



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org



Industrial Policy for Prosperity: UNIDO's Strategic Support



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

MANUFACTURING – THE KEY TO PROSPERITY

Many developing countries are still heavily dependent on products from the primary sector—agriculture, forestry, fishing and mining—for economic growth. The rapidly growing demand of newly industrializing countries and natural limits to supply have triggered a boom in exports of many primary commodities creating expectations for sustained growth, but the markets for these commodities remain volatile and, when looking at employment creation in the higher skill categories, value added and linkages that stimulate other economic activities, the positive effects on the supplier countries are limited.

To trigger a process of sustained growth in these countries from which everyone benefits, their economies must shift away from the primary sector. This is known as *inter-sectoral structural change*. The transformation of primary sector products by the manufacturing sector has been a key factor in the process of structural change in many countries.

What makes the manufacturing sector the key to prosperity?

- *It provides the material basis for wealth: tools, building materials, clothing, medication, educational materials, etc.;*
- *It provides the equipment, chemicals, etc., that enable the further development of the primary sector;*
- *It generates value added by the transformation of raw materials into finished products, thus increasing earnings in domestic and export markets;*
- *It stimulates other economic activities through forward and backward linkages;*
- *It boosts incomes by its demand for new and higher skills;*
- *It stimulates the development of technological, managerial and administrative know-how, boosting productivity growth and innovation throughout the economy.*

BOX 1: Mauritius: getting structural change right

Mauritius, a small island with a population of only 1.2 million, is one of the fast-growing sub-Saharan economies. Until the 1970s, Mauritius was completely dependent on sugar. It had a tiny domestic market and limited resources. But its economy has moved from sugar processing to manufacturing and Mauritius now also has a booming up-market tourism sector.

Mauritius successfully broke into global textile and garment markets after the government used the proceeds of the 1972–75 exports, when sugar prices skyrocketed, to diversify into manufacturing. The share of the manufacturing value added (MVA) in GDP rose from 14.2 percent to 20.7 percent and MVA per capita rose from US\$ 225 to US\$ 842 between 1981 and 2001. The share of industrial jobs in total employment rose from 24.5 percent to 42.5 percent in that period.

Mauritius succeeded due to a combination of factors. A key strategy at the beginning of industrialization was the use of Export Processing Zones (EPZs), established with the help of UNIDO. EPZs helped to attract crucial foreign direct investment due to the combination of strong political commitment and excellent physical infrastructure. EPZs simplified trade liberalization: new export firms could import duty-free while domestic import-substituting policies remained in place. The small size of the economy soon made the EPZs a major factor of political life, and there is broad, sustained support for the export strategy.

The fast growth of manufactured exports was helped by privileged access to European markets and the need for Hong Kong-based garment manufacturers to relocate production due to increasing labour costs. Improvements in the industrial support infrastructure, a stable political system, support across the political parties and effective governance have also contributed to the ‘Mauritian miracle’.

MANUFACTURING AND THE DYNAMICS OF STRUCTURAL CHANGE

Competition and progress

Domestic and international competition continuously forces a country’s industrial sector to innovate, stimulating *intra-sectoral structural change*: shifts from labour-intensive industries with low capital and skill intensity to industries with high skill, capital and technology intensities. These can take the form of *inter-industrial* shifts among branches, such as the relative decline of textiles and the rise of electronics, or *intra-industrial* shifts, when a specific

branch upgrades its products: in the footwear industry, for example, mass-produced footwear can make place for high-quality leather products for niche markets. These shifts offer opportunities for other producers to take over a market segment. In this way, many developing countries have taken their first steps on the path towards prosperity.

Entrepreneurs and other stakeholders must understand the dynamics of structural change—not only to tackle the problems caused by change and make the most of the opportunities it offers, but also to take the lead in the process of change, reaping its benefits and increasing prosperity.

Market failure and the challenge of sustainable development

Development is spearheaded by (industrial) entrepreneurs operating in open markets which are the main coordination mechanism of economic development. The prices in those markets provide them with the key signals that ‘change is in the air’; lower or higher prices over a longer period of time may signal structural change. Reacting to these signals requires complex decisions with regard to skills composition, technologies, sourcing of inputs, networking with other enterprises, investments, marketing strategies, etc. Formulating the right response is made even more complex by the many factors that are beyond the control of the entrepreneur and the fact that market signals are not always clear. Markets only function perfectly in theory and information on markets is rarely complete.

Market failure is becoming a more acute problem because of the challenge of environmental sustainability: most of our natural environment is not owned by anyone and therefore the market cannot give clear price signals. The externalities—the (negative) side effects of environmental damage which are not reflected in the costs or benefits of production and consumption—have now reached proportions that pose a long-term threat to economic development, with climate change as the most acute problem.



