

How to ensure Green Industries and Job Creation through the Industrial Upgrading Approach?

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Introduction

In the last few years the international economic environment has undergone profound, rapid and complex changes that have affected the methods of organizing and managing industry, production systems, distribution networks and commercial practices at the national and international level.

Many developing countries and economies in transition view with concern the dawn of a new economic era characterized by the globalization of trade. While some countries react, prepare themselves and seek to take up the challenge, others fail to react and, at the risk of further impoverishment, surrender themselves to the dominant forces of history. In this new atmosphere of continual change and at the request of a number of countries, the United Nations Industrial Development Organization (UNIDO) has developed a technical assistance, restructuring and upgrading programme to prepare and adapt industries and their environments to this new context, which is marked by tough competition.

For most industries, increasing resource efficiency in production is not a response to environmental concerns or objectives. It has become a core determinant of economic competitiveness and sustainable growth. Since resource inputs represent an important cost of production for industries, efficiency improvements can be a significant lever for competitive advantage (SER I, 2009). Moreover, reductions in production costs can result in lower prices for consumers.

Definition and objectives

According to the UNIDO terminology, upgrading is a process of continuous improvement designed to *“prepare and adapt enterprises and their business climate to the requirements of the free trade setting and introduce an approach for progress-driven actions, strengthening enterprises’ strong points while eliminating their weaknesses”*.

In line with this philosophy, the Upgrading Approach aims at improving competitiveness of selected groups of companies with potential to further development through strengthening their productive and trade capacities. For industries and enterprises, it involves two goals of reaching:

- (i) competitiveness in terms of price, quality and innovation; and
- (ii) ability to follow and assimilate the development of technologies and markets.

Such an approach allows existing manufacturing SMEs and their networks to build interlinked capacities necessary to reliably produce larger volumes of manufacturing goods in compliance with the requirements of open markets.

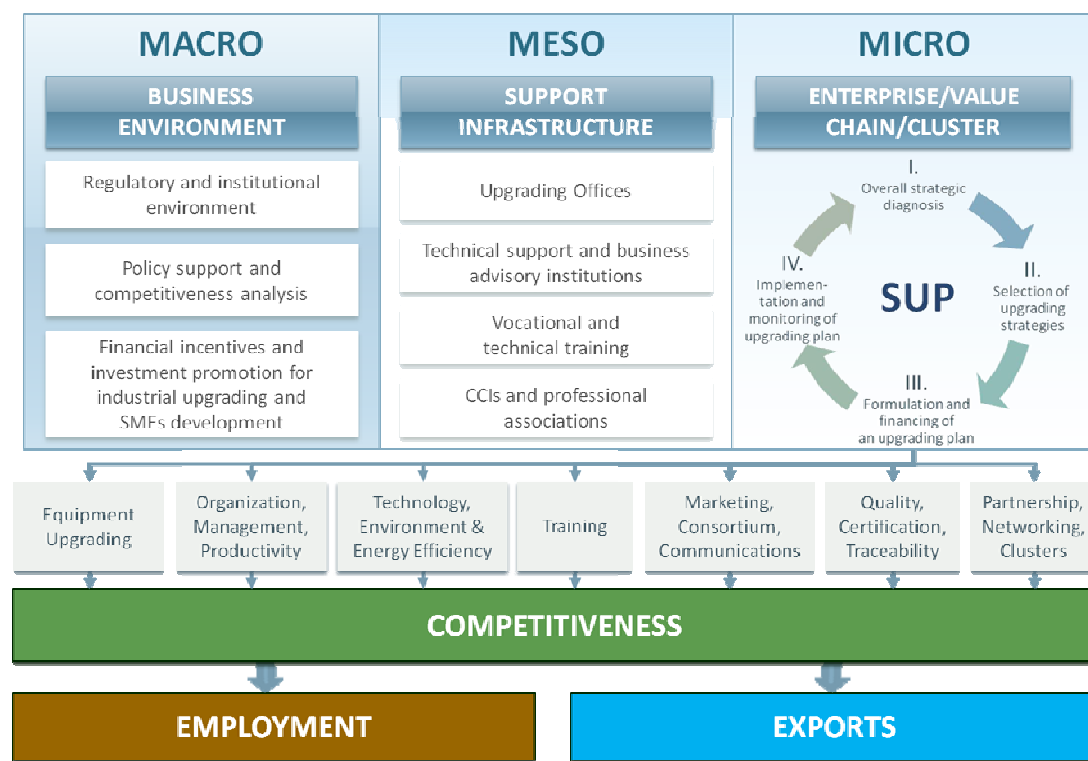
More specifically, industrial upgrading assumes undertaking actions that intend to improve the financial situation of companies, their productive performance and energy efficiency, human resource management, ability to produce according to international standards and technical requirements, and to market this production locally and internationally thus facilitating integration of individual companies and their respective economies to the regional and world markets. Upgrading projects lead not only to providing direct assistance to the companies but also to the improvement of immediate environment and sustaining the upgrading momentum through the establishment of permanent national capacities capable to deliver the upgrading services on a long-term basis.

