

SMALL AND MEDIUM-SIZED ENTERPRISES IN ECONOMIC DEVELOPMENT: THE UNIDO EXPERIENCE

Dr. Sarwar Hobohm*

This paper presents the experience of UNIDO, the United Nations Industrial Development Organisation, in supporting the growth and development of small and medium-sized industrial enterprises (SMEs) in developing countries and countries with economies in transition. It does so against the background of the accelerating integration of international production and trading systems in the process popularly referred to as globalisation, which offers significant opportunities but also presents considerable challenges, and possibly even risks, to these countries. In recognition of the mixed potential of these changes in the global economic environment for the economic and social development of developing countries and countries with economies in transition, UNIDO has devised a range of mechanisms and instruments to help SMEs in these countries to overcome the challenges posed by these changes and to take full advantage of the opportunities provided by them.

Given its focus on industrial SMEs, the paper begins with a short overview of the role of industry in economic and social development, followed by a review of the contribution made by SMEs to industrial growth. The paper then assesses the implications of the process of globalisation for industrial development and considers the nature of the responses needed to ensure that developing countries and countries with economies in transition can benefit from this process. Following this conceptual discussion, the paper turns to specific presentations of UNIDO technical cooperation programmes to promote SMEs, illustrated wherever possible with examples from member states of the Organisation of the Islamic Conference.

1. STRENGTHENING INDUSTRIAL SMEs TO FACE THE OPPORTUNITIES AND CHALLENGES OF GLOBALIZATION

1.1. Industry as a driving force in economic development

Industrialisation has historically been a significant driver of economic growth and modernisation. It has retained its importance for developing countries and countries with economies in transition to the present day, providing them with the principal means to increase their factor

* Industrial Development Officer, UNIDO, Vienna.

productivity. This, in turn, provides the foundation for a long-term and sustainable increase in the standard of living and a corresponding decline in poverty. Industrial development is also critically important because of the support it provides to other sectors of the economy, for example by raising agricultural productivity and through the processing of agricultural goods. In addition, it provides the base for the emergence of many firms offering high-tech services in support of manufacturing activities.

The historical role of industry in fostering economic development is well known - indeed, the onset of the industrial revolution in England in the second half of the eighteenth century and its subsequent spread to other countries in Europe and North America set the stage for the economic development of these regions. It is not for nothing that the terms “industrialised countries” and “developed countries” are used almost synonymously. Even in our own times, it is industrial development that has led to the emergence of new “developed” countries, such as the original “tiger” economies of East Asia.

Although the growing contribution of services in the national economies of the developed countries is giving rise to statements about the “post-industrial society” and the “de-industrialisation” of these economies, these statements are misleading for a number of reasons:

- ☞ Industrial output is **not** declining in the developed countries. In fact, manufacturing output has continued to record steady real growth in absolute terms throughout the 1990s in all G-7 countries. The fact that the service sectors are growing (somewhat) more rapidly than the manufacturing sector, and thereby gradually assuming a greater share of GDP, does not imply the de-industrialisation of these countries.
- ☞ Even to the extent that the service sectors are growing more rapidly than the manufacturing sectors, their growth is in most cases related to, if not dependent upon, a corresponding growth in manufacturing activity and output. The growth of trade-related services depends on an accompanying growth in merchandise trade, for example, and the growth in telecommunications services and the “new economy” would be impossible without a continuous stream of new hardware.
- ☞ In many cases, moreover, the accelerated growth of the service sectors reflects the outsourcing of activities, such as design and R&D, that were previously carried out within the manufacturing

enterprises themselves and hence counted as “industrial” rather than “service” activities.

In developing countries today, industrial development continues to be the principal source of employment and income growth, technological progress and broader economic development. In fact, much of the slowdown in manufacturing growth in developed countries is related to a diversion of manufacturing activities to developing countries through foreign direct investment as the globalisation of industry proceeds. Industry therefore remains the driver of economic development.

1.2. The contribution of SMEs

It is widely recognised that at all levels of development small and medium-sized enterprises (SMEs) have a significant role to play in economic development in general and in industrial development in particular. SMEs form the backbone of the private sector, make up over 90 per cent of enterprises in the world and account for 50 to 60 per cent of employment. SMEs engaged in manufacturing account for between 40 and 80 per cent of manufacturing employment. In the Least Developed Countries (LDCs), UNIDO’s priority clients, the role is even more important since SMEs often offer the only realistic prospects for increases in employment and value-added. This applies equally to the countries with economies in transition, where large inefficient state-owned enterprises are giving way to much smaller and more efficient private entities.

SMEs make a vital contribution to the development process for the following reasons:

- *SMEs are more labour-intensive and tend to lead to a more equitable distribution of income than larger enterprises.* They play an important role in generating employment and thus alleviating poverty, often providing employment opportunities at reasonable rates of remuneration to workers from poor households and women who have few alternative sources of income.
- *SMEs contribute to a more efficient allocation of resources in developing countries.* They tend to adopt labour-intensive production methods and thus more accurately reflect the resource endowments in developing countries where labour is plentiful and capital is scarce. To the extent that these enterprises operate in

“informal” markets, the factor and product prices they face also provide a better reflection of social opportunity costs than the prices faced by large enterprises.

- *SMEs support the building of systemic productive capacities.* They help to absorb productive resources at all levels of the economy and contribute to the establishment of dynamic and resilient economic systems in which small and large firms are interlinked. They also tend to be more widely dispersed geographically than larger enterprises, support the development and diffusion of entrepreneurial spirit and skills, and help to reduce economic disparities between urban and rural areas.

1.3. The impact of globalisation, economic liberalisation and the emergence of new technologies

In recent decades, the process of industrialisation has undergone profound changes. While industrial development has remained the basic instrument of economic and social development in developing countries, the framework within which it plays this role has changed dramatically through the processes of globalisation and economic liberalisation, and the emergence of new technologies. These developments have removed both the natural and legal shelters previously afforded to the industrial sectors of developing countries by geographical distance and protectionist economic policies, and exposed them to high levels of external competition, in terms of both quality and price, in an increasingly integrated international marketplace.

Table 1
Private fixed investment as a share of total fixed investment, 1970-96
(%, weighted averages)

Region	Average 1970-79	Average 1980-89	Average 1990-96
East Asia	73.2	70.4	74.8
South Asia	55.8	50.5	61.1
Europe, Middle East and North Africa	53.1	51.6	62.8
Latin America and the Caribbean	63.9	68.6	76.2
Sub-Saharan Africa	50.8	57.6	68.5
All developing regions	61.8	63.1	71.2

Source: Glen, Jack D., and Sumlinski, Mariusz A., *Trends in Private Investment in Developing Countries - Statistics for 1970-96*, IFC Discussion Paper Number 34, figures re-calculated.

The processes of globalisation and liberalisation have also resulted in a significant shift in emphasis from the public to the private sector, with the market replacing the state as the primary driving force of industrial growth. An indication of the extent of this shift is given by the data in Table 1 which show a substantial increase in the share of private fixed investment in total fixed investment between the 1970s and the 1990s in almost all developing regions of the world. The only significant exception is provided by East Asia, where private investment already played a much larger role in the 1970s than in all other regions.

Table 2
Investment as a share of GDP, 1970-96
(%; weighted averages)

Region	Average 1970-79	Average 1980-89	Average 1990-96
<i>East Asia:</i>			
Total investment	24.7	27.7	34.9
Private investment	18.0	19.5	26.1
Public investment	6.6	8.1	8.8
<i>South Asia:</i>			
Total investment	16.5	19.8	21.6
Private investment	9.1	10.0	13.2
Public investment	7.5	9.7	8.4
<i>Europe, Middle East and North Africa:</i>			
Total investment	22.8	22.1	23.4
Private investment	12.1	11.4	14.7
Public investment	10.7	10.7	8.7
<i>Latin America and the Caribbean:</i>			
Total investment	20.5	20.7	19.3
Private investment	13.1	14.2	14.7
Public investment	7.4	6.5	4.6
<i>Sub-Saharan Africa:</i>			
Total investment	26.8	22.9	16.8
Private investment	13.8	13.2	11.5
Public investment	12.9	9.8	5.3
<i>All developing countries:</i>			
Total investment	20.7	22.2	23.2
Private investment	12.8	14.0	16.6
Public investment	7.9	8.2	6.7

Source: Glen, Jack D., and Sumlinski, Mariusz A., *Trends in Private Investment in Developing Countries - Statistics for 1970-96*, IFC Discussion Paper Number 34.

As a result of the growing role assumed by the private sector in financing industrial growth, developing countries have also been

exposed to a high degree of international competition for investment funds, in which there have been winners as well as losers. As shown in Table 2, the increase in the share of private investment in total investment does not necessarily reflect a corresponding increase in the contribution of private investment to aggregate demand. The available data show that this is particularly so in the case of Sub-Saharan Africa, where the increased relative importance of the private sector is attributable mainly to a sharp drop in public sector investment rather than to any substantial growth in private investment itself. In fact, this table shows that the contribution of private investment to GDP in Africa has actually declined marginally during the past 25 years, from an average of almost 14% in the 1970s to just above 13% in the 1980s and less than 12% in the first half of the 1990s.

The mixed performance of different regions in attracting private investment is highlighted further by data on the geographical trends of FDI flows presented in Table 3. These data, which have been compiled and/or estimated by UNCTAD, show that the share of FDI inflows into the developing regions is both relatively low and highly volatile. It has consistently amounted to substantially less than half of total global FDI inflows during the mid-1990s, and fell to less than 30% in 1998 as a result of the financial crises that affected parts of Asia and eastern Europe in that year.

