



Strategic Industrial Intelligence and Governance



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The Issue

International pressures are forcing countries to transform their economies. Competition is so fierce that countries cannot rely solely on their natural endowments and traditional sectors to sustain growth, create jobs and compete. Evidence shows that industrial policies that trigger structural change and enhance capability building have set the foundations for the success of newly industrialized countries.

Crucial policy choices are usually flawed due to weak institutional capacity, lack of information and insufficient private-public sector dialogue.

Entrepreneurship will always play the key role in a country's economic transformation. Yet, governments in developing countries are confronted with new stringent challenges to support private firms. They have to guide the policy process, determine goals, identify binding constraints and design and apply policy instruments. However, experience shows that these crucial policy choices are usually flawed due to weak institutional capacity, lack of information and insufficient private-public sector dialogue. This often results in governments not being able to develop realistic strategies based on thorough and objective analysis. In some cases, strategies cannot be implemented through action plans as the government lacks a dedicated implementation team staffed with skilled and committed technocrats, and a coordination

mechanism to involve other stakeholders throughout the policymaking process.

UNIDO's response

Governments in developing countries are overwhelmed with the many strategic reports and sectoral studies produced by international organizations and consulting firms. Though these reports provide useful information and advice on what governments could do, they fall short in addressing the policy process and the 'institutional architecture' and sequence needed to transform knowledge into action.

UNIDO aims to support governments throughout the industrial policymaking cycle with advice, capacity building and facilitation.

To fill this gap, UNIDO has developed a programme to generate strategic industrial intelligence and governance mechanisms for policy design and implementation. In particular, the Strategic Industrial Intelligence and Governance programme aims to support governments throughout the industrial policymaking cycle with advice, capacity building and facilitation. The creation and training of autonomous national implementation teams and industrial intelligence units in influential government agencies, the establishment of industrial observatories and overall guidance in the elaboration of industrial diagnosis are core to the programme.

The units are trained in UNIDO's methodologies on industrial competitiveness and sectoral/value chain performance. They were designed under the guidance of the late Professor Sanjaya Lall of Oxford University, who formulated a series of indicators and indices to measure countries' industrial performance and capabilities. These indicators constitute the foundation of UNIDO's Competitive Industrial Performance (CIP) index, a combined index that captures the ability of

countries to produce and export manufactures competitively in a simple measure. The CIP is published in UNIDO's Industrial Development Report series, and country assessments and benchmarks of national industrial performance are now in high demand.

The Approach

UNIDO's approach derives from the literature on the 'Good Principles for a New Industrial Policy'. Both researchers and practitioners agree that a focus on the policy process rather than on its outcome (e.g. a strategy paper) is one of the key elements for successful industrial policies. An industrial strategy or policy paper is certainly a desired output that requires continuous review and feedback. However, many policy reports do not live up to expectations as they fail to acknowledge the institutional capabilities and transparency and collaborative elements of the policy process (e.g. involvement of stakeholders). Supporting this process calls for particular emphasis on 'how to' rather than 'what to do'.

Institutional capability building is the key for successful industrial policy design and implementation.

The Strategic Industrial Policy (SIP) process comprises four stages: diagnosis, design, implementation and evaluation. UNIDO provides capacity development, technical advice and facilitation throughout the process. Institutional strengthening is a key cross-cutting factor for successful policymaking. No country in the world has been able to make and implement policies without influential and capable institutions staffed with qualified and committed civil servants. Though this is a long process, evidence from UNIDO's projects shows that a significant impact on institutions' capacities can be achieved within 2-3 years. To generate strategic intelligence and support industrial governance mechanisms, UNIDO's strategy builds on four phases (see figure 1):

Phase I. Raising awareness and building the skills base.

UNIDO organizes seminars for high-level government officials and influential private sector representatives to present and discuss key themes for industrial policy, including:

- New industrial policies: good principles and international best practice;
- The 'institutional architecture' for policymaking;
- Trends on industry and trade: implications for country competitiveness;
- Structural change and diversification: why it matters.

