

# INDUSTRIAL UPGRADING & MODERNIZATION PROGRAMME

TAKING YOU AND YOUR INDUSTRY  
TO THE NEXT LEVEL

Inclusive  
Sustainable  
Industrial  
Development



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION





# **INDUSTRIAL UPGRADING & MODERNIZATION PROGRAMME**

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## INTRODUCTION

In developing countries and economies in transition, industrial small and medium enterprises (SMEs) often lack managerial capacities and have insufficient knowledge of business processes as well as of operational and production cycles.

Furthermore, their performance is often hindered by poor technologies utilized and limited access to finance needed to expand production capacities.

Individual SMEs also find it very difficult to deal with policy and regulatory challenges that impact on their sector or on the business sector in general.

This results in creating obstacles and barriers to SMEs to compete on domestic and international markets.

Tackling these challenges in a holistic way will allow SMEs to produce innovative, cost-effective, safe, reliable, and quality products in sufficient volumes.





# THE OBJECTIVE

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To improve the industrial  
performance of manufacturing  
SMEs by strengthening their  
competitiveness and  
environment





1  
ENABLE

2  
BUILD

3  
EMPOWER



## THE KEY COMPETITIVENESS AND INNOVATION

The Industrial Upgrading and Modernization Programme (IUMP) aims to contribute to economic growth and facilitate regional integration of developing countries and economies in transition by increasing the capacities of local industries for value-added generation, economic diversification, exports and employment creation. UNIDO advocates that competitiveness and innovation are the key dynamics to take advantage of liberalization and to drive economic development and growth.

*IUMP:  
a strategic competitiveness  
and enterprise development  
approach*

## **AN INTEGRATED SOLUTION FOR INDUSTRY COMPETITIVENESS**

A number of internal and external factors play a critical role in the performance and competitiveness of SMEs. Factors related to business environment, industrial and economic policies and support institutions are as important as internal factors influencing production and growth of SMEs. Addressing one or a set of factors in a fragmented and uncoordinated manner, is unlikely to enhance SME competitiveness and trade performance.

Therefore, the integrated technical assistance offered by IUMP consists of remedial actions at three levels to maximize industrial competitiveness.

A holistic IUMP focuses on promoting competitiveness and diversification of manufacturing sectors along with improving regulatory frameworks and the business environment, and reinforcing institutional capacities of technical and business support infrastructure.



The three levels with special focus on priority products, sub-sectors and value-chains with high employment and export potential constitute the core of IUMP's integrated response to countries' needs in boosting their industrial competitiveness.





# THE IUMP APPROACH



# ENABLE

## A FAVORABLE BUSINESS ENVIRONMENT

Without addressing the issues related to the overall business environment, interventions at the enterprise level alone do not produce optimal results to increase industrial competitiveness.

Fostering competitive industries and SMEs requires that an “enabling environment” is in place.

IUMP supports the creation of more favorable economic, financial, and regulatory frameworks for SMEs to upgrade, grow and compete on local and foreign markets.

### ***IUMP:***

*Creating an attractive business  
climate for local and foreign  
industries*

## **Access to finance**

*IUMP assists stakeholders to come up with funding scenarios for continued implementation of industrial upgrading interventions at national, sectoral or regional levels.*

*The Programme facilitates the creation of new financial products and services and provides advice and technical support in the establishment of a dedicated upgrading fund to finance SME upgrading needs.*

*In this context, the role of the financial sector and its involvement in the IUMP and its Steering Committee is very important for the viability of the industrial upgrading process.*

## AREAS OF INTERVENTION

### POLICY

Formulation of industrial upgrading and modernization policies and their integration into national development plans and strategies

### REGULATORY FRAMEWORK

Developing and supporting the enhancement of the existing regulatory, and financial frameworks related to the private sector and industrial development

### COMPETITIVENESS ANALYSIS

Carrying out competitive positioning (and market opportunity) studies for priority industrial sectors and selected value chains and supporting the implementation of identified actions

### MANAGEMENT & MONITORING MECHANISMS

Supporting the establishment of programme management, coordination and monitoring mechanisms and setting up a sustainable platform for public-private dialogue on industrial development

### NATIONAL INSTITUTIONAL CAPACITIES

Building capacities of ministries and other counterparts involved in IUMP implementation to ensure sustainability of the Programme



# CAMEROON PILOT PROGRAMME

FOR INDUSTRIAL UPGRADING



The Programme supported national stakeholders in adopting new regulations and policies suitable for industrial development and established/strengthened relevant institutions for management and monitoring of the Programme.