Table 3
Regional distribution of global FDI inflows, 1994-98 (%)

Region	1994	1995	1996	1997	1998
World	100.0	100.0	100.0	100.0	100.0
Developed countries	57.7	63.4	58.8	58.8	71.5
<i>Western Europe</i>	33.3	37.0	32.1	29.1	36.9
<i>North America</i>	21.0	20.7	23.9	26.0	32.6
Central and eastern Europe	2.3	4.3	3.5	4.0	2.7
Developing countries	39.9	32.3	37.7	37.2	25.8
<i>Africa</i>	2.1	1.3	1.6	1.6	1.2
North Africa	0.9	0.4	0.5	0.7	0.4
Other Africa	1.2	0.9	1.1	1.0	0.8
<i>Asia</i>	25.2	20.7	22.9	20.6	13.2
West Asia	0.6	-0.1	0.2	1.0	0.7
Central Asia	0.4	0.4	0.6	0.7	0.5
South, East and Southeast Asia	24.2	20.4	22.1	18.9	12.00
<i>Latin America and the Caribbean</i>	12.4	10.0	12.9	14.7	11.1

Source: UNCTAD, World Investment Report 1999, Annex Table B.1.

In addition, these flows are also characterised by considerable inter-country imbalances. Almost 85% of the total inward investment of \$2.6 billion into North Africa flowed into just three countries (Egypt, Tunisia and Algeria) in 1998, for example, while more than half of the total investment of \$5.3 billion into the remainder of Africa went to only five countries (Nigeria, Zimbabwe, Angola, South Africa and Gabon). In some of the other regions this disparity was even more marked, with Brazil, Saudi Arabia and China accounting for more than half of the total FDI flows into South America, West Asia and South, East and Southeast Asia, respectively. In the case of Central Asia, Azerbaijan and Kazakhstan together accounted for almost 75% of the total inflows of approximately \$3 billion.

From the point of view of the Organisation of the Islamic Conference, it is of interest to note that the total volume of FDI inflows to all member countries of the OIC amounted to slightly less than \$16.4 billion in 1998. This represented a mere 2.5% of total global FDI inflows in that year, or just under 10% of the FDI inflows to all developing countries. In no single member state of the OIC did the volume of inward FDI even reach 1% of the world total.

Of course, it needs to be stressed that these aggregate data conceal significant inter-country differences with regard to such variables as the ratio of FDI inflows to gross fixed capital formation and the ratio of FDI stocks to GDP, and with regard to the developmental impact of such inflows in individual countries. In particular, a closer inspection of these subsidiary variables reveals that some of the smaller countries, including such OIC member states as Chad, Gabon, Gambia, Mozambique, Togo, Guyana and Azerbaijan, have performed relatively well when considered in relation to their size, and recorded impressive FDI-to-GDP ratios ranging from 21% to 66%. Several of the larger countries, including such OIC member states as Egypt, Saudi Arabia, Indonesia and Malaysia have also proved very successful in attracting FDI.

1.4. The changing role of the public sector in supporting economic development

In overall terms, however, it must be acknowledged that the impact of the private sector in promoting economic development at a global level has been patchy in spite of the increasing spread of economic

liberalisation and globalisation. While some developing countries and regions have performed relatively well in attracting the resources needed to enhance the competitiveness of their economies and integrate themselves into the world economy, others continue to face serious challenges in achieving these objectives and have been marginalised.

A considerable body of literature has evolved in recent years to explain this phenomenon of the uneven spread of investment and industrial growth, which was also one of the main subjects of an international forum on sustainable industrial development organised by UNIDO in December 1999¹. The principal finding of this research is that markets, if left to themselves, will not necessarily promote an even spread of industrialisation because of an inherent tendency of industry to agglomerate. To overcome these intrinsic forces of concentration, specific measures need to be taken to create favourable circumstances in developing countries to attract private investments. These measures need to be focussed mainly at the policy and institutional levels, and hence can best be taken by public-sector bodies.

In summary, it may be concluded that the shift in emphasis from the public to the private sector has not proved to be the panacea for global economic development that many expected. On the contrary, it has become clear that the role of government has not declined, but has shifted from the exercise of direct ownership and control over the means of industrial production and distribution to the provision of an enabling environment required to encourage the development of private enterprise. In this context it is particularly important to promote the growth of SMEs, which for the reasons outlined above play a highly significant developmental role. In order to enable these SMEs to unleash their full productive potential and hold their own in the increasingly competitive international business environment brought about by the process of globalisation, it is becoming increasingly vital to design supportive national and local strategies, policies and programmes. It is also in this area that international organisations, such as UNIDO, can provide valuable support and cooperation.

A particularly important consideration that needs to be borne in mind when developing such an enabling environment is the need to avoid the risk of what some analysts have referred to as “immiserising”

¹ The papers presented at this forum have been published by UNIDO in the volume *Industry for Growth in the Millennium*, May 2000.

growth. This would involve a race to the bottom, where competition is achieved on the basis of lowering wages, disregarding labour and environmental standards and avoiding taxation. There are some indications that this has already occurred in some countries, which appear superficially to have benefited from globalisation because it has led to increased sourcing of manufactured products from them. In fact, however, the increase in export activity has been much higher than the increase in income derived from this activity, as the terms of trade of manufactured exports from developing countries have fallen relative to those from developed countries.

In order to achieve both export growth and sustainable income growth it is important for developing country producers to upgrade their activities. Such upgrading, of the products produced and the processes employed in producing them, is essential for obtaining higher returns, and it is only through such upgrading that producers in developing countries will be able to compete effectively in world markets and enter into partnerships with international firms to obtain access to finance and technology. In this connection, it needs to be stressed that the presence of a strong domestic private sector - much more than the availability of short-term financial incentives - acts as an important determinant for attracting foreign direct investment.

It is here that the establishment of an appropriate policy framework and the creation and/or strengthening of the required institutional capacities play a vital role. The public sector inevitably has to play a prominent role, albeit in partnership with the relevant private players, in establishing such a policy and institutional structure. As has been argued in a UNIDO document prepared for the 14th Conference of African Ministers of Industry, “there is considerable evidence to show that appropriate public sector investment - in physical infrastructure, in training and skills development, in governance - ‘crowds in’ private sector investment”.²

By providing a wide range of technical cooperation services based on its extensive experience and expertise in this field, UNIDO can play a strong supporting role as a third partner in this process. Recognising that such support is often most needed, and has the greatest potential of success, in the field of SMEs, the bulk of UNIDO’s technical cooperation

² UNIDO, *African Industry 2000: The Challenge of Going Global*, Paper prepared for the 14th Conference of African Ministers of Industry, Dakar, Senegal, 18-23 October 1999.

services are specifically tailored to promoting the growth and development of such enterprises. The remainder of this paper will be devoted to a detailed presentation of these services, illustrated wherever possible with specific examples of projects in member states of the OIC.

2. THE UNIDO EXPERIENCE

2.1. UNIDO's guiding principles

UNIDO is the specialised agency of the United Nations dedicated to improving the lives of people in developing countries and in countries with economies in transition through industrial development. Acknowledging private sector leadership in business matters, the promotion of private sector development is a key principle of the Organisation's work. UNIDO's aim is to help lay a firm foundation for long-term sustainable economic and social progress in its partner countries, enabling them to overcome their development constraints and generate their own economic wealth.

UNIDO does this by:

- Acting as a forum for global debate on industrial development, and as a facilitator for the exchange and dissemination of industrial information, best-practice principles, and norms and standards.
- Providing integrated technical co-operation services focused on helping to build national capacities, especially at the policy and institutional levels, according to the requests and needs of its client countries.

In line with the priorities of the United Nations, UNIDO's work addresses three broad dimensions referred to as the "3Es":

- Competitive Economy
- Sound Environment
- Productive Employment

This simplified typology reflects the essence of UNIDO's services, which are intended to enhance the competitiveness of enterprises and of the countries in which they operate (Economy), to address and prevent ecological problems in industrialisation (Environment) and to stimulate

the creation of productive jobs (Employment). To achieve these objectives, UNIDO has devised a palette of 16 “service modules” providing a wide range of specialised services in each of these categories, from which the appropriate mix can be selected to address specific developmental needs. These service modules are summarised in Box 1.

Box 1
UNIDO service modules

<p>Competitive Economy</p> <p>Service Module 1: Industrial policy: formulation and implementation</p> <p>Service Module 2: Statistics and information networks</p> <p>Service Module 3: Metrology, standardisation, certification and accreditation</p> <p>Service Module 4: Continuous improvement and quality management</p> <p>Service Module 5: Investment and technology promotion</p> <p>Sound Environment</p> <p>Service Module 6: Environmental policy: the framework</p> <p>Service Module 7: Climate convention and Kyoto Protocol</p> <p>Service Module 8: Energy efficiency</p> <p>Service Module 9: Rural energy development</p> <p>Service Module 10: Cleaner production</p> <p>Service Module 11: Pollution control and waste management</p> <p>Service Module 12: Montreal Protocol</p> <p>Productive Employment</p> <p>Service Module 13: SME policy framework</p> <p>Service Module 14: Women entrepreneurship development</p> <p>Service Module 15: Industrial business development services</p> <p>Service Module 16: Upgrading agro-industries and related technical skills</p>

The key word in the delivery of UNIDO’s services is *integration*, by which the Organisation ensures that any support rendered to client countries is provided in a complementary and coherent manner, and leads to synergy at the level of both the direct and ultimate beneficiaries, be they enterprises, private and public support institutions, ministries or other public bodies.

UNIDO places particular emphasis on supporting SMEs because of their dominant role and unfulfilled potential in many developing economies, especially LDCs, and in the economies in transition. Clearly, there is no formal and generally accepted definition for SMEs, which are categorised differently from country to country and within countries depending on their size and the objective of various regulatory and incentive systems. In a functional approach, UNIDO defines SMEs as enterprises that are too small to achieve an optimal division of labour, and thus an internal specialisation in their business operations. In

supporting SMEs, UNIDO focuses on the policy and institutional levels of intervention: strengthening national capabilities to provide a conducive and demand-led support environment for the establishment and growth of competitive enterprises.

2.2. Policy support services

An overriding precondition for the success of SMEs and the programmes supporting them is the appropriateness of the policy, legal and regulatory environment in which they operate. Many obstacles facing SMEs are related to the overall environment. Policies that are not directly aimed at SMEs often nevertheless have an impact on them and can put them at a disadvantage, making it difficult for them to gain access to the human, technological and financial resources needed to upgrade levels of quality and productivity. In response to this, UNIDO places particular emphasis on policy advice intended to support a “levelling of the playing field” through the establishment and maintenance of a legal and regulatory framework and an enabling institutional support infrastructure in which SMEs can thrive and prosper.