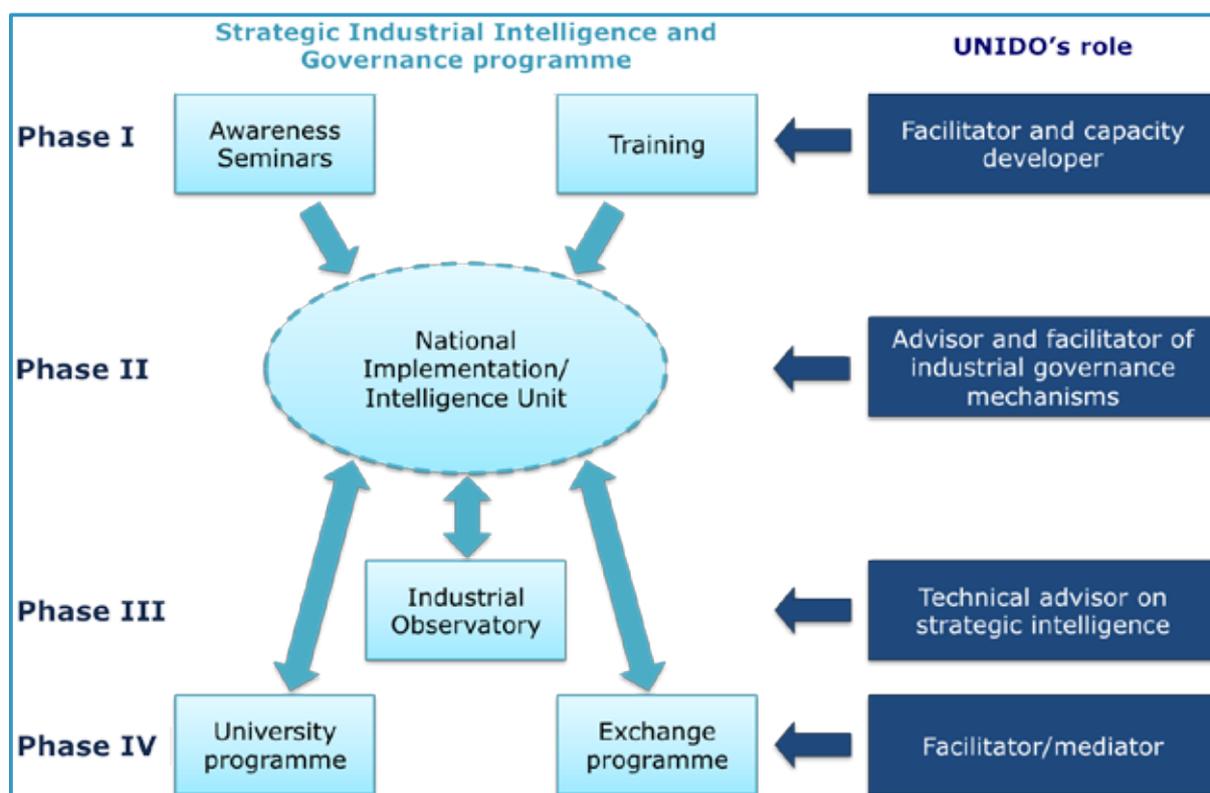
A small group (12-15 people) of highly qualified professionals will be carefully selected from the public and private sectors to be trained in UNIDO's methodologies. The course duration is around two full weeks and requires participants to have a strong technical background in economics, statistics and trade



and industry theory. Trainees are introduced to the manipulation and processing of trade and industry data, the creation of aggregated and sectoral competitiveness indicators and indices, the use of benchmarking techniques for country comparisons, and the analysis and interpretation of results. The most popular courses are:

- Indicators of Industry and Trade Competitiveness for Country Diagnosis;
- Sectoral Competitiveness and Value Chain Analysis;
- Structural change analysis.

Figure 1. Phases of the Strategic Industrial Intelligence and Governance programme and UNIDO's role



Under the umbrella of UNIDO's Institute for Capacity Building, the Strategic Industrial Intelligence and Governance programme also organizes executive trainings at UNIDO headquarters in Vienna. The objective is to train selective groups of decision-makers on UNIDO's methodologies and practices in the fields of competitiveness and industrial policy. Study tours to relevant locations are also organized to expose policymakers to real life examples of best practices in developed and developing countries.

Phase II. Setting up National Implementation/Competitiveness Intelligence Units

Specialized technical units are set up in influential institutions in the country. They assume different forms depending on the government's needs and priorities. Some countries may request intelligence units to purely act as think tanks, while others may ask for implementation units to transform knowledge into programmes and projects. In either case, units are inter-institutional and are ideally staffed with selected trainees from UNIDO's courses. The units are equipped with UNIDO's industrial observatory, international databases, an 'international best practice' library, and UNIDO's flagship publications (Industrial Development Reports, Yearbook of Industrial Statistics, Working Papers). UNIDO does not intend to create units where they already exist – in that case, UNIDO strengthens the existing units' analytical foundations, guides them in the elaboration of specific policy reports and links them up



with similar units set up by UNIDO in other countries.