The Programme was implemented on a pilot basis for three industrial sectors:  
textile, agro-industry and wood

Cameroon implemented reforms needed to boost industrial modernization

The Pilot Programme for Industrial Upgrading, Standardization and Quality, funded by the European Union and implemented by UNIDO, offered Cameroon an important opportunity to revisit its industrial regulations and institutional frameworks.

Based on a participative approach involving the main stakeholders from public, private and financial sectors, the Programme successfully supported Cameroon in strengthening its institutional framework, formulating new regulations related to SME development and quality promotion, adopting the required texts and procedures to create new institutions and agencies.

CAMEROON  
SUCCESS STORY

*Due to the success of the Programme in ensuring high-level national ownership and creating an enabling environment for SMEs, the European Union allocated an additional €10 million to expand Programme activities.*

POLICY	REGULATORY FRAMEWORK	POSITIONING STUDIES	MANAGEMENT & MONITORING BODIES	NATIONAL INSTITUTIONAL CAPACITIES
A National Upgrading Programme was formulated and presented to national stakeholders. In addition, public-private dialogue was facilitated allowing the validation of the Programme and the design of a roadmap for its implementation. Furthermore, the project supported the formulation of the national quality plan to strengthen the quality infrastructure.	Several laws and regulations were recommended to national authorities allowing the establishment of the National Upgrading Office and the Programme Steering Committee. Moreover, a feasibility study was carried out to set up an incentive mechanism for SMEs participating in the Programme.	Two positioning studies were carried out for the agro-food sector and business development services in Cameroon. The studies resulted in the formulation of an action plan for developing these sectors.	Important technical assistance and coaching activities were delivered to ensure the set up of the Upgrading Office (technical unit), Steering Committee, Subcontracting and Partnership Exchange (SPX) and the Cameroon standardization body (ANOR).	Capacities of Ministries and national institutions involved in Programme management and implementation were strengthened: Ministries in charge of Economy (MINEPAT), Industry (MINIMIDT) and SMEs (MINPMEESA).

# BUILD

## DEMAND-DRIVEN INDUSTRY SUPPORT SERVICES

IUMP builds capacities of business support institutions and the consultancy sector; enhancing existing tools and providing additional ones to detect and respond to the development needs of SMEs.

The Programme provides technical assistance that enables business support institutions to raise the quality of their existing services and create new ones in response to SME demand.

The consultancy sector is trained and involved in the upgrading process to gain practical experience while providing assistance to beneficiary SMEs within the upgrading programme.

*The effectiveness of an IUMP intervention at this level is considered highly important due to spill-over effects that will benefit a wider range of SMEs from all sectors.*

## A transparent cross cutting partnership

*The implementation of an upgrading programme is always conducted through a partnership between the private and public sectors. The Steering Committee of an IUMP, which is the highest decision making body of the Programme, includes members from relevant Ministries (industry, finance, etc), support institutions, private sector associations, consultancy associations, and the banking sector. The aim is to ensure national ownership and accountability for the upgrading programme as well as to guarantee a transparent transaction and cooperation environment among different stakeholders.*

*This partnership aims at setting a unified vision for industrial upgrading between the private and public sectors through the establishment of a platform for discussion and exchange of information.*



## PRIORITIES



### DEVELOPING SKILLS

Building skills and capacities of national consultancy sector institutions and individuals through training, coaching and their direct involvement in the implementation of upgrading activities



### IMPROVING QUALITY

Mapping and assessing the quality of industry support services against the needs of SMEs to be consequently enhanced and strengthened to match the requirements of local and export markets



### EXPANDING SERVICES

Expanding the range of services required by SMEs to keep abreast of the increasingly changing industry needs and ensuring improved responsiveness to market trends