Reconciling economic development with the need to prevent a further deterioration of the natural environment and the depletion of non-renewable resources will require massive structural change in the industrial sector: its activities are, after all, based on the consumption and transformation of natural resources. How can manufacturing provide employment for the population of growing developing countries and countries with economies in transition while taking the lead in low-carbon, resource-efficient ‘green’ development?

BOX 2: Industrial energy efficiency: a key to ‘green industry’

UNIDO has much experience with the promotion of industrial energy efficiency (IEE). Based on this experience, it considers IEE as one of the keys to the emergence of a ‘green industry’ worldwide. IEE is a ‘win-win-win’ combination—it has three dividends:

- ***Environmental dividend.*** IEE reduces pollution and the rates of global warming and energy resource depletion.
- ***Economic dividend.*** With increasing energy prices, more efficient use of energy can lead to important financial savings. A more realistic pricing of environmental damage in the future is bound to strengthen the case for IEE.
- ***Social dividend.*** Bottlenecks to energy supply are common in developing countries. Lower energy use in industry can therefore help to make more energy available to the population, and reduced emissions in energy generation and use will have a positive impact on public health.

In small enterprises, which tend to be less energy efficient, the positive environmental, social and economic impacts of IEE will be proportionally larger.

Collective international action on IEE will be needed to make progress towards ‘green industry’. The four areas for such action would be: creating global energy performance targets, technical and structural change, agreements on international IEE technology transfers and a financial mechanism to support such transfers. As the locus of industrial activity shifts to developing countries, these could be major beneficiaries of such action.

For developing countries, this question is a particularly difficult one: while making the transition from dependence on the primary sector to manufacturing-led development, they are confronted with developments that will force manufacturing to change radically in many ways. To cope successfully with this challenge, environmental considerations must be fully integrated into decisions made by enterprises and relevant government departments about

investments, product development, marketing, the regulatory and incentives structure, training, etc. The capacities to do this are in most cases still very limited and these countries would have to rely on imported ‘green’ technologies for which their financial resources or absorptive capacity are inadequate.



Yet ‘green industry’ is actually a major opportunity, not just a necessity. This is demonstrated by the growing success of ‘green’ exports from developing countries and the efforts of a country like China to stimulate ‘green’ technologies as the country takes off. With the right mindsets, measures and incentives, they will be able to tap international and local reservoirs of knowledge and expertise for sustainable development—which includes the ‘green’ ideas and practices that must exist in countries where most people have always used resources frugally.



THE ROLE OF INDUSTRIAL POLICY

Why joint efforts are needed

In recent decades the dominant view has been that governments should limit themselves to removing obstacles to industrial development and correcting market failures. They should not favour specific manufacturing activities. However, structural change in a global economy requires complex strategic choices, and markets can, unaided, neither save the environment nor easily coordinate interrelated investments. Successful industrial development cannot be based on the decisions of individual entrepreneurs alone. *Achieving sustainable prosperity for all requires a broad consensus about development objectives.*



The view has been gaining ground that governments can play a more pro-active role through deliberate industrial policies, understood as a ‘*discovery process*’ where entrepreneurs, governments and other relevant stakeholders jointly assess costs and opportunities and engage in strategic coordination to select best options for industrial development and diversification.

This type of industrial policy is radically different from industrial policies in the past which imposed the industrial priorities of a country top-down; that is, *this type of industrial policy is interactive*. The best options for industrial development are explored jointly, decisions are made after intensive consultation, selective interventions are made to stimulate specific or new sectors and the process is an open-ended one: as conditions change, policies are adapted. This requires institutionalized, sustained cooperation among the key actors. To be effective, the approach must be a strategic one, focussing on the *long-term* positioning of a country’s manufacturing sector in the *global* economy.

The new industrial policy is interactive. It requires institutionalized, sustained cooperation among all key stakeholders in industrial development.

The elements of a strategic approach

Multi-stakeholder involvement

As indicated above, the strategic policymaking process should involve all key stakeholders in industrial development. Entrepreneurs and government are the main stakeholders, but the key role of technology and innovation also requires the involvement of research institutions; and prosperity for all is unlikely to be achieved without the active participation of civil society organizations.

The multi-stakeholder approach requires learning. Antagonisms which may exist (for example, between business and civil society organizations or between businesses and government agencies) must be overcome—all must engage in a serious dialogue and learn from each other. Furthermore, all parties must learn to understand the key features of industrial development and the policymaking process. This implies, among other things, involving everyone from the beginning, so that the understanding of and ability to take part in the policymaking and implementation process becomes part of the ‘group culture’ of stakeholders.

The multi-stakeholder approach requires learning – the implementation process must become part of the ‘group culture’ of stakeholders.

Prioritization

In determining strategic priorities, the stakeholders must consider a number of complex questions: given our resources, what is feasible in the short, medium and long term? Which industries can take the lead? How can they position themselves internationally?

