and private equity</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
COMPONENT III: Strengthen the quality infrastructure in the Arab world through enhancing AIDMO's capacities in coordinating the regional implementation of the Arab Standardization Strategy 2009-2013 and respond to the immediate needs identified by the Member States			
III.1 Critical and technical review conducted to validate the Arab Standardization Strategy 2009-2013 and to ensure its harmonization and compatibility with international standards and best practices	The degree of harmonization and compliance of the Arab Standardization Strategy with the international good practices on Quality Infrastructure	Compliance report	All Arab countries are in agreement with the scope and content of the Strategy
<i>III.1.a Provide technical support to AIDMO for the formulation of a regional quality policy framework based on the existing strategy</i> <i>III.1.b Initiate consultation within the members of AIDMO on the regional quality policy framework for final approval.</i> <i>III.1.c Organize a regional workshop to discuss and validate the policy framework</i> <i>III.1.d Support AIDMO in the process of endorsing the policy framework at Ministerial level.</i> <i>III.1.e Launch the policy framework at national level through a campaign with series of workshops</i>			
III.2 Situation analysis survey on all AIDMO Member States conducted to map the quality infrastructure status and to identify its needs in both 'soft' and 'hard' interventions at country and regional levels	The QI matrix and index which will be measured as a result of the survey and the list of interventions to be proposed at the end of the survey	The survey and analysis report	AIDMO and the Arab states provide reliable, accurate and complete information for the survey
<i>III.2.a Design the mapping methodology and tools and identify the resources needed to carry out the mapping</i> <i>III.2.b Conduct the full mapping exercise for all members of AIDMO at national level</i> <i>III.2.c Organize national workshops to validate the country specific mapping results</i> <i>III.2.d Organize a regional workshop to discuss and validate the mapping results</i> <i>III.2.e Formulate the intervention matrix at national and regional level and produce the master action plans for each country</i>			
III.3 Series of 'soft' technical interventions at regional level to respond to the needs identified by AIDMO members and those identified in the situation analysis as common and immediate interventions carried out	The list of the interventions to be carried out at regional level	The action plan to be developed as a result of the analysis	AIDMO will have the absorption capacity and commitment to coordinate the implementation of the interventions
<i>III.3.a Prepare a detailed action plan of the interventions to be implemented at regional and technical level including all training and technical assistance activities</i> <i>III.3.b Implement series of interventions (Training and Technical assistance) at regional and national levels</i> <i>III.3.c Review and report on the results of the implementation to AIDMO regional committees</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
III.4 Three full-fledged programmes for three main components of the strategy formulated and support to AIDMO in raising necessary funds for its implementation provided	The number of the programmes to be developed at regional level	The program progress reports	All AIDMO members in agreement on the scope of the 3 programme areas to be developed
<i>III.4.a Identify the 3 most priority areas to be targeted at regional level through a consultation process</i> <i>III.4.b Support AIDMO in the formulation of 3 full-fledged programmes at regional level as part of the regional quality policy framework</i> <i>III.4.c Review and validate the programmes with the regional committees of AIDMO for endorsement</i> <i>III.4.d Support AIDMO in the fund raising process for the formulated programmes</i>			
III.5 Technical capacities of AIDMO in coordinating and managing the regional implementation of the strategy components with its members reinforced	The degree of effective implementation of the agreed action plans	The program progress reports versus the action plans	AIDMO will have the absorption capacity and commitment to implement the interventions and the degree of agreement between its members
<i>III.5.a Conduct an assessment of the capacities of AIDMO in coordinating and managing the regional quality policy framework</i> <i>III.5.b Formulate an action plan for the capacity building of AIDMO based on the assessment results</i> <i>III.5.c Implement the action plan and provide the necessary training and support for AIDMO</i> <i>III.5.d Evaluate the performance of AIDMO in the delivery of the support service to its members</i>			
III.6 Detailed situation assessment conducted and the existing AIDMO survey on the regional accreditation status and countries mapping based on their accreditation capacities and status updated	Updated version of the accreditation survey	The availability of the survey report approved by all member states	The assumption that AIDMO and the Arab states provide reliable, accurate and complete information for the survey with their agreement on the outputs
<i>III.6.a Design the mapping methodology and tools and identify the resources needed to carry out the mapping</i> <i>III.6.b Conduct the full mapping exercise for all members of AIDMO at national level</i> <i>III.6.c Organize national workshops to validate the country specific mapping results</i> <i>III.6.d Organize a regional workshop to discuss and validate the mapping results</i> <i>III.6.e Formulate the intervention matrix at national and regional level and produce the master action plans for each country</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
III.7 Consultation roundtables supported and coordinated with the members of AIDMO and consensus and agreement on the best possible operational model and structure for the Arab Coordination Center for Accreditation achieved	Agreement on a model to be adopted for the Arab Coordination Center for Accreditation.	The minutes of meetings of the regional committees	All member states agree on a model for the coordination center
<i>III.7.a Design different options for the model of the regional coordination center</i> <i>III.7.b Organize regional workshop and expert working group to discuss the proposed options and select the most suitable one</i> <i>III.7.c Prepare a detailed package for the selected model with a detailed action plan for the establishment of the center, review with AIDMO members for endorsement</i>			
III.8 Arab Coordination Center for Accreditation at AIDMO established and its technical and human capacities strengthened to be able to coordinate the regional accreditation setup with all members; its recognition at regional and international levels supported (based on outcomes III.1 and III.6)	A functional center in place with clear scope and mandate equipped with the necessary human resources	The reports of the center	All member countries recognize the role and the mandate of the center and support its activities
<i>III.8.a Implement the detailed action plan for the establishment for the center and provide the needed human resources, equipment and training</i> <i>III.8.b Prepare the procedures, by-laws and documentation needed for the center</i> <i>III.8.c Promote the center at national, regional and international level</i> <i>III.8.d Support the center in the coordination activities at the regional level</i>			
III.9 Selected technical interventions implemented within the region to coordinate and support the regional accreditation efforts within the countries (the interventions will be defined based on the outcomes of the mapping exercise of the region; based on Outcome III.1)	Report on the results of implemented activities	Progress reports and implementation records	All member countries recognize the role and the mandate of the center and support its activities
<i>III.9.a Identify the priority accreditation needs at regional and national level</i> <i>III.9.b Implement selected training activities at regional and national level</i> <i>III.9.c Implements selected technical support activities at regional and national level</i> <i>III.9.d Support the setup of an accreditation cluster at sub-regional level as a model of coordination within the region</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
COMPONENT IV: Support the process of SMI development, investment promotion and enhance productive and trade capacities of the manufacturing enterprises operating in agro-food value chains, ICT and green industries of the Arab States			
IV.1 20 strategic positioning studies conducted for selected niches in agro-food value chains, ICT sector and green industry for member countries.	Markets niches identified and approved by the major stakeholders	Reports on Programme activities implementation, reports of concerned ministries and institutions, study reports	Commitment to structural reforms necessary for successful Programme implementation
<i>IV.1.a Analyze the structure of agro-food value chains, ICT sector and green industry in all beneficiary states and conduct a benchmarking study of the these sectors existing in the region with those of competitor countries</i> <i>IV.1.b Set up selection criteria for the products/value chains subject to the strategic positioning studies</i> <i>IV.1.c Determine the list of products/value chains subject of complementary studies on strategic positioning and identify their geographic scope (local or national)</i> <i>IV.1.d Develop the terms of reference and identify the experts/consultants and consulting firms to conduct the strategic positioning studies</i> <i>IV.1.e Conduct the studies and elaborate reports to be communicated to potential beneficiaries</i> <i>IV.1.f Organize dissemination seminars to communicate and discuss results of the studies</i>			
IV.2 Entrepreneurial, entrepreneurial combined with IT, technical, quality and market related training provided to at least 100 selected to-be or existing entrepreneurs in each country through the EDIP programme and preparation of bankable business plans with special attention to youth and women entrepreneurs.	40 enterprise created and 60 existing enterprises expanded their businesses	Programme progress reports, reports of chambers of commerce and industry, media	Involvement/commitment of participating enterprises
<i>IV.2.a Set-up the EDIP programme, including staffing and equipment</i> <i>IV.2.b Organize the sensitization workshops</i> <i>IV.2.c Organize the Training of Trainers on Enterprise Creation and on Enterprise Growth methodologies</i> <i>IV.2.d Identify/select potential entrepreneurs for Enterprise Creation programme</i> <i>IV.2.e Train identified to-be entrepreneurs through the Enterprise Creation programme</i> <i>IV.2.f Organize entrepreneurs advisory support: advisory/counseling support, foreign partnership promotion, linkage with financing schemes, IT, technical, quality and market related enterprise establishment support</i> <i>IV.2.g Organize awareness workshops on Growth Programme</i> <i>IV.2.h Identify/select enterprises for the Growth Programme</i> <i>IV.2.i Assess performance/potential audit and growth plan development and provide the growth Plan implementation support</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
IV.3 Diagnostics and upgrading plans based on cluster approach developed and implemented by selected private sector SMLs operating in agro-food value chains, ICT sector and green industries (15 per country on pilot basis; based on Outcome IV.1)	Up to an average 15% increase in sales by beneficiary enterprises. Number of pilot clusters operating in agro-food value chains, ICT sector and green industries	Programme progress reports, reports of chambers of commerce and industry, media	Involvement/commitment of participating enterprises
<i>IV.3.a On the basis of the strategic positioning studies, select 15 SMLs active in the three priority sectors in each country – eligible to Upgrading Programmes according to the global and specific approaches</i> <i>IV.3.b Distribute the selected SMLs among homogeneous groups taking into account the approved action plans and the companies' main characteristics (area of activity, size, technical facilities and human resources, priorities in upgrading, etc.)</i> <i>IV.3.c Elaborate questionnaires necessary for diagnostics according to the global and specific approaches</i> <i>IV.3.d Define the specific activities to be implemented for every group and develop plans of intervention</i> <i>IV.3.e Conduct thorough diagnostics (market research and strategic positioning, management skills, quality and technical skills, finances and financial structure, etc.) for the selected companies within the global approach and implement the upgrading plans</i> <i>IV.3.f Carry out fine diagnostics (targeting the companies' specific functions) for selected companies within the specific approach, and implement the upgrading plans</i> <i>IV.3.g Evaluate an impact of the implemented actions on companies' performance</i>			
IV.4 Investment needs at company level identified, a project portfolio formulated and scouting of investment opportunities provided for at least 15 medium and small-scale enterprises in each recipient country (based on Outcome IV.1)	Number of investment projects developed and promoted by the Programme	Media, Programme progress reports and reports on partners' activities	On-going political reforms, involvement/commitment of participating enterprises
<i>IV.4.a Identification of investment needs at company level for at least 15 medium and small-scale enterprises in each recipient country</i> <i>IV.4.b Formulation of a project portfolio of investment opportunities</i> <i>IV.4.c Scouting of investment opportunities of medium and small-scale enterprises in the beneficiary countries</i> <i>IV.4.d Assess business plans and provide advice on financial performance and investment strategies of the selected companies through COMFAR and other ITPO methodological tools</i>			
IV.5 Selected companies assisted in the identification and access to financial mechanisms such as credit lines, mutual guarantee schemes, private equity, financial incubator models for youth and others available locally and abroad	New financial products, mechanism and tools facilitating SMEs' funding approved and available locally	Questionnaires at the companies, reports of funding banks/financial institutions	Cooperation of banking sector and adherence of companies' management to the development process

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
<i>IV.5.a Assess the needs of local companies in self-development activities and investments, and analyze existing obstacles to access financing</i> <i>IV.5.b Carry out a study on existing financial products and assess their impact on industrial SMEs' activities in the region</i> <i>IV.5.c Carry out a feasibility study on the better utilizing of the financial tools available in the region and the development of various new financial products to finance business activities using best practices and existing models</i> <i>IV.5.d Explore and propose various options to develop the Programme's performance and its role as an instrument to mobilize the financial support of financial services sector</i> <i>IV.5.e Design a proposal on the architecture of such financial products as credit lines, mutual guarantee schemes, private equity, financial incubator models for youth</i> <i>IV.5.f Conduct awareness raising and training programmes on management and claim procedures for the national and regional financial institutions</i> <i>IV.5.g Encourage dialogue and exchange of information between local companies and financial institutions</i>			
IV.6 Services of existing NCPs extended to selected groups of enterprises to improve cleaner production in member countries and further spread the cleaner production knowledge	Number of companies completed a Resource Efficient and Cleaner Production (RECP) assessment Share of companies implemented recommended RECP options Reduced use of resources and waste/pollution in the pilot companies	Assessment reports Progress report on implementation at the pilot companies	Arab manufacturing enterprises are committed to implement RECP activities and to exchange on the results achieved
<i>IV.6.a Take stock of the previous CP-related activities in the Arab region and worldwide and analyze benefits achieved and lessons learned</i> <i>IV.6.b Select pilot groups of existing manufacturing SMLs in each Arab State</i> <i>IV.6.c Conduct Resource Efficient and Cleaner Production (RECP) assessment in pilot companies and report on findings</i> <i>IV.6.d Establish and maintain website</i> <i>IV.6.e Produce and disseminate related information materials</i> <i>IV.6.f Hold series of awareness seminars for key sectors and regions</i> <i>IV.6.g Publish case studies with implementation results</i> <i>IV.6.h Organize a regional RECP conference</i>			
IV.7 Assistance on export promotion provided by creating export opportunities in international markets through the UNIDO ITPO network, participation to specialized fairs, B2B, round-tables, and during the negotiations of industrial cooperation agreements with foreign partners	Number of partnerships negotiated and concluded between local and foreign companies	Media, Programme progress reports and reports on partners' activities	Involvement/commitment of participating enterprises
<i>IV.7.a Carry out the fora preparatory activities: identification of export markets, identification of potential internal and external investing countries, identification and formulation of business opportunities, creation of promotional materials, identification of logistics, negotiation and presentation of the Forum with the ITPO network worldwide, development of a media coverage strategy.</i> <i>IV.7.b Organize 2 large investment forums and/or B2B meetings to highlight the investment potentials and new business opportunities and models in the Arab manufacturing sector for the old and new investors, and follow-up in effective accomplishment of the partnership agreements/contracts</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
COMPONENT V: Facilitate transfer of industrial technologies and best product and process innovation practices to the private sector SMEs operating in the priority agro-food value chains, ICT sector and green industries			
V.1 Capability of Arab countries to analyze, gauge and understand current economic performance reinforced with a view to strengthen the ability to identify profitable sources of growth in competing industries, such as fruitful innovation and the adoption and creation of appropriate technologies for the individual country and industry context	Institutions are able to carry out and disseminate analysis of economic performance and concomitant implications for sources of growth identification.	Media, reports and databases	Involvement/commitment of participating institutions, in particular that Governments are ready to release key data needed for analysis
<i>V.1.a Awareness raising initiatives to sensitise all actors involved, including Government and industry, of the importance of innovation and technology for sector and country performance</i> <i>V.1.b Measurement and benchmarking of AIDMO countries' productivity performance within AIDMO as well as relative to the rest of the world</i> <i>V.1.c Measurement of AIDMO countries' changing productivity performance over time within AIDMO as well as relative to the rest of the world</i> <i>V.1.d Comparison of regions'/countries' performance, with an analysis of the role of context versus generalization</i> <i>V.1.e Diagnosis of AIDMO regions'/countries' sources of growth</i> <i>V.1.f Training on how to carry out problem identification with respect to innovation and growth</i> <i>V.1.g Training on the role of investment in intangible assets for innovation and growth</i> <i>V.1.h Training on the measurement, analysis and the respective roles of embodied and disembodied technical change for innovation and growth</i> <i>V.1.i Based on the above outcomes, survey of SMEs in agro-industry, ICT and green industries in AIDMO countries to obtain a picture of technology acquisition, kinds of technologies acquired and the demands of firms in terms of incentives and loosening of constraints</i>			
V.2 Capacity reinforced to analyze past policies and strategies carried out for promoting innovation and technology in Arab countries, including benchmarking against innovation policies implemented in some developed countries and emerging economies (France, Italy, Malaysia, Spain, Turkey) conducted	Catalogue of successful innovation countries and institutions able to carry out comparisons with other countries based on benchmarking tools	Report and database	Governments' willingness to be ranked and compared with other countries
<i>V.2.a Cataloguing of successful innovation countries, with particular reference made to useful and appropriate innovation and technology for the case of AIDMO</i> <i>V.2.b Capacity-building at innovation and technology institutions using training and workshops</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
V.3 Improved system for the facilitation of technology transfer to the Arab world	Number of technology acquisition projects and partnership agreements (including South-South cooperation) in the area of innovation and systems of innovation	Programme progress reports, national statistics, reports of concerned ministries and institutions, media	Involvement/commitment of academia, Government and other participating public and private entities
<i>V.3.a Training on how to link to and acquire technological knowledge from export and import markets, foreign direct investment, partnerships, joint ventures, etc.</i> <i>V.3.b Linking industry to Government and academia by way of innovation systems</i> <i>V.3.c Linking AIDMO countries to South-South cooperation initiatives, such as UNIDO International Technology Centres, with an aim to identify appropriate technologies, support complete technology transfer and set up pilot programs</i> <i>V.3.d Linking AIDMO industries to the UNCHAIN twinning program</i>			
V.4 A coherent and harmonized regional action-plan for promoting innovations (e.g., innovation policies, legislative framework, incentives, information campaigns and training on innovation) developed for the Arab countries (based on outcomes V.1-3)	Regional action-plan adopted and visible in planning and strategy documents of both regional and national importance	Regional and national planning and strategy documents, programme progress reports, Media	Commitment and involvement of the public sector to structural reforms and the Programme implementation
<i>V.4.a Examination of the legislative framework, incentives and training, as well as comparison with success cases</i> <i>V.4.b Development of an action-plan</i> <i>V.4.c Adoption and implementation of action-plan</i> <i>V.4.d Evaluation of implementation and fine-tuning of action-plan</i>			
V.5 Capacities of R&D and technical support institutions in Arab states reinforced for promoting technologies and innovation, as well as facilitating technology transfer through partnerships with similar institutions in industrialized developing and developed countries	Policies for improving the capacity of innovation and technology institutions developed and validated and number of partnerships established	Programme progress reports and reports of concerned institutions, Media	Commitment and involvement of the public sector to structural reforms and the Programme implementation
<i>V.5.a Identification of technology and innovation institutions in industrialized developing and developed countries</i> <i>V.5.b Training on promotion of innovation and technologies</i> <i>V.5.c Training on policy design and implementation for innovation and technology-driven SMI development</i>			