### PROMOTING LINKAGES AND PARTNERSHIPS

Strengthening linkages between businesses, institutions and academia to better meet the needs of industry in terms of R&D, product and process innovation and technology transfer



### EQUIPPING WITH TOOLS & METHODOLOGIES

Developing a number of tailored tools and methodologies for national counterparts to operate, monitor and track the IUMP implementation; thus ensuring sustainability and national ownership



# TUNISIA

## INDUSTRIAL UPGRADING PROGRAMME

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The programme increased productivity and economic diversification, reduced production costs and improved quality in the country's manufacturing sector

## The key role of Tunisian support institutions in IUMP

The National Upgrading Programme in Tunisia contributed to the country's efforts to increase productivity and economic diversification, reduce production costs and improve quality in the country's manufacturing sector, enhancing its competitiveness and increasing the share of Tunisian goods in the global market.

One of the significant achievements of the Upgrading Programme was its contribution to the emergence of a competitive and diversified manufacturing sector, historically dominated by the textile industry. Currently, production and export of highly sophisticated foodstuffs and chemicals, mechanical and electromechanical equipment, automotives and aeronautics parts and components, and technical textiles are among largest and fast growing sectors in Tunisia.

Most of these structural changes were implemented by Tunisian authorities through the establishment of an efficient and market-responsive system of support agencies, providing assistance to the industrial sector, and in particular to enterprises seeking to become more competitive internationally. Currently, Tunisia's industrial support infrastructure includes 8 sectoral technical centers, quality infrastructure bodies, the

export promotion center, the energy efficiency agency, the environment technology center, investment and innovation promotion agencies, a dynamic private consultancy sector, and a comprehensive vocational system. A number of these institutions were supported by UNIDO in order to build their capacities and improve the quality of their services to enterprises.

This large spectrum of support institutions played a leading role to promote the National Upgrading Programme and to assist enterprises to improve their competitiveness through a diversified range of services, including production, marketing, quality control, organization, management and training.

## TUNISIA SUCCESS STORY

*Thanks to the support provided by the Technical Centre for Chemical Industry, CAP-Valentine enterprise successfully implemented its upgrading programme and increased turn-over by 32% and exports by 136% between 2001 and 2009.*

*Mr. Tarek CHERIF, DG, CAP-Valentine*

# EMPOWER

## ENTERPRISE PERFORMANCE

IUMP contributes to strengthening supply side capacities at the enterprise level through technical assistance for improving the quality and quantity of industrial output, and for facilitating market access at national, regional, and international levels.

IUMP undertakes a thorough diagnosis of enterprise functions and performance, thus identifying bottlenecks and areas of intervention, based on which an upgrading plan with priority actions is developed.

Subsequently, the implementation of the upgrading plan is carried out by teams of highly qualified international experts in close cooperation with national experts trained by IUMP.

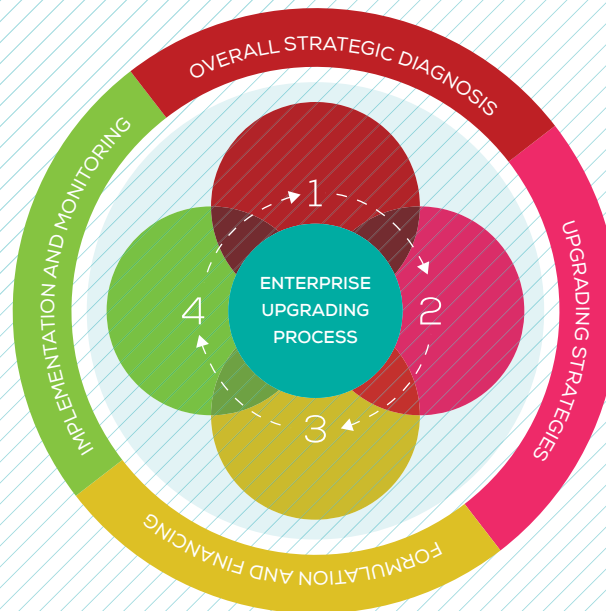
### ***IUMP:***

*Enabling manufacturing firms to upgrade their managerial, technological and innovative capabilities on a pilot basis for demonstrations effects.*