Such units play a crucial role in supporting the industrial policy process by providing inputs for the production of an industrial strategy/policy paper. These three tasks are:

- *Production of horizontal and sectoral industrial diagnosis*, such as industrial competitiveness reports, value chain studies, policy briefs and sectoral notes;
- *Elaboration of industrial baselines and targets*. The use of this hard factual evidence is necessary for: a) an assessment of the current state of industry and its key strategic sectors; b) identification of country role models and possible threats; c) determining realistic future targets to be achieved through policy intervention; and d) continuously monitoring progress in the implementation of policy

Units set up by UNIDO support the policymaking process in three ways: production of horizontal and sectoral industrial diagnosis; elaboration of baselines and targets; and consensus building.

- *Development of a National Strategic Vision*. The unit can play a fundamental role through consensus building and the socialization of transparent, objective and technical analytical outputs. The legitimation process should be straightforward, as the unit is likely to include representatives from the private sector. Round discussion tables need to be organized to define short and long-term industrial goals and the strategies and capabilities required to reach those goals.

Phase III. The Industrial Observatory

In a fast moving world, effective policymaking needs e-tools that provide quick but reliable

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technical solutions. Knowing that policymakers cannot wait to take decisions based upon timely and long-gestating reports, UNIDO has developed the 'Industrial Competitiveness Intelligence System' (ICIS) software. This is a virtual industrial observatory that centralizes international and national performance and capability indicators to:

- Monitor global and regional trends of industry and trade;
- Benchmark national performance at the macro and sectoral level;
- Benchmark the structural drivers for industrial competitiveness internationally;
- Identify country role models, immediate and future threats and assess their industrial paths;
- Monitor the impact of policy on the competitiveness of specific strategic sectors;

- Assess the impact on other dimensions, including poverty and the environment.

Phase IV. Linking up with National and International Centres of Knowledge

UNIDO creates an inter-institutional mechanism to facilitate the participation of centres of knowledge in the policy debate. Units set up by UNIDO are linked to universities (through the university programme) and similar units set up by UNIDO in other countries (through the exchange programme). This results in benefits both in scale – tapping into a huge pool of skilled human capital to produce applied research, and scope – enhancing impartiality and generating quality inputs for policy.

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Activities under Phase IV take several forms. For example, UNIDO supports an internship programme for graduates to join the unit for 3-6 months. Excellent candidates may be offered paid positions. Seminars on industrial policy and competitiveness may be organized

Figure 2. Example of UNIDO's software application ICIS



at national universities, and papers may be commissioned to support the unit's analytical work. Through the exchange programme, unit members may work for a few months in other units set up by UNIDO or participate in study tours to learn about other unit's activities. Initiatives like this are designed to boost South-South inter-institutional cooperation through knowledge and experience sharing.

Programme outputs

UNIDO's programme to strengthen institutional capacity for industrial policy design and implementation includes the following tangible deliverables:

1. *National implementation/competitiveness intelligence unit set up and trained (see Phase II);*
 2. *Industrial observatory (UNIDO's Industrial Competitiveness Intelligence System) (see Phase III);*
 3. *Publication of key analytical inputs for industrial policymaking, including:*
 - a. *The Country's Industrial Competitiveness Report.* It positions the country on the global industrial scene, benchmarking its performance against other countries. It also assesses the drivers of industrial competitive performance and provides horizontal policy recommendations;
 - b. *Report of Baselines and Targets for Industrial Development.* Using a good number of quantitative indicators, this report provides baseline data (at the macro and sector levels) to assess current performance levels and to define future targets;
 - c. *Sectoral Competitiveness and Value Chain Studies.* They assess and benchmark the competitive performance of selected strategic sectors vis-à-vis other countries. These reports map out value addition in the chain, identify niche markets and give recommendations for value capture and upgrading;
 - d. *The Business Environment for Industrial Activity: Factor Costs, Transactions, and Regulatory and Legal Framework.* This reference guide presents a roadmap for investors detailing costs, transactions and procedures for setting up and operating an industrial business;
 - e. *Policy briefs.* These are monthly short policy notes on key issues in industry and trade that are relevant for stakeholders;
 - f. *Sectoral profiles.* These are short summaries produced to disseminate the findings of the detailed sectoral competitiveness and value chain studies described above;
4. *Industrial Strategy/Policy Paper.* Drawing on the analytical inputs generated previously, this document elaborates the government's vision for the country's industrial competitiveness, defines strategies, presents broad intervention areas and highlights institutional arrangement and coordination mechanisms;
 5. *Implementation Roadmap.* In line with the intervention areas identified in the strategy/policy paper, the roadmap presents specific programmes and projects with indicative resources, indicators, target group(s), means of verification, sunset clauses and implementing agencies.