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
V.6 Infrastructure for product and process innovation developed and promoted on pilot basis among SMIs operating in priority sectors (agro-industries, ICT and green industries)	Action-plan adopted and cleared for the implementation, and innovation and technology institutions able to develop products and processes suitable to local context and conditions	Reports of innovation and technology institutions, action plan, programme process report, media	Commitment and involvement of the public sector to structural reforms and the Programme implementation
<i>V.6.a Identification of existing infrastructure of relevant innovation and technology</i> <i>V.6.b Comparison of existing infrastructure with similar infrastructures in fast-growing industrialized countries</i> <i>V.6.c Development and implementation of an action-plan for the improvement and creation of an innovation-conducive infrastructure for product and process innovation</i> <i>V.6.d Training of relevant innovation and technology institutions on best-practice product and process innovation</i> <i>V.6.e Training on adaptation of best-practice product and process innovation to different contexts and conditions</i>			

ANNEX III: PROGRAMME ARTICULATION BETWEEN COUNTRY GROUPS AND PRIORITY SECTORS

How to read the matrix

0 = no relevance to sub group of countries and/or sector

1 = low relevance to sub group of countries and/or sector

2 = high relevance to sub group of countries and/or sector

- The numbering merely indicates the degree of relevance of the programme's technical interventions to the specific needs and characteristics of each sub group. It does not, however, have any implication on the technical nature of the intervention. A technical intervention of high relevance (numbered 2) in the ICT sector in the primary product export group of Arab countries will focus on basic ICT skills while a similarly numbered technical intervention in the GCC is to focus on highly advanced applications in ICT.
- Merged cells mean that a single intervention achieves two objectives or an intervention is not sensitive to differences between sectors

COUNTRY GROUPS	GROUP 1 GCC/ OIL ECONOMIES			GROUP 2 DIVERSIFIED ECONOMIES			GROUP 2 PRIMARY PRODUCT EXPORT ECONOMIES		
PRIORITY SECTORS	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries
COMPONENT I: Reform of the institutional framework, the business environment and financial instruments related to the development of small- and medium-size manufacturing enterprises									
I.1 Specific constraints on SMIs in the present institutional, regulatory, business and financial frameworks identified in the areas of SMI creation, operation, innovation, export promotion, green orientation, and employment of youth and women	2			2			2		
I.2 Action plans developed for upgrading and improving the present frameworks to the benefit of SMIs in the areas and sectors specified in Outcome I.1	1	2	2	2	2	2	2	2	
I.3 A handbook entitled "Arab SMIs Policy Framework" including all actual policies/incentives common to each sub-group and specificities of individual countries plus new improved policies proposed by UNIDO	2			2			2		
I.4 The initiative undertaken by UNIDO to create a new "Arab SMI Enhancer Indicator" (ASEI) in order to rank sub-groups and individual countries as per implementation status of needed reforms listed in handbook. Indicators to be measured by yearly and promoted worldwide	2			2			2		
I.5 Modules for improved financing packages for SMIs at their different stages of development prepared and tested	2			2			2		

COUNTRY GROUPS	GROUP 1 GCC/ OIL ECONOMIES			GROUP 2 DIVERSIFIED ECONOMIES			GROUP 2 PRIMARY PRODUCT EXPORT ECONOMIES		
PRIORITY SECTORS	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries
COMPONENT II: Strengthen capacities and capabilities of technical and advisory support institutions providing assistance to SMI development, job creation and investment promotion in Arab States									
II.1 A handbook entitled "Arab SMIs Supporting Institutions" including a listing of all existing technical and advisory support institutions at the country, sub-group and regional levels along with types of support and eligibility criteria	2			2			2		
II.2 Diagnostic studies conducted and action plans developed for upgrading selected technical, advisory, employment and vocational training support institutions	2			2			2		
II.3 Capacities and capabilities of selected technical and advisory support institutions reinforced through training, study tours, software, small equipment, documentation, etc.	1	2	2	2	2	2	2	2	2
II.4 Capacity of selected employment and vocational training centers operating in agro-food value chains, ICT sector and green industries strengthened	1	2	2	2	2	2	2	2	2
II.5 Training provided for 800 national experts, trainers, engineers and technicians plus special training for 200 regional and sub-regional experts	1	2	2	2	2	2	2	2	2
II.6 Assistance provided in the development and creation of pilot incubators in the beneficiary countries	1	2	2	2	2	2	2	2	2

COUNTRY GROUPS	GROUP 1 GCC/ OIL ECONOMIES			GROUP 2 DIVERSIFIED ECONOMIES			GROUP 2 PRIMARY PRODUCT EXPORT ECONOMIES		
PRIORITY SECTORS	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries
COMPONENT III: <i>Strengthen the quality infrastructure in the Arab world through enhancing AIDMO's capacities in coordinating the regional implementation of the Arab Standardization Strategy 2009-2013 and respond to the immediate needs identified by the Member States</i>									
III.1 Critical and technical review conducted to validate the Arab Standardization Strategy 2009-2013 and to ensure its harmonization and compatibility with international standards and best practices	2			2			2		
III.2 Situation analysis survey on all AIDMO Member States conducted to map the quality infrastructure status and to indentify its needs in both 'soft' and 'hard' interventions at country and regional levels	2			2			2		
III.3 Series of 'soft' technical interventions at regional level to respond to the needs identified by AIDMO members and those identified in the situation analysis as common and immediate interventions carried out	2			2			2		
III.4 Three full-fledged programmes for three main components of the strategy formulated and support to AIDMO in raising necessary funds for its implementation provided	2								
III.5 Technical capacities of AIDMO in coordinating and managing the regional implementation of the strategy components with its members reinforced	2								

COUNTRY GROUPS	GROUP 1 GCC/ OIL ECONOMIES			GROUP 2 DIVERSIFIED ECONOMIES			GROUP 2 PRIMARY PRODUCT EXPORT ECONOMIES		
PRIORITY SECTORS	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries
III.6 Detailed situation assessment conducted and the existing AIDMO survey on the regional accreditation status and countries mapping based on their accreditation capacities and status updated	2			2			2		
III.7 Consultation roundtables supported and coordinated with the members of AIDMO and consensus and agreement on the best possible operational model and structure for the Arab Coordination Center for Accreditation achieved	2			2			2		
III.8 Arab Coordination Center for Accreditation at AIDMO established and its technical and human capacities strengthened to be able to coordinate the regional accreditation setup with all members; its recognition at regional and international levels supported	2								
III.9 Selected technical interventions implemented within the region to coordinate and support the regional accreditation efforts within the countries	2			2			2		

COUNTRY GROUPS	GROUP 1 GCC/ OIL ECONOMIES			GROUP 2 DIVERSIFIED ECONOMIES			GROUP 2 PRIMARY PRODUCT EXPORT ECONOMIES		
PRIORITY SECTORS	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries
COMPONENT IV: Support the process of SMI development, investment promotion and enhance productive and trade capacities of the manufacturing enterprises operating in agro-food value chains, ICT and green industries of the Arab States									
IV.1 20 strategic positioning studies conducted for selected niches in agro-food value chains, ICT sector and green industry for member countries	1	2	2	2	2	2	2	2	2
IV.2 Entrepreneurial, entrepreneurial combined with IT, technical, quality and market related training provided to at least 100 selected to-be or existing entrepreneurs in each country through the EDIP programme and preparation of bankable business plans with special attention to youth and women entrepreneurs.	2			2			2		
IV.3 Diagnostics and upgrading plans based on cluster approach developed and implemented by selected private sector SMIs operating in agro-food value chains, ICT sector and green industries	1	2	2	2	2	2	2	2	2

COUNTRY GROUPS	GROUP 1 GCC/ OIL ECONOMIES			GROUP 2 DIVERSIFIED ECONOMIES			GROUP 2 PRIMARY PRODUCT EXPORT ECONOMIES		
PRIORITY SECTORS	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries
IV.4 Investment needs at company level identified, a project portfolio formulated and scouting of investment opportunities provided for at least 15 medium and small-scale enterprises in each recipient country	1	2	2	2	2	2	2	2	2
IV.5 Selected companies assisted in the identification and access to financial mechanisms such as credit lines, mutual guarantee schemes, private equity, financial incubator models for youth and others available locally and abroad	2			2			2		
IV.6 Services of existing NCPs extended to selected groups of enterprises to improve cleaner production in member countries and further spread the cleaner production knowledge	1	0	2	2	0	2	2	0	2
IV.7 Assistance on export promotion provided by creating export opportunities in international markets through the UNIDO ITPO network, participation to specialized fairs, B2B, round-tables, and during the negotiations of industrial cooperation agreements with foreign partners	1	2	2	2	2	2	2	2	2

COUNTRY GROUPS	GROUP 1 GCC/ OIL ECONOMIES			GROUP 2 DIVERSIFIED ECONOMIES			GROUP 2 PRIMARY PRODUCT EXPORT ECONOMIES		
PRIORITY SECTORS	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries
COMPONENT V: <i>Facilitate transfer of industrial technologies and best product and process innovation practices to the private sector SMEs operating in the priority agro-food value chains, ICT sector and green industries</i>									
V.1 Capability of Arab countries to analyze, gauge and understand current economic performance reinforced with a view to strengthen the ability to identify profitable sources of growth in competing industries, such as fruitful innovation and the adoption and creation of appropriate technologies for the individual country and industry context	2			2			2		
V.2 Capacity reinforced to analyze past policies and strategies carried out for promoting innovation and technology in Arab countries, including benchmarking against innovation policies implemented in some developed countries and emerging economies (France, Italy, Malaysia, Spain, Turkey) conducted	2								
V.3 Improved system for the facilitation of technology transfer to the Arab world	2								

COUNTRY GROUPS	GROUP 1 GCC/ OIL ECONOMIES			GROUP 2 DIVERSIFIED ECONOMIES			GROUP 2 PRIMARY PRODUCT EXPORT ECONOMIES		
	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries	Agro-Food Value Chains	ICT Sector	Green Industries
V.4 A coherent and harmonized regional action-plan for promoting innovations (e.g., innovation policies, legislative framework, incentives, information campaigns and training on innovation) developed for the Arab countries	2								
V.5 Capacities of R&D and technical support institutions in Arab states reinforced for promoting technologies and innovation, as well as facilitating technology transfer through partnerships with similar institutions in industrialized developing and developed countries	1	2	2	2	2	2	2	2	2
V.6 Infrastructure for product and process innovation developed and promoted on pilot basis among SMIs operating in priority sectors	1	2	2	2	2	2	2	2	2

ANNEX IV: PROGRAMME ACTIVITIES BY OUTCOMES

COMPONENT I: REFORM OF THE INSTITUTIONAL FRAMEWORK, THE BUSINESS ENVIRONMENT AND FINANCIAL INSTRUMENTS RELATED TO THE DEVELOPMENT OF SMALL- AND MEDIUM-SIZE MANUFACTURING ENTERPRISES

Outcome I.1	Specific constraints on SMIs in the present institutional, regulatory, business and financial frameworks identified in the areas of SMI creation, operation, innovation, export promotion, green orientation, and employment of youth and women			
Success indicators	Action plan carrying amendments to the institutional, regulatory, business and financial framework developed and approved			
UNIDO Service Module(s)	PTC/BIT, PTC/EMB, PTC/SPL, RSF/DPR			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
I.1.a Collect information on studies carried out in the area of SMIs and women and youth employment in the beneficiary countries	UNIDO, AIDMO and national counterparts	07	09	Inventory report available
I.1.b Consultants in individual countries to prepare short legal studies stating exact policies and actions of relevance to SMI creation, operation, innovation, exit and employment of youth and women. Studies are prepared on the basis of a specific set of questions for all 21 countries (same format)		07	09	Short legal studies for each beneficiary state produced
I.1.c A survey for a small selected sample of SMIs in agro food value chains, green industries and ICT enquiring on institutional, regulatory, business and financial constraints faced by them at the policy and institutional levels in the areas identified (same format for all countries)		07	09	Results of survey available

Activities	Parties involved	Duration		Milestones
		Start	End	
I.1.d Analyze existing national legislation, institutional framework and financial mechanisms related to the promotion of SMEs and employment in the beneficiary countries and produce a report for each sub-group of countries with 1) listing of problems for the countries within the group for all constraints of relevance to agro-food value chain, ICT sector and green industries; 2) collection of common problems in the sub-group; 3) identification of country specificities	UNIDO, AIDMO and national counterparts	09	12	Analysis conducted and reports produced
I.1.e Based on results of the analysis and the experience of selected Arab and other developing and developed states and in consultations with concerned national bodies, propose an action plan detailing amendments to the existing regulations, fiscal, financial and other administrative mechanisms for SMEs and employment promotion		09	12	Amendments elaborated
I.1.f Organize a series of validation workshops to discuss and adopt the amendments to the legislative and institutional framework favourable for the business environment (including financial instruments)		13	13	Legislative and institutional framework adopted

Outcome I.2	Action plans developed for upgrading and improving the present frameworks to the benefit of SMLs in the areas and sectors specified in Outcome I.1			
Success indicators	Institutional, regulatory, business and financial environment favours the local private sector development and employment creation for young graduates			
UNIDO Service Module(s)	PTC/BIT, PTC/EMB, PTC/SPL, RSF/DPR			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
I.2.a Assist national governments in implementing the proposed amendments to the legislative and institutional framework (see Outcome I.1)	UNIDO, AIDMO, Chambers of Commerce and Industry, and national counterparts	15	24	Proposed amendments introduced
I.2.b Develop guidelines on regulatory and administrative procedures and define advantages of the new legislative framework proposed by the Programme		09	12	Guidelines developed
I.2.c Prepare information and training programmes on new administrative procedures		10	12	Programmes prepared
I.2.d Conduct a training seminar on the new regulations for SMLs and the staff of concerned ministries, institutions, banks, employment support institutions and sectoral associations and employment related institutions		24	27	Concerned stakeholders sensitized

Outcome I.3	A handbook entitled “Arab SMIs Policy Framework” including all actual policies/incentives common to each sub-group and specificities of individual countries plus new improved policies proposed by UNIDO			
Success indicators	Handbook produced and promoted at the national, sub group, regional and international levels			
UNIDO Service Module(s)	PTC/BIT, PTC/EMB, PTC/SPL, RSF/DPR			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
I.3.a Put the information in I.2 in a handbook format for stakeholders	UNIDO, AIDMO and national counterparts	10	12	Handbook produced
I.3.b Promote the handbook at the national, sub group, regional and international levels		13	30	Handbook promoted

Outcome I.4	The initiative undertaken by UNIDO to create a new “Arab SMI Enhancer Indicator” (ASEI) in order to rank sub-groups and individual countries as per implementation status of needed reforms listed in handbook. Indicators to be measured by yearly and promoted worldwide			
Success indicators	ASEI established and promoted internationally			
UNIDO Service Module(s)	PTC/BIT, PTC/EMB, PTC/SPL, RSF/DPR			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
I.4.a Prepare the blueprints for survey format and questionnaire needed for measurement of indicators and ranking of countries	UNIDO, AIDMO and national counterparts	09	12	Blueprints prepared
I.4.b Wide promotion campaign for the idea of the indicator to create competition among governments for implementation of policies		13	18	Promotion activities carried out
I.4.c Negotiate with international donor agencies financing SMI projects in individual countries on basis of indicators results		13	24	Series of negotiations conducted