## **Value chain based approach**

*Upgrading programmes target vital value chains in priority sectors. Weaknesses impacting the value chain and its actors are identified first at the macro level and later verified through strategic enterprise diagnosis*

*A value chain approach to upgrading seeks to identify and address major weaknesses along the supply chain. Instead of concentrating on just one group of enterprises or a location, IUMP, using a value chain approach, is more effective and has higher impact.*



### OVERALL STRATEGIC DIAGNOSIS

The overall diagnosis of an SME consists of five steps:

- Analysis of external sources of competitiveness
- Analysis of product markets and strategic positioning
- Diagnosis of managerial skills and social aspects
- Diagnosis of technical capacities and quality, including energy efficiency and environmental issues
- Financial diagnosis

### UPGRADING STRATEGIES

At the completion of the diagnosis phase, the upgrading plan is agreed with the SME management to define priority remedial actions. Strategies are selected in accordance with comparative advantages, and the development vision and goal of a beneficiary enterprise.

### FORMULATION & FINANCING

Upgrading plans describe the required intervention in terms of adoption of new technologies, renewal of production equipment, introduction of IT systems, management capacity building and quality improvements. The upgrading plans are formulated in a bankable format (business plan/feasibility study) that enables SMEs to approach financing institutions in an expeditious manner.

### IMPLEMENTATION AND MONITORING

Implementation of upgrading plans is carried out by teams of highly specialized international and national experts providing on-site technical assistance. These interventions are undertaken in different time intervals to allow for a learning process and to ensure that the technical assistance is assimilated at the SME level, and that the desired results are produced.





# SYRIA

## SUCCESS STORY

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The programme developed the competitiveness of the textile value chain by enabling each enterprise to benefit from new trade opportunities



## Industrial Modernization and Upgrading Programme Syria: Case of Ghazal Enterprise

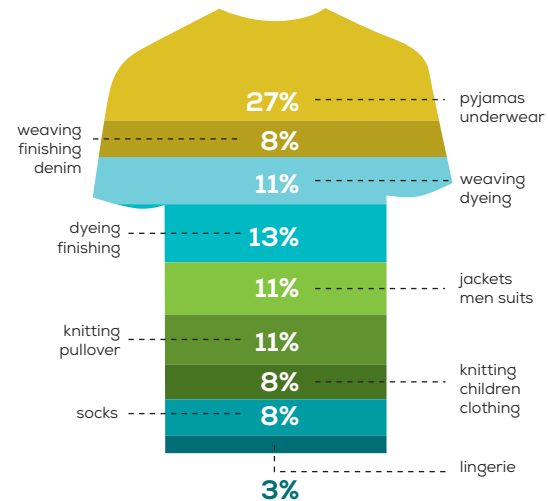
Phase I of the Industrial Modernization and Upgrading Programme (I'MUP-Syria) brought immediate improvements to enterprises such as Ghazal, a medium-sized company operating in the Syrian textile and clothing sector. I'MUP provided technical assistance with a special focus on product development to adapt it to the requirements of the targeted export markets.

Ghazal went on from being a business that lacked the required knowledge and experience into an enterprise that began exporting into new markets.

Similar to the successful case of Ghazal, 35 additional enterprises – supported on a pilot basis – benefited from assistance provided by I'MUP-Syria in the fields of production planning, cost-accounting and human resource management. This intervention was implemented by international and national experts trained by the Programme to enable beneficiary enterprises to redesign entire production lines, reduce costs and improve quality which resulted in attracting new local and international clients.

## SYRIA SUCCESS STORY

### TEXTILE SMES PER ACTIVITY



*Beneficiary enterprises are able to redesign entire production lines and attract international clients*



# TANZANIA PILOT PROGRAMME

ON INDUSTRIAL UPGRADING AND  
MODERNIZATION








The programme promotes competitive industries through the improvement of the quality and quantity of industrial output, and facilitation of market access at national, regional, and international levels

## IUMP in Tanzania

Launched in 2012, the Tanzania Industrial Upgrading and Modernization Programme (Tanzania IUMP) is a result of the joint efforts of the Ministry of Industry and Trade of Tanzania and UNIDO to strengthen supply-side capacity of some industrial sector and to improve competitiveness of locally manufactured goods on domestic and international markets.