In this context, UNIDO supports the formulation of national SME development strategies and action plans in a number of countries. An overview of policy towards the private sector in general and an assessment of the degree to which it is supportive of private industry, and SMEs in particular is the first step towards developing a coherent SME policy framework.

This is followed by the recommendation of specific support policies for SME development, which may include the following elements:

- A coherent SME policy linked to broader economic and social goals;
- Proper co-ordination and monitoring of policy measures and support programmes;
- Public-private sector partnership in policy formulation and implementation by increasing dialogue between private organisations and public bodies on SME policy;
- Competent representative business organisations to participate actively in the policy dialogue; and
- Specific support policies for SME development to facilitate access to crucial resources such as finance and information, and to stimulate a more balanced geographic distribution of business activities.

Box 2
Chad: Industrial policy advice

In the mid-1990s, Chad faced daunting challenges to its development. It had just emerged from nearly three decades of domestic strife and external conflicts, which had wrecked its institutions and infrastructure, squandered its human resources, and severely restrained its economic progress. The difficult economic outlook caused by these problems was further compounded by the high transport and transaction costs inherent in its landlocked situation.

The Government's recovery programme first concentrated on restoring the overall business environment in the country, beginning with the re-establishment of the legal foundations of Chadian society, from the Supreme Court down to the Business Law and its enforcement tribunals. In parallel, the country initiated its first structural adjustment programme in 1995, followed by reforms of the civil service and the gradual establishment of a policy and institutional framework conducive to a greater participation of the private sector in economic affairs.

The industrial policy efforts of the Chadian authorities were actively supported by UNIDO, which provided technical assistance to identify policies, legislation and institutions required for the efficient operation of industry and the private sector. This assistance included development of the legal framework, the tax regime, a system of financial intermediation for the enterprise sector, a trade code and an investment charter. To enhance the competitiveness of Chadian enterprises, institutions to promote standards and quality management were established. In addition, the administrative procedures governing private businesses were reviewed and simplified to reduce the expense and time required for business registration, reporting, and compliance with government policies.

Some of these reforms had to comply with regional agreements that Chad had signed, such as the "Organisation pour le Droit des Affaires en Afrique" (OHADA), and the "Charte Régionale des Investissements dans la Communauté des Etats de l'Afrique Centrale" (CEMAC). Chad was one of the first countries to take advantage of the new Regional Court of Justice established in Abidjan in 1999 to arbitrate business disputes within the OHADA framework.

These services can span a very broad range. At the most aggregated level, they involve the establishment of a comprehensive and coherent industrial policy framework aimed at creating a conducive environment for the growth of domestic private entrepreneurship, and especially for the growth of SMEs. In formulating such broad-based strategies to promote competitive industrial SMEs, great care is also taken to give due consideration to a country's overall economic objectives, including poverty alleviation and employment generation. A good illustration of this approach is given in Box 2 with reference to Chad.

At the other end of the spectrum, UNIDO can provide services to identify and overcome specific policy constraints inhibiting the operation of SMEs. These constraints can include excessively complex reporting requirements or regulatory processes, which raise transaction

costs and stifle entrepreneurial initiative. An example of such targeted policy advice is given in Box 3 with regard to Benin, where such technical cooperation services provided by UNIDO resulted in a significant easing of the regulations governing the establishment of industrial enterprises.

Box 3

Benin: One-stop shop to establish SMEs

In Benin, the formalities to establish a business used to be long and complicated. To simplify these processes, UNIDO was requested to help in the establishment of a one-stop shop known as the Centre de Formalités.

This institution was based in the Chamber of Commerce and Industry. In addition to the Central office in Cotonou, two branch offices have been established so far in the provinces.

Since its creation in August 1997, the Central Office has received some 38,000 visitors, and in the period 1997-1999 some 2,075 enterprises have been formally established, the vast majority of which are SMEs. The time needed for the formal establishment of a small business has been reduced from some 6-8 weeks to an average of 5 days.

Typically, policy issues are included as an integral component of broader UNIDO projects aimed at promoting the development of SMEs. For example, such a policy component forms an important part of an ongoing project in Kyrgyzstan, which also has a major institutional capacity building dimension in a number of fields involving business development services (see Box 4).

Box 4

Kyrgyzstan: Project to support small and medium-sized enterprise development

The UNIDO Project to Support Small and Medium-sized Enterprises Development in Kyrgyzstan which was launched in 1997 and is now extended until the end of 2001, has two major objectives:

1. To contribute towards creating an enabling policy and regulatory environment to promote entrepreneurship and development of SMEs in Kyrgyzstan; and
2. To enhance the national capacity for providing support services to SMEs through integrating the existing support activities into a national network of Small Business Development Centres.

During project implementation, an attempt has been made to focus and develop three main ideas:

The *micro-macro feedback* in SME support;
A *decentralised* approach to the technical assistance offered; and
An *integrated* approach to the technical assistance offered.

a) The *micro-macro feedback*: The project has been conducting important activities at the *macro* level, working together with various government organisations to create an enabling

environment for SMEs. At the same time, a national network of Small Business Development Centres (SBDCs) has been set up to provide direct advice to these entrepreneurs on the establishment and development of their SME businesses at the *micro* level. The information gained at the grass roots level could thus be transmitted directly to the government and used in the formulation of new laws. On the other hand, the SME business community could always be informed at first hand on the current intentions of the Government with respect to the relevant business environment.

(b) The project has enhanced the national consulting and training capacity for the SME sector with the application of a *decentralised* approach. The establishment of the SBDC network has shifted the focus of technical assistance and financial support from the capital city towards the more remote regions of the country.

(c) An *integrated* approach has been adopted with regard to the creation of the national network of SBDCs. This approach assumes that an SBDC becomes one of the leading components of a bigger unit, the Integrated Business Centre, which can provide, under one roof, a comprehensive range of services for entrepreneurs: consulting, training, information and financing of SME projects. The Integrated Centres have been developed together with the State Fund for SME Support at the Government of Kyrgyzstan and the Kyrgyz Chamber of Commerce and Industry. The Integrated Centres therefore consist of three main components:

The *SBDC component*, which takes care of SME-related consulting and training services. Business counsellors of the SBDC provide entrepreneurs with information on possible ways and sources of financing an SME project and help prepare business plans according to the requirements of particular SME credit lines;

The *financial component* of the State Fund for SME Support, which takes care of project financing by offering credits and leasing services from the domestic credit line; and

The *Chamber of Commerce component*, which provides entrepreneurs with legal advice and business information (including foreign market related information), issues certificates of origin, and generally represents the interests of the local business community.

The Integrated Business Centres have been established in 6 major regions of Kyrgyzstan. It is planned that in future, in this one-stop shop facility, an entrepreneur would be able to fill out all documents required to start own business.

Since the beginning of 1998, the SBDC network has received more than 2,700 clients and helped prepare about 700 businesses plans.

More than 3200 entrepreneurs participated in 125 training events organised either by the project alone, or in training events to which the project provided major inputs;

The Project team has participated in the preparation of draft proposals for all major Government legal initiatives aimed at improving the legal and economic/business environment for SMEs, including a proposal for the simplification of the tax and licensing system for SMEs as well the government's support programmes for the sector.

In 1999, a *Small Business Club* was launched at the project. The *Club* is an informal forum for discussion and information exchange between the SME business community and the Government. This initiative has been recently submitted to the UNDP as an example of Best Practices.

An SME manual, *Foundations of Business in Kyrgyzstan*, has been published. This is the first book of this type in Kyrgyzstan devoted to setting up and development of small and medium-sized businesses.

UNIDO also co-operates with the OECD in its Forum on Entrepreneurship and Enterprise Development programme (FEED). The objective of the programme is to facilitate the exchange of experience and knowledge on best practices among policy makers and SME development practitioners in Central and Eastern Europe and the NIS. This is achieved through a policy dialogue among themselves, as well as between them and the OECD countries. A combination of instruments are employed to achieve this end, including an annual forum supported by preparatory working groups, an Internet site and a directory providing information about FEED members and partner institutions.

2.3. Strengthening institutional capacities in the public sector

A crucial requirement to bridge the gap between good policy formulation and good policy implementation is the existence of strong, efficient public institutions to support the private sector in a new role as promoters and regulators. As this role differs significantly from their traditional role of providing direct services or finance to business, these institutions often need to be upgraded, and to redefine their functions in light of the changed role of the state and the effects of globalisation. This needs to be accompanied by a re-training of staff, the adoption of modern tools, and the introduction of new working practices.

In this connection, the increased participation of private sector institutions in policy formulation referred to above needs to be supplemented by a similar cooperation in policy implementation. Another new element is the need to restructure the inter-governmental arrangements for private sector development. This is particularly crucial for government bodies responsible for SME promotion, since they often carry only limited weight within the government. An SME promotion agency, for example, usually has little influence with the Ministry of Finance, despite the fact that much of the government legislation and some of the policies affecting SMEs are developed within the Ministry of Finance. Organisational arrangements must be made within the government to ensure that SME promotion issues and recommendations are known not just in the SME promotion agency, but in the Ministry of Finance, the Ministry of Labour, and other government bodies that affect the private sector.

An example of UNIDO's approach to strengthening public agencies to support private sector development is presented in Box 5 with reference to Sudan.

Box 5
Strengthening the Ministry of Industry in Sudan

The Ministry of Industry in Sudan is confronted with many of the same problems faced by similar ministries in other developing countries. It has a core of well-educated staff members who nevertheless lack specialised expertise in certain SME and economic issues.

Working with the Ministry staff, UNIDO has developed a technical assistance programme to develop the private sector by strengthening the entire SME promotion process in the country. The Ministry staff will be trained, and outside experts will be brought in to undertake studies on specific issues that the staff lacks expertise in. The governmental arrangements for dealing with private sector issues are being improved by the formation of an inter-ministerial group to address issues and disseminate information related to private sector development. The private sector will be included in the entire process, especially in providing more input into policy and legislative issues, through various workshops, conferences, and other public/private partnership activities. These activities will lead to the preparation of the first SME strategy document, outlining the country's workplan for SME development and regulation.

