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

Rafik FEKI
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Outline

I. Industrial Upgrading:  
   Why does it matter?

II. The Industrial Upgrading Approach:  
   Concept, objectives, model & intervention approach

III. UNIDO’s upgrading experience
I. Industrial Upgrading: Why does it matter?
New trade and development context
Challenges, opportunities and risks

- The new context of accelerated trade liberalization and globalization of the world economy have been characterised by profound, rapid and complex changes

- Against this background, the new preferential trade environment presents:
  - **Opportunities** to obtain a foothold in the developed markets,
  - **Challenges**: inherent lack of supply capacity to produce cost-effective, safe, reliable, quality products in sufficient volumes, that generate
  - **Risks** for countries and enterprises – to loose not only existing export markets, but also their presence in the local marketplace
REGIONAL LEVEL
Weak intra-regional trade and socio-economic integration, weak positioning on world map in:
MVA, manufacturing exports, competitiveness indicators, innovation and social development.

COUNTRY LEVEL
Low MVA, low exports, limited diversification of economy, high unemployment rates, low per capita incomes, poverty

Gaps in the business environment
- Weaknesses in the business regulatory and institutional frameworks
- Shortages in availability of finance for manufacturing SME
- Insufficient and/or inappropriate incentives
- Absence of holistic regional development approach for industrial SME promotion

Inadequate technical support services
- Weak expertise in provision of business advisory and market information services
- Lack/insufficient capacities and capabilities of specialized technical support institutions
- Limited specific technical expertise in different aspects of the quality infrastructure
- Inadequate technical and professional vocational training support

Weak industrial SME and technology development
- Local SMEs’ poor diversification and weak product development and marketing capacities
- Poor managerial, financial, energy and resource management practices
- Weak capabilities of local entrepreneurs in identifying and accessing finance
- Lack of reliable and mutually supportive links between SMEs up and down supply chains
Tangible and effective regional integration supported by improved int’l positioning in MVA, manufactured exports, competitiveness, high-tech attainment, and social development.

EXPECTED RESULTS:

- **Country Level**: Increase in MVA, exports, diversification, increased per capita income, faster employment rates and improved human development indicators.

SMEs: Equipped and ready to act as drivers for growth, employment and innovation.

**Tree of Solutions**

- **Regional Level**: 
  - Improved business environment favors SMEs development
  - Manufacturing SMEs enjoy the scope and quality of support services provided
  - Manufacturing SMEs emerge, expand, network and gain market shares

**Country Level**: 
- **SMEs**
  - Equipped and ready to act as drivers for growth, employment and innovation

**Country Level**
- **Manufacturing SMEs enjoy the scope and quality of support services provided**
  - Business and technical support institutions upgraded in promoting industrial SMEs
  - National expertise equipped by methodologies and tools on SME development & upgrading
  - Adequate quality infrastructure in place and standards Harmonized regionally
  - Vocational training institutions contribute effectively in manuf. SMEs’ growth

**Country Level**
- **Manufacturing SMEs emerge, expand, network and gain market shares**
  - Industrial SMEs take use of strategic positioning studies conducted for priority sectors
  - Business plans & advice on fin/Mkg/envirment/energy mgmnt improve SME performance
  - EDIP programme continuously supports SMEs in the areas of entrepreneurship, quality, etc.
  - Pilot manufacturing SMEs enjoy the benefits of joining clusters and export consortia

**Country Level**
- **Improved business environment favors SMEs development**
  - Legislative and regulatory frameworks enhanced to the benefit of industrial SMEs
  - Effective instruments facilitating access to finance and credit available to the local SMEs
  - Comprehensive package of incentives for promoting SMEs and entrepreneurship applied
  - National capability to develop and implement business-enabling policies in place
So how to fill the gap and make SMEs from developing countries compete effectively in global markets?
II. The Industrial Upgrading and Enterprise Competitiveness Initiative:

*Concept, objectives, model & intervention approach*
Upgrading Concept

- ‘Upgrading’ is a neither a *final result* nor a *tool* to achieve it
- It is a *process* of continuous improvement involving a *wide range* of different development *tools and services* designed to *prepare and adapt* manufacturing *enterprises* and their *environment* to the requirements of free trade
  - For industries and enterprises it involves two goals:
    - Competitiveness in terms of price, quality and innovation
    - Ability to follow and assimilate the development of technologies and markets in line with the principles of environmental sustainability
UNIDO’s Industrial Upgrading and Enterprise Competitiveness Initiative

Global objective

- To enhance the **contribution of private sector** manufacturing enterprises to the **sustainable economic growth** and **reduction of socio-economic disparities** within the whole country through industrial upgrading and improvement of enterprise competitiveness.