## Actions undertaken

By June 2013, the Tanzania IUMP undertook industrial diagnosis for 14 companies operating in the dairy and edible oil sectors and 50 national experts were trained on industrial upgrading methodologies. Further, 5 dairy companies received coaching for the implementation of upgrading plans, which were developed by project-trained national experts. These activities are expected to generate, among others, productivity improvement, reduced production costs, and, as a result, increased competitiveness of manufactured milk, cheese, yogurt and other milk derivative products and their market expansion.

 KEY INDICATORS*	 BASELINE (2012)	 TARGET (2015)	 SPECIFIC MEANS
TURNOVER (in '000 USD)	\$35,805	\$72,393 (+102%)	ENHANCED production, maintenance & marketing capacity INCREASED productivity COMPLIANCE with standards
OPERATING MARGIN	-7.54%	15%	OPTIMIZED cost structure
EMPLOYMENT	460	+5%	INCREASED ratio of qualified finance, marketing and technical staff to the total staff
CAPACITY UTILIZATION	28%	60-70 % (+115%)	IMPROVED maintenance, mobilization of working capital, marketing actions
WASTE & LOSSES	2% impurities in seed 2% of oil in meal cake 5% of raw milk	50-90% reduction in losses	REDUCED LOSSES of seeds, oil in meal (cake) and milk during the process
 IN ADDITION	Implementation of Tanzania IUMP is expected to improve conformity of products to international quality and hygiene standards, and enhance environmental management at the enterprise level		

\*KEY INDICATORS: The indicators are based on observations from pilot 5 dairy companies and 9 companies operating in the edible oil sector.

The background of the slide is a dynamic industrial scene. On the left, a large, bright burst of orange and yellow sparks radiates outwards. On the right, a dark, circular industrial component, possibly a wheel or a part of a machine, is visible. A large, white circular graphic with a thin yellow border is centered on the slide, containing the title and a short paragraph. The overall color palette is dominated by the warm tones of the sparks and the dark industrial elements.

# **SENEGAL**

## **INDUSTRIAL UPGRADING PROGRAMME**

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The programme improved competitiveness in agro-food, metal-work, wood processing and furniture, printing, and laundry sectors

## The National Upgrading Programme in Senegal

Launched in 2003, the Senegalese IUMP aimed to improve the competitiveness of local private sector producers, ensuring sustainability of their market positioning, and the promotion of a new corporate culture among local businesses. The project was the result of cooperation between the Government, the Private Sector, UNIDO and the French Development Agency (Afd).

## SENEGAL SUCCESS STORY

*Phase I of the IUMP undertook upgrading activities at enterprise level while developing domestic technical expertise and infrastructure necessary for a nationally owned upgrading process.*

### PROCESS-EFFICIENCY ORIENTED RESULTS

■ BEFORE ■ AFTER  
■ TARGET ■ PERCENT

#### CUTS IN FACTOR COSTS

Cost to produce 1 ton of steel re-bars [USD]



26.5%

\$68  
\$50

Raw milk used to produce 1 kg of cheese [LITERS]



21.4%

14 L  
11 L

Full production cycle in a poultry unit [DAYS]



16%

50 D  
42 D

#### IMPROVED USE OF INPUTS

Poultry unit (feedstuff per 1 kg of meat produced) [KILOGRAMS]



20.8%

2.4 kg  
1.9 kg

Furniture unit (output from 1 m3 of timber) [SET]



100%

1 Set  
2 Set

Juice & water bottling (plastic used per 1.5 l pet) [GRAMS]



11.8%

34 g  
30 g

#### REDUCED WASTE

Laundry/Printing [PERCENT]



50 %

10%  
5%

Juice & water production [PERCENT]



66.7%

6%  
2%

### SENEGAL

The National Upgrading Programme  
PHASE I  
LAUNCHED IN 2003

The UNIDO / AFD supported Phase II of the National Upgrading Programme focuses on environmental upgrading and promotion of energy efficiency of Senegalese enterprises.