In addition, greater awareness, transparency, and information dissemination will be provided through the preparation of an Annual Report on SMEs, and the organisation of an annual conference, bringing together all major actors, public and private, in the process of private sector development.

The expected result is an improvement in the Ministry's policies and SME promotion activities and, more importantly, a long-term strengthening of the entire institutional process of private sector development.

In the era of globalisation, there is a particularly acute need for an upgrading of public institutions that provide technical and technological support to the private sector, especially in the areas of quality management, standardisation, and metrology. Compliance with international standards of measurement, and assuring trading partners of the quality and safety of exported products are becoming a major factor in the export competitiveness of countries. However, critical capacities are lacking in many developing countries. There is an urgent need for the creation of appropriate institutions and the upgrading of existing bodies through the provision of modern equipment and staff training, and for the design and implementation of programmes to establish or improve certification bodies. The absence of such services can have serious consequences for businesses, especially those oriented towards export markets, as illustrated by the experience of Uganda presented in Box 6.

Faced with the twin challenges of undertaking environmentally sustainable industrial development and competing against international firms, businesses in developing countries need ways of reconciling the two Cleaner production methods to provide a means to achieve this

objective, since they are used to reduce industrial wastes during production rather than to clean them up after they have formed. As such, the emphasis is not on pollution abatement or waste control, but on better management of the production process to use less energy and material inputs, and more environmentally friendly inputs to produce fewer wastes. Often, cleaner production methods can be introduced that provide significant reduction in industrial pollution while also increasing productivity and profitability of the firm. In some cases, the economics of production may require and justify major changes in the production process, or expensive new equipment. In other cases, however, major improvements are possible with inexpensive changes in the management and operation of the firm.

Box 6

Uganda: Standards and testing for private sector development

Although Uganda is taking important steps to restore economic growth and stimulate the private sector to become the engine of growth, Ugandan firms face many problems in competing, especially in export markets. A critical constraint to the private sector is the inadequate quality of the products that are produced by Ugandan firms, and the improvement of the product quality is, in turn, severely constrained by the poor state of the standardisation, quality assurance, metrology, and testing capabilities in Uganda. This is exemplified by the Uganda National Bureau of Standards (UNBS) which until recently was only able to formulate standards and undertake compliance testing at very low levels, had only very basic metrology facilities, and had no quality assurance and certification programme. Without such basic services to the private sector, improvements in the quality of products and the ability to meet the international export requirements were severely hampered. This was underlined by the recent ban on Ugandan fish exports by the EU as a result of a cholera scare, which showed the serious effects that lack of quality assurance programmes and a micro-biology and chemical testing laboratory can have on competitiveness.

As a result of the recognition that the lack of such basic facilities was constraining the development of the private sector, the Ugandan government initiated a programme to lay the foundations for this basic infrastructure, using technical assistance from UNIDO. UNBS is being strengthened, with new facilities and equipment and specialised staff training, to deliver a full complement of services in these areas. Particularly important will be the development of additional standards, through an increase in the number of technical committees, to include such areas as metrology, electro-technology, textiles, leather, plastics, pharmaceuticals, mechanical engineering and metallurgy, pollution control, and the environment. The current number of 34 Ugandan standards will be increased to 340. Laboratory facilities are being established in legal metrology, industrial metrology, microbiology testing, chemical testing, pharmaceutical testing, mechanical testing, electrical testing, and textile/leather/plastic testing.

The ultimate outcome of this upgrading of UNBS will be an institution capable of providing the services Ugandan enterprises need to increase the quality of Ugandan products and comply with international standards required for export. In addition, Ugandan consumers will benefit from improved products that are also safer and healthier.

In 1994, UNIDO launched a programme, together with the United Nations Environmental Programme (UNEP), to establish a network of

Box 7
Cleaner production in Tunisia

The Centre de Production Plus Propre Tunisien (CP3) was established with the help of the United States Agency for International Development in 1993. From 1996 onwards, UNIDO/UNEP started supporting the centre. In common with the other NCPCs in UNIDO/UNEP network, the CP3 provides in-plant assessments, training, information dissemination and policy advice aimed at enhancing the environmental sustainability and economic competitiveness of industrial enterprises, and SMEs in particular.

An example of the effectiveness of the cleaner production measures promoted by the CP3 is given by its efforts to encourage the re-use of chromium in leather tanning, with particular reference to the Société Moderne des Cuirs et Peaux (SMCP) tannery in Sfax. The company tans approximately 600,000 sheep hides per year and periodically tans goat hides. The company employs 45 permanent and 30 seasonal workers.

At the time of the Cleaner Production (CP) assessment, a number of pollution problems existed at the facility, including the generation of sulfide, excessive chromium discharge, excessive effluent volume, inefficient chromium fixation and inefficient use of dye chemicals. In addition, the company's waste water pre-treatment station was not functioning adequately, resulting in the discharge of waste water exceeding the required norms.

The CP assessment identified four solutions to bring significant environmental and economic benefits. These are:

- Segregate the liming and washing waste waters from other acidic waste waters to eliminate sulfide generation. This is done by constructing a sump that intercepts waste water from the liming and washing operations. The sulfides are oxidized.

Raise the temperature and control the pH of the tanning baths to increase chromium fixation on the hides. This is done by repairing the boiler to pre-heat the tanning bath, and by installing continuous, digital temperature and pH probes for each bath.

Recycle used chromium effluent with the addition of one third of the initial requirements to reduce chromium discharge into waste water. This is done by constructing a holding pit into which the used tanning bath is pumped after having being screened. The solution can be used five times before being discharged.

Recycle used black dye solution, with the addition of half of the initial requirements, to reduce the dye discharged into the waste waters. This is done by installing tanks, plumbing and filters needed for recycling.

The implementation of these measures will result in improved productivity and increased quality of products, as well as yielding both environmental and financial benefits.

Economic benefits: The CP measures reduce the quantity of toxic chemicals released. The amount of waste water to be treated is reduced by 8.5 per cent (2,000 m³ per year); the loading of toxic chromium salts by 55 per cent and of dye baths by 25 per cent. Isolating incompatible waste streams for separate treatment enables the pre-treatment station to operate more efficiently, and avoids the generation of foul smelling and toxic hydrogen sulfide gas.

Financial benefits: The implementation of the CP project was estimated to result in an annual saving of US\$ 98,000 for a total investment of about US\$ 25,000. Specifically, recycling used chromium effluent resulted in a financial benefit in the first year of US\$ 42,000, and required a total investment of only US\$ 5,000.

National Cleaner Production Centres (NCPCs). The objective of this programme is to build national capacities in the field of cleaner production and to provide support services to industrial enterprises, and SMEs in particular, to enable them to enhance their competitiveness while at the same time reducing industrial pollution. These services include in-plant assessments, training, information dissemination and policy advice. Sixteen NCPCs are currently operational throughout the world, and their number is growing steadily. In a particularly significant development, a recently approved UNIDO programme for technical cooperation with Pakistan during the coming 3-5 years foresees the establishment of a number of sectorally specialised cleaner production centres to support SMEs in the leather, textiles and food processing industries. An overview of the activities and achievements of such NCPCs is given in Box 7 with reference to Tunisia.

2.4. Strengthening institutional capacities in the private sector

The preceding discussion has frequently stressed the need for the private sector to play a contributing role in the formulation and implementation of policies affecting the industrial sectors. The ability of the private sector to make such a contribution depends critically on the existence of suitable representative organisations. These are often lacking, especially in the case of SMEs, and their absence is a major cause for the introduction of policies that do not take into account the specific needs and constraints of such enterprises. The creation and/or strengthening of such organisations can therefore make a significant impact towards the establishment of a conducive business environment for the development of SMEs. Recognising the benefits to be gained from this process, UNIDO provides technical assistance in a number of countries to support such private sector organisations as illustrated in Box 8 with reference to Palestine.

2.5. Business development services

Particular emphasis is placed by UNIDO on entrepreneurship development. The entrepreneur constitutes the core of the private sector. It is the entrepreneur who takes a business initiative and the corresponding risk. Unfortunately, many entrepreneurs, and especially women entrepreneurs and those in LDCs, operate at the bottom of the market, competing on the basis of low cost, low price and low quality.

Box 8
Support for the Federation of Palestinian Industries

UNIDO was requested mid-1999 to assist the establishment of the Federation of Palestinian Industries in the West Bank and Gaza, bringing together sub-sectoral Palestinian industrial associations in one representative apex organisation.

The Federation was expected to:

Act as a representative of and for private industry in the West Bank and Gaza in relevant councils and committees;

Provide a forum for dialogue and consultation between the Palestinian Authorities and private industry regarding policy making and implementation;

Play a catalytic role in strengthening its member associations including the mobilisation of support for this purpose;

Establish relevant co-operation arrangements with local institutions and with similar private industrial sector organisations abroad.

The Federation opened its Central Office in August 1999 in Ramallah and meanwhile has also established a Branch Office in Gaza. Complementary support has been provided by UNIDO and the Friedrich Naumann Foundation (Germany) in the first months of its establishment and is ongoing. Additional resources have been already mobilised to expand support to the Federation and its member associations.

To some degree, the limited size and weakness of the indigenous private sector in many developing countries and economies in transition can be attributed to a lack of entrepreneurship and ability to respond effectively to business opportunities. This seriously inhibits the survival and growth of small and medium-sized enterprises. Even where entrepreneurs in these countries may be able to identify business opportunities, they are often not able to take advantage of them due to a lack of appropriate skills and knowledge.

Such skill and information gaps can be overcome, however, through properly targeted business development services (BDS). These may include information (by direct contact and publications) and referral; general business counselling with regard to such issues as loan packaging and the preparation of business plans; management training and specialised advisory services such as market research; facilitation of business linkages, technology acquisition and use; and, enterprise restructuring and expansion. These services are often provided through business advisory centres or similar units in institutions that offer a mix of services such as Chambers of Commerce.