In particular, along with pilot activities on the development and improving competitiveness of enterprises or their clusters, the upgrading programme embraces the following aspects:

- i. Business environment support framework (including policy and regulatory environment), which also addresses bottlenecks to regional and global trade;
- ii. Capacity building for consolidation of economic data and its dissemination (competitiveness analysis and market intelligence);
- iii. Support for the development and introduction of new financial instruments;
- iv. Strengthening technical support institutions (e.g. business development, technical centres, consulting firms, upgrading infrastructure, investment and export promotion agencies, vocational training institutions, etc.), including those that can emerge, in time, as centres of excellence; and
- v. Support to intermediary organisations (including chambers of commerce and industry, professional associations).

Figure 1a below gives an overview of UNIDO's Upgrading Approach.

Figure 1a. The UNIDO Industrial Upgrading Process



Components of the Industrial Upgrading Approach

Upgrading per se or upgrading at the micro-economic level assumes delivering pilot development activities on enhancing economic performance and competitiveness of individual enterprises and/or SME clusters operating in priority industrial sectors or value chains. The micro-level intervention may include such aspects of improvement as capacity building in areas related to technology, business planning, accounting and financial management, human resources, marketing, quality, energy efficiency, partnerships and business alliances, consortia, ICT, etc.

A Strategic Upgrading Process (SUP) for an enterprise/cluster/value chain represents a core procedural module of industrial enterprise upgrading. The SUP life cycle consists of four consequent steps:

Step I. Overall strategic diagnosis, which aims to analyze competitiveness of local companies, to reveal the strengths and weaknesses of the companies and, as a result, to identify companies' upgrading strategies with short and mid-term upgrading actions to be implemented within the upgrading programme. The diagnosis will also propose a financial plan to carry out the selected actions. Hence, the SUP first step 'Overall strategic diagnosis' consists of:

- 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 and environmental issues; and
- Financial diagnosis.

Step II. Selection of upgrading strategies where the strategic decision is being made in agreement between enterprise managers and owners, and financing banks based on the following aspects:

- Strengths, weaknesses, challenges and opportunities of the beneficiary enterprise;
- Social and political aspects;
- Strategic alternatives according to the available scenarios;
- Values and aspirations of the beneficiary company management.

Step III. Formulation and financing of an upgrading plan, which mainly covers or reviews:

- The short- and medium-term strategy and objectives;
- Already implemented activities to raise the companies' interest;
- The action plan of 'soft' upgrading activities (see below) with special accent on companies' competitiveness;
- The plan of financial sustainability of the company.

Step IV. Implementation and monitoring of the upgrading plan usually consisting of:

- Forming an implementation team;
- Development and running the Programme monitoring and reporting framework;
- Implementing corrective measures and regular reviews;
- Updating stakeholders on the progress.

The approach may also assume the financial restructuring of an enterprise as a prior stage to benefit ultimately from the upgrading activities. The restructuring plan covers mainly the structural and financial adjustments which could lead to conversion or liquidation of nonviable activities or to financial reorganization of the enterprise. The objective of restructuring plan is to enable companies to become financially sustainable. Once the enterprise implements its restructuring plan, it becomes eligible to the upgrading plan. In this case, it will first update the initial diagnosis followed by the elaboration of the upgrading plan.

Support to the industrial companies

Under the Industrial Upgrading Approach, the enterprise upgrading distinguishes two types of support:

- **‘Hard’ upgrading activities** or capital investment in the form of acquisition and installation of the upgrading, laboratory and production equipment; and
- **‘Soft’ upgrading activities** or technical assistance, which includes building capacities and skills 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, 17025, 22000 certification, introduction of HACCP system, purchase of software, establishing accounting system, traceability, audit on energy management, energy saving activities, etc.

The Approach also considers the implementation of upgrading plans according to:

- **a global upgrading plan**, which includes global strategic diagnosis, formulation of upgrading plans and technical assistance in implementing priority activities; and
- **a specific upgrading plan** consisting in the assessment of company’s specific problem and assistance in implementing related activities.

Implementation of the global upgrading plan will improve company’s entire performance with regard to its management and production systems, whereas the specific upgrading plan will only touch the particular functions through the specific activities. The Programme allows conducting simultaneously both the global and specific upgrading plans. A beneficiary company, according to its performance level and priorities, will be able to choose the best possible solution proceeding through a short and free-of-charge initial diagnosis.

Skipping the long diagnosis or the business-plan elaboration, the specific approach allows the rapid introduction of the state-of-the-art management systems (CAM, CAMM, ERP, ICT), marketing techniques, cost calculation tools, quality management methodologies and techniques, etc.

The declaration of interest is a part of the questionnaire launched at the inception stage to serve as an attribute of an enterprise's fully voluntary participation in the upgrading programme.

Impact of the approach

UNIDO Evaluation Group has initiated in 2010 a Thematic Evaluation related to the projects dealing with various forms of enterprise upgrading. For this purpose, a survey had been conducted with 211 companies that benefited from different UNIDO projects aiming at “competitiveness”, namely enterprise upgrading and the SPX programs and thereby get a cross-cutting perspective giving insight into the strengths as well as the weaknesses of the different approaches.

The 211 targeted companies were located in different countries where UNIDO implemented Competitiveness and Upgrading Programmes at national and sub-regional levels: Algeria – Benin – Burkina Faso – Cote d'Ivoire – Egypt – India – Lebanon – Mali – Niger – Senegal – South Africa – Syria – Togo – Tunisia.

The graphs below clearly show that the satisfaction of companies with the below-mentioned support services is very high with satisfaction rates of at least 75% for each of the services.