There are three broad, complementary and interlinked options to stimulate industries:

- Expansion and upgrading, which focuses on existing industries (*intra-industry*);
- Industrial deepening, which aims at creating more forward and backward linkages and exploiting complementarities within one industry (*intra-industry*);
- Industrial diversification, which nurtures new industries (*inter-industry*).

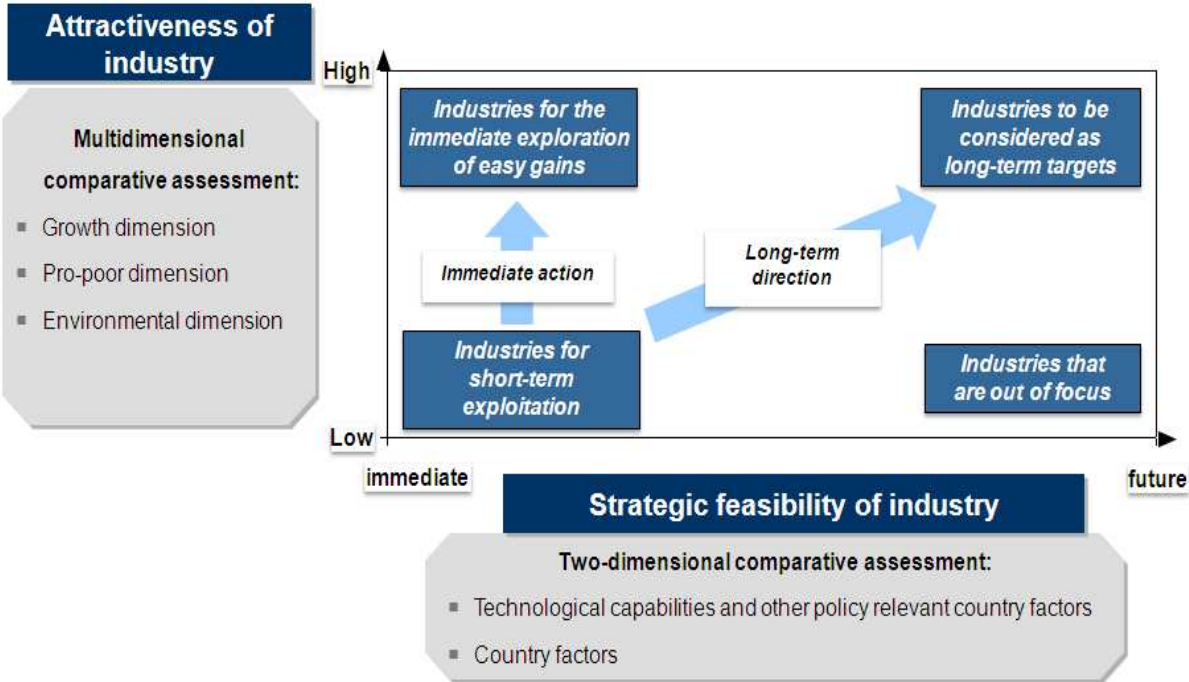
As strategies take a long-term view, complex questions of balance are likely to arise as well:

- Industries that may not be viable in the short run may hold great promise for the future. To what extent do they deserve priority in terms of efforts and resources required (new technologies, infrastructure adaptations, training and education, etc.)?
- In assessing the attractiveness of an industrial option, its economic, social and environmental dimensions must be studied. Which approach will ensure prosperity for all and avoid irreversible environmental damage?

Figure 1 schematically illustrates which elements play a role in assessing the attractiveness and strategic feasibility of individual industries. An assessment of the relative attractiveness of industries on the vertical axis is combined with an assessment of the strategic feasibility of the industries in question on the horizontal axis. Attractiveness is based on:

- *Economic factors* (e.g., specific economic growth effect, size and growth of the world market, competitive pressure)
- *Social factors* (e.g., the specific employment and poverty reduction effects and the inclusiveness of the growth path of industries)
- *Environmental factors* (e.g., their energy/material efficiency and resource depletion effects)

Figure 1: Framework for assessing the relative attractiveness and strategic feasibility of manufacturing activities



Strategic feasibility is derived from an analysis of current technological capabilities and other essential policy-relevant factors (education, incentives, institutions, etc.) as well as relevant country characteristics such as country size, factor endowments and population density.

This assessment makes it possible to identify and select industries that have an immediate or future strategic feasibility combined with a high or low attractiveness. Measures can then be taken immediately to stimulate the highly attractive industries that are feasible at present, and long-term diversification measures can be developed for stimulating industries with an equally high attractiveness that will be feasible in the future. The potential of less attractive but immediately feasible industries may be exploited with limited efforts; industries with both low attractiveness and feasibility ratings would normally be disregarded.