In a market economy, most BDS should be provided by the market. Governments intervene, however, when it is felt that the problems confronting existing and potential entrepreneurs are not being addressed by market institutions. Small entrepreneurs, because of their size,

isolation and inexperience, often lack adequate access to important information and other inputs. The situation is worse in countries with economies in transition, since they have relatively little experience of entrepreneurship and business ownership. As a result, there is a shortage of skilled entrepreneurs and business managers, and of institutions capable of providing enterprises with good quality services in close proximity and at a cost the new entrepreneurs can afford.

UNIDO's activities in the provision of BDS include support for the design, establishment or strengthening of business service centres operated by a variety of private and public service providers. They help to assess the type of services to be provided, strengthen the institutions that provide them and create awareness of international 'best practices' in the provision of such services. In this way, UNIDO assists developing countries and countries with economies in transition in formulating and strengthening BDS-related programmes that address many of the needs of the private sector with a high degree of cost-effectiveness. An example of UNIDO's technical cooperation activities in the field of BDS is given in Box 4 above with reference to the SME development project in Kyrgyzstan.

Business incubators are a specialised form of BDS used by UNIDO to provide start-up enterprises with a location in which to operate, plus a variety of support services, such as business counselling, management training, use of equipment and administrative support services. Business incubators can offer a supportive environment in which new businesses can receive intensive support for a limited period of time, usually three to five years. After that, businesses are expected to expand and move out of the incubator, to be replaced by new start-up enterprises. In this way, business incubators provide an instrument to promote the constant creation and expansion of new enterprises.

2.6. SME networking

SMEs face a number of specific constraints as a direct consequence of their size. Individually, they are often unable to capture market opportunities, which require large production quantities, homogenous outputs and consistent quality standards. By the same token, they experience difficulties in achieving economies of scale in the purchase of inputs, such as equipment, raw materials, finance, consulting services, etc. Small size also constitutes a significant hindrance to the internalisation of

functions such as training, market intelligence, logistics and technology innovation - all of which are at the very core of firm dynamism. Furthermore, small scale can also prevent the achievement of specialised and effective internal division of labour that fosters cumulative improvements in productive capabilities and innovation.

Experience has shown, however, that the networking of individual SMEs can help them to overcome these problems and improve their competitive position. Through horizontal co-operation (with other SMEs at the same level in the value chain,) such enterprises can collectively achieve economies of scale beyond the reach of individual small firms. Vertical integration with other SMEs and with large-scale enterprises allows enterprises to specialise in their core business and participate in a system of external division of labour.

In addition, inter-firm co-operation also gives rise to a collective learning space, where ideas are exchanged and developed, and knowledge is shared in a collective attempt to improve product quality and access more profitable market segments. Similarly, networking among enterprises, providers of business development services (e.g. training institutions or technology centres) and local policy makers can help to shape a shared local development vision and give strength to collective actions to improve entrepreneurial strategies.

Spontaneous concentrations of SMEs producing similar or complementary goods exist in many regions of the developed and developing world. However, the entrepreneurs operating within them are often locked in their routines because of the struggle to preserve their narrow profit margins, especially in developing countries. This prevents them from looking beyond the boundaries of their own firms to capture new market opportunities and introduce innovative improvements to their products and processes. Consequently, the “virtuous” features of successful clusters do not always emerge. Effective networking, though it has been observed in some cases, appears to be relatively uncommon. Even less common is the spontaneous emergence of institutions promoting collective learning and innovation.

The main factors hindering the evolution of these virtuous features which would transform a geographical concentration of SMEs into a coherent, efficient and effective business system include:

The frequently high transaction costs that need to be borne by SMEs to identify suitable network partners, establish relations of mutual trust and forge long-term relationships;

The imperfect functioning of the markets for such crucial inputs for cluster development as information and innovation; and

The high risk of “free riding” faced especially in contexts where the legal framework to back up joint endeavours is relatively underdeveloped.

Experience from a number of both developed and developing countries shows that the intervention of an external agent acting as a catalyst to facilitate the emergence of successful clusters and networks can greatly reduce the significance of the above factors. Based on these experiences, UNIDO has developed a highly effective methodology of initiating successful interventions aimed at fostering cooperative relations within SME clusters. This provides for the promotion of SME networking through the development of systematic linkages among enterprises and between enterprises and institutions, which allows SMEs to achieve new collective competitive advantages beyond the reach of individual small firms. Specifically, it enables SMEs to co-operate on joint development projects, complementing each other and specialising in order to overcome common problems; to achieve collective efficiency and conquer markets beyond their individual reach; and to take advantage of external economies, such as the emergence of specialised suppliers of raw materials and components, and the growth of a pool of sector-specific skills. Such a system also favours the growth of local institutions, both private and public, that foster collective learning and local development by providing technical, managerial and financial services.

UNIDO assists in the design, implementation and evaluation of networking projects. The nature and structure of the projects depends on the specific needs prevailing in particular countries and regions. Thus, a preliminary phase is always launched in order to assess local strengths and weaknesses, shape a focused local development vision with the participation of all actors and establish an action plan to enact that vision.

The UNIDO cluster approach emphasises the development of local institutions to act as facilitators, or “brokers”, of the networking process. These should support the emergence of a joint entrepreneurial vision

involving the whole business system - composed of firms, their suppliers, buyers and support institutions - and be able to enact that vision through common development projects. It is this emphasis on the whole business system rather than on individual enterprises, and on its collective challenges and opportunities, that constitutes the main difference between the UNIDO cluster development approach and most traditional SME development programmes.

While highlighting this difference, it should also be pointed out that the cluster approach is not in competition with other business development services but, on the contrary, usually enhances their use by the enterprises. The collective projects generated within the clusters demand, in fact, technical and financial inputs for their execution. This demand is not directly satisfied by the cluster project (as it is not part of its core functions) but is channelled to other available providers of technical/financial services. In this way, the relationships between enterprises and local service providers can be optimised while the usage rate of the services is increased.

This approach has been successfully applied in a large number of developing countries throughout the world, including India and several countries in Africa and Latin America. A similar project is currently being proposed for Indonesia following the recent conclusion of a preparatory study, the results of which are summarised in Box 9. In addition, such programmes have also been included in the recently approved integrated programmes for UNIDO's technical cooperation with the Islamic Republic of Iran and Pakistan, both of which were drafted in close consultation with the relevant public- and private-sector counterparts in these countries.

A separate networking service provided by UNIDO, which may be used in conjunction with the cluster and networking approach described above or on its own, is assistance with the establishment of industrial information networks providing information and value-added support to SMEs. This service is based on the recognition that while access to information is a crucial prerequisite for enhancing the performance, productivity and competitiveness of SMEs, the existing information support structure for SMEs is usually relatively weak in developing countries.

Box 9

SME cluster and network development programme in Indonesia

The development of a strong and vibrant SME sector has been a major objective of successive Indonesian governments throughout the post-independence period. As early as the 1950s the government had thus begun to initiate various programmes to assist the development of indigenously-owned SMEs, inter alia, through the establishment of industrial centres (*induks*) to support regional concentrations of enterprises producing similar goods. This approach was given additional emphasis from the early 1990s onwards, when increased efforts were made to promote small industry clusters, known locally as *sentra industri kecil*, through the provision of a variety of support services. These included the full range of financial and technological services, as well as the establishment of common facilities, such as technical service units (*Unit Pelayanan Teknis*), offering technical assistance and the use of machinery on a cooperative basis. By the end of 1996, no less than 10,267 *sentra* had been established throughout Indonesia.

In late 1997, UNIDO initiated a preparatory assistance in cooperation with the Ministry of Industry and Trade (MOIT) of the Republic of Indonesia to determine the applicability of a cluster-based development strategy. This project was intended to assess the performance of the existing SME support programmes and provide the basis for the formulation of a more extensive national cluster-based SME development programme specifically designed to suit Indonesian conditions. On the basis of desk research and cluster-specific diagnostic studies conducted in 1998 on four sample SME clusters, the project found that the bulk of Indonesian SMEs and SME clusters remained weak in spite of the support measures adopted in the preceding decades. This has been due to a combination of factors associated with intrinsic weaknesses in the individual SMEs comprising such clusters, a lack of networking within the clusters themselves, and inadequate links with external agents such as commercial enterprises and support institutions.

These findings have important implications for the format of the follow-up UNIDO technical cooperation programme currently being drawn up. Although they indicate the existence of some common or similar problems and challenges facing the various SME clusters in the country, thus suggesting some major areas of action for the programme, the most basic finding is that the Indonesian SME clusters vary widely in their structure and state of development, and their relative organisational and institutional strengths. This strongly suggests that a successful National SME Cluster Development Programme should be based on a differentiated and decentralised approach taking into account the diverse characteristics of individual clusters. This would represent a significant departure from most of the programmes hitherto undertaken in Indonesia to develop and promote SME clusters, which have been based on essentially identical actions by the same kinds of agents and applied "across the board" to all clusters regardless of their specific constraints/opportunities.

The UNIDO programme is consequently based on the understanding that what is needed is not primarily more hardware or large-scale infusions of capital but better 'software' - i.e. advice and assistance in setting up linkages and strengthening inter-enterprise organisation; brokering between the SMEs and sources of business, marketing and technical expertise; and matching funds on a relatively modest scale to encourage business initiatives by the SMEs themselves. At the level of the individual cluster, what is needed is not the replication or routine application of nationally pre-determined modes of specific support activity, such as credit lines or infrastructure. Instead, the need is for a diagnosis of the needs of the individual clusters and the development, in consultation with their constituent SMEs and their partners, of action plans tailored to each cluster's specific needs. In most clusters across the country, the existing broad SME institutional infrastructure could be complementary to, and be utilised in support of, this improved software.

One of the major possibilities to strengthen this structure is to harness the efficient networking tools provided by the new information technologies, such as the Internet, to create an information network for SMEs. The approach adopted by UNIDO in this context is to support the establishment of a focal point, or “One-Stop Shop”, equipped with these technologies, that could provide the local SMEs with the required information and value-added services. The One-Stop Shop would network the national SME support institutions, including export promotion agencies, institutes of standards and industrial research, trade and development agencies, chambers of commerce and industry, export guarantee funds, export development banks, etc. Furthermore, it would also facilitate access to international sources of information on such subjects as export markets and sources of raw materials and technology.