Economic Growth and Poverty Reduction through

- Employment creation
- Exports generation
- Investment & technology promotion
Strategic upgrading process (SUP) for an enterprise/cluster/value chain in 4 phases

I. Overall strategic diagnosis

II. Selection of upgrading strategies

III. Formulation and financing of an upgrading plan

IV. Implementation and monitoring of upgrading plan

SUP
Phase I: A 5-step overall strategic diagnosis

OVERALL STRATEGIC DIAGNOSIS

1. Analysis of external sources of competitiveness
2. Analysis of product markets and strategic positioning
3. Diagnosis of managerial skills and social aspects
4. Diagnosis of technical capacities and quality, incl. energy & environmental issues
5. Financial diagnosis
# Analysis of External Sources of Competitiveness

## Socio-economic Environment

- Political environment
- Investment policy
- Legal environment
- Export policy
- Tariff system

## Industrial/business Environment

- Industrial support agencies
  - Standardization
  - Metrology
  - Management
  - Industrial consultancy
- Investment and financial incentives
  - Investment climate
  - Financial incentives
- Cost of production factors
  - Labour
  - Energy
  - Communications
  - Taxes and levies

## Technological Environment

- Technical support centres for industry
- Promotion and transfer of technology
- Quality and certification
- Research and development
ANALYSIS OF PRODUCT MARKETS AND STRATEGIC POSITIONING

1. EVALUATION OF MANAGERIAL SKILLS
2. EVALUATION OF THE ORGANIZATIONAL STRUCTURE
3. QUALITY AUDIT
4. ANALYSIS OF COMMERCIAL PERFORMANCE
5. ANALYSIS OF THE MARKETING MIX
6. SALES MANAGEMENT

**Analysis of commercial performance**
- Segmentation of activities into strategic fields of activity
- Analysis of performances by strategic field of activity
- Evaluation of strategic positioning

**Analysis of marketing mix**
- Product policy
- Price policy
- Distribution policy
- Promotion policy

**Sales management**
- Market study
- Brand image
- Product quality
- After-sales service
3. DIAGNOSIS OF MANAGERIAL SKILLS AND SOCIAL ASPECTS

**Evaluation of managerial skills**
- Vision, mission and strategy
- Management information system (MIS)
- Corporate culture

**Evaluation of the organizational structure**
- Organizational chart
- Human resources management
- Pay and motivation

**Social aspects**
- Corporate Social Responsibility
- Occupational health, safety and security
- Other social benefits
4. DIAGNOSIS OF TECHNICAL CAPACITIES AND QUALITY INCLUDING ENERGY AND ENVIRONMENTAL ISSUES

BIT, AGR

Analysis of production operations
- Analysis of inputs
- Analysis of production system (technology and process)

BIT, AGR

Evaluation of technical performance
- Productivity
- Costs
- Quality of finished products

BIT, AGR, EM

Analysis of technical support functions and environmental aspects
- Technical support functions
  - Engineering
  - Maintenance
  - Control and inspection
- Environmental aspects
  - Waste management
  - Clean production

ECC, EM

Energy management and efficiency
- Energy audit
- Energy system optimization
- Energy management standards

TCB, AG

Quality audit
- Quality system (ISO 9001, ISO 14001, ISO 22000…)
- Quality assurance
- Product standards
- Metrology
- Control and inspection
  - Inputs, process, production
  - Laboratories
FINANCIAL DIAGNOSIS

Conversion of accounting data

Analysis of financial statements
- Financial structure
- Working capital
- Cash flow analysis

Analysis of income statement
- Sales development
- Costs development
- Analysis of production costs and cost prices by strategic field of activity

Product costs
- Analysis of break-even point
- Decisions to manufacture or outsource
The 5-step diagnosis leads to the selection of an upgrading strategy (Phase II)