No one-size-fits-all

Structural change takes place under widely varying conditions. Strategic industrial policymaking can therefore never be standardized, even if much can be learned from experience elsewhere. It must not only be based on a thorough understanding of the baseline situation in a particular country and/or industry and a clear idea of what can work, given the local conditions and the international environment in which an industry operates—

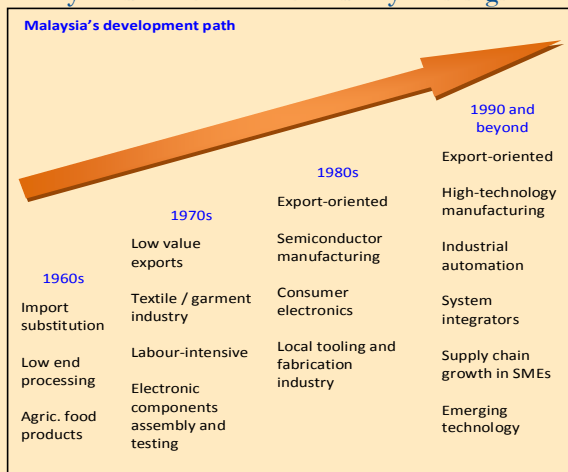
decision-makers must also be capable of adapting the strategy if circumstances demand this. This requires a strong yet flexible governance system and a good system for monitoring developments.

Focusing on viable industries and lasting impacts

Supporting entrepreneurs in their exploration of new opportunities should not result in the protection of unviable activities. Support should be withdrawn from losers and shifted to more promising industrial activities. Strong but flexible governance is needed here as well. Support to winners should be limited in time and based on performance.

Box 3 Malaysia: Applying industrial policies successfully

Strong political commitment has driven diversification in Malaysia. The Government’s determination to experiment and craft entire “reform packages” instead of single sequential policies was of crucial importance. Targeted policies have promoted the transformation of Malaysia into a diversified economy with high value-added industries.



Before 1970, policies mostly aimed at diversifying the primary sector. The New Economic Policy (NEP) in 1970 promoted small and medium-sized industries and foreign direct investment in export-oriented firms. The Malaysian Industry Development Authority (MIDA) and the Investment Incentives Act played an important role in achieving the NEP’s goals. Low skill, labour-intensive light manufacturing activities, such as textiles and garments and assembly of electronic components, developed in EPZs. Interventions took the form of licensing, quotas and regulated prices.

Faced with economic slowdown in the early 1980s, the Government invested in heavy industries (cement, iron, paper, petrochemicals and automotive) to fuel growth and create stronger linkages in industry. In 1991, a National Development Policy (NDP) replaced NEP. The focus remained on growth with equity and balanced sectoral and regional development with a strong reliance on the private sector. To boost Malaysia’s international competitiveness, the Government introduced a structural tax reform. Manufacturing evolved towards high-tech electronics, facilitated by the existence of a highly skilled population. By the year 2000, Malaysia’s manufacturing exports accounted for 80 percent of total exports.

Two principles underlined the Government’s policy approach:

- In each development phase, policymaking was based on mobilizing Government agencies’ and private investors’ support for diversification “*experiments*”.
- Policymaking was conducted through detailed consideration of options, the involvement of a broad spectrum of stakeholders and the bundling of related policy measures into packages to overcome legislative and coordination problems.

The following is needed to achieve lasting positive impacts of strategic policy interventions:

- *A firm empirical basis for decision-making, supported by research, expert opinion and consideration of a wide range of views and options.*
- *A clear understanding of the effects on society and the natural environment.*
- *A focus on using limited government resources for the removal of key ‘binding constraints’ to development. ‘Quick wins’, positive effects that are discernable within a short period of time, will ensure continued support for the policy process within government and the business community and among the other actors involved.*
- *Assessments with sound baseline information of the viability of activities or sectors, feasible rates of performance improvement, the likely evolution of demand and the cost-benefit ratio of government support. Portfolio analysis and risk assessments should also be carried out. Only then should decisions be taken on measures that help to ‘create’ new comparative advantages for domestic industries.*
- *Effective and efficient institutional technological and managerial capabilities to design and implement policy measures and initiate a self-reinforcing development dynamic. This includes mechanisms that ensure effective public-private sector cooperation.*
- *Continuous monitoring of implementation, the results being fed back into the process. Periodic or final evaluation should include independent third-party evaluation.*

UNIDO’s STRATEGIC APPROACH TO INDUSTRIAL POLICY

The basic character of UNIDO’s strategic approach

UNIDO defines a strategic approach to development as government interventions aimed at steering economic activity, particularly the intra- and intersectoral structure of production, towards areas that offer better prospects for economic development. UNIDO’s Strategic Industrial Policy Approach (SIP) helps governments to identify and initiate interventions that will guide a country’s economy towards sustainable growth by encouraging structural change.