In recognition of the fact that such a One-Stop Shop has to function as a commercial undertaking to be sustainable, it is usually located in the private sector, either as a branch of an existing institution or as an independent enterprise operated by a suitable counterpart. As a first step, the actual information needs of SMEs to be served by the One-Stop Shop have to be assessed (possibly in combination with the needs assessment for other SME support services). These needs form the demand for services of the One-Stop Shop, and as such, they form the input and justification to the type of services to be provided (including certain types of information services, Web hosting services, etc.). Based on the latter, a business plan is formulated and implemented to ensure the commercial viability and sustainability of the service.

This approach was pioneered in 1994 with the establishment of such a network, then called an Industrial Technology and Market Information Network (ITMIN), in Sri Lanka. ITMIN Ltd. began commercial operations in March 1996 and the project was operationally completed in October 1996. Variations of the ITMIN model were subsequently introduced in various other countries, and in late 1997 a preparatory assistance project was proposed to assess the possibility of establishing a regional system of linked national networks in the Arab region. Details of this proposal are summarised in Box 10.

Box 10

Industrial information networking in the Arab region

The project was devised as a regional project covering fifteen countries (Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, the United Arab Emirates and Yemen) with the purpose of paving the way for the establishment of effective national information networks in these countries as well as a Regional Arab Business Network. The rationale of the programme was to provide SMEs in these countries with appropriate linkages to national and international information sources and value-added services, including specialised UNIDO information networks.

The project was based on the following three premises:

SMEs in developing countries typically do not have the resources or knowledge to search for appropriate and reliable information sources, and therefore require a well-functioning national information network to facilitate their growth and development.

The international business community also needs a “window” on available business opportunities in developing countries, which such a network can provide.

The new information technologies, including the Internet and other electronic systems, provide a highly efficient means of accessing national and international information sources on technology and business opportunities.

This approach was well received by all potential counterparts. As a first stage, individual country networks are expected to be established in several of these countries, including Algeria, Egypt, Morocco, Saudi Arabia and Tunisia, as part of UNIDO’s integrated programmes for these countries.

2.7. Integrating SMEs into global value chains

The increasing globalisation of international trade patterns and the accompanying liberalisation of domestic trade regimes imposes an inescapable demand for international competitiveness on the SMEs of developing countries and countries with economies in transition. At the same time, it also provides those enterprises that can achieve such competitiveness with the opportunity of substantially increased profitability by enabling them to integrate themselves into global value chains. One of the most promising approaches to achieving this goal is the promotion of partnerships linking SMEs either with larger domestic enterprises that have access to international markets or directly with foreign firms.

UNIDO has developed a variety of such brokering arrangements to find suitable partners for SMEs. The basic concept is that cooperative arrangements often produce benefits for both parties, but that the parties concerned are prevented from identifying each other and negotiating mutually-beneficial agreements by a lack of information. In this approach, enterprises provide their own assistance, and third parties do nothing more than put them in touch with each other.

One such approach involves the promotion of subcontracting arrangements between SMEs and larger domestic or foreign enterprises. This approach is based on the recognition that SMEs in developing countries are often prevented by their size and isolation to identify opportunities for sub-contracting work from larger firms, and to identify joint venture partners from whom they could obtain financing, technology, and marketing benefits. What is lacking is a mechanism to broker such relationships efficiently that would work to the advantage of both parties. The solution devised by UNIDO for this problem is the establishment of a Subcontracting and Partnership Exchange (SPX), which maintains information on the manufacturing capabilities and capacities of SMEs, and on potential partners, and actively markets partnership opportunities. Such exchanges have been established and are operating successfully in a large number of countries, as illustrated in Box 10 with reference to the SPX in Morocco.

Box 11

The subcontracting and partnership exchange (SPX) in Morocco

The SPX in Morocco was set up in Casablanca in 1987. It provides matchmaking opportunities and support in negotiating agreements for a core group of 600 registered members. In addition to offering one-to-one brokering services and local procurement events, it has since 1994 organised international subcontracting, procurement and partnership fairs (Salon International de Sous-traitance, d'Approvisionnement et de Partenariat, SISTEP) every two years. At the national level, these fairs have achieved considerable success in promoting and supporting outsourcing policies among the large public and private sector business groups and corporations in Morocco. At the international level, it has been particularly active in promoting partnerships with France, Spain and Portugal, partly in conjunction with other UNIDO projects.

For the latest year in which information is available, the Moroccan SPX brokered 131 subcontracting agreements and 176 partnerships that reached the negotiation stage. This is a significant percentage of the 600 members that it serves, and explains why the SPX is essentially self-sustaining from membership fees and support from private sector associations.

Another approach adopted by UNIDO involves the promotion of foreign direct investment, which can make a valuable contribution to the development in private sector enterprises in developing countries and transition economies by providing a direct means of transferring capital, technology and skills. As indicated in Chapter I, however, many developing countries face considerable difficulties in attracting such investment flows. The reasons for these difficulties are varied, and include inadequate supporting institutions to help identify business opportunities, financial constraints and a dearth of suitably qualified

managers, professionals, local promoters and entrepreneurs to prepare business plans and write viable investment projects to internationally acceptable standards.

The mechanisms and tools developed by UNIDO to help overcome these constraints include capacity building services for setting up and upgrading investment promotion agencies (IPAs), and the training of their staff in such fields as the negotiating skills needed for successful technology transfer agreements and industrial partnerships, such as joint ventures and strategic alliances. In this context UNIDO has also developed a computerised model for feasibility analysis and reporting (COMFAR) and other appropriate tools, which IPA staff are trained to apply.

In addition, UNIDO provides direct support in the brokering of industrial partnerships by helping to identify potential partners, appraising and promoting specific projects, and minimising associated risks. The work involves the evaluation of partnership opportunities in the most attractive industrial sectors and an assessment of the technological and innovative capabilities of enterprises to forge international industrial partnerships. UNIDO's assistance in this field covers the formulation of promotion strategies and techniques, based on the specific strengths and advantages offered by the host country, so that viable projects can be packaged and offered to targeted potential investors. UNIDO's role as an honest broker is particularly useful in constructing financial proposals and applying for credit from national and international funding bodies and capital providers.

In undertaking these investment promotion activities, UNIDO benefits from its own international network of Investment and Technology Promotion Offices (ITPOs) located in Bahrain, Belgium, China, Egypt, France, Greece, Italy, Japan, Poland, the Republic of Korea and the Russian Federation. In addition, the Organisation cooperates closely with a large variety of external institutions in promoting partnership opportunities, including international and national chambers of commerce and industry, professional associations, national technology centres, regional development agencies and other focal points.

Box 12
Pakistan: Investment and Technology Promotion Programme - Intechmart
Pakistan 2000

This project was implemented in cooperation with the United Nations Development Programme (UNDP), the Board of Investment (BOI) and Export Promotion Bureau (EPB) in Pakistan, and the Federation of Pakistan Chambers of Commerce and Industry (FPCCI). It was aimed at building the capacities of the Pakistani counterpart institutions in the fields of investment and technology promotion and SME management through:

The secondment of staff from these institutions to the Project Offices in Islamabad and Lahore for on-the-job training in project screening; the design and management of the promotion campaign for the main matchmaking event "Intechmart Pakistan 2000"; and the preparation of the final portfolio of 99 project proposals/profiles presented at this event.

A series of training seminars and workshops during 1999, attended by more than 150 participants, on the preparation of industrial investment project and feasibility studies, marketing and technology negotiations;

The holding of the Intechmart Pakistan 2000 meeting on 15-17 February 2000 in Lahore, providing potential foreign investors an opportunity for one-to-one business discussions with Pakistani entrepreneurs.

The project started off with a comprehensive "profiling exercise" in the field in mid-1997, applying UNIDO's established methodology for industrial project identification, formulation and appraisal. Supported by international and national experts, Pakistani enterprises interested in some form of business cooperation with foreign companies were asked to complete UNIDO's Industrial Investment and Technology Project Profile (IITPP), which provides basic information on (a) the company/proponent and its present business, and (b) the proposal for a joint investment or other type of business collaboration. Potentially viable proposals were released for promotion upon screening by UNIDO Headquarters and disseminated to relevant foreign businesses through various promotional channels, including promotional missions by the counterparts to Europe and Japan; the placement of delegates at several of UNIDO's Investment and Technology Promotion Offices, and the Internet.

The Intechmart attracted 168 institutional and 253 individual participants, including 44 potential foreign investors. Some 300 one-to-one meetings were held between Pakistani and foreign businessmen, with ten letters of intent being signed during the event. Negotiations between other potential partners are continuing. The foreign countries represented at the Intechmart comprised Australia, Belgium, France, Germany, Italy, the People's Republic of China, the Republic of Korea, Qatar, Saudi Arabia, Spain, the United Kingdom and the USA.

In recent years, UNIDO has begun to cooperate with the government of Italy in a new programme designed to combine SME development and investment promotion activities. This programme is based on the provision of soft loans by the Italian government to selected developing countries for the purpose of upgrading local SMEs and facilitating the establishment of joint ventures and other forms of industrial cooperation between these SMEs and foreign counterparts. The operation of this programme is described in Box 13 with reference to Egypt, where this programme is in its most advanced stage. Similar agreements have been signed with Tunisia and Jordan, and an agreement with Morocco is under negotiation. Outside the Arab region, it is expected that such

agreements will also be signed with the Islamic Republic of Iran and Pakistan in the foreseeable future.

Box 13

Egypt: The UNIDO/Italian Investment Promotion Unit at GAFI

UNIDO has been entrusted with the implementation of an Integrated Support Programme launched in 1998 by the Italian government and the General Authority for Investment and Free Zones (GAFI) in Egypt for the development of local industrial SMEs in conjunction with Italian counterparts. The programme is operated through the UNIDO/Italian Investment Promotion Unit (IPU) established within GAFI to provide technical and financial assistance to Egyptian SMEs in order to enhance their competitiveness and facilitate linkages with foreign partners.