# RESULTS

## ENABLE

### BUSINESS ENVIRONMENT

Industrial upgrading programme integrated into national development strategies and plans

Sustained and up-scaled upgrading process through the establishment of

- (a) autonomous management and monitoring mechanisms and
- (b) financial and non-financial incentive schemes

Policy and decision making process supported by strategic competitiveness and sectoral analysis tools

## BUILD

### INDUSTRY SUPPORT SERVICES

Increased range and quality of services provided by industry support institutions

Improved domestic technical expertise on industrial upgrading and expanded pool of qualified national consultants

Strengthened linkages between businesses, institutions and academia to better meet the needs of industry

## EMPOWER

### ENTERPRISE PERFORMANCE

Increased market share and stronger linkages across priority value chains

Enhanced export capacities and compliance with international requirements and standards

Strengthened product quality and reduced factor costs

Improved productivity and increased manufacturing value added

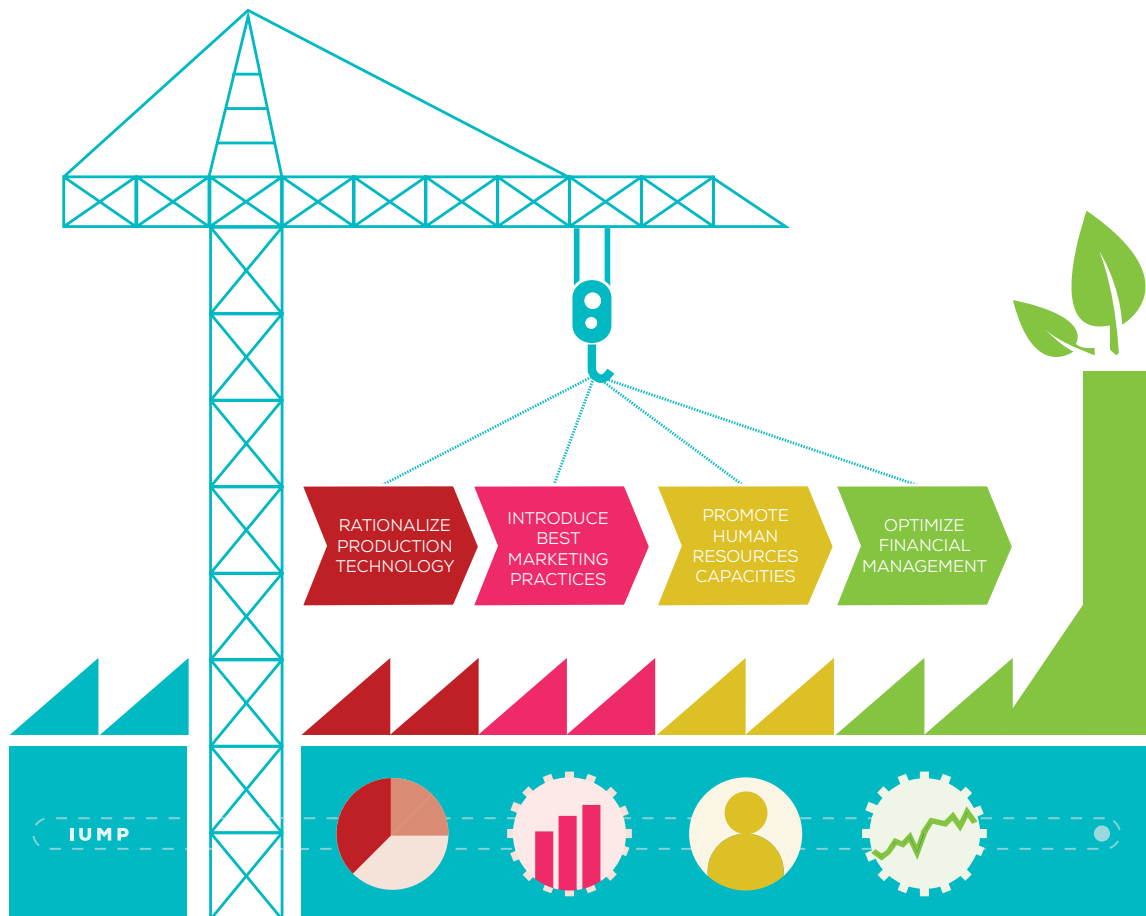
Facilitated access to finance



# INDUSTRIAL UPGRADING AND MODERNIZATION PROGRAMME

IMPROVE EFFICIENCY • INNOVATE • FULFILL YOUR POTENTIAL

**UPGRADE YOUR BUSINESS!**



## IUMP WORLDWIDE

UNIDO successfully implemented a number of upgrading projects at the national and regional levels in a number of countries in North Africa, the Middle East, and West, Central and East African sub-regions. Currently, IUMP is expanding its regional coverage to Asia, Eastern Europe, the Caucasus and Central Asian countries.