Outcome I.5	Modules for improved financing packages for SMLs at their different stages of development prepared and tested			
Success indicators	New procedures and mechanism facilitate financing of the local SMLs and funding institutions systematically link local SMLs to credit			
UNIDO Service Module(s)	PTC/BIT, PTC/SPL, RSF/DPR			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
I.5.a Assess the needs of local companies in self-development activities and investments, and analyze existing obstacles to access financing	UNIDO, AIDMO and national counterparts	08	12	Analysis conducted
I.5.b Identify five financial institutions providing finance to SMLs (three national institutions, one from each sub group plus two regional on the basis of clearly identified criteria: size of operation, degree of success in financing projects etc.)		08	12	Institutions identified
I.5.c Carry out a study on existing financial products, assess their impact on industrial SMLs' activities in the region and identify problem areas and suggested solutions from institutions themselves		08	12	Study carried out
I.5.d Carry out a feasibility study on the better utilizing of the financial tools available in the region and the development of various new financial products to finance business activities using best practices and existing models		08	12	Study carried out
I.5.e Explore and propose various options to develop the Programme's performance and its role as an instrument to mobilize the financial support of financial services sector		10	12	Options of funding identified
I.5.f Design a proposal on the architecture of such financial products (sources of financial injections, organization of operations, management scheme, financial incubators and long term borrowing)		08	12	Architecture developed and approved

Activities	Parties involved	Duration		Milestones
		Start	End	
I.5.g Promote partnership with regional and international financial institutions	UNIDO, AIDMO and national counterparts	13	14	Activity implemented
I.5.h Conduct awareness raising and training programmes on management and claim procedures for the national and regional financial institutions		13	14	Training programme organized
I.5.i Promote a common methodology (both national and regional) in risk assessment and analysis of applications for funding		13	14	Consolidated methodology developed
I.5.g Encourage dialogue and exchange of information between local companies and financial institutions		13	18	Activity implemented

COMPONENT II: STRENGTHEN CAPACITIES AND CAPABILITIES OF TECHNICAL AND ADVISORY SUPPORT INSTITUTIONS PROVIDING ASSISTANCE TO SMI DEVELOPMENT, JOB CREATION AND INVESTMENT PROMOTION IN ARAB STATES

Outcome II.1	A handbook entitled “Arab SMIs Supporting Institutions” including a listing of all existing technical and advisory support institutions at the country, sub-group and regional levels along with types of support and eligibility criteria			
Success indicators	Handbook produced and promoted among support institutions across the region			
UNIDO Service Module(s)	PTC/BIT, PTC/AGR, PTC/EMB, PTC/SPL, RSF/DPR			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
II.1.a Identify the key technical support institutions in charge of promotion of SMEs and employment at country, sub-group and regional levels if relevant (concerned ministries, agencies, general directorates, sectoral centres, research and development institutions, export promotion agencies, analysis and testing laboratories, specialized in technical expertise, information systems and networks)	UNIDO, AIDMO and national counterparts	09	10	Institutions identified
II.1.b Produce a handbook for all supporting technical and advisory support institutions in the individual countries, sub-group level and regional level with services offered by each (handbook to be updated every four years)		11	13	Handbook produced
II.1.c Promote handbook jointly with ‘Arab SMIs policy framework’ as a package or ‘survival kit for an Arab SMI’		13	18	Handbook promoted across the Arab world

Outcome II.2	Diagnostic studies conducted and action plans developed for upgrading selected technical, advisory, employment and vocational training support institutions (4 institutions per country; on the basis of Outcome II.1)			
Success indicators	Upgrading plans for the technical support institutions developed and approved			
UNIDO Service Module(s)	PTC/BIT, PTC/AGR, PTC/EMB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
II.2.a Assess current situation in existing technical support institutions (questionnaires, on-site visits, etc.) through diagnostics studies	UNIDO, AIDMO and national counterparts	11	16	Diagnostics conducted for each institution
II.2.b Identify the needs in strengthening institutional and technical capacities and prepare upgrading plans for selected institutions		11	16	Needs identified and upgrading plans prepared
II.2.c Elaborate detailed action plans for every institution on the basis of diagnostics on upgrading		11	16	Action plans elaborated
II.2.d Organize a validation workshop to adopt the upgrading plans		17	18	Upgrading plans adopted
II.2.e Elaborate the terms of reference and identify consultants to develop and implement these activities		16	18	Consultants recruited

Outcome II.3	Capacities and capabilities of selected technical and advisory support institutions reinforced through training, study tours, software, small equipment, documentation, etc. (3 institutions per country; on the basis of outcomes II.1 and II.2)			
Success indicators	Degree of SMEs' satisfaction with the quality of services provided by selected institutions			
UNIDO Service Module(s)	PTC/BIT, PTC/AGR, PTC/EMB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
II.3.a Assist in the implementation of the approved action plans for upgrading of the selected technical support institutions (see Outcome II.2)	UNIDO, AIDMO, Chambers of Commerce and Industry, and national counterparts	19	27	Upgrading plans implemented
II.3.b Assist technical support institutions in developing new services, which are better adapted to the needs of the local industries		19	27	Services enhanced and/or developed
II.3.c Purchase and deliver small equipment, documentation, and software tools to reinforce the programme implementation capacities of the concerned institutions		19	27	Technical capacities of beneficiary institutions strengthened
II.3.d Organize trainings and information seminars for the staff of the beneficiary ministries, banks, and institutions in charge of SMI development and employment promotion		25	27	Staff trained and equipment delivered and installed
II.3.e Develop joint activities and establish a regional infrastructure aiming at strengthening coordination and partnership between the beneficiary technical support institutions		25	30	Regional networking and coordination infrastructure in place
II.3.f Organize study tours for selected staff members of the concerned national institutions to learn best practices and experience of similar centers throughout the region and in other developing and developed countries		25	30	Training activities organized

Outcome II.4	Capacity of selected employment and vocational training centers operating in agro-food value chains, ICT sector and green industries strengthened (one center per country; on the basis of relevant parts in outcomes II.1 and II.2)			
Success indicators	Number of persons equipped with state-of-the-art skills			
UNIDO Service Module(s)	PTC/BIT, PTC/AGR, PTC/EMB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
II.4.a Take stock of existing national programmes and curricula in the area of professional and vocational training in all beneficiary countries	UNIDO, AIDMO and national counterparts	08	11	Inventory report available
II.4.b Identify and proceed to analysis of the needs and supply capacities (with special focus on weaknesses in labor skills of women and youth) in providing technical and professional training programmes for selected vocational training centers operating in agro-food, ICT and green industries		08	12	Major indicators and trends identified
II.4.c Design upgrading plans to enhance the supply of selected vocational training institutions in terms of quality and number of young professionals		12	15	Upgrading plans developed
II.4.d Organize a validation workshop to discuss and adopt the proposed upgrading plans		15	16	Upgrading plans approved
II.4.e Assist in the implementation of the approved upgrading plans comprising 'soft' and 'hard' activities		18	36	"Soft" and 'hard' upgrading activities delivered
II.4.f Develop training materials and manuals adapted to the national specificities		18	24	Adapted materials and manuals available
II.4.g Reinforce capacities of the concerned professional training institutions through delivery of computer equipment and training kits		18	36	Equipment et kits delivered
II.4.h Organize training-of-trainers sessions		21	30	Training sessions implemented

Outcome II.5	Training provided for 800 national experts, trainers, engineers and technicians plus special training for 200 regional and sub-regional experts (50 experts per sub- group (total 150) and 50 regional experts)			
Success indicators	National and regional technical expertise available for SMIs development			
UNIDO Service Module(s)	PTC/BIT, PTC/AGR, PTC/EMB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
II.5.a Identify national needs in capacity building for the local technical expertise (technicians, engineers, trainers, etc.) on approaches and methodologies in the project formulation and appraisal, development and creations of SMIs in agro-food industries, entrepreneurship, promoting youth and women employment, ICT and green industries	UNIDO, AIDMO and national counterparts	07	09	Needs identified
II.5.b Prepare an action plan for capacity building and select trainers and trainees		09	12	Action plans prepared, beneficiaries identified
II.5.c Organize a validation workshop with the participation of representatives from consulting companies, SMI and SME agencies, employment associations and chambers of industry and commerce to discuss and adopt the proposed action plans		13	14	Action plan supported by major stakeholders
II.5.d Provide assistance in the implementation of the programmed training activities for 800 national experts, trainers, engineers and technicians plus special training for 200 regional and sub-regional experts (50 experts per sub- group (total 150) and 50 regional experts)		15	30	Up to 1000 experts trained

Outcome II.6	Assistance provided in the development and creation of pilot incubators in the beneficiary countries (one per beneficiary country)			
Success indicators	Pilot incubators established and operational in each beneficiary country			
UNIDO Service Module(s)	PTC/BIT			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
II.6.a Analysis and identification of most competitive and high-growth sectors, as identified by the programme, as well as of entrepreneurs' market potentials, specially related to academic, research and technical institutions, suitable location and all background conditions for the set-up of the pilot incubator in the country.	UNIDO, AIDMO and national counterparts	16	21	Background analysis of the incubator finalized
II.6.b Business planning to determine costs, benefits and sustainable conditions of the incubator.		22	26	Incubator business plan completed
II.6.c Establishment of the planned incubator at sustainable conditions, including the development of management, training & monitoring of operations and set-up of international linkages with incubator networks in Europe (EBN) and Worldwide (InfoDev networks).		26	38	Incubator established and operational
II.6.d Development of guideless and tools for the efficient management and monitoring of the incubator technical and financial operations		30	36	Incubator tools and methodologies finalized and applied
II.6.e Assistance for the creation of a high-growth start-ups pool, which could access venture capital funds and private equity		36	42	Pool of high-growth start-ups created

COMPONENT III: STRENGTHEN THE QUALITY INFRASTRUCTURE IN THE ARAB WORLD THROUGH ENHANCING AIDMO'S CAPACITIES IN COORDINATING THE REGIONAL IMPLEMENTATION OF THE ARAB STANDARDIZATION STRATEGY 2009-2013 AND RESPOND TO THE IMMEDIATE NEEDS IDENTIFIED BY THE MEMBER STATES

Outcome III.1	Critical and technical review conducted to validate the Arab Standardization Strategy 2009-2013 and to ensure its harmonization and compatibility with international standards and best practices			
Success indicators	Validated regional standardisation strategy following international best practices and endorsed by AIDMO member states			
UNIDO Service Module(s)	PTC/TCB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
III.1.a Provide technical support to AIDMO for the formulation of a regional quality policy framework based on the existing strategy	UNIDO, AIDMO and national counterparts	09	12	Policy framework formulated
III.1.b Initiate consultation within the members of AIDMO on the regional quality policy framework for final approval		11	15	Technical consultations organised
III.1.c Organize a regional workshop to discuss and validate the policy framework		15	15	Policy framework validated
III.1.d Support AIDMO in the process of endorsing the policy framework at Ministerial level		15	16	Policy framework endorsed
III.1.e Launch the policy framework at national level through a campaign with series of workshops		18	22	Policy framework launched

Outcome III.2	Situation analysis survey on all AIDMO Member States conducted to map the quality infrastructure status and to indentify its needs in both 'soft' and 'hard' interventions at country and regional levels			
Success indicators	Comprehensive situation analysis and needs assessment report reflects the current status of the quality infrastructure in the region.			
UNIDO Service Module(s)	PTC/TCB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
III.2.a Design the mapping methodology and tools and identify the resources needed to carry out the mapping	UNIDO, AIDMO and national counterparts	12	15	Methodology and tools designed and needs identified
III.2.b Conduct the full mapping exercise for all members of AIDMO at national level		15	22	Results of mapping available
III.2.c Organize national workshops to validate the country specific mapping results		20	22	Results of mapping validated nationally
III.2.d Organize a regional workshop to discuss and validate the mapping results		23	23	Results of mapping validated regionally
III.2.e Formulate the intervention matrix at national and regional level and produce the master action plans for each country		24	26	Intervention matrix and master action plans formulated

Outcome III.3	Series of ‘soft’ technical interventions at regional level to respond to the needs identified by AIDMO members and those identified in the situation analysis as common and immediate interventions carried out (based on Outcome III.1)			
Success indicators	Number and quality of interventions carried out at regional level			
UNIDO Service Module(s)	PTC/TCB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
III.3.a Prepare a detailed action plan of the interventions to be implemented at regional and technical level including all training and technical assistance activities	UNIDO, AIDMO and national counterparts	24	26	Action plan developed
III.3.b Implement series of interventions (Training and Technical assistance) at regional and national levels		26	36	Regional and national level activities implemented
III.3.c Review and report on the results of the implementation to AIDMO regional committees		28	36	Progress report submitted

Outcome III.4	Three full-fledged programmes for three main components of the strategy formulated and support to AIDMO in raising necessary funds for its implementation provided			
Success indicators	Amount of funds raised for the implementation of the 3 formulated programmes			
UNIDO Service Module(s)	PTC/TCB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
III.4.a Identify the 3 most priority areas to be targeted at regional level through a consultation process	UNIDO, AIDMO and national counterparts	26	28	Priority areas identified
III.4.b Support AIDMO in the formulation of 3 full-fledged programmes at regional level as part of the regional quality policy framework		28	30	3 full-fledged programmes formulated
III.4.c Review and validate the programmes with the regional committees of AIDMO for endorsement		30	30	Programmes endorsed
III.4.d Support AIDMO in the fund raising process for the formulated programmes		30	34	Fund-raising campaign supported

Outcome III.5	Technical capacities of AIDMO in coordinating and managing the regional implementation of the strategy components with its members reinforced			
Success indicators	Effective and sustainable delivery of support services provided by AIDMO			
UNIDO Service Module(s)	PTC/TCB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
III.5.a Conduct an assessment of the capacities of AIDMO in coordinating and managing the regional quality policy framework	UNIDO, AIDMO and national counterparts	16	25	Assessment report available
III.5.b Formulate an action plan for the capacity building of AIDMO based on the assessment results		15	15	Action plan developed
III.5.c Implement the action plan and provide the necessary training and support for AIDMO		16	22	Action plan implemented
III.5.d Evaluate the performance of AIDMO in the delivery of the support service to its members		22	48	Post-evaluation report available

Outcome III.6	Detailed situation assessment conducted and the existing AIDMO survey on the regional accreditation status and countries mapping based on their accreditation capacities and status updated (based on Outcome III.1)			
Success indicators	A comprehensive mapping report in place for the regional accreditation.			
UNIDO Service Module(s)	PTC/TCB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
III.6.a Design the mapping methodology and tools and identify the resources needed to carry out the mapping	UNIDO, AIDMO and national counterparts	15	18	Mapping methodology and tools designed and needs identified
III.6.b Conduct the full mapping exercise for all members of AIDMO at national level		16	22	Results of mapping available
III.6.c Organize national workshops to validate the country specific mapping results		20	22	Results of mapping validated nationally
III.6.d Organize a regional workshop to discuss and validate the mapping results		23	23	Results of mapping validated regionally
III.6.e Formulate the intervention matrix at national and regional level and produce the master action plans for each country		24	26	Intervention matrix and master action plans formulated

Outcome III.7	Consultation roundtables supported and coordinated with the members of AIDMO and consensus and agreement on the best possible operational model and structure for the Arab Coordination Center for Accreditation achieved			
Success indicators	A model for the regional coordination centre for accreditation identified and endorsed by AIDMO			
UNIDO Service Module(s)	PTC/TCB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
III.7.a Design different options for the model of the regional coordination center	UNIDO, AIDMO and national counterparts	19	22	Models of regional coordination center designed
III.7.b Organize regional workshop and expert working group to discuss the proposed options and select the most suitable one		23	23	Most suitable model selected
III.7.c Prepare a detailed package for the selected model with a detailed action plan for the establishment of the center, review with AIDMO members for endorsement		24	26	Action plan developed and endorsed

Outcome III.8	Arab Coordination Center for Accreditation at AIDMO established and its technical and human capacities strengthened to be able to coordinate the regional accreditation setup with all members; its recognition at regional and international levels supported (based on outcomes III.1 and III.6)			
Success indicators	Coordination centre in place and recognised at national, regional and international level			
UNIDO Service Module(s)	PTC/TCB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
III.8.a Implement the detailed action plan for the establishment for the center and provide the needed human resources, equipment and training	UNIDO, AIDMO and national counterparts	27	48	Action plan implemented
III.8.b Prepare the procedures, by-laws and documentation needed for the center		30	36	Documentation developed
III.8.c Promote the center at national, regional and international level		30	36	Promotion activities carried out
III.8.d Support the center in the coordination activities at the regional level		30	48	Support provided