SIP incorporates the elements of a strategic approach discussed above and:

- *Is tailored to the specific needs of a country;*
- *Pays special attention to economic, social and environmental sustainability;*
- *Puts the stakeholders at centre stage in the industrial development process.*

UNIDO’s roles

In implementing an SIP project, UNIDO plays three roles:

Facilitator

The Organization helps to initiate and stimulate the industrial development dialogue among all key public and private sector stakeholders in a country. It does so impartially.

Policy adviser

From the dialogue and its vast experience and research, UNIDO distils recommendations for the process and content of a strategic industrial policy.

Capacity developer

To enable them to realize the strategy, UNIDO helps the actors, individually and as a group, to develop their skills, knowledge, administrative and managerial capacities.

Tailoring industrial policies to the needs of individual countries obviously requires a variety of specialized knowledge and instruments. With the help of UNIDO’s wide range of services and expertise, an optimal policy response can be formulated to a country’s industrial challenges. The specific tasks of Development Policy, Statistics and Research (DPR) in this context include strategic industrial policy advice and the creation of local capacities for policy design and implementation. The Annex lists the areas to which the services that can be provided by the Branch can be applied. There are two major service categories: *information and knowledge* and *governance mechanisms*. The creation of a good governance system for the process of developing and implementing a policy can be considered the most demanding task.

The stages of a strategic industrial policy

A strategic industrial policy has four stages:

Diagnosis

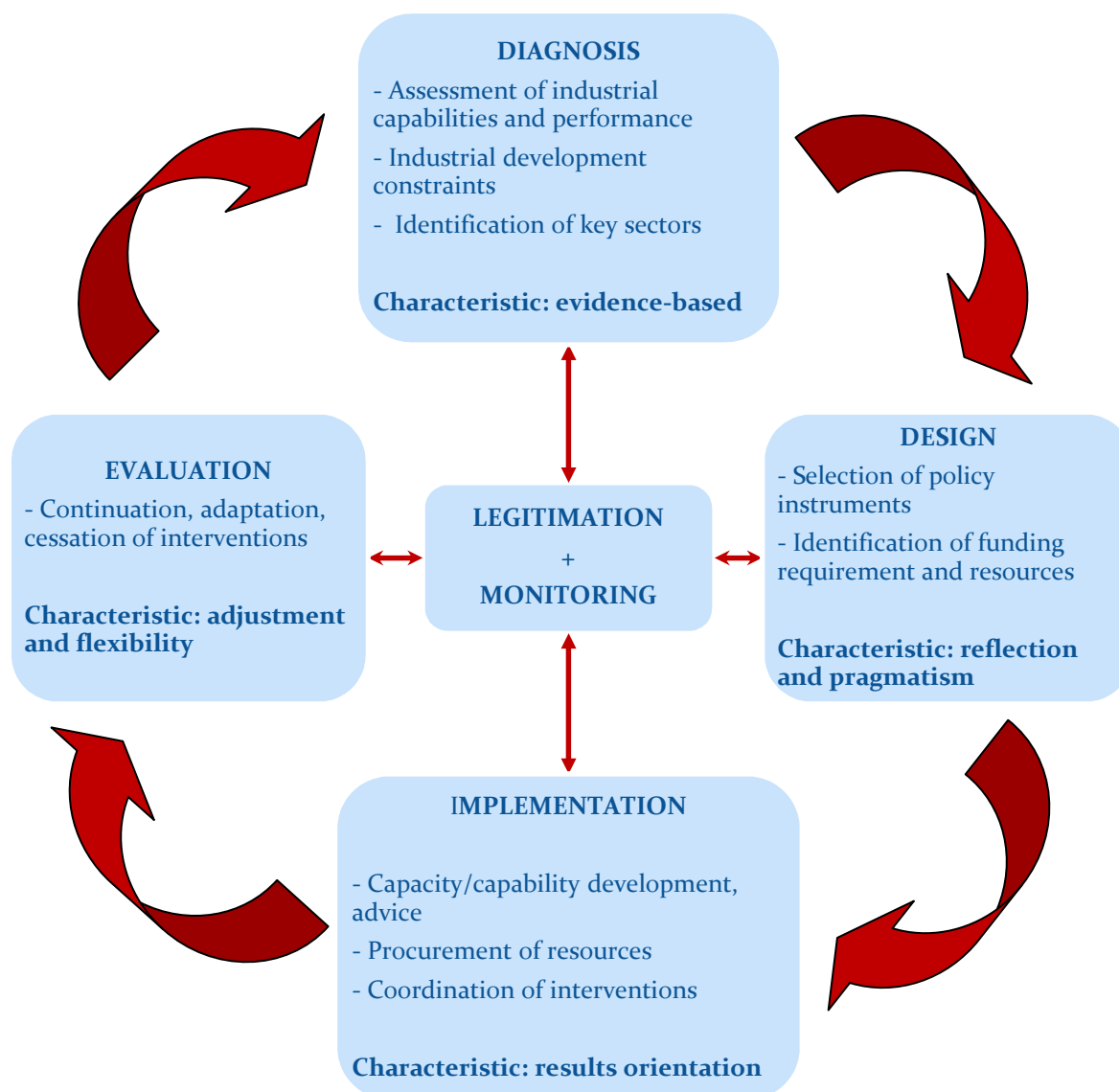
Design

Implementation

Evaluation

Figure 2 shows the main stages and characteristics of the industrial policy process, which will be discussed below.

