

UNIDO Partnership Programme: Joining Hands with Business to Promote Industrial Development

by Wilfried Luetkenhorst, UNIDO

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SUPPORT TO THE PRIVATE SECTOR AND INDUSTRIAL PARTNERSHIP DEVELOPMENT

UNIDO Partnership Programme:
Joining Hands with Business to
Promote Industrial Development



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Executive summary

The present paper demonstrates how international industrial partnerships can contribute to the development of small and medium enterprises by integrating them into the production networks of transnational corporations. In its first part, the paper provides empirical evidence on the overwhelming predominance of the private sector in economic and industrial development. This is reflected in both the growing role of private flows, in particular foreign direct investment, from OECD countries to developing countries and countries in transition and in the increasing share of private investment in domestic capital formation. The paper then introduces the concept of global value chains and argues that issues related to systemic competitiveness and related governance structures need to be addressed if SMEs are to benefit from inclusion in such value chains. This is followed by presenting the case for public-private partnerships in bringing about conducive policies, effective institutional support systems and concrete support programmes for enterprise upgrading. Such partnerships increasingly also involve cooperation between the UN system and the business community. In its final part, the paper presents an innovative Partnership Programme developed by UNIDO. Its overall approach and main principles are elaborated which is followed by a presentation of the concrete results and impact achieved in applying this Programme in support of the automotive component industry in India.

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I. Introduction

This paper presents an example of UNIDO's new initiative to intensify its cooperation with the private business community, in particular to work with transnational corporations and other partners with the ultimate objective of improving the performance and increasing the competitiveness of small and medium enterprises (SMEs). The presentation of the specific case – the UNIDO Partnership Programme for the automotive component industry in India – is preceded by more general reflections on the rationale for multi-dimensional public-private partnerships and on the rationale for enhanced cooperation between the United Nations and the global business community.

II. Overall context

1. The increasing role of the private sector

Without any doubt, the private sector has gained predominance as the main force driving economic development in general and industrial development in particular. This has been largely the impact of the widespread disenchantment with the poor outcome of public sector-led development strategies and the redefinition of the role of the state from planning economic results to enabling and facilitating economic dynamism.

As a result of the rapidly advancing processes of globalization and market liberalization, international flows of private capital have increased sharply in recent years. While the bulk of these flows have remained confined to the developed regions of the world, there has nevertheless been a dramatic increase in the flow of private capital to the developing countries and transition economies since the early 1990s.

This trend is highlighted in recent OECD data which show an absolute increase in the volume of private capital flows to DAC-recipient countries from US\$ 53 billion in 1991 to almost US\$ 292 billion in 1996. Even after the downturn in such capital flows prompted by the financial

crises in Asia and elsewhere in the developing world, their overall volume amounted to more than US\$ 147 billion in 1998.

Even more impressive than the growth in the absolute volume of private capital flows during this period has been the shift in the relative shares of official development finance (ODF) and private flows from donor to recipient countries. With ODF flows having remained largely static, fluctuating in a comparatively narrow annual range of US\$ 73 billion to US\$ 88 billion, the result has been an almost complete reversal of these shares between 1991 and 1998. Whereas ODF flows accounted for some two-thirds of total capital flows to OECD DAC recipient countries in 1991, this share had fallen to only about one-third by 1998. The interim values for 1996, before the downturn in private flows prompted by the financial crises, are even more pronounced – in that year ODF flows had fallen to less than 20% of the total. These trends are illustrated in Figure 1.

Within the category of private flows, foreign direct investment (FDI) is assuming a particularly significant and dynamic role, and by 1998 accounted for almost half of all financial flows from developed to developing countries. By comparison, the corresponding figure for 1991 amounted to less than 20%, as also illustrated in Figure 1.

An alternative indicator of the growing importance of the private sector in generating economic growth in developing countries is given in Figure 2. This figure shows that the share of private fixed investment (both domestic and foreign) in total fixed investment increased substantially in almost all developing regions of the world between the 1970s and the 1990s. 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 regions¹.

¹ See International Finance Corporation, Trends in Private Investment in Developing Countries, Statistics for 1970-1996, December 1998, figures recalculated.

Figure1

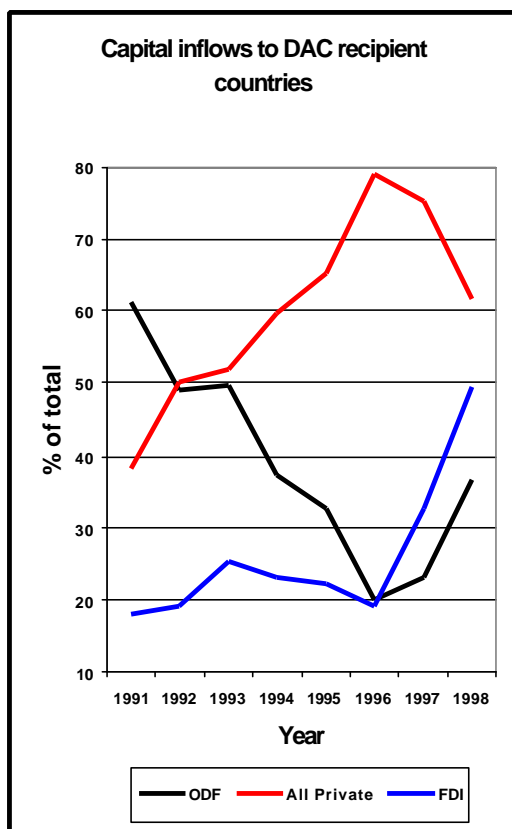