Outcome III.9	Selected technical interventions implemented within the region to coordinate and support the regional accreditation efforts within the countries (the interventions will be defined based on the outcomes of the mapping exercise of the region; based on Outcome III.1)			
Success indicators	Series of interventions implanted by the centre successfully			
UNIDO Service Module(s)	PTC/TCB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
III.9.a Identify the priority accreditation needs at regional and national level	UNIDO, AIDMO and national counterparts	15	18	Priority needs identified
III.9.b Implement selected training activities at regional and national level		18	30	Training activities implemented
III.9.c Implements selected technical support activities at regional and national level		18	30	Technical assistance provided
III.9.d Support the setup of an accreditation cluster at sub-regional level as a model of coordination within the region		31	42	Accreditation cluster established

COMPONENT IV: SUPPORT THE PROCESS OF SMI DEVELOPMENT, INVESTMENT PROMOTION AND ENHANCE PRODUCTIVE AND TRADE CAPACITIES OF THE MANUFACTURING ENTERPRISES OPERATING IN AGRO-FOOD VALUE CHAINS, ICT AND GREEN INDUSTRIES OF THE ARAB STATES

Outcome IV.1	20 strategic positioning studies conducted for selected niches in agro-food value chains, ICT sector and green industry for member countries			
Success indicators	Strategic positioning studies for selected sectors carried out and approved by the concerned parties			
UNIDO Service Module(s)	PTC/BIT, PTC/AGR, PTC/EMB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
IV.1.a Analyze the structure of agro-food value chains, ICT sector and green industry in all beneficiary states and conduct a benchmarking study of the these sectors existing in the region with those of competitor countries	UNIDO, AIDMO and national counterparts	08	12	Results of the benchmarking study available
IV.1.b Set up selection criteria for the products/value chains subject to the strategic positioning studies		08	12	Criteria set-up and approved
IV.1.c Determine the list of products/value chains subject of complementary studies on strategic positioning and identify their geographic scope (local or national)		08	12	List of products/value chains approved
IV.1.d Develop the terms of reference and identify the experts/consultants and consulting firms to conduct the strategic positioning studies		11	13	Consultants recruited
IV.1.e Conduct the studies and elaborate reports to be communicated to potential beneficiaries		14	24	Studies conducted
IV.1.f Organize dissemination seminars to communicate and discuss results of the studies		24	30	Seminars organized

Outcome IV.2	Entrepreneurial, entrepreneurial combined with IT, technical, quality and market related training provided to at least 100 selected to-be or existing entrepreneurs in each country through the EDIP programme and preparation of bankable business plans with special attention to youth and women entrepreneurs			
Success indicators	40 enterprises created and 60 existing enterprises expanded their businesses			
UNIDO Service Module(s)	PTC/BIT, PTC/SPL			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
IV.2.a Set-up the EDIP programme, including staffing and equipment	UNIDO, AIDMO and national counterparts	09	10	EDIP programme set-up
IV.2.b Organize the sensitization workshops		11	30	Target groups sensitized
IV.2.c Organize the Training of Trainers on Enterprise Creation and on Enterprise Growth methodologies		13	30	Trainers trained on EDIP methodology
IV.2.d Identify/select potential entrepreneurs for Enterprise Creation programme		16	42	Potential start-ups identified
IV.2.e Train identified to-be entrepreneurs through the Enterprise Creation programme		18	42	To-be entrepreneurs trained
IV.2.f Organize entrepreneurs advisory support: advisory/counseling support, foreign partnership promotion, linkage with financing schemes, IT, technical, quality and market related enterprise establishment support		20	48	Start-up advisory support provided
IV.2.g Organize awareness workshops on Growth Programme		18	42	Target groups sensitized
IV.2.h Identify/select enterprises for the Growth Programme		20	48	Existing enterprises for expansion identified
IV.2.i Assess performance/potential audit and growth plan development and provide the growth Plan implementation support		30	48	Growth plan assistance implemented

Outcome IV.3	Diagnostics and upgrading plans based on cluster approach developed and implemented by selected private sector SMIs operating in agro-food value chains, ICT sector and green industries (15 per country on pilot basis; based on Outcome IV.1)			
Success indicators	Increase in sales of the beneficiary companies by up to 15% on average			
UNIDO Service Module(s)	PTC/BIT, PTC/AGR, PTC/EMB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
IV.3.a On the basis of the strategic positioning studies, select 15 SMIs active in the three priority sectors in each country – eligible to Upgrading Programmes according to the global and specific approaches	UNIDO, AIDMO and national counterparts	15	16	Companies selected
IV.3.b Distribute the selected SMIs among homogeneous groups taking into account the approved action plans and the companies' main characteristics (area of activity, size, technical facilities and human resources, priorities in upgrading, etc.)		21	24	Groups of companies formed and validated
IV.3.c Elaborate questionnaires necessary for diagnostics according to the global and specific approaches		15	15	Questionnaires drawn up according to the both approaches
IV.3.d Define the specific activities to be implemented for every group and develop plans of intervention		22	24	Specific actions defined and approved
IV.3.e Conduct thorough diagnostics (market research and strategic positioning, management skills, quality and technical skills, finances and financial structure, etc.) for the selected companies within the global approach and implement the upgrading plans		16	24	Thorough diagnostics accomplished and action plans implemented
IV.3.f Carry out fine diagnostics (targeting the companies' specific functions) for selected companies within the specific approach, and implement the upgrading plans		16	21	Fine diagnostics accomplished and action plans implemented
IV.3.g Evaluate an impact of the implemented actions on companies' performance		37	39	Evaluation forms filled in and submitted

Outcome IV.4	Investment needs at company level identified, a project portfolio formulated and scouting of investment opportunities provided for at least 15 medium and small-scale enterprises in each recipient country (based on Outcome IV.1)			
Success indicators	Impact on the global inward and intra-Arab investments flow to the Arab manufacturing sector			
UNIDO Service Module(s)	PTC/BIT			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
IV.4.a Identification of investment needs at company level for at least 15 medium and small-scale enterprises in each recipient country	UNIDO, AIDMO and national counterparts	09	11	Assessment of needs finalized
IV.4.b Formulation of a project portfolio of investment opportunities		12	15	Project portfolio completed
IV.4.c Scouting of investment opportunities of medium and small-scale enterprises in the beneficiary countries		16	18	Scouting of investment opportunities completed
IV.4.d Assess business plans and provide advice on financial performance and investment strategies of the selected companies through COMFAR and other ITPO methodological tools		13	48	COMFAR assessment of business plans carried out

Outcome IV.5	Selected companies assisted in the identification and access to financial mechanisms such as credit lines, mutual guarantee schemes, private equity, financial incubator models for youth and others available locally and abroad (to link with Outcome I.4)			
Success indicators	New procedures and mechanism facilitate financing of the local SMEs and funding institutions systematically link local SMEs to credit			
UNIDO Service Module(s)	PTC/BIT, PTC/SPL			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
IV.5.a Assess the needs of local companies in self-development activities and investments, and analyze existing obstacles to access financing	UNIDO, AIDMO and national counterparts	08	12	Analysis conducted
IV.5.b Carry out a study on existing financial products and assess their impact on industrial SMEs' activities in the region		08	12	Study carried out
IV.5.c Carry out a feasibility study on the better utilizing of the financial tools available in the region and the development of various new financial products to finance business activities using best practices and existing models		08	12	Study carried out
IV.5.d Explore and propose various options to develop the Programme's performance and its role as an instrument to mobilize the financial support of financial services sector		10	12	Options of funding identified
IV.5.e Design a proposal on the architecture of such financial products as credit lines, mutual guarantee schemes, private equity, financial incubator models for youth		08	12	Financial products developed and approved
IV.5.f Conduct awareness raising and training programmes on management and claim procedures for the national and regional financial institutions		13	14	Training programme organized
IV.5.g Encourage dialogue and exchange of information between local companies and financial institutions		13	18	Activity implemented

Outcome IV.6	Services of existing NCPs extended to selected groups of enterprises to improve cleaner production in member countries and further spread the cleaner production knowledge			
Success indicators	Up to 90% of beneficiary companies implemented recommended RECP options, and resource and energy saving achieved by pilot companies			
UNIDO Service Module(s)	PTC/EMB			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
IV.6.a Take stock of the previous CP-related activities in the Arab region and worldwide and analyze benefits achieved and lessons learned	UNIDO, AIDMO and national counterparts	12	14	RECP Status review prepared
IV.6.b Select pilot groups of existing manufacturing SMLs in each Arab State		12	42	Beneficiary companies selected
IV.6.c Conduct Resource Efficient and Cleaner Production (RECP) assessment in pilot companies and report on findings		12	48	RECP Assessments performed
IV.6.d Establish and maintain website		12	48	Website developed
IV.6.e Produce and disseminate related information materials		18	48	Promotion materials developed
IV.6.f Hold series of awareness seminars for key sectors and regions		12	48	Seminars organized
IV.6.g Publish case studies with implementation results		21	48	Case studies published
IV.6.h Organize a regional RECP conference		16	48	Regional conference organized and report available

Outcome IV.7	Assistance on export promotion provided by creating export opportunities in international markets through the UNIDO ITPO network, participation to specialized fairs, B2B, round-tables, and during the negotiations of industrial cooperation agreements with foreign partners (based on Outcome IV.1)			
Success indicators	Number of partnerships negotiated and concluded between local and foreign companies			
UNIDO Service Module(s)	PTC/BIT			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
IV.7.a Carry out the fora preparatory activities: identification of export markets, identification of potential internal and external investing countries, identification and formulation of business opportunities, creation of promotional materials, identification of logistics, negotiation and presentation of the Forum with the ITPO network worldwide, development of a media coverage strategy.	UNIDO, AIDMO and national counterparts	18	30	Preparatory and promotional activities of the fora concluded
IV.7.b Organize 2 large investment forums and/or B2B meetings to highlight the investment potentials and new business opportunities and models in the Arab manufacturing sector for the old and new investors, and follow-up in effective accomplishment of the partnership agreements/contracts		30	42	Large investment for a concluded and partnerships negotiated

COMPONENT V: FACILITATE TRANSFER OF INDUSTRIAL TECHNOLOGIES AND BEST PRODUCT AND PROCESS INNOVATION PRACTICES TO THE PRIVATE SECTOR SMIs OPERATING IN THE PRIORITY AGRO-FOOD VALUE CHAINS, ICT SECTOR AND GREEN INDUSTRIES

Outcome V.1	Capability of Arab countries to analyze, gauge and understand current economic performance reinforced with a view to strengthen the ability to identify profitable sources of growth in competing industries , such as fruitful innovation and the adoption and creation of appropriate technologies for the individual country and industry context			
Success indicators	- Report produced by AIDMO countries on productivity performance - Analysis carried out by AIDMO countries on productivity performance - Survey and attendant report produced by AIDMO countries			
UNIDO Service Module(s)	PTC/BIT			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
V.1.a Awareness raising initiatives to sensitise all actors involved, including Government and industry, of the importance of innovation and technology for sector and country performance	UNIDO, AIDMO and national counterparts	07	08	Sensitisation completed
V.1.b Measurement and benchmarking of AIDMO countries' productivity performance within AIDMO as well as relative to the rest of the world		08	13	Report chapter
V.1.c Measurement of AIDMO countries' changing productivity performance over time within AIDMO as well as relative to the rest of the world		08	13	Report chapter
V.1.d Comparison of regions'/countries' performance, with an analysis of the role of context versus generalization		14	18	Analysis
V.1.e Diagnosis of AIDMO regions'/countries' sources of growth		14	18	Analysis
V.1.f Training on how to carry out problem identification with respect to innovation and growth		14	18	Training completed
V.1.g Training on the role of investment in intangible assets for innovation and growth		14	18	Training completed

Activities	Parties involved	Duration		Milestones
		Start	End	
V.1.h Training on the measurement, analysis and the respective roles of embodied and disembodied technical change for innovation and growth	UNIDO, AIDMO and national counterparts	14	18	Training completed
V.1.i Based on the above outcomes, survey of SMEs in agro-industry, ICT and green industries in AIDMO countries to obtain a picture of technology acquisition, kinds of technologies acquired and the demands of firms in terms of incentives and loosening of constraints		19	30	Survey completed, survey report

Outcome V.2	Capacity reinforced to analyze past policies and strategies carried out for promoting innovation and technology in Arab countries , including benchmarking against innovation policies implemented in some developed countries and emerging economies (France, Italy, Malaysia, Spain, Turkey) conducted			
Success indicators	- Catalogue available - Local institution-led trainings and workshops			
UNIDO Service Module(s)	PTC/BIT			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
V.2.a Cataloguing of successful innovation countries, with particular reference made to useful and appropriate innovation and technology for the case of AIDMO	UNIDO, AIDMO and national counterparts	07	18	Catalogue
V.2.b Capacity-building at innovation and technology institutions using training and workshops		19	48	One training and workshop per year

Outcome V.3	Improved system for the facilitation of technology transfer to the Arab world			
Success indicators	- Evidence of technology acquisition as a result of UNIDO training - Evidence of cooperation in line with the notion of innovation system - Application of foreign technology emanating from the South - Problem identified and addressed by the UNCHAIN program			
UNIDO Service Module(s)	PTC/BIT			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
V.3.a Training on how to link to and acquire technological knowledge from export and import markets, foreign direct investment, partnerships, joint ventures, etc.	UNIDO, AIDMO and national counterparts	07	48	Training completed
V.3.b Linking industry to Government and academia by way of innovation systems		07	48	Cooperation established
V.3.c Linking AIDMO countries to South-South cooperation initiatives, such as UNIDO International Technology Centres, with an aim to identify appropriate technologies, support complete technology transfer and set up pilot programs		07	48	First South technology transferred
V.3.d Linking AIDMO industries to the UNCHAIN twinning program		07	48	First problem identified and addressed

Outcome V.4	A coherent and harmonized regional action-plan for promoting innovations (e.g., innovation policies, legislative framework, incentives, information campaigns and training on innovation) developed for the Arab countries (based on outcomes V.1-3)			
Success indicators	- Report on the current state of affairs - Action-plan - Adoption and implementation of action-plan visible in planning and strategy documents - Evaluation report of implementation of action-plan			
UNIDO Service Module(s)	PTC/BIT			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
V.4.a Examination of the legislative framework, incentives and training, as well as comparison with success cases	UNIDO, AIDMO and national counterparts	07	30	Report
V.4.b Development of an action-plan		31	36	Action-plan
V.4.c Adoption and implementation of action-plan		37	42	First adoption of action-plan by Government
V.4.d Evaluation of implementation and fine-turning of action-plan		43	48	Report of evaluation

Outcome V.5	Capacities of R&D and technical support institutions in Arab states reinforced for promoting technologies and innovation, as well as facilitating technology transfer through partnerships with similar institutions in industrialized developing and developed countries			
Success indicators	- Establishment of cooperation with technology and innovation institutions in industrialized developing and developed countries - Evidence of promotion of innovation and technologies to industry - Evidence of policies for improving the capacity of innovation and technology institutions - Implementation of policies for improving the capacity of innovation and technology institutions			
UNIDO Service Module(s)	PTC/BIT			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
V.5.a Identification of technology and innovation institutions in industrialized developing and developed countries	UNIDO, AIDMO and national counterparts	07	12	List of institutions
V.5.b Training on promotion of innovation and technologies		18	24	Training completed
V.5.c Training on policy design and implementation for innovation and technology-driven SMI development		25	30	Training completed

Outcome V.6	Infrastructure for product and process innovation developed and promoted on pilot basis among SMIs operating in priority sectors (agro-industries, ICT and green industries)			
Success indicators	- Adoption of an action-plan with a view to improve and create an innovation-conducive infrastructure for product and process innovation - Innovation and technology institutions are able to develop products and processes suitable to local context and conditions			
UNIDO Service Module(s)	PTC/BIT			
Counterpart(s)	AIDMO and national counterparts			
Activities	Parties involved	Duration		Milestones
		Start	End	
V.6.a Identification of existing infrastructure of relevant innovation and technology	UNIDO, AIDMO and national counterparts	07	12	Description of infrastructure
V.6.b Comparison of existing infrastructure with similar infrastructures in fast-growing industrialized countries		13	18	Report on infrastructure
V.6.c Development and implementation of an action-plan for the improvement and creation of an innovation-conducive infrastructure for product and process innovation		19	30	Action-plan
V.6.d Training of relevant innovation and technology institutions on best-practice product and process innovation		31	39	Training completed
V.6.e Training on adaptation of best-practice product and process innovation to different contexts and conditions		40	48	Training completed

ANNEX V: PROGRAMME IMPLEMENTATION SCHEDULE

Planning by outcome	Year 1 Trimesters				Year 2 Trimesters				Year 3 Trimesters				Year 4 Trimesters			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
COMPONENT I: Reform of the institutional framework, the business environment and financial instruments related to the development of small- and medium-size manufacturing enterprises	Preparation for take-off				Pilot implementation of technical Programme				Advanced implementation of technical Programme							
I.1 Specific constraints on SMIs in the present institutional, regulatory, business and financial frameworks identified in the areas of SMI creation, operation, innovation, export promotion, green orientation, and employment of youth and women																
I.2 Action plans developed for upgrading and improving the present frameworks to the benefit of SMIs in the areas and sectors specified in Outcome I.1																
I.3 A handbook entitled "Arab SMIs Policy Framework" including all actual policies/incentives common to each sub-group and specificities of individual countries plus new improved policies proposed by UNIDO																
I.4 The initiative undertaken by UNIDO to create a new "Arab SMI Enhancer Indicator" (ASEI) in order to rank sub-groups and individual countries as per implementation status of needed reforms listed in handbook. Indicators to be measured by yearly and promoted worldwide																
I.5 Modules for improved financing packages for SMIs at their different stages of development prepared and tested																