The IPU provides technical assistance to the Egyptian SME sector at both the enterprise and institutional level. At the enterprise level, the IPU offers a wide range of business development services such as:

- Assistance in the preparation and appraisal of industrial business plans;
- Promotion in Italy of investment projects and other business opportunities for the identification of potential partners;
- Assistance in the formulation and negotiation of joint-venture agreements and other forms of industrial cooperation with Italian counterparts;
- Diagnostic analyses of problems at the technical, managerial, marketing and financial levels; and
- Identification of sources of finance available through the Egyptian banking system and elsewhere.

At the institutional level, the IPU supports the country promotion activities carried out by GAFI and the SME development activities carried out by local institutions. In addition, the IPU contributes to the improvement of the local business environment through partnership initiatives involving local institutions, banks and industry associations.

The financial assistance provided by the IPU derives from an associated credit line facility from the Italian government, which is disbursed through the Egyptian banking system. In providing these funds, priority is given to activities related to equity joint ventures, technology upgrading and innovation, employment generation and clean production.

The major activities of the IPU include:

- Identification of industrial partners and opportunities for industrial cooperation;
- Supporting the participation of Egyptian entrepreneurs in specialised exhibitions and investment fora;
- Provision of consultancy services at enterprise level;
- Financing of feasibility studies;
- Organisation of business meetings and match-making events in Egypt and Italy;
- Organisation of awareness-building and joint-learning workshops to facilitate exchange of experience and information between enterprises and institutions from Egypt and Italy; and
- Preparation of surveys on selected industrial sectors in Egypt to highlight the potential for industrial cooperation with foreign partners.

2.8. Addressing issues of equity

Given their high potential for employment creation and income generation, and their potentially low entry requirements in terms of

capital and human resources, SMEs are particularly well suited for the achievement of equity and social objectives. In this context, micro, small and medium-sized enterprises in rural areas, where more than half of the population of developing countries typically lives, play a particularly important role. They help to secure sustainable livelihoods and contribute to the growth of household incomes in rural areas by providing alternative and supplemental sources of income for small farmers and reducing unemployment and underemployment. The contribution of such enterprises to the creation of backward and forward linkages between the industrial and agricultural sectors, and hence to the creation of a basis for a resilient economy, is well known. Moreover, industrial micro enterprises can act as a seedbed for the emergence of growth-oriented formal SMEs, either within the lifetime of the original enterprise or over several generations.

Against this background, UNIDO pays special attention to promoting and supporting such rural enterprises. At the same time, however, UNIDO recognises that in the final analysis these enterprises will only be sustainable in the long term if they are able to compete freely in their particular business environment. UNIDO activities in this field therefore emphasise capacity-building of existing public and private sector institutions. In particular, they seek to strengthen the capacity of private sector organisations to help themselves and to become active partners of local authorities in promoting economic and social development. Specific support services offered by UNIDO's rural SME development programmes include the following elements:

- Assisting governments in identifying and taking measures to improve the policy environment for, and provide encouragement to, rural entrepreneurial initiatives, in particular for micro and small-scale enterprises;

- Designing training programmes on entrepreneurship for potential young entrepreneurs in rural areas and for local officials in the implementation of rural entrepreneurship development policies;

- Assisting rural entrepreneurs to develop collective self-help activities to establish common services, common procurement of inputs, and common marketing of their products;

- Developing programmes to link local private sector organisations with rural authorities, local service institutions and civil society organisations to improve entrepreneurship skills, enhance the capacity of SMEs to absorb new technologies, and create a conducive business environment for rural SMEs to expand into the formal sector;

Improving access to small-scale finance.

The UNIDO approach to the development of rural SMEs thus rests upon supporting local initiatives in the formulation of strategies and integrated service programmes, including through private-sector self-organisation. The aim is to reduce rural-urban imbalances by increasing non-farm income and employment opportunities for the rural population through appropriate technical co-operation activities in a broader political, economic, social, cultural and environmental framework. These activities are designed to help carefully selected groups of target beneficiaries, in particular the rural poor, and to complement other economic, agricultural, literacy, health and infrastructure development programmes.

Box 14

Promotion of micro- and small-scale industries in Mozambique

A project to promote and develop micro- and small-scale industries (MSIs) in the Province of Zambézia in Mozambique was launched in January 1999. By December 1999, the project had achieved the following results:

- Methodologies were developed for entrepreneurial training courses, and a draft manual was prepared for trainers;

Three entrepreneurial training courses were held in Milange, Guruè and Alto Molócue with 76 participants; and

Eight capacity-building training courses were carried out for the Provincial Directorate for Industry and Commerce, District Directors and various NGOs. The capacity building of NGO staff members who interact directly with about 700 clients for micro- and small financial services will result in improved outreach and quality of services for micro- and small entrepreneurs in the districts.

The project also assisted the Fondo de Fomento de Pequena Industria (FFPI), a credit fund for small industries, to establish and operate a branch office in Quelimane. The FFPI has so far approved seven loans. In addition, the project formulated a concept to create a One-Stop Office to facilitate the registration process for small businesses; prepared information material on the legal environment affecting small businesses and carried out awareness building measures among public administrators and entrepreneurs. Finally, the project has initiated steps to support and strengthen the service and advocacy functions of the Industrial and Commercial Association of Zambézia (ACIZA).

Similarly, levelling the playing field in terms of gender is a major concern. Although women can play a key role in industrial development in most developing countries, their potential is not yet fully realised. A serious gender gap has developed as women entrepreneurs have faced a variety of impediments when competing for scarce resources and services due to socio-cultural constraints, lack of legal rights, low

educational and skill levels, and limited access to financial resources. These constraints are making it more and more difficult for women entrepreneurs, who usually operate on a small scale and at low levels of technology, to enter and remain in markets. Their limited access to appropriate and new technologies makes it particularly difficult for women entrepreneurs to meet the requirements of environmentally sustainable production processes, ecolabelling and strict quality standards imposed by the globalisation of markets.

UNIDO follows two approaches in addressing the gender issue. The first is through mainstreaming, whereby the needs of both men and women entrepreneurs are analysed and solutions are introduced accordingly within a programme. The second is through the adoption of women-specific activities that address the particular needs and constraints of women in business in order to close the gender gap. This latter category of programmes is intended mainly to promote the social, technical and economic integration of women in industrial development through appropriate support at the policy, institution and sector level.

A typical UNIDO programme for women entrepreneurs would include:

Gender awareness building to develop the skills of decision-makers to assess the needs and constraints of women during policy formulation and implementation;

Gender-specific data and information collection and research, influencing the participation of women entrepreneurs in industry, policy advice; and

Capacity building including skill upgrading for women entrepreneurs combining business management and production techniques with confidence building and negotiation skills.

Experience has demonstrated that such programmes enable women entrepreneurs to respond effectively to economic challenges and opportunities, as shown in Box 15.

2.9. The need for an integrated approach to technical assistance

Finally, one of the lessons of experience that is particularly difficult to implement is the need to initiate SME development programmes that

Box 15
Women entrepreneurs in food processing in Tanzania

The Integrated Training Programme for Women Entrepreneurs in the Food Processing Industry in Tanzania has been implemented by UNIDO in cooperation with the Small Industries Development Organisation of Tanzania (SIDO) since 1993. It has sought to promote women's entrepreneurship in the food processing subsector through the improvement of existing micro enterprises managed by women, and the encouragement of new ventures with a potential to grow into SMEs. The programme addresses the major constraints that affect enterprise operation and growth through skill development and integrated technical, business and managerial assistance in food processing.

The principal activities of the programme include:

1. Skills development, involving the preparation of teaching materials, the training and capacity building of the programme's technical team, and the training of trainers and women entrepreneurs;
2. Monitoring and feedback to trainees and enterprises, involving post-training visits to women entrepreneurs to provide advice and technical and managerial support at the plant level;
3. Promoting enterprise networking to enable the entrepreneurs to benefit from economies of agglomeration;
4. Market development, including the conduct of periodic market surveys to identify product and market opportunities as well as problems and constraints affecting production and marketing;
5. The provision of a variety of support services, including assistance with the sourcing of equipment and inputs and the granting of SIDO micro-enterprise credit.

The programme has yielded impressive results in terms of jobs created, new products developed, individual entrepreneurial improvements, production and sales, contribution to family income, and sustainability. By December 1998 the training programme had resulted in the training of 37 trainers, the training of 240 women entrepreneurs in full-length (3-month) technical and/or entrepreneurial courses, and the training of 609 women entrepreneurs in short courses dealing with specific products or topics. From a mere 48 in 1994, the number of enterprises in operation had risen to 168, and the average investment per enterprise had risen from \$400 to \$2,000. In a particularly important development, the graduates of the training programmes established the Tanzanian Food Processors Association (TAFOPA) in 1997, which has introduced a common brand called SHIBE ("full satisfaction" in Swahili) for its products.

address technical assistance needs on a comprehensive, integrated basis. Although the need for this approach has long been recognised, it has proven difficult to put into practice because of the large numbers of organisations involved in private sector development, which include different government units, private sector development institutions, non-governmental organisations, and multilateral organisations. New programmes or projects, then, need to be not only complementary to what is being done by others, but to make a serious attempt at identifying the full range of needs. UNIDO is addressing this requirement by concentrating the bulk of its resources and efforts on developing integrated programmes for the countries that it serves, with

priority being given to African countries in the development of these new programmes. A description of one of these programmes that is currently being implemented in Guinea is given in Box 16.

Box 16
Integrated support to the national private sector development programme in Guinea

Guinea is one of the African countries for which an integrated UNIDO programme was formulated in November 1998. The UNIDO assistance covers support to a national private sector development programme (Programme Cadre de Soutien et de Développement du Secteur Privé). This national programme, elaborated with the financial support of UNDP and validated by the national stakeholders in September 1998, reflects a comprehensive and ambitious plan of action at the sectoral and cross-sectoral levels. Its implementation involves a vast range of national and local organisations and actors in both the public and the private sectors. The objective of the programme is to gradually reduce the barriers hampering private sector development, and to combat poverty by promoting the creation of income and employment opportunities.

A unit established under the lead Ministry, the Ministry of Trade, Industry and Small and Medium Enterprises, is responsible for the day-to-day coordination of the programme, including its ongoing funds mobilisation efforts. A board consisting of representatives of the major stakeholders will guide and monitor the overall programme, thus reflecting a private-public partnership and shared ownership in both the formulation and implementation of the national programme.