Figure 2: The Strategic Industrial Policy (SIP) Process



Diagnosis

To compile *information and knowledge*, long-term industrial performance is analyzed and the prospects for future development are assessed. The type of information needed for this purpose includes:

- *Long-term changes in the structure of the industrial sector, analysis of value chains;*
- *Comparative advantage in specific industries;*
- *Trends in international markets, investment and technologies;*
- *International or regional agreements (trade, environment) that may affect domestic industry;*

- *Domestic capacities (education and training, R&D, physical and institutional support infrastructure, raw materials);*
- *Governance and institutional structures that are relevant to industrial development (government agencies and policymaking systems, business organizations, public-private sector consultation mechanisms, etc.);*
- *Constraints to industrial growth and structural change (regulations, institutional weaknesses, environmental sustainability, etc.);*
- *Industrial statistics.*

BOX 4: Mongolia: strategic directions for industrial policy

The Mongolian Government asked UNIDO for assistance and advice in developing a strategic orientation towards industrial development. Mongolia possesses major reserves of 80 different minerals, some of them of strategic importance. Unsurprisingly, the Mongolian economy has relied on its mining sector and high international mineral prices for economic growth. But a rapid structural transformation of the economy was needed to improve living standards significantly and weather the shocks associated with the volatile minerals markets.

The diagnosis carried out by UNIDO focused on identifying manufactured products that use local raw materials and would be competitive in international markets. The industries processing natural (animal) fibres and red meat were found to offer great potential for upgrading and strategic export promotion. Only 15 per cent of Mongolia’s cashmere exports, for example, were finished products. By increasing spinning capacity and replacing imported yarn with its own yarn, the cashmere industry could move to the higher stages in the value chain. The meat processing industry, which mainly produces for the domestic market and currently does not conform to international standards, could move from a “production focus” to a “consumer focus” and develop a strategic orientation towards international niche markets by complying with standards and a better understanding of demand.

The key mechanism established for developing the strategic orientation was a series of workshops and national fora where stakeholders—ranging from individual entrepreneurs and NGOs to officials of international organizations and public policymakers—identified ‘binding constraints’ and crafted possible interventions for industrial development.

On the basis of the information provided by the diagnosis, this stage also develops an outline of better *governance mechanisms*, including the overall management structure of the relevant ministry (Ministry of Economy, Ministry of Industry) and/or the state planning commission, the industrial information infrastructure (industrial observatories and intelligence gathering units, bureaus of statistics) and coordination and consultation mechanisms for the involvement of the major stakeholders in industrial development.

The diagnosis will conclude with an assessment of the options for the removal of constraints and/or the stimulation of promising industries and will deliver a stakeholder-endorsed industrial strategy and vision.

Design

The design stage of an industrial strategy builds on all the relevant information gathered in the diagnostic stage, from human skills and technological capabilities to fiscal and policy space. The design stage involves:

- Creation of *public-private partnership mechanisms* to support policy development;
- Preparation of a consistent, detailed set of *inter- and intra-sectoral industrial policy recommendations* and objectives;
- Definition of the *institutions, mechanisms, incentives, programmes, projects and resources needed* to implement the strategy;
- Identification of *funding sources*;
- Preparation of an *action plan*;
- Development of *coordination mechanisms among the actors involved* in executing the strategy.



The design services of DPR focus on exploring the policy options in detail. *Information and knowledge* can be used to define the most effective policies, policy mix and policy instruments

for an industry or country, to prepare regulatory frameworks and (pre-) feasibility studies, to suggest public sector restructuring and industrial upgrading strategies, to make cost-benefit analyses of individual projects, to integrate environmental and employment aspects, and so on.

With regard to *governance and coordination*, advice can be provided on priority projects, the establishment of programme design groups or restructuring and upgrading task forces, coordination of inter-ministerial mechanisms and the creation of policymaking and regulatory bodies.