Planning by outcome	Year 1 Trimesters				Year 2 Trimesters				Year 3 Trimesters				Year 4 Trimesters			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
COMPONENT II: Strengthen capacities and capabilities of technical and advisory support institutions providing assistance to SMI development, job creation and investment promotion in Arab States	Preparation for take-off		Pilot implementation of technical Programme						Advanced implementation of technical Programme							
II.1 A handbook entitled "Arab SMIs Supporting Institutions" including a listing of all existing technical and advisory support institutions at the country, sub-group and regional levels along with types of support and eligibility criteria																
II.2 Diagnostic studies conducted and action plans developed for upgrading selected technical, advisory, employment and vocational training support institutions (4 institutions per country; on the basis of Outcome II.1)																
II.3 Capacities and capabilities of selected technical and advisory support institutions reinforced through training, study tours, software, small equipment, documentation, etc. (3 institutions per country; on the basis of outcomes II.1 and II.2)																
II.4 Capacity of selected employment and vocational training centers operating in agro-food value chains, ICT sector and green industries strengthened (one center per country; on the basis of relevant parts in outcomes II.1 and II.2)																
II.5 Training provided for 800 national experts, trainers, engineers and technicians plus special training for 200 regional and sub-regional experts (50 experts per sub-group (total 150) and 50 regional experts)																
II.6 Assistance provided in the development and creation of pilot incubators in the beneficiary countries (one per beneficiary country)																

Planning by outcome	Year 1 Trimesters				Year 2 Trimesters				Year 3 Trimesters				Year 4 Trimesters			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
COMPONENT III: Strengthen the quality infrastructure in the Arab world through enhancing AIDMO's capacities in coordinating the regional implementation of the Arab Standardization Strategy 2009-2013 and respond to the immediate needs identified by the Member States	Preparation for take-off		Pilot implementation of technical Programme								Advanced implementation of technical Programme					
III.1 Critical and technical review conducted to validate the Arab Standardization Strategy 2009-2013 and to ensure its harmonization and compatibility with international standards and best practices																
III.2 Situation analysis survey on all AIDMO Member States conducted to map the quality infrastructure status and to identify its needs in both 'soft' and 'hard' interventions at country and regional levels																
III.3 Series of 'soft' technical interventions at regional level to respond to the needs identified by AIDMO members and those identified in the situation analysis as common and immediate interventions carried out (based on Outcome III.1)																
III.4 Three full-fledged programmes for three main components of the strategy formulated and support to AIDMO in raising necessary funds for its implementation provided																
III.5 Technical capacities of AIDMO in coordinating and managing the regional implementation of the strategy components with its members reinforced																
III.6 Detailed situation assessment conducted and the existing AIDMO survey on the regional accreditation status and countries mapping based on their accreditation capacities and status updated (based on Outcome III.1)																
III.7 Consultation roundtables supported and coordinated with the members of AIDMO and consensus and agreement on the best possible operational model and structure for the Arab Coordination Center for Accreditation achieved																
III.8 Arab Coordination Center for Accreditation at AIDMO established and its technical and human capacities strengthened to be able to coordinate the regional accreditation setup with all members; its recognition at regional and international levels supported (based on outcomes III.1 and III.6)																
III.9 Selected technical interventions implemented within the region to coordinate and support the regional accreditation efforts within the countries (the interventions will be defined based on the outcomes of the mapping exercise of the region; based on Outcome III.1)																

Planning by outcome	Year 1 Trimesters				Year 2 Trimesters				Year 3 Trimesters				Year 4 Trimesters			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
COMPONENT IV: Support the process of SMI development, investment promotion and enhance productive and trade capacities of the manufacturing enterprises operating in agro-food value chains, ICT and green industries of the Arab States	Preparation for take-off		Pilot implementation of technical Programme						Advanced implementation of technical Programme							
IV.1 20 strategic positioning studies conducted for selected niches in agro-food value chains, ICT sector and green industry for member countries																
IV.2 Entrepreneurial, entrepreneurial combined with IT, technical, quality and market related training provided to at least 100 selected to-be or existing entrepreneurs in each country through the EDIP programme and preparation of bankable business plans with special attention to youth and women entrepreneurs																
IV.3 Diagnostics and upgrading plans based on cluster approach developed and implemented by selected private sector SMIs operating in agro-food value chains, ICT sector and green industries (15 per country on pilot basis; based on Outcome IV.1)																
IV.4 Investment needs at company level identified, a project portfolio formulated and scouting of investment opportunities provided for at least 15 medium and small-scale enterprises in each recipient country (based on Outcome IV.1)																
IV.5 Selected companies assisted in the identification and access to financial mechanisms such as credit lines, mutual guarantee schemes, private equity, financial incubator models for youth and others available locally and abroad (to link with Outcome I.4)																
IV.6 Services of existing NCPCs extended to selected groups of enterprises to improve cleaner production in member countries and further spread the cleaner production knowledge																
IV.7 Assistance on export promotion provided by creating export opportunities in international markets through the UNIDO ITPO network, participation to specialized fairs, B2B, round-tables, and during the negotiations of industrial cooperation agreements with foreign partners (based on Outcome IV.1)																

Planning by outcome	Year 1 Trimesters				Year 2 Trimesters				Year 3 Trimesters				Year 4 Trimesters			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
COMPONENT V: Facilitate transfer of industrial technologies and best product and process innovation practices to the private sector SMEs operating in the priority agro-food value chains, ICT sector and green industries	Preparation for take-off		Pilot implementation of technical Programme						Advanced implementation of technical Programme							
V.1 Capability of Arab countries to analyze, gauge and understand current economic performance reinforced with a view to strengthen the ability to identify profitable sources of growth in competing industries, such as fruitful innovation and the adoption and creation of appropriate technologies for the individual country and industry context																
V.2 Capacity reinforced to analyze past policies and strategies carried out for promoting innovation and technology in Arab countries, including benchmarking against innovation policies implemented in some developed countries and emerging economies (France, Italy, Malaysia, Spain, Turkey) conducted																
V.3 Improved system for the facilitation of technology transfer to the Arab world																
V.4 A coherent and harmonized regional action-plan for promoting innovations (e.g., innovation policies, legislative framework, incentives, information campaigns and training on innovation) developed for the Arab countries (based on outcomes V.1-3)																
V.5 Capacities of R&D and technical support institutions in Arab states reinforced for promoting technologies and innovation, as well as facilitating technology transfer through partnerships with similar institutions in industrialized developing and developed countries																
V.6 Infrastructure for product and process innovation developed and promoted on pilot basis among SMEs operating in priority sectors (agro-industries, ICT and green industries)																

ANNEX VI: COUNTRY PROFILES

1. ALGERIA



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$170.3 BILLION
ANNUAL GROWTH OF REAL GDP	21.7%
GDP PER CAPITA (NOMINAL VALUES)	\$4,916
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$83,995 MILLION
EXTRACTION AS % OF GDP	45.5%
MANUFACTURING AS % OF GDP	3.8%
REAL MVA GROWTH	17.9%
LISTING OF MAIN MANUFACTURING INDUSTRIES	WATER AND ENERGY, HYDROCARBONS, MINING, MECHANICAL AND ELECTRICAL GOODS, CHEMICALS, FOOD PROCESSING, TEXTILE
FDI NET INFLOWS	\$2.65 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	11.3%
HDI	104

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Algeria has the means to implement ambitious economic and social policies. Excellent macroeconomic indicators (growth, inflation, fiscal balance, government debt, unemployment rate, etc.) mean that the Algerian government has the means to undertake massive efforts to reduce inequalities and satisfy the needs of younger generations. It has undertaken major sustainable development work; including two economic recovery plans (2001-2004 and 2005-2009) featuring government measures to support new businesses.

Nevertheless, the manufacturing industry is still one of the minor contributors to Algeria's GDP with a share of 5% only. The SME sector is still facing several problems, as for example the access to funding in response of which, a few years ago, the government, with the support of PME I, created the SME Credit Guarantee Fund (FGAR) with a budget of 30 billion Dinars (300 million Euros), and the "Risk Capital Fund" of 3.5 billion Dinars (35 million Euros).

The development of small businesses in Algeria has still a long road to go. Nevertheless, the initiatives taken by the government, and supported by the European Union, will surely offer to the sector the opportunity to move forward.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Food industry is one of the industries with a high and increasing added value. Most of the sector is being managed by the private sector where the public sector's share fell from 89% in 2005 to 16% in 2007. The food sector is one of the major promising sectors in Algeria with the possibility of having high growth rates. The national plan for agricultural developments, aims at reducing the country's imports with a budget of \$350 billion to achieve this aim.

B.2.2 Green industries

Main potential beneficiary industry from green industry orientation is chemical industry. The value added of this industry has been increasing through the years. However the whole manufacturing sector is not considered one of the strong sectors in the Algerian economy.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper-middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	0.6	2.7	3.1	3.3
Telecommunications investment (% of revenue)	23.9	23.7	23.6	-
Sector Performance				
Access				
Telephone lines (per 100 people)	5.8	9.6	16.2	21.6
Mobile Cellular subscriptions (per 100 people)	0.3	92.7	58.0	95.3
Fixed internet subscribers (per 100 people)	0.2	0.6	2.0	8.2
Personal computers (per 100 people)	0.7	1.1	5.7	11.5
Quality				
Population covered by mobile cellular network (%)	40	82	93	94
Fixed broadband subscribers (% of total internet subscribers)	0.0	71.7	22.6	81.8

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Algeria		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

2. BAHRAIN



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$24.3 BILLION
ANNUAL GROWTH OF REAL GDP	25.7%
GDP PER CAPITA (NOMINAL VALUES)	\$21,639
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$9,697 MILLION
EXTRACTION AS % OF GDP	26.0%
MANUFACTURING AS % OF GDP	13.8%
REAL MVA GROWTH	13.2%
LISTING OF MAIN MANUFACTURING INDUSTRIES	ALUMINIUM, PETROCHEMICAL SECTOR
FDI NET INFLOWS	\$1.8 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	1.2%
HDI	39

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Bahrain's small and medium enterprises (SMEs) are facing challenges to growth because they lack access to finance and specialized advice. Without access to finance, SMEs were held from expanding, updating their technology and management and advancing their marketing campaigns. SMEs in Bahrain faced a high level of competition because the country and the Gulf region represent a small market with open borders.

To compensate for its small market, SMEs in Bahrain needed to export their products, but this was another challenge. SMEs that export to a nearby region have to compete with locally made products, which are likely to be lower in price and made with better technology because they are already selling to bigger markets.

Two other problems are high transportation costs to remote markets and weak marketing capabilities.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Petrochemical industry is the most important industry in the manufacturing sector representing 43.5% of total manufacturing production. Food industries, on the other hand, represent no more than 6.5% from total manufacturing production. This is mostly due to the desert nature of the whole Gulf area.

B.2.2 Green industries

Main potential beneficiary industry from green industry orientation is chemical industry. Chemical industry together with the petrochemical industry contributes 44% to the total manufacturing production and absorbs 47% of the investments in the manufacturing sector.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper-middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	4.9	4.1	3.1	3.1
Telecommunications investment (% of revenue)	21.4	14.9	23.6	15.4
Sector Performance				
Access				
Telephone lines (per 100 people)	26.3	28.4	16.2	47.0
Mobile Cellular subscriptions (per 100 people)	31.6	185.8	58.0	106.1
Fixed internet subscribers (per 100 people)	3.4	14.8	2.0	25
Personal computers (per 100 people)	14.6	74.6	5.7	67.8
Quality				
Population covered by mobile cellular network (%)	100	100	93	99
Fixed broadband subscribers (% of total internet subscribers)	0.0	96.1	22.6	89.0

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Bahrain		
	No	Low	High
Agro-food value chain		X	
Green industries			X
ICT			X

3. DJIBOUTI



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$1.0 BILLION
ANNUAL GROWTH OF REAL GDP	11.0%
GDP PER CAPITA (NOMINAL VALUES)	\$1,152
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$26 MILLION
EXTRACTION AS % OF GDP	0.0%
MANUFACTURING AS % OF GDP	2.6%
REAL MVA GROWTH	4.3%
LISTING OF MAIN MANUFACTURING INDUSTRIES	MINERAL-WATER-BOTTLING, DAIRY
FDI NET INFLOWS	\$0.2 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	59%
HDI	155

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Despite its important international port-related activities, Djibouti remains a poor country. GDP per head was estimated at US\$880 in 2007; although this is higher than in all of its neighbouring states, the Horn is one of the poorest regions in Africa. In the Human Development Report 2007/08, published by the UN Development Programme, Djibouti was ranked 149th out of 177 countries.

The economy of Djibouti is based on services centred on the port, the railway, the civil service, the French military garrison and, since 2002, the German and US bases, which accounted for an estimated 79% of GDP in 2007. There are no significant mining operations. Manufacturing is rudimentary, and agriculture is severely constrained by shortages of both cultivable land and water. Economic prospects depend largely on Djibouti's ability to continue developing its port facilities and improving trade and transit links with Ethiopia.

The above means that the SME sector is service related and very limited in manufacturing. This means that the proposed project would be almost creating a sector in the country thus creating potential for job creation, poverty reduction and more port activities.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

The Agro-food in Djibouti is extremely dependent on the expanding port and services sector. The main industries are construction and food processing. Most people work in agriculture. Industrial sector employs 35 thousand people in a large mineral water bottling plant, leather tanning, construction, pharmaceutical factory, salt mining and petroleum refinery.

B.2.2 Green industries

Main potential beneficiary industries from green industry orientation are food processing and construction.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	2.8	3.7	3.1	3
Telecommunications investment (% of revenue)	18.8	48.1	23.6	22.6
Sector Performance				
<i>Access</i>				
Telephone lines (per 100 people)	7.8	14.6	16.2	13.6
Mobile Cellular subscriptions (per 100 people)	1.9	50.6	58.0	47.0
Fixed internet subscribers (per 100 people)	0.1	3.1	2.0	5.6
Personal computers (per 100 people)	1.1	3.9	5.7	4.5
<i>Quality</i>				
Population covered by mobile cellular network (%)	-	95	93	77
Fixed broadband subscribers (% of total internet subscribers)	-	30.7	22.6	40.4

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Djibouti		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

4. EGYPT



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$162 BILLION
ANNUAL GROWTH OF REAL GDP	15.7%
GDP PER CAPITA (NOMINAL VALUES)	\$2,191
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$50,833 MILLION
EXTRACTION AS % OF GDP	15.7%
MANUFACTURING AS % OF GDP	15.6%
REAL MVA GROWTH	17.3%
LISTING OF MAIN MANUFACTURING INDUSTRIES	FOOD, TEXTILES, CEMENT, AUTO, PHARMACEUTICAL, IRON AND STEEL.
FDI NET INFLOWS	\$9.5 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	8.8%
HDI	123

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

While SME development is a priority in Egypt, it faces considerable challenges especially in the case of SMIs. The vast majority of SMIs are far from meeting the competitiveness standard and are facing increasingly hostile conditions. New trade agreements signed by Egypt make markets, locally and internationally, more open and competitive. While these provide new opportunities, unless SMIs increase their competitiveness, they will not be able to survive this new competition. This is exacerbated by the fact that many SMIs have followed traditional routes to competitiveness in the past, relying heavily on unskilled labour, natural resources, and simple technologies. This approach is facing fierce price competition and they have limited ability to shift to higher value added products. These characteristics make it particularly difficult for SMIs to increasingly fulfil the export role which has been targeted for them by the government.

The constraints to SMI performance are well known and an increasing number of donor and government programs have begun to address them. Substantial gaps continue to exist, however, in this fragmented support network. Key challenges facing SMIs are as follows:

- **At the firm level**, SMEs are indicating that the business development services available through a wide range of suppliers (e.g., business centres, associations, NGOs, etc.) do not reflect their needs and are not demand driven. The multiplicity of services being developed by donors and government agencies are not providing support in the areas most needed.
- **At the level of the supporting institutions level**, a number of common problems are seen as well. Typical problems across business development service providers include: low levels of cost recovery; assistance that is too generic for the needs of the SMEs; limited qualified staff; a social orientation not a focus on supporting competitiveness; lack of coordination among service providers; and a prevalence of supply driven approaches; lack of awareness of specific needs and concerns of women entrepreneurs.
- **At the policy level**, SMI development continues to be characterized by: a lack of coordination between the multiple government ministries and agencies responsible for SME policy; a lack of coordination among donor programs; and a continued subsidization of some programs which distort the development of market driven solutions.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

The food industry is one of the main industries in Egypt. Foreign investments in this sector have been highly encouraged. The food industry is ranked the second with respect to number of establishments and the number of jobs offered. The industry is ranked first in the manufacturing industry with respect to the volume of production as well as the value added (\$10.7 million in 2008). The industry's production represents 30% of the total manufacturing industry production (\$ 21 billion) and employs more than 200 thousand people. This sector is expected to grow in the near future due to the demographic changes taking place in Egypt and the increasing demand that the sector will face as a result.