Country experience

UNIDO's first programme was launched in Ecuador in 2004 where a specialized technical unit (UTEPI) was established at the Ministry

of Industry, Trade, Competitiveness and Fisheries (MICIP) following several seminars and trainings. Together with the counterpart, UNIDO defined the terms of reference, deliverables and required human resources. In 2006, the unit was formally integrated into the structures of the Ministry through a decree to become the Department of Statistics and Industrial Studies. It was assigned the task to contribute to the elaboration of Ecuador's Industrial Policy 2008-2012 and to produce a roadmap for its implementation. The department has become the Ministry's think tank and produces biannual industrial competitiveness reports, value chain analyses, sectoral briefs, policy notes and offers online access to industrial information and data through the observatory. It is totally self-sufficient and autonomous.

Paraguay and Colombia followed. UTEPI Paraguay, based on the Ecuador model, was formally created by ministerial decree in 2007 and is now fully operational. UNIDO trained and staffed the intelligence unit, which is now producing analytical outputs for policymaking. In Colombia, UNIDO has strengthened existing intelligence units and has been instrumental in boosting inter-agency network and cooperation. Several institutions, including the Ministry of Industry and Trade, the Department of National Planning and the Institute of National Statistics, jointly contributed to the elaboration of Colombia's first Industrial Competitiveness Report.

Overall, UNIDO's programme in Latin America has resulted in a network of intelligence competitiveness units that use UNIDO's methodologies and standard publications to drive the industrial policy debate. A spin-off feature of the expanding network of technical units in Latin America is the opportunity they offer for staff exchanges and twinning arrangements for sharing experience, knowledge, data and methodologies. Recently, UNIDO has been particularly active in sub-Saharan Africa. In Cameroon, a training was organized in 2005 for young professionals

from relevant ministries, chambers of commerce and industry and the regional central bank, Banque des États de l'Afrique Centrale (BEAC). The result was the publication of the report 'Industrial Performance and Capabilities of Cameroon: Analysis of the Industrial Sector'. The government has been very supportive in the implementation of the unit and the establishment of the observatory.

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In Rwanda, UNIDO has initiated the first phase of implementation, which is financed by One UN Plan. A training on 'indicators of industry and trade competitiveness for country diagnosis' was carried out in October 2008, and a draft report of the Industrial Competitiveness Report of Rwanda has been produced.

In the Gambia, the first phase of the programme included an institutional gap assessment in key government agencies to identify bottlenecks for the design of industrial policies, and the training of 15 government officials in UNIDO's methodology. The programme will be fully funded in 2013 to deliver intelligence, strategies and an action plan for the Government of the Gambia.

In Tanzania, UNIDO is currently implementing the Strategic Industrial Intelligence Programme with the aim of establishing a policy monitoring function at the Ministry of Trade and Industry.

In Cape Verde, UNIDO's policy unit is engaged in the One UN Plan to deliver technical assistance in the 'Promotion of Growth in Economic Communities' component. The Institutional Capacity Building for Competitiveness project in Cape Verde aims at strengthening the public sector in designing and implementing an industrial policy for diversification. UNIDO

has set up a Competitiveness Intelligence Unit (CIU) at the newly-established Centre of Strategic Policy. CIU members have been trained in UNIDO's methodology for industry and trade competitiveness analysis for country diagnosis, and value chain and sectoral competitiveness. The team has finalized the Cape Verde Industrial Competitiveness Report 2011 and is engaged in several value chain studies.



In Viet Nam, UNIDO's policy unit is delivering technical assistance through the One UN plan. UNIDO's project aims to strengthen the public sector, particularly the Ministry of Industry and Trade (MoIT), and to design technically grounded, high-impact industrial policies. During 2010, UNIDO assisted MoIT in setting up an inter-ministerial Industrial Competitiveness Group (ICG) to act as a think tank on industrialization and competitiveness. ICG members have been trained and recruited by UNIDO. The ICG is producing the Viet Nam Industrial Competitiveness Report 2011 (VICR 2011), which positions the country in the international industrial scene and sheds light on strategies to boost manufacturing growth and structural change.

Following the launch of the VICR 2011, an executive training course targeting twenty high-level Vietnamese policymakers (including the Deputy Minister) was organized in April 2012 at UNIDO headquarters in Vienna. The five-day training covered areas of UNIDO expertise, including industrial intelligence, capacity building and industrial policy,

resource efficiency, cleaner production and renewable energy.



In Palestine, the Strategic Industrial Intelligence and Governance programme aimed at strengthening the capacity of the Palestinian Trade Centre (Paltrade), the Palestinian Federation of Industries (PFI), and the Ministry of Economy to design economic policies. A team of technocrats was trained and placed at Paltrade with the objective to identify products and export markets that are strategic and can enhance Palestinians' manufactured export growth.



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