UNIDO's industrial upgrading programmes have had immediate impacts on the acceleration of growth of industrial sectors, thereby contributing to overall economic growth and employment creation. Industrial upgrading is often at the core of national and regional action plans that UNIDO Member States adopt for economic growth and industrialization.

*UNIDO's industrial upgrading programmes have had immediate impacts on the acceleration of growth of industrial sectors, thereby contributing to overall economic growth and employment creation.*

### Completed and ongoing IUMPs

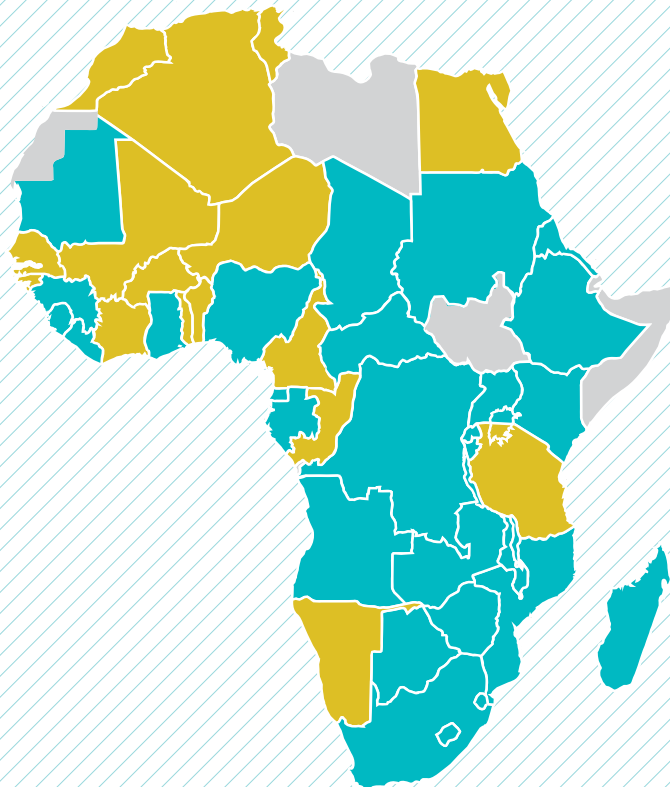
Algeria, Benin, Burkina Faso, Cameroon, Republic of Congo, Cote d'Ivoire, Guinea-Bissau, Jordan, Mali, Morocco, Namibia, Niger, Palestine, Senegal, Syria, United Republic of Tanzania, Togo and Tunisia.

### Planned IUMPs

Angola, Armenia, Botswana, Burundi, Cabo Verde, Central African Republic, Chad, Comoros, Republic of Congo, Democratic Republic of Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kazakhstan, Kenya, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Mauritius, Mauritania, Mozambique, Nigeria, Rwanda, Seychelles, Sierra Leone, South Africa, Sudan, Swaziland, Uganda, Zambia and Zimbabwe.

**IUMP IN AFRICA**  
**NATIONAL AND REGIONAL UPGRADING PROGRAMMES**

■ COMPLETED AND ONGOING      ■ PLANNED





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INDUSTRY TO THE NEXT  
LEVEL



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