B.2.2 Green industries

There is a lot of interest in Egypt for relocating polluting establishments outside population areas to improve environmental condition, improve processes of production and meet international standards. In spite of all efforts, there are problems in financing cleaner processes of production and there is limited awareness of the importance of cleaner production and its impact on reducing costs for producers. A cleaner production center already established by UNIDO few years ago is having an impact but not yet deep enough to make a tangible difference.

SMIs in light chemicals and textiles qualify as potential candidates for benefiting from this programme in the domain of green industries.

B.2.3 ICT

As seen in table below, ICT has experienced major improvements in the period between 2000 and 2008. It also enjoys high sector efficiency, capacity and performance levels in comparison to the Middle East and North African regions as well as to the lower middle income group of countries where Egypt belongs. This means that the infrastructure for the extended use of ICT in manufacturing already exists and the country is to reap high benefits from focused technical support in this area.

ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper-middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	2.8	3.7	3.1	3
Telecommunications investment (% of revenue)	18.8	48.1	23.6	22.6
Sector Performance				
Access				
Telephone lines (per 100 people)	7.8	14.6	16.2	13.6
Mobile Cellular subscriptions (per 100 people)	1.9	50.6	58.0	47.0
Fixed internet subscribers (per 100 people)	0.1	3.1	2.0	5.6
Personal computers (per 100 people)	1.1	3.9	5.7	4.5
Quality				
Population covered by mobile cellular network (%)	-	95	93	77
Fixed broadband subscribers (% of total internet subscribers)	-	30.7	22.6	40.4

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Egypt		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

5. IRAQ



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$110.4 BILLION
ANNUAL GROWTH OF REAL GDP	38.6%
GDP PER CAPITA (NOMINAL VALUES)	\$3,610
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$74,770 MILLION
EXTRACTION AS % OF GDP	66.0%
MANUFACTURING AS % OF GDP	1.8%
REAL MVA GROWTH	21.7%
LISTING OF MAIN MANUFACTURING INDUSTRIES	OIL SECTOR
FDI NET INFLOWS	\$0.5 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	15.9%
HDI	N.C.

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

The lifting of sanctions following the passing of UN Security Council Resolution 1483 in May 2003 allowed efforts for the reconstruction of the national economy to begin, but serious security problems continue to hamper the rebuilding effort. However, improvements in security starting from 2007 allowed business activity to revive in some areas (although foreign investment has remained minimal), causing real GDP to expand by 5.9%. This process has continued into 2008.

Past efforts at establishing a manufacturing base have often been subject to short-term considerations that undermined progress. In 1990 the UN trade embargo denied the sector raw materials, intermediates and spare parts. The result was a severe shrinkage of manufacturing activity. Since 2003, development of the manufacturing sector has also been hindered by the country's infrastructural deficiencies in addition to security issues. In order to address the latter, the government has sought to boost development spending significantly, but progress has been hampered by security problems (despite improved stability since mid-2007).

Unemployment is high in Iraq, although accurate data are lacking. According to the IMF, the unemployment rate was around 18.5% in 2005, although official Iraqi data put the figure at 30-50%. Reliable employment figures are difficult to obtain, but it is

estimated that up to one-third of Iraqis were employed directly by the state under the previous regime, a pattern being repeated under the new government. As a result, major economic activity (outside the oil sector) has for many years been concentrated in the main cities, which has contributed to a decline in agriculture's share of GDP.

The above means that this project is of very high relevance to Iraq both to solve its serious unemployment problems and revive SMIs in a country rich in oil and natural resources but going through difficult times.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Food, beverages and tobacco industry is one of the highest value added industry (305,269 million Dinars) and output of 658,257 million Dinars and employs 37,964 people with 4,885 establishments.

B.2.2 Green industries

A main potential beneficiary industry from green industry orientation is chemical industry which is one of the major industries with value added of 467,804 million Dinars and a total output of 843,774 million Dinars.

The government has not developed a comprehensive environmental conservation policy, but it has initiated programs to prevent water pollution, to reclaim land by reducing soil salinity, and to protect wildlife by limiting hunting. As a result of damage from the 1991 Persian Gulf War, water pollution has increased. Purification systems for water and sewage are inadequate. Toxic chemicals from damaged oil facilities contribute to water pollution. Iraq has 35.2 cubic kilometres of renewable water resources with 92% used in farming activity. Only 48% of those living in rural areas have access to safe drinking water.

Iraq ranks among the 50 nations with the world's highest levels of industrial carbon dioxide emissions. Its 1992 emissions totaled 64.5 million metric tons, a per capita level of 3.33 metric tons. In 1996, the total rose to 91 million metric tons. The nation's cities produce on average 6 million tons of solid waste per year.

Waste recycling has increased, for example with many small and medium-size metal recycling plants. Metal recovery plants from waste generated by metal smelters are thriving.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	-	-	3.1	3
Telecommunications investment (% of revenue)	-	-	23.6	22.6
Sector Performance				
Access				
Telephone lines (per 100 people)	2.7	3.5	16.2	13.6
Mobile Cellular subscriptions (per 100 people)	0.0	57.1	58.0	47.0
Fixed internet subscribers (per 100 people)	0.1	0.0	2.0	5.6
Personal computers (per 100 people)	0.8	-	5.7	4.5
Quality				
Population covered by mobile cellular network (%)	-	72	93	77
Fixed broadband subscribers (% of total internet subscribers)	0.0	1.3	22.6	40.4

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Iraq		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

6. JORDAN



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$21.2 BILLION
ANNUAL GROWTH OF REAL GDP	9.3%
GDP PER CAPITA (NOMINAL VALUES)	\$3,624
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$5,018 MILLION
EXTRACTION AS % OF GDP	5.6%
MANUFACTURING AS % OF GDP	18.1%
REAL MVA GROWTH	16.2%
LISTING OF MAIN MANUFACTURING INDUSTRIES	AGRICULTURE, FORESTY AND FISHING, MINING, MANUFACTURING, ELECTRICITY AND WATER SUPPLY, CONSTRUCTION, WHOLESALE AND RETAIL TRADE, TOURISM, TRANSPORT, FINANCE
FDI NET INFLOWS	\$1.95 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	12.7%
HDI	96

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Generally, SMEs represent around 97% of total projects in Jordan, but services represent the main activity – not manufacturing – which leaves a lot of room for benefiting from the proposed project. As a developing country with limited resources Jordan's present and past governments have continuously tackled the problems of poverty and unemployment by supporting the SMI sector. However, SMIs face organizational, technical and financial challenges.

The majority of SMIs in Jordan are still in the introductory stages of development. They rely on personal and family members' savings for financing new ventures or the expansion of existing enterprises. But such sources are insufficient to spur growth in an expanding and highly competitive market. Therefore, access to formal financing institutions is the necessary alternative.

The net effect of the inability of SMIs to gain adequate access to loans is that the sector is underperforming. And over the long-term, it faces a serious threat from outside competition which will compound the problem as trade barriers continue to

fall. Jordanian SMIs must become more competitive, but few have the experience, training or tools necessary to achieve this.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Food industry is the second largest industry representing 23% of Jordan's total manufacturing production. Exports reached the value of 723 million dollars up from 220 million dollars in 2007. The annual growth rate of the sector is 12%. 91% of Jordan's total food exports are directed to the Middle East followed by Asia, Europe, USA, UK and African countries. Main exported items are tobacco, vegetable oils and meat and dairy products.

B.2.2 Green industries

The main beneficiary in the area of green industries in Jordan would be chemical industry. It is the main manufacturing industry in Jordan and contributes to the total manufacturing production by 24%.

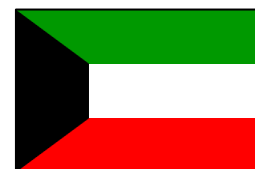
B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper-middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	6.7	6.7	3.1	3
Telecommunications investment (% of revenue)	38.5	11.4	23.6	22.6
Sector Performance				
Access				
Telephone lines (per 100 people)	12.9	8.8	16.2	13.6
Mobile Cellular subscriptions (per 100 people)	8.1	90.0	58.0	47.0
Fixed internet subscribers (per 100 people)	0.7	3.9	2.0	5.6
Personal computers (per 100 people)	3.1	7.5	5.7	4.5
Quality				
Population covered by mobile cellular network (%)	99	99	93	77
Fixed broadband subscribers (% of total internet subscribers)	0.6	59.9	22.6	40.4

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Jordan		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

7. KUWAIT



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$148.2 BILLION
ANNUAL GROWTH OF REAL GDP	16.3%
GDP PER CAPITA (NOMINAL VALUES)	\$43,056
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$96,367 MILLION
EXTRACTION AS % OF GDP	59.5%
MANUFACTURING AS % OF GDP	5.6 %
REAL MVA GROWTH	20.4%
LISTING OF MAIN MANUFACTURING INDUSTRIES	OIL SECTOR, FOOD PROCESSING, BUILDING MATERIALS, FURNITURE, WOODEN ITEMS, METAL PRODUCTS, MACHINERY
FDI NET INFLOWS	\$0.056 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	1.3%
HDI	31

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

With 33,000 established SMEs in the country, making about 88.6 percent of the total registered companies in Kuwait, the SME sector is important for the development of the whole country. SMIs currently represent a small percentage of SME activity in Kuwait yet there is room for a wide expansion given the size of the oil sector and the potential supporting and complementary roles of relevant SMIs.

The existing SMIs face problems similar to the whole SME sector. The main challenges are the lack of innovations, limited managerial capabilities and over reliance on foreign labor. In spite of governmental interest in the sector and efforts towards improving availability of and access to finance, a lot more needs to be done at the institutional, technical and training levels if the SME sector and particularly SMIs are to reach their full potential in benefiting Kuwait and its people.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

The food industry is not considered a main industry in Kuwait. Kuwait imports most of its needs in food with the exception of fish. The climate conditions in Kuwait are not suitable for any agricultural activity.

B.2.2 Green industries

Refineries in Kuwait use new technologies to reduce sulphur emissions, gas flaring and other hydrocarbon releases as part of their efforts towards environmentally-friendly production.

Kuwait's oil refineries need to be revamped, and heavy gas oil to be improved in a bid to produce more clean and low-sulphur diesel, given the growing global demand for such a type of diesel in the future, according to a recent study. Diesel is used for engines, mainly cars, vehicles, trucks, ships, trains and agricultural equipment, on a wide scale, and diesel engines are more efficient than gasoline engines at a rate of 25-40 percent.

The State of Kuwait's rapid economic growth has both burdened the environment and left it lagging behind other areas of progress. The attainment of the Millennium Development Goal 7 of Ensuring Environmental Sustainability remains to be challenge with outdated environmental laws and regulations, lack of coordination between institutions, limited institutional capacities and lack of public information on environmental issues.

The industry of relevance to green industries is chemical industry.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	1.7	3.5	3.1	3.1
Telecommunications investment (% of revenue)	19.7	27.0	23.6	15.4
Sector Performance				
Access				
Telephone lines (per 100 people)	21.3	19.8	16.2	47.0
Mobile Cellular subscriptions (per 100 people)	21.7	106.6	58.0	106.1
Fixed internet subscribers (per 100 people)	-	11.2	2.0	25.0
Personal computers (per 100 people)	11.4	23.7	5.7	67.8
Quality				
Population covered by mobile cellular network (%)	100	100	93	99
Fixed broadband subscribers (% of total internet subscribers)	-	8.8	22.6	89.0

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Kuwait		
	No	Low	High
Agro-food value chain		X	
Green industries			X
ICT			X

8. LEBANON



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$29.6 BILLION
ANNUAL GROWTH OF REAL GDP	6.9%
GDP PER CAPITA (NOMINAL VALUES)	\$7,462
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$2,691 MILLION
EXTRACTION AS % OF GDP	0.0%
MANUFACTURING AS % OF GDP	9.1%
REAL MVA GROWTH	6.9%
LISTING OF MAIN MANUFACTURING INDUSTRIES	FOOD INDUSTRY, TEXTILE, METALLURGY AND METAL WORKS, EDITING, NON-METAL INDUSTRY, WOODEN ITEMS, MANUFACTURE OF EQUIPMENT AND MACHINES.
FDI NET INFLOWS	\$3.6 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	8.2%
HDI	83

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

The Lebanese economy is small, open and largely services-based. Although agriculture remains an important source of employment, most rural holdings are small, economically inefficient and rented by subsistence farmers, - so agriculture accounts for only around 5% of nominal GDP. The industrial sector is also small, partly because the domestic market shows a preference for imported goods.

The manufacturing sector accounts for an estimated 12% of nominal GDP. Over 114,000 people (or around 3% of the total population) were employed in the industrial and manufacturing sectors. Underlining the small scale of most businesses in the sector, 96% of the 22,200 industrial and manufacturing firms licensed by the Ministry of Industry employ less than ten people, and only 0.1% employ more than 250 people. On average, each firm had around five employees.

Food manufacturing was the most important sector, accounting for the largest share of employment and the highest number of firms. New ventures have tended to focus on providing materials for the construction sector, such as chemical and building

supplies. Among the sector's most significant exports are processed food and jewellery, with the latter showing strong growth in recent years.

Government policy towards the private sector and SMIs, in particular, has historically been non-interventionist, and bank lending to the sector has been weak, partly because high returns are available on government debt. Given the modest size of the market, penetration by international companies has also been limited.

The major challenges facing Lebanese SMEs are:

- Macro climate: Tax policy, debt, private sector development; Hidden taxes, rules of origin, standards, norms, accreditation;
- Business climate: Access to information corruption, doing business, investment funds, risk assessment and feasibility studies; Technology transfer and absorption, capacity building; Access to finance, competition, market rigidities;
- Export diversification: innovation, R&D, non-conflict exports (not produced in destination markets or exported during off-season).

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Agriculture is one of the major industries in Lebanon as well as food processing. Agriculture accounts for around 15% of GDP and employs almost half the workforce. Problems in agriculture sector: traditional farming methods, limited export markets, damaged infrastructure and degraded land (due to civil war) which led to decline in the agro-industry.

B.2.2 Green industries

Water and Energy Minister Jibran Bassil criticized the chaotic electricity network available in Lebanon and said that technical and legislative changes need to take place in order to introduce renewable energy in the country. Bassil said that the ministry's aim is for Lebanon to reach a 12 percent usage rate of renewable energy by 2020, "which is feasible due to the highly skilled human resources available in Lebanon in addition to the special nature of the country. Bassil added that the ministry is starting to do a great job in the field of renewable energy. "The government last week allocated \$9 million for these projects," he said. "This indicates that the government is highly committed to such projects by taking actions and not just through ministerial statements." He called on Lebanese investors and businessmen to work on spreading the culture of renewable energy consumption by going into projects that depend highly on such plans.

The manufacturing industry to benefit the most from green orientation is pharmaceutical industry plus light chemical industries.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	2.8	3.7	3.1	3.3
Telecommunications investment (% of revenue)	18.8	48.1	23.6	-
Sector Performance				
Access				
Telephone lines (per 100 people)	7.8	14.6	16.2	21.6
Mobile Cellular subscriptions (per 100 people)	1.9	50.6	58.0	95.3
Fixed internet subscribers (per 100 people)	0.1	3.1	2.0	8.2
Personal computers (per 100 people)	1.1	3.9	5.7	11.5
Quality				
Population covered by mobile cellular network (%)	-	95	93	94
Fixed broadband subscribers (% of total internet subscribers)	-	30.7	22.6	81.8

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Lebanon		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

9. LIBYA



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$76.7 BILLION
ANNUAL GROWTH OF REAL GDP	- 0.5%
GDP PER CAPITA (NOMINAL VALUES)	\$10,516
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$60,829 MILLION
EXTRACTION AS % OF GDP	74.3%
MANUFACTURING AS % OF GDP	5.0%
REAL MVA GROWTH	-1.0%
LISTING OF MAIN MANUFACTURING INDUSTRIES	HYDROCARBONS SECTOR, TELECOMMUNICATIONS, TOURISM
FDI NET INFLOWS	\$4.1 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	10%
HDI	55

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Libya's economy has been state-controlled until recently and thus most SMIs have existed in what is known as the informal sector, in fact, absence of statistics is one of the challenges facing any attempt to reform the sector. Other challenges are:

- Lack of knowledge and awareness. There is a lack of awareness of the economic importance of SMIs to faster economic growth;
- Lack of SMI-related infrastructures. Most important amongst these are transportation and communication and information services;
- Lack of technical know-how and weak promotional activity;
- Lack of finance;
- There is a lack of regulations to encourage local investors.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Although agriculture is the second-largest sector in the economy, Libya depends on imports in most foods. Climatic conditions and poor soils limit farm output, and domestic food production meets about 25% of demand. Domestic conditions limit output, while income and population growth have increased food consumption. The existence of agriculture, however, means that there is room for agro-food manufacturing.