The technical assistance programme is managed by a multi-disciplinary and cross-organisational team that covers an array of fields such as: industrial policy, investment and technology promotion; SME policy framework, business support services, quality, metrology and standardisation; information; agro-industry; cleaner production and waste management.

UNIDO's support to the national programme consists of a package of complementary services at three levels:

- Policy and strategy implementation (including start-up support to the coordination of the national programme);

- Capacity building at the level of a number of service providers; and

- Enterprise-level support through existing institutions.

The focus of UNIDO's support is on sub-sectors where potential impact is highest: agro-industry including fisheries, building materials industries and mechanical industries. The types of enterprises targeted depend on the activities covered, varying from micro- and small enterprises (such as artisans in the traditional textile sector) to formal, medium-sized enterprises (such as the ones seeking partnerships with foreign investors).

The programme involves a range of local partners that are expected to work together in a network to create synergies not only among UNIDO services but also among local institutions. The local partner institutions vary depending on the nature of the activities and include, inter alia, the Ministry of Trade, Industry and Small and Medium Enterprises; the Chamber of Commerce, Industry and Handicrafts; the Investment Promotion Bureau; the Standards Institute; the National Environment Division; the principal agency to support SME development (l'Agence Autonome d'Assistance aux Entreprises); and NGOs.

2.10. Innovative new approaches - the private sector partnership programme

In view of the new economic realities facing developing and developed nations, the Secretary General of the United Nations has proposed a new partnership between the UN and the private sector as one of the cornerstones of his reform programme to prepare the UN system for the 21st century. Responding to this initiative, and recognising the benefits that SMEs in developing countries can gain from being linked to the supply networks of Transnational Corporations (TNCs), UNIDO has initiated a programme to forge an innovative partnership between SMEs and government institutions, civil society organisations and the business community with the objective of enhancing the efficiency, productivity and competitiveness of developing country SMEs.

This programme was launched on a pilot basis in India in late 1998, with the objective of improving the structure of the country's automotive component industry and enhancing the performance of domestic SMEs in this sector to transform them into globally competitive suppliers. This was intended to enable the components industry to meet the challenge of international competition in 2002, when India is required by the terms of its WTO agreements to end all local content restrictions on its domestic automotive producers. At the same time, this programme was also intended to enable the automotive producers to benefit from stronger backward linkages with a pool of efficient local component suppliers.

To achieve these goals, UNIDO has put together a multi-sectoral team comprising the following programme partners and interests:

The **Government of India** assumes overall ownership of this initiative; it ensures that a broad developmental perspective remains at the forefront; it will maintain a favourable business environment; and it acts as official counterpart and coordinator.

FIAT S.P.A. (represented through **Magneti Marelli**, the FIAT Group's automotive component system company) as a leading global player in automobile manufacturing. The company is raising its investment profile in India and has an obvious interest in rendering its investment as cost-effective as possible and in meeting local content requirements. It is thus interested in gradually building up an efficient industrial system to support its activities in India.

In terms of Indian private sector support institutions, the **Automotive Component Manufacturers Association of India** and the **Automotive Research Association of India** represent the voice of industry. They will be crucially important to ensure sustainability through institutional capacity-building, be it in specialised training, quality issues, or environmental dimensions.

The **European Institute for Management (INSEAD)** is among the leading global business schools. It operates a dedicated research centre on the automotive industry and commands specific contextual knowledge on Indian industry.

The **Prince of Wales Business Leaders Forum (PWBLF)** - as a global advocacy and capacity-building organisation for socially responsible business - has pioneered new modalities of cooperation between the UN, the private sector and civil society. In this role, the Forum enjoys full endorsement from the UN Secretary General. In India, as in many other countries, it acts as promoter and facilitator of UN-Business cooperation.

UNIDO itself has brought to the Programme its multi-dimensional expertise and existing networks. At Headquarters itself, a cross-organisational team has been set up under the lead of the Private Sector Development Branch. In addition, UNIDO's extensive network of Investment and Technology Partnership Offices is a key player to promote any investment opportunities emerging from the Programme.

The partnership programme has three defining characteristics, and must meet three further preconditions for its effective functioning. The defining elements are:

- To agree on joint objectives;
- To engage in a collaborative relationship towards achieving these objectives with clearly delineated roles for each partner; and
- To share responsibility and accountability for the outcome.

While these are necessary conditions for an effective partnership, they are not sufficient for the success of the partnership. The further preconditions for the effective operation of the partnership are:

- To consider it as an instrument, a modality, which may be time-bound, and not an end in itself;

To ensure that clear-cut benefits are generated by the partnership which exceed its costs; and
To share the resulting value-added in a manner perceived as being fair by all partners.

Box 17

The UNIDO-private sector partnership programme in India - first results

The automotive component industry in India is characterised by a large number of small enterprises with a low volume of production of varying quality. These conditions have played a part in inhibiting the evolution of effective supply linkages between component suppliers at different levels of the supply-chain, thus creating a highly fragmented market in which the automobile manufacturers must operate. The low local content and domestic value-added of new automobiles on the road in India bear witness to this fact.

In response, UNIDO has taken the initiative to launch a programme to upgrade the industry in partnership with FIAT, INSEAD, the Prince of Wales Business Leaders Forum, the Automotive Component Manufacturers Association of India (ACMA) and the Automotive Research Association of India (ARAI). The programme is intended to take advantage of the wealth of know-how, technology, and experience of each partner as a building block for the formulation and delivery of an integrated package of solutions for the automotive component sector.

Implementation of the programme commenced in December 1998. During the first phase, which lasted until the end of 1999, a demonstration approach was adopted to provide expert advice to the participating small and medium-sized component suppliers at the shop-floor level. Specifically, the activities of this phase focussed on inducing non-capital changes by using world-class manufacturing (WCM) methods such as single-minute exchange of die (SMED), 5S activities (organisation, neatness, cleaning, standardisation and discipline), variations of the Kanban system and other recognised methods of generating productivity gains. The objective of the first phase of the programme was to help increase the production volume of export-quality components as well as employment levels in the participating enterprises.

At the end of the first phase, the partnership programme was found to have yielded significant results in three areas:

- Substantial technical improvements (reflected in productivity increases) and heightened awareness resulting from the application of modern manufacturing methods;

- Sound market approaches developed through workshops and seminars, leading to a far-sighted market vision and marketing strategies capable of creating sourcing and joint-venture opportunities; and

- An emerging culture of continuous improvement which also fosters collaborative efforts among participating enterprises, such as networks and other mechanisms for information exchange and experience sharing.

A comprehensive system was devised to measure the quantitative changes resulting from the programme. The major results included:

- A reduction in the average through-put time in all participating enterprises by 52% from 15.3 to 8.1 days;

- An increase in shop-floor training from negligible levels to an average of more than 238 days per month;

- A reduction in absenteeism by 39%;

- A increase of 53% in the application of standard operating procedures (SOP); and

- An average increase in production space by 25% through the use of 5S methods, improved stock control and the application of single-flow as opposed to batch production methods.

The pilot programme, as applied to the automotive components industry in India, meets all of these criteria. The recently concluded first phase of the programme has consequently achieved remarkable successes, as described in Box 17, and the second phase is currently being drawn up. In view of the successes achieved so far, moreover, UNIDO has decided to expand this programme to cover other sectors in other countries with other partners. Negotiations are under way with potential partners in such industries as engineering, telecommunications and information technology, and life sciences. In addition, UNIDO has begun to codify the experiences gained so far into a comprehensive set of guidelines based on these experiences.

3. SUMMARY AND CONCLUSIONS

This paper has shown that the industrial sector in general and industrial SMEs in particular continue to play a pre-eminent role in driving the process of economic and social development. At the same time, however, the forces of globalisation and domestic trade liberalisation have given rise both to significant opportunities and to considerable risks for SMEs in developing countries and countries with economies in transition. These same forces have also dramatically altered the scope for public-sector support for SMEs, and the methods that can be effectively employed to provide this support.

An intense debate is in progress within the development community on best practices and on lessons learned in promoting SMEs. A new sobriety is gaining ground in assessing the widespread failures of the past - of trying to protect SMEs rather than exposing them to competition; of trying to build up huge and centralised state capacities to support SMEs rather than creating a decentralised network of service providers, etc. Some of the best practice principles identified by the Donor Committee for Small Enterprise Development, for instance, are:

- To work with groups of SMEs to ensure a joint learning process and experience-sharing for the targeted industry as a whole as well as greater cost-effectiveness for development agencies;
- To insist on at least partial cost recovery for the services provided;
- To involve the private sector directly as a provider of services; and
- To design a framework for performance and impact measurement.

These are all principles embraced by UNIDO, which is an active member of the Donor Committee. In addition, UNIDO strongly believes

that a holistic approach must be adopted towards SME development - that efforts to promote the development of SMEs must take into account related policy issues, the need to strengthen appropriate institutional capacities in the public and private sectors, the provision of required business development services, the encouragement of networks between SMEs and links with other enterprises and institutions, and the integration of SMEs into global value chains. In addition, UNIDO also believes that there is a role for the promotion of SME development on equity grounds, for example in the context of rural employment and income generation schemes or in the context of women entrepreneurship development programmes, so long as efforts are made to ensure that these schemes operate within the highest possible degree of economic rationality under the prevailing circumstances.

Through its many years of global involvement in promoting industrial SMEs as the specialised agency of the United Nations system for supporting the industrial development efforts of developing countries and countries with economies in transition, UNIDO has acquired a uniquely extensive degree of experience and expertise in all of these fields. As indicated above, this has enabled the Organisation to develop a wide range of services to address either any specific weaknesses in the operating environment for SMEs, or to formulate and implement comprehensive integrated packages of measures to promote SME development. In a particularly exciting development, this existing portfolio of services is currently being expanded through the conceptualisation of a new form of SME promotion system in partnership with transnational corporations in order to benefit from the access to capital, technology and markets that they can provide.

The judicious adoption of such support measures, as and when necessary, will go a long way towards enabling SMEs in developing countries to take advantage of the opportunities offered by the process of globalisation while reducing the risks.