BOX 5: Ecuador: capacity-building for policymaking

UNIDO launched its first competitiveness programme in Ecuador in 2003 to create domestic capacity for policymaking. Following an awareness-raising seminar, a first training course on UNIDO’s industry and trade competitiveness analysis was organized. A total of 15 technicians from the Ministry of Trade and Industry (MICIP), the Central Bank of Ecuador and the National Competitiveness Council participated. Analytical work prepared during the training was used as input for the *Industrial Competitiveness Report of Ecuador 2004*, published by MICIP and the Central Bank, with financial and technical support from UNIDO.

High demand resulted in a second training course in March 2004, exclusively for MICIP staff. Aware of the usefulness of the information and analysis produced by the technicians, the Vice-Minister of Industry accepted UNIDO’s proposal to set up a specialized technical unit in MICIP. The Competitiveness Intelligence Unit was composed of four young local economists financed by UNIDO and supervised by an international consultant. The Unit produced several publications, including the second *Industrial Competitiveness Report of Ecuador*, *Costs and Transactions of Doing Business*, and *Value Chain Studies for Lemon-Lime, Cocoa and Pineapple*. It also provided ad hoc analysis to the authorities and Chambers of Commerce. In 2006, the Unit was formalized within the structure of the Ministry, gaining recognition by the public and the private sector. Its website (www.micip.gov.ec/utepi) presents its services, publications and data to a broader audience.

In 2007, the Unit moved slowly into the policy arena when it was asked to provide thorough analysis and data to high-level working groups. In 2008, the Unit elaborated Ecuador’s Industrial Policy, with the assistance of international consultants. The Unit continues its involvement in the refinement of the policy and the elaboration of specific programmes. MICIP has guaranteed sustainability of the Unit after the end of the UNIDO programme through its conversion into the Department of Statistics and Industrial Studies within the Sub-Secretariat of Competitiveness. UNIDO retains an advisory technical role.

Implementation

Once the resources—human, financial, technological and otherwise—for the strategy are available, projects and programmes can be implemented. As a first step this will often involve creating the institutions and coordination mechanisms for the implementation. Monitoring mechanisms must also be put in place to check the implementation process and the effects of the strategy, so that the governance system can adjust parts of or projects under the strategy when these do not achieve their purpose or in response to changing external conditions.

In terms of *information and knowledge*, UNIDO can provide expertise to analyze and organize (i) programme and project implementation, pinpointing any problems that may arise, and (ii) development trends that may affect the implementation of programmes and projects.



Through its *governance and coordination* services, the Organization can help to set up the necessary mechanisms and structures. The implementation of a strategy is a complex task because of the different actors and project locations and changes in conditions that may occur over time. The key elements in governing the implementation are specialized management teams and multi-stakeholder consultations. Management of the process can be supported by analyses of relevant experience elsewhere. Specialized institutional support mechanisms for specific aspects of strategy implementation offered by various UNIDO branches include:

- Investment and Technology Promotion Offices (ITPOs);
- The Subcontracting and Partnership Exchange (SPX) Programme, which focuses specifically on small and medium-scale enterprises;
- Resource efficient and Cleaner Production Centres, which help enterprises to introduce environmentally friendly technologies and management methods.

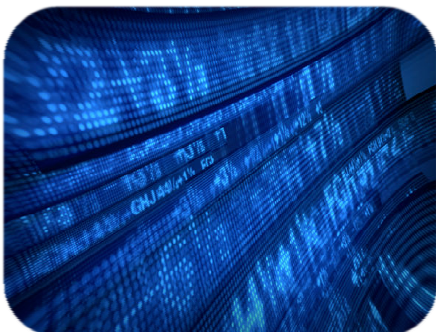
Evaluation

At the end of an SIP project the lessons learned are drawn by an evaluation team. The evaluation covers the design and implementation stages as well as the outcomes of the policy (has it led to changes for the better as planned?) and its impact, the longer-term effects on industrial development. Apart from assessing the overall achievements, the evaluation will also look into:

- *The reasons for failure and success*
- *The effectiveness and efficiency of the processes*
- *The sustainability of the achievements*

The methods used include peer reviews (for example, meetings with stakeholders in the project), the study of project reports and the collection of other relevant information, which may be purely quantitative (such as increases in employment or export figures) or qualitative (development of enterprise clusters or local subcontracting). The results are fed back into policymaking, helping to improve a country’s ability to respond to future challenges for the manufacturing sector.

For the long-term success of an SIP, a country needs good evaluation capacities of its own. This may take the form of the establishment or reinforcement of a national statistical office and/or of an industrial policy evaluation unit within the government, linked to research institutions, ‘think tanks’ or policymaking bodies. Another approach would be the establishment of a multi-stakeholder national review forum on industrial development. UNIDO has extensive experience in many of these areas.