B.2.2 Green industries

Main beneficiaries from green industry orientation are petrochemical industries and other chemical industries.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper-middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	-	-	3.1	3.3
Telecommunications investment (% of revenue)	-	-	23.6	-
Sector Performance				
Access				
Telephone lines (per 100 people)	11.3	16.4	16.2	21.6
Mobile Cellular subscriptions (per 100 people)	0.7	76.7	58.0	95.3
Fixed internet subscribers (per 100 people)	-	1.4	2.0	8.2
Personal computers (per 100 people)	2.4	2.2	5.7	11.5
Quality				
Population covered by mobile cellular network (%)	-	71	93	94
Fixed broadband subscribers (% of total internet subscribers)	-	11.7	22.6	81.8

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Libya		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

10. MAURITANIA



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$3.6 BILLION
ANNUAL GROWTH OF REAL GDP	18.4%
GDP PER CAPITA (NOMINAL VALUES)	\$1,124
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$1,350 MILLION
EXTRACTION AS % OF GDP	30.3%
MANUFACTURING AS % OF GDP	7.0%
REAL MVA GROWTH	11.7%
LISTING OF MAIN MANUFACTURING INDUSTRIES	AGRO-INDUSTRY, WATER, ENERGY, FISH PROCESSING, BUILDING MATERIALS
FDI NET INFLOWS	\$0.1 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	3.7%
HDI	154

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Although the economy has expanded considerably from its low base since independence, it retains the same structural weaknesses and remains extremely vulnerable to exogenous shocks, in particular rainfall patterns, insect plagues, fluctuations in global commodity prices and desertification. This represents the main challenge for Mauritania. As a result, the performance of the key agricultural, mining and fishing sectors continues to fluctuate widely. In addition, economic activity remains dependent on foreign aid inflows, which stimulate activity in the construction and services sectors.

SMIs are limited particularly in the area of manufacturing. This means that the proposed project is of particularly high relevance to Mauritania because it is a step towards its development, job creation and poverty reduction.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Major industries: food processing (largely sugar milling), textiles, clothing, mining, chemicals, metal products, transport equipment, non-electrical machinery, tourism.

B.2.2 Green industries

The industries to benefit most from green industry orientation are chemical industry and textiles.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	2.4	7.7	3.1	4.7
Telecommunications investment (% of revenue)	131.7	23.4	-	-
Sector Performance				
Access				
Telephone lines (per 100 people)	0.7	2.4	4.6	1.5
Mobile Cellular subscriptions (per 100 people)	0.6	65.1	28.5	33.3
Fixed internet subscribers (per 100 people)	0.0	0.3	1.0	-
Personal computers (per 100 people)	1.0	4.5	1.7	2.0
Quality				
Population covered by mobile cellular network (%)	-	62	56	56
Fixed broadband subscribers (% of total internet subscribers)	0.0	60.6	7.2	-

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Mauritania		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

11.MOROCCO



A. SNAPSHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$85.7 BILLION
ANNUAL GROWTH OF REAL GDP	11.6%
GDP PER CAPITA (NOMINAL VALUES)	\$2,630
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$13,473 MILLION
EXTRACTION AS % OF GDP	1.9%
MANUFACTURING AS % OF GDP	13.8%
REAL MVA GROWTH	14.1%
LISTING OF MAIN MANUFACTURING INDUSTRIES	AGRICULTURE, ADMINISTRATIVE SERVICES, TELECOMMUNICATIONS, MANUFACTURING, CONSTRUCTION, TRANSPORT, MINING
FDI NET INFLOWS	\$2.4 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	9.6%
HDI	130

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

- **Financing Policies:** Conservative attitude of banks: excessively stringent securitization requested. Also procedural difficulties are reported;
- **Limited Diffusion of Alternatives:** Financing instruments like credit guarantees schemes are marginal in the ICT sector. The development of factoring services is lagging;
- **Constraints on the Demand Side:** Small entrepreneurs are often scarcely familiar with the various financial instruments available. Poor quality of projects submitted;
- **Understanding of ICT:** Bank officers have often a scarce knowledge of the various ICT/ICTE business models, and therefore are more inclined to reject request of loans in this area.
- **Business Environment Constraints:** The existing credit information system has a very limited coverage. The existing legal framework does not incentive the enlargement of access to credit.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

The food industry is one of the main industries in Morocco. The growth rate of morocco reached 5.6% in 2008 compared to 2.7% in 2007 due to the outstanding performance of the agricultural sector being a main player in the Moroccan economy. The agro-food sector is the second most important sector in the manufacturing sector after the chemical industry. The food industry's production represents 29% of the total manufacturing production, however the exports of the sector fell in 2009 by 3%. Agro-food value chains are one of the promising industries in Morocco.

B.2.2 Green industries

The Morocco NCPC (National Cleaner Production Center) is already operating in Morocco. It pioneered the two-phase pressing of olives to achieve higher oil recovery and avoid generating wastewater. Expansion in its activities is needed. A specific industry to benefit from green orientation would be the chemical industry.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	3.2	5.1	3.1	3
Telecommunications investment (% of revenue)	50.7	20.3	23.6	22.6
Sector Performance				
Access				
Telephone lines (per 100 people)	4.9	9.5	16.2	13.6
Mobile Cellular subscriptions (per 100 people)	8.1	72.2	58.0	47.0
Fixed internet subscribers (per 100 people)	0.1	1.5	2.0	5.6
Personal computers (per 100 people)	1.2	5.7	5.7	4.5
Quality				
Population covered by mobile cellular network (%)	95	98	93	77
Fixed broadband subscribers (% of total internet subscribers)	0.0	98.9	22.6	40.4

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Morocco		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

12. OMAN



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$59.9 BILLION
ANNUAL GROWTH OF REAL GDP	34.5%
GDP PER CAPITA (NOMINAL VALUES)	\$20,892
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$36,978 MILLION
EXTRACTION AS % OF GDP	51.4%
MANUFACTURING AS % OF GDP	10.2%
REAL MVA GROWTH	31.3%
LISTING OF MAIN MANUFACTURING INDUSTRIES	OIL SECTOR, MANUFACTURING, TOURISM, FISHERIES
FDI NET INFLOWS	\$2.9 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	7.5%
HDI	56

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Although the SMI sector in Oman is relatively young in terms of its life cycle, as compared to other similar markets, its potential for growth is tremendous. A similar argument applies to SMIs which represent a minority of the activities.

SMIs are a crucial driving force for innovation, employment and development of Omani economy. The SMIs, however, have long-standing difficulties in getting finances, which is hampering the sustainable development of the country. The issue of financing for SMIs needs to be addressed jointly by the government, financial institutions and other enterprises to enhance innovation in financial systems, products and services as also to improve sustainable development of SMIs in Oman.

In addition, there is limitation of adequate infrastructure, energy, transport, communication (either inadequate or too costly).

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

The food sector in Oman is one of the sectors that require special attention. The number of establishments in the sector as well the number of workers fell in 2008, however the total investments in the sector increased enormously, where a \$5 billion were given as support to specific industries, the food being one of them. Exports of the food industry have increased by 57% in the year 2008.

B.2.2 Green industries

A sector that stands to benefit from green industry orientation is chemical industry. It is one of the main manufacturing industries in Oman, where together with the petrochemical it had a 74% growth rate in the value of their exports.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	1.9	3.4	3.1	3.1
Telecommunications investment (% of revenue)	19.0	65.8	23.6	15.4
Sector Performance				
Access				
Telephone lines (per 100 people)	9.2	9.8	16.2	47.0
Mobile Cellular subscriptions (per 100 people)	6.7	115.6	58.0	106.1
Fixed internet subscribers (per 100 people)	1.0	2.9	2.0	25.0
Personal computers (per 100 people)	3.3	16.9	5.7	67.8
Quality				
Population covered by mobile cellular network (%)	91	96	93	99
Fixed broadband subscribers (% of total internet subscribers)	0.0	39.9	22.6	89.0

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Oman		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

13. PALESTINIAN TERRITORY



A. SNAPSHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	N.A.
ANNUAL GROWTH OF REAL GDP	N.A.
GDP PER CAPITA (NOMINAL VALUES)	N.A.
MANUFACTURING	
INDUSTRIAL ADDED VALUE	N.A.
EXTRACTION AS % OF GDP	N.A.
MANUFACTURING AS % OF GDP	N.A.
REAL MVA GROWTH	N.A.
LISTING OF MAIN MANUFACTURING INDUSTRIES	METAL PRODUCTS, FOOD PROCESSING, TEXTILES, CLOTHING AND LEATHER.
FDI NET INFLOWS	\$0.029 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	21.6%
HDI	110

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

The Palestinian private sector has been the dominant economic force in the Palestinian territories accounting for approximately 85% of the GDP, the vast majority of productive assets are privately owned. However the size of the role played by the private sector with regard to its contribution to GDP is perhaps much attributable to the absence of the Palestinian public sector during the occupation decades.

The major obstacles to creation and development of small-scale enterprises in Palestine are summarized as follows:

1. The destruction of the infrastructure as a result of prolonged occupation and restrictions on the movement of goods and people; energy production, communication; roads, airports seaports, telecommunication.
2. Lack of industrial zones to host small scale industries as a result of Israeli restrictions on the land use, all lands outside the populated area is still under the Israeli control.
3. Absence of non-finical supporting services organizations and inappropriate representation of this sector in the chambers elected administrative boards and consequently inadequate services and lack of advocate to their interests.
4. Absence of non financial supporting organization at both private and governmental level and unfavourable banking lending policies and difficult access to credit.
5. Lack of information and low level of technology.
6. Poor management and lack of professionalism.

7. Low technology and dependency of the used equipment, mainly bought from the Israeli market because of the restriction on the direct import imposed by the Israeli authority.
8. High cost of production as most of the raw material is imported from or via Israel.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

The food industry is one of the main industries in Palestine. The food and tobacco industry represent 30% of the total production of the manufacturing sector and employs more than 9000 people. The added value of the sector reached \$ 262 million in 2008 compared to \$171 million in 2007 (53% increase). However the number of establishments decreased by 13% in 2008 compared to the previous year.

B.2.2 Green industries

Textile industry is one of the main industries in Palestine, contributing to the total manufacturing production by 13%. It is thus the one that stands to benefit the most from green industry orientation plus the traditional light chemical industry that exists in almost all countries.

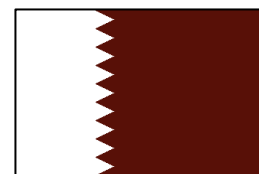
B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	0.4	0.8	3.1	3
Telecommunications investment (% of revenue)	46.2	18.4	23.6	22.6
Sector Performance				
Access				
Telephone lines (per 100 people)	9.1	8.8	16.2	13.6
Mobile Cellular subscriptions (per 100 people)	5.9	29.3	58.0	47.0
Fixed internet subscribers (per 100 people)	0.2	2.7	2.0	5.6
Personal computers (per 100 people)	3.4	5.5	5.7	4.5
Quality				
Population covered by mobile cellular network (%)	95	95	93	77
Fixed broadband subscribers (% of total internet subscribers)	0.0	54.5	22.6	40.4

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Palestine		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT		X	

14. QATAR



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$102.3 BILLION
ANNUAL GROWTH OF REAL GDP	N.A.
GDP PER CAPITA (NOMINAL VALUES)	\$70,649
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$70,088 MILLION
EXTRACTION AS % OF GDP	61.7%
MANUFACTURING AS % OF GDP	6.8%
REAL MVA GROWTH	N.A.
LISTING OF MAIN MANUFACTURING INDUSTRIES	CHEMICAL AND FERTILISER INDUSTRY, HYDROCARBONS SECTOR
FDI NET INFLOWS	\$6.7 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	0.5%
HDI	33

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Small and medium enterprises (SMEs) particularly SMIs in Qatar have “failed” to provide impetus to the country’s diversification although they are sizeable in number, according to the Qatar Chamber of Commerce and Industry (QCCI).

The SMEs, which have limited influence, face multiple challenges and hence more governmental support is needed as their future looked bright in view of Qatar’s supportive investment climate and legislations.

By and large, SMIs in Oman face the following typical challenges:

- Financing is the main barrier to sustainable growth for SMIs;
- Weak entrepreneurship culture;
- The in-existence of specialized programs on Entrepreneurship Development and the setting-up of SMIs;
- Limited support institutions targeting entrepreneurs;
- Lack of systematic mechanisms aimed at developing entrepreneurship and SMIs;
- Lack of growth programs that provide counselling and support on quality control, marketing and technology upgrading;
- Lack of needed infrastructure facilities as business incubators, science and technology parks;
- Quality of financial schemes currently available that don't go in line with the needs of SMIs and their growth plans.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Qatar's agricultural products are consumed locally, providing 70 percent and 40 percent of the consumption of summer and winter vegetables, respectively. In addition to vegetables, Qatar produces cereals, fruits and dates, eggs, poultry, and dairy products. Despite a noticeable increase in agricultural production in the course of the past 20 years, however, Qatar continues to rely on food imports, especially foodstuffs and live animals, which account for roughly 10% of total imports.

Moreover, the amount of investments in the food, beverages and tobacco industry did not change much from the year 2007 to 2008, where its value increased from \$274 million to \$275 million and the foreign investment represents 16% and 16.4% in the years 2007 and 2008 respectively.

B.2.2 Green industries

Textile industry is one of the main industries in Qatar with \$57 million investments and employing at least 9 thousand workers. It stands to benefit the most from green industry orientation.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper-middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	1.9	1.8	3.1	3.1
Telecommunications investment (% of revenue)	10.8	22.5	23.6	15.4
Sector Performance				
Access				
Telephone lines (per 100 people)	26.0	20.6	16.2	47.0
Mobile Cellular subscriptions (per 100 people)	19.6	131.4	58.0	106.1
Fixed internet subscribers (per 100 people)	1.7	9.0	2.0	25.0
Personal computers (per 100 people)	14.6	15.7	5.7	67.8
Quality				
Population covered by mobile cellular network (%)	95	100	93	99
Fixed broadband subscribers (% of total internet subscribers)	0.0	89.2	22.6	89.0

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Qatar		
	No	Low	High
Agro-food value chain		X	
Green industries			X
ICT			X

15. SAUDI ARABIA



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$468.8 BILLION
ANNUAL GROWTH OF REAL GDP	9.5%
GDP PER CAPITA (NOMINAL VALUES)	\$18,898
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$306,790 MILLION
EXTRACTION AS % OF GDP	57.2%
MANUFACTURING AS % OF GDP	8.3%
REAL MVA GROWTH	-2.4%
LISTING OF MAIN MANUFACTURING INDUSTRIES	FINANCIAL CENTER, OIL AND GAZ INDUSTRIES, IRON AND STEEL, CONSTRUCTION MATERIALS, FOOD PROCESSING, ENGINEERING, CHEMICAL AND METAL FABRICATION
FDI NET INFLOWS	\$38.2 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	10%
HDI	59

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Small and medium-size industries in Saudi Arabia have the potential to play a variety of important roles:

- (a) selling their own products, usually finished goods;
- (b) acting as either subcontractors; or
- (c) suppliers of raw materials for larger multinational enterprises.

There are several great success stories in creating a large number of jobs and relatively low costs by the local SMIs. For example, the information technology (IT) job market is booming in Saudi Arabia, many positions filled by Saudis working for SMIs.

Currently, SMIs in Saudi Arabia represent almost 93% of total enterprises and account for about 24.7% of total employment.

However, SMIs in Saudi Arabia confront many problems, notably:

- ***Lack of credit/finance/capital***

The effective cost of capital is often quite high because regular lending institutions have a hard time evaluating new businesses, especially those production areas with which they are not familiar.

- ***Dependence on foreign resources***

As is often the case, imported capital and technology have, in effect, made many SMIs dependent on foreign technicians and manpower. Because of the pervasiveness of imported equipment across the kingdom, many companies face tight labor markets for skilled workers.

- ***Limited marketing skills***

Many SME managers in Saudi Arabia have little in the way of formal training in marketing and product distribution, even by developing country standards. As a result, their operations often cannot take advantage of economies of scale and are of high cost. They are limited to local rather than export, or even national markets.

- ***Bureaucratic hindrances***

While some progress has been made in cutting bureaucratic red tape, the cost of complying with national and international standards remains relatively high for the local SMEs.

- ***Limited information on possible markets and clients***

Many Saudi SME owner/operators have little experience in exporting to foreign markets. Similarly, they have difficulty identifying and attracting foreign investors. As a result, their firms are often under-sized and cannot expand in line with growing markets.