Overall strategic diagnosis

Strategic decision making

- Challenges and opportunities
- Social and political aspects
- Strategic options
- Choice of strategic options
- Strategic alternatives according to the scenarios
- Strengths and weaknesses of the enterprise
- Values and aspirations of management

CHOICE OF UPGRADING STRATEGY by managers, owners and banks
Phase III: Formulation and financing of an upgrading plan

An exercise of a feasibility study (COMFAR)

Formulation
- soft & hard actions

Validation and approval
- by owner, bank

Funds mobilization
- self-financing, upgrading grant, bank credit
Phase IV: Implementation and monitoring of the upgrading plan

- Establishing an implementation team (team work)
- Monitoring and reporting framework
- Corrective measures and regular reviews
- Update stakeholders on the progress
Methodologies and information tools

The upgrading kit currently comprises:

Methodological Guide: Restructuring, Upgrading and Industrial Competitiveness, 2003 (available in English and French)

Upgrading Plan: Methodological Guide, 2008 (Senegal)

Electronic database of national experts on upgrading, CD format, 2008 (Senegal)

PRMN UEMOA-ONUDI: Approche méthodologique pour la réalisation d’un diagnostic de restructuration et de mise à niveau, 2007 (UEMOA)
Manuel des procédures de restructuration et de mise à niveau, 2008, (UEMOA)

Electronic database of financial and technical support institutions for upgrading, CD format, 2008 (Senegal)

...as well as many other technical papers, thematic publications, manuals and software
UNIDO’s experience in upgrading
Comparative advantages

- **Years of intensive experience**
  - ✓ since 1996 at *country* level (Algeria, Cameroon, Egypt, Senegal, Syria and Tunisia)
  - ✓ since 2005 at *sub-regional* level (ECOWAS, UEMOA)

- **Wide recognition** by the int’l development community (EU, the World Bank, France, Italy…) + developing countries all over the world

- Relevance to inter-regional trade liberalization processes (e.g. EPAs…)

- Forming the core of national/regional action plans for economic growth and poverty reduction (e.g. AU, West Africa…)
National & regional upgrading programmes implemented or currently underway

- Algeria
- Cameroon
- Congo
- Egypt
- Morocco
- Senegal
- Syria
- Tunisia
- West Bank and Gaza
- 8 UEMOA countries
# UNIDO’s immediate contribution to upgrading programmes

<table>
<thead>
<tr>
<th>Programme activities</th>
<th>Tunisi</th>
<th>Algeria</th>
<th>Syria</th>
<th>UEMOA</th>
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<tbody>
<tr>
<td>Establishment of national upgrading offices and national steering committees</td>
<td>✓</td>
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<tr>
<td>Establishment of financing schemes/funds supporting upgrading activities</td>
<td>✓</td>
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<tr>
<td>Local consulting companies trained in conducting diagnostic studies and designing upgrading plans</td>
<td>✓</td>
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<tr>
<td><strong>Design, launch and implementation of pilot upgrading activities in priority sectors</strong></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Upgrading of technical support institutions</td>
<td>✓</td>
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Tunisian Upgrading Programme
Results and impact

- As a result of the 13-year upgrading programme (1997-2010), more than 5000 manufacturing enterprises recorded:
  - An annual increase in exports of 18%
  - 16%-growth in sales annually
  - Increased manager and engineer recruitment rate of 12% per year
  - Yearly 6%-increase in employment
  - 40% of beneficiary enterprises started to export
  - Number of certified operators jumped from 60 to 800
  - 30% of investment flows to the industry generated by upgrading (USD 5.0 billion-worth investments)
  - 10-fold increase of business consulting market
  - the number of local firms partnering with the EU operators
Upgrading in Senegal
Immediate results

- Phase I of the Programme produced the following immediate results:
  - €13.4 m provided by financial sector and €34.8 m – as investments
  - Improved competitiveness in agro-food, metal-work, wood processing/ furniture, printing, laundry sectors due to:
    - cost reduction and reduced time of production cycle
    - increase in equipment capacity utilization
    - improved resource saving and reduced industrial waste generation
    - improved labor-force productivity
  - As result, increase in export operations by beneficiary firms
  - Improved financial transparency of beneficiary companies
  - Improved quality of applications submitted to banks for funding
So are we?

Thank you for your attention!