Issues that cut across stages

Legitimation

Legitimation means that all stakeholders in the strategy must ‘own’ it. Only then will the policymaking process and its results be ensured widespread support, and the seeking of privileges at the expense of other stakeholders can be prevented. Legitimation involves:

- *Representation of all parties who have a stake in the strategy, equal access to information for all and openness in setting the agenda;*
- *Decision-making involving all stakeholders;*
- *Checks and balances to prevent specific interests from capturing the process and its results for their own interests;*
- *Achieving results that are in line with the objectives;*
- *Accountability of actors and full information on decision-making and implementation.*

To ensure legitimation, UNIDO promotes the establishment of governance structures that are based on public-private partnerships involving all stakeholders.

Monitoring

A monitoring system must be part of the design of an SIP. Without continuous monitoring of the SIP process right from the start, it is not possible to check progress or to trace and tackle problems as they emerge. Monitoring reports are also a key source of information for evaluations. Monitoring requires dedicated resources and should be entrusted to a clearly defined stakeholder unit. The major monitoring tools are:

- *Regular reports on progress of specific projects under the SIP;*
- *Interviews and open meetings with stakeholders, etc., to monitor accomplishments with regard to the ‘ownership’ of the strategy.*

ANNEX

UNIDO's STRATEGIC INDUSTRIAL POLICY SERVICES (SIPS) – AREAS OF APPLICATION

<i>UNIDO's STRATEGIC INDUSTRIAL POLICY SERVICES (SIPS) – AREAS OF APPLICATION</i>				
STAGES	SERVICE AREA	ADVICE & FACILITATION		HUMAN CAPACITY DEVELOPMENT (Seminars, workshops, training)
		Information and Knowledge	Governance and Coordination	
Diagnosis	Industrial Development Analysis	<ul style="list-style-type: none"> Industrial statistics Studies on: <ul style="list-style-type: none"> (a) industrial trends, competitiveness, sectors and value chain selection and development, export potential, cluster identification, binding constraints (b) Policymaking benchmarking Overall resource requirements and public and private capacity availability On-site advice 	<ul style="list-style-type: none"> Establishing statistics systems National and local fora on industrial development Public communication and dissemination Multi-stakeholder consultation and negotiation mechanisms Industrial observatory and intelligence gathering secretariat 	<ul style="list-style-type: none"> Data collection, editing and updating Statistical methodologies and survey Benchmarking, baseline studies Competitiveness and structural change analysis Policymaking process
Design	Industrial Strategy and Policy	<ul style="list-style-type: none"> Public sector reform Private sector upgrading Policy coordination and coherence Policy instruments development Project and programme formulation and feasibility studies Sectoral resource requirements and capability availability International study tours for sharing experiences 	<ul style="list-style-type: none"> Cross-ministerial/ regional/sectoral/ stakeholder coordination and consultation mechanism Public campaigns and advocacy Restructuring and upgrading task forces Resource deployment mechanisms Policy instrument development and project feasibility teams 	<ul style="list-style-type: none"> Organizational restructuring and development, change management Institutional and regulatory architecture Policy instrument development Policy impact analysis Industrial project management cycle
Implementation	Industrial Projects and Programmes	<ul style="list-style-type: none"> Sectoral projects and programmes Sectoral regulation and support measures Sectoral project and programme control and progress review Procedures and problem solving approaches 	<ul style="list-style-type: none"> Programme /project management Regulation agencies (e.g., standards) Institutional development (e.g., banks, funds, specialized agencies) Cross-ministerial/ regional/sectoral/ stakeholder coordination and consultation mechanism Public education and mobilization 	<ul style="list-style-type: none"> Results-based industrial management and administration Industrial service delivery Regulation setting Stakeholder involvement approaches
Evaluation	Industrial Development Impact Assessment	<ul style="list-style-type: none"> Peer review Assessment of: <ul style="list-style-type: none"> (a) Sustainability (b) Goals, outcomes, effectiveness, efficiency Early warning systems 	<ul style="list-style-type: none"> National review forum on industrial development Internal /external assessment teams/instances Feedback and auditing mechanisms 	<ul style="list-style-type: none"> Tools and procedures Impact assessment Project and programme learning

This brochure is based on a Development Policy, Statistics and Research Branch (DPR) study of UNIDO's experience and of key literature, *Industrial Policy for Prosperity – Reasoning and Approach*. The study is available as a Working Paper for readers who are interested in a more in-depth treatment of the issues discussed here: www.unido.org

For further details, please contact:

Ludovico Alcorta
Director
Development Policy, Statistics and Research Branch
A.Alcorta@unido.org

Shyam Upadhyaya
Unit Chief
Statistics Unit
S.Upadhyaya@unido.org

Jacek Cukrowski
Unit Chief
UNIDO Capacity-building Institute and Regional Analysis Unit
J.Cukrowski@unido.org

Michele Clara
Coordinator
Research and Policy Advice Group
M.Clara@unido.org



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Telephone: (+43-1) 26026-0, Fax: (+43-1) 26926-69
E-mail: unido@unido.org, Internet: www.unido.org