Compounding these problems is the fact that, because of their lack of access to credit, Saudi SMEs are usually the most vulnerable in times of economic recession.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Food and beverages industry has 668 factories in Saudi Arabia and a share of 9.8% in total investments in the country. Value of food exports in Saudi Arabia is relatively lower than other industries; however the value grows by an average of 19% per annum. The exports of this sector represent only 7% of the total value of exports in the country.

B.2.2 Green industries

Given the importance of oil and petro chemical industries, the chemical industry stands to benefit the most from green industry orientation.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	2.4	2.7	3.1	3.1
Telecommunications investment (% of revenue)	33.9	84.1	23.6	15.4
Sector Performance				
Access				
Telephone lines (per 100 people)	14.4	16.6	16.2	47.0
Mobile Cellular subscriptions (per 100 people)	6.7	146.1	58.0	106.1
Fixed internet subscribers (per 100 people)	1.0	7.4	2.0	25.0
Personal computers (per 100 people)	6.3	69.8	5.7	67.8
Quality				
Population covered by mobile cellular network (%)	92	98	93	99
Fixed broadband subscribers (% of total internet subscribers)	3.5	57.2	22.6	89.0

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Saudi Arabia		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

16. SOMALIA



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	N.A.
ANNUAL GROWTH OF REAL GDP	N.A.
GDP PER CAPITA (NOMINAL VALUES)	N.A.
MANUFACTURING	
INDUSTRIAL ADDED VALUE	N.A.
EXTRACTION AS % OF GDP	N.A.
MANUFACTURING AS % OF GDP	N.A.
REAL MVA GROWTH	N.A.
LISTING OF MAIN MANUFACTURING INDUSTRIES	AGRICULTURE, MANUFACTURING, SERVICES
FDI NET INFLOWS	\$0.087 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	25%
HDI	N.C.

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

The economy of Somalia has long been heavily dependent on livestock and agriculture. Stock-rearing is practised throughout the country. Most of the farmland lies between the Jubba and Shabelle rivers in the south of the country. The small manufacturing sector is based largely on the processing of agricultural products.

The pre-war manufacturing sector was small and confined mostly to the public sector. Some small-scale private enterprises in simple consumer goods, including food-processing, plastic bags, detergent and soap, hides and skins, and boat-building have grown up in recent years. A Coca-Cola bottling plant opened in the capital in 2004, marking a return to Somalia for the soft drinks company after a 15-year absence.

The economy is likely to have contracted in recent years because of the impact of the ban on livestock imports imposed by Saudi Arabia and other Gulf States and other problems. According to the survey, 43% of Somalis live in extreme poverty, with an income of US\$1 a day or less. Average life expectancy at birth is put at 47 years, the adult literacy rate is 19% and 47% of the economically active population is unemployed.

This means that the proposed project is of high relevance for the future of Somalia, its economic development and poverty reduction.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

In 2009, agriculture is the most important sector, with livestock accounting for about 40% of GDP and more than 50% of export earnings. Processing of agricultural products, which dominates the country's modest industrial sector, accounts for 10% of Somalia's GDP. The major agro-food sectors are sugar refining, an oil seed crushing mill, and soap factories.

B.2.2 Green industries

Current environmental issues are use of contaminated water which contributes to human health problems, deforestation, overgrazing, soil erosion, and desertification. There is very little manufacturing but focus on green industries is nevertheless important to make manufacturing grow on solid environmentally safe grounds.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	-	-	3.1	4.7
Telecommunications investment (% of revenue)	-	-	-	-
Sector Performance				
Access				
Telephone lines (per 100 people)	0.3	1.1	4.6	1.5
Mobile Cellular subscriptions (per 100 people)	1.1	7.0	28.5	33.3
Fixed internet subscribers (per 100 people)	0.0	0.1	1.0	-
Personal computers (per 100 people)	0.1	0.9	1.7	2.0
Quality				
Population covered by mobile cellular network (%)	-	-	56	56
Fixed broadband subscribers (% of total internet subscribers)	0.0	0.0	7.2	-

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Somalia		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

17. SUDAN



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$61.1 BILLION
ANNUAL GROWTH OF REAL GDP	-2.3%
GDP PER CAPITA (NOMINAL VALUES)	\$1,600
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$14,245 MILLION
EXTRACTION AS % OF GDP	15.7%
MANUFACTURING AS % OF GDP	7.6%
REAL MVA GROWTH	-3.4%
LISTING OF MAIN MANUFACTURING INDUSTRIES	MANUFACTURING, OIL SECTOR, PHARMACEUTICALS, ELECTRICAL GOODS, CEMENT, TEXTILE AND PAINTS.
FDI NET INFLOWS	\$2.6 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	19.7%
HDI	150

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

In Sudan, small and medium enterprises play a very important role in the national economy. However, they suffer from serious challenges particularly SMIs. Their biggest problem lies in the scattered nature of the administrative system as Sudan is divided into 25 governorates. In addition they suffer from financing problems and limited technical and managerial capabilities.

SMEs are still in need of more moral and financial support.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Agricultural sector is one of the most important sectors in Sudan representing 1/3 of the total GDP. The most famous agro industries are edible oil, sugar, dried onion and other vegetables – all industries with very high potential but with limited

achievements so far due to constraints on SMIs. In fact Sudan imports most of its food in spite of huge agricultural areas.

B.2.2 Green industries

The manufacturing industries of highest potential benefit from green industries orientation in Sudan are textiles, chemical and sugar industries.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	1.1	3.3	4.7	3.0
Telecommunications investment (% of revenue)	71.2	-	-	22.6
Sector Performance				
<i>Access</i>				
Telephone lines (per 100 people)	1.1	0.9	1.5	13.6
Mobile Cellular subscriptions (per 100 people)	0.1	29.0	33.3	47.0
Fixed internet subscribers (per 100 people)	-	0.1	-	5.6
Personal computers (per 100 people)	0.3	10.7	2.0	4.5
<i>Quality</i>				
Population covered by mobile cellular network (%)	20	66	56	77
Fixed broadband subscribers (% of total internet subscribers)	-	4.7	-	40.4

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Sudan		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

18. SYRIA



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$52.6 BILLION
ANNUAL GROWTH OF REAL GDP	16.7%
GDP PER CAPITA (NOMINAL VALUES)	\$2,678
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$17,248 MILLION
EXTRACTION AS % OF GDP	26.4%
MANUFACTURING AS % OF GDP	6.4%
REAL MVA GROWTH	9.4%
LISTING OF MAIN MANUFACTURING INDUSTRIES	MINING, MANUFACTURING, OIL AND GAS INDUSTRY, PHOSPATE MINING, LIGHT INDUSTRY, TEXTILE, CEMENT, CHEMICAL
FDI NET INFLOWS	\$2.1 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	8.4%
HDI	107

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Most Syrian SMIs are weak in the managerial and technology and innovation areas. They also suffer from shortages in skilled labor and access to finance. Some enterprises are performing well but the vast majority are having trouble competing in the domestic and international markets. Even though the whole SME sector is on the priority agenda of the government, a lot needs to be done at the institutional level and in direct support to enterprises. Such support would give a strong boost to the whole Syrian economy especially that the country has a tangible comparative advantage in a number of sectors where SMIs can successfully operate and compete such as agro industries and many others.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

The food industry is one of the major industries in Syria. Manufacturing industry contributed to GDP by 5.8% in the year 2008, where 25% of the sector is represented

by the food industry. The food industry employs 22% of the total number of manufacturing workers.

Although, the total production of the food industry has been increasing over the last decade it faces a number of problems such as limited finance, shortage in investments and others. Most important is that food industry is one of the promising industries in Syria and has very high potential. The food sector is considered a strategic sector in Syria. The sector is still under the control of the public sector.

B.2.2 Green industries

The manufacturing industry to benefit the most from green industry orientation is textile industry. It is one of the main manufacturing industries in Syria representing 27% of the total manufacturing production.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	1.9	3.0	3.1	3
Telecommunications investment (% of revenue)	80	409	23.6	22.6
Sector Performance				
Access				
Telephone lines (per 100 people)	10.1	17.7	16.2	13.6
Mobile Cellular subscriptions (per 100 people)	0.2	34.3	58.0	47.0
Fixed internet subscribers (per 100 people)	0.1	3.5	2.0	5.6
Personal computers (per 100 people)	1.5	9.0	5.7	4.5
Quality				
Population covered by mobile cellular network (%)	50	96	93	77
Fixed broadband subscribers (% of total internet subscribers)	0.0	1.6	22.6	40.4

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Syria		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

19.TUNISIA



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$40.9 BILLION
ANNUAL GROWTH OF REAL GDP	10.4%
GDP PER CAPITA (NOMINAL VALUES)	\$3,961
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$11,045 MILLION
EXTRACTION AS % OF GDP	9.1%
MANUFACTURING AS % OF GDP	17.2%
REAL MVA GROWTH	15.6%
LISTING OF MAIN MANUFACTURING INDUSTRIES	TEXTILES AND LEATHER, MECHANICAL AND ELECTRICAL INDUSTRIES, FOOD PROCESSING, CONSTRUCTION MATERIALS, CHEMICALS
FDI NET INFLOWS	\$2.8 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	14%
HDI	98

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

The main weaknesses faced by Tunisian SMEs in general, and SMIs in specific, can be grouped in the following:

- 1. Management:** SMEs do not have a very formalized or differentiated structure and they are characterized by a very centralized and short term decision making, often based on the owner's intuitions or knowledge.
- 2. Financial weakness:** Financial weakness is also a common problem, because managers of SMEs are not always able to prepare financial plans to support new investments, even if financial sources are available. Many SMEs are undercapitalized and do not undertake sizeable investments to be competitive.
- 3. Technology:** SMEs very often utilize foreign technology, with a scarce percentage of shared ownership or leasing. They usually acquire foreign licences, because local patents are not frequent.
- 4. Information:** SMEs generally lack of the necessary information about foreign markets and technology, but also about local institutions, financial schemes, and so on. Also within the firms information is scarce and centralized and the utilization of IT sources is still not well-developed.

- 5. Business environment:** Tunisia SMEs are vulnerable with respect to external competition, depending heavily from external sources of technology, against which they have a very low bargaining power.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

Food industry is one of the main industries in Tunisia. Exports of food products represent only 7% of total manufacturing exports in 2007 and 2008. Tunisia is the second major exporter of olive oil after the European Union. The investments made in the food sector, increased by 3.7% to reach 280 million Dinars, representing 20% from total capital in manufacturing sector. A plan has been prepared to increase the share of food exports to 12%.

B.2.2 Green industries

Mechanical and electronic industries plus chemical industries are the industries to benefit the most from green industry orientation.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	2.1	4.3	3.1	3
Telecommunications investment (% of revenue)	39.8	17.4	23.6	22.6
Sector Performance				
Access				
Telephone lines (per 100 people)	10.0	12.0	16.2	13.6
Mobile Cellular subscriptions (per 100 people)	1.2	83.3	58.0	47.0
Fixed internet subscribers (per 100 people)	0.4	2.7	2.0	5.6
Personal computers (per 100 people)	2.2	9.7	5.7	4.5
Quality				
Population covered by mobile cellular network (%)	60	100	93	77
Fixed broadband subscribers (% of total internet subscribers)	0.0	80.8	22.6	40.4

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Tunisia		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X

20. UNITED ARAB EMIRATES



A. SNAPSHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$250.5 BILLION
ANNUAL GROWTH OF REAL GDP	15.6%
GDP PER CAPITA (NOMINAL VALUES)	\$52,571
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$127,271 MILLION
EXTRACTION AS % OF GDP	38.2%
MANUFACTURING AS % OF GDP	12.6%
REAL MVA GROWTH	10.9%
LISTING OF MAIN MANUFACTURING INDUSTRIES	OIL SECTOR, HYDROCARBONS SECTOR, MANUFACTURING, ALUMINUM, SERVICES AND NEW TECHNOLOGIES INDUSTRIES
FDI NET INFLOWS	\$13.7 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	3.7%
HDI	35

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

The sector employs about 85% of the UAE workforce and contributes about 46% to the country's GDP of US\$145.82bn, according to the Ministry of Economy. Some 98% of businesses registered in Dubai are classified as SMEs, figures from the Dubai Chamber of Commerce and Industry show. But many small firms have struggled to stay afloat since the economy started to contract in the fourth quarter of 2008, hurting consumer demand and investments.

Small businesses rely heavily on bank financing and have complained that banks are reluctant to lend to them especially if they have any exposure to the construction sector, which is beset with payment problems.

There are many challenges facing SMEs in the UAE, including lack of training, financing, high operation cost, labour considerations, the absence of marketing networks to promote national products, and procedural obstacles. These problems are more serious in the case of SMIs which represent a minority in the SME group.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

The food, beverage and tobacco industry absorbed investments of 8761 million USD in 2007, which increase in 2008 by 4.4%, but it is not a main industry in UAE.

B.2.2 Green industries

The industry to benefit the most from green industry orientation is chemical industry. It is the second main manufacturing industry and the one with the largest number of establishments absorbing investments amounting to \$4 billion and employing more than 30 thousand workers.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper-middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	2.7	3.1	3.1	3.1
Telecommunications investment (% of revenue)	28.9	9.8	23.6	15.4
Sector Performance				
<i>Access</i>				
Telephone lines (per 100 people)	31.5	33.6	16.2	47.0
Mobile Cellular subscriptions (per 100 people)	44.1	208.6	58.0	106.1
Fixed internet subscribers (per 100 people)	6.5	26.8	2.0	25.0
Personal computers (per 100 people)	12.4	33.1	5.7	67.8
<i>Quality</i>				
Population covered by mobile cellular network (%)	100	100	93	99
Fixed broadband subscribers (% of total internet subscribers)	0.7	46.4	22.6	89.0

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to the UAE		
	No	Low	High
Agro-food value chain		X	
Green industries			X
ICT			X

21.YEMEN



A. SNAP SHOT IN 2008

INDICATORS	VALUES
ECONOMIC	
GDP	\$28.7 BILLION
ANNUAL GROWTH OF REAL GDP	3.8%
GDP PER CAPITA (NOMINAL VALUES)	\$1,181
MANUFACTURING	
INDUSTRIAL ADDED VALUE	\$10,618 MILLION
EXTRACTION AS % OF GDP	28.9%
MANUFACTURING AS % OF GDP	8.1%
REAL MVA GROWTH	13.2%
LISTING OF MAIN MANUFACTURING INDUSTRIES	MANUFACTURING, OIL SECTOR
FDI NET INFLOWS	\$0.46 BILLION
SOCIAL	
OVERALL UNEMPLOYMENT	15.9%
HDI	140

B. RELEVANCE OF THE PROJECT TO THE COUNTRY

B.1 CHALLENGES FACING SMIS

Manufacturing accounted for an estimated 9.9% of Yemen's real GDP in 2006. In general, the growth prospects for manufacturing are limited by a lack of finance and by dependence on imports for most inputs. The largest contributor to the sector's output is oil refining. Beyond oil refining, the manufacturing sector is confined to the production of consumer goods and construction materials. Some 95% of industrial establishments in Yemen are classified as micro, employing between one and four workers.

Given the expected steady decline in Yemen's oil output capacity, the development of a viable non-oil sector is a growing priority for the government.

Unemployment is high, at around 16.5%, according to IMF estimates. However, the supply of skilled labour is limited, with both literacy and school attendance rates very low (for both men and women). Many Yemenis choose to seek employment opportunities abroad, particularly in Yemen's wealthier Gulf neighbours. With a high fertility rate and a young population, the serious labour issues Yemen currently faces will only get worse. A survey conducted by the UN Population Fund (UNFPA) in late 2007 found that the population could well exceed 50 million by 2033.

B.2 PRIORITY SECTORS IN PROGRAMME

B.2.1 Agro-food

The food industry is one of the main industries in Yemen. The value added of the industry has been increasing through the years, with a major decline in the year 2009. 50% of the establishments in the manufacturing sector work in the food production. The food sector is considered the main employer in Yemen.

B.2.2 Green industries

Chemical and paper industries are the industries that stand to benefit from green industry orientation.

B.2.3 ICT indicators

Indicator	2000	2008	ME & NA Region 2008	Upper- middle income group 2008
Sector efficiency and capacity				
Telecommunications revenue (% of GDP)	1.0	1.2	3.1	3.1
Telecommunications investment (% of revenue)	51.1	-	23.6	-
Sector Performance				
<i>Access</i>				
Telephone lines (per 100 people)	1.9	4.9	16.2	4.6
Mobile Cellular subscriptions (per 100 people)	0.2	16.1	58.0	28.5
Fixed internet subscribers (per 100 people)	0.0	1.3	2.0	1.0
Personal computers (per 100 people)	0.2	2.8	5.7	1.7
<i>Quality</i>				
Population covered by mobile cellular network (%)	-	68	93	50
Fixed broadband subscribers (% of total internet subscribers)	0.0	0.0	22.6	7.2

B.3 OVERALL ASSESSMENT

Sectors of focus in this Programme	Degree of relevance to Yemen		
	No	Low	High
Agro-food value chain			X
Green industries			X
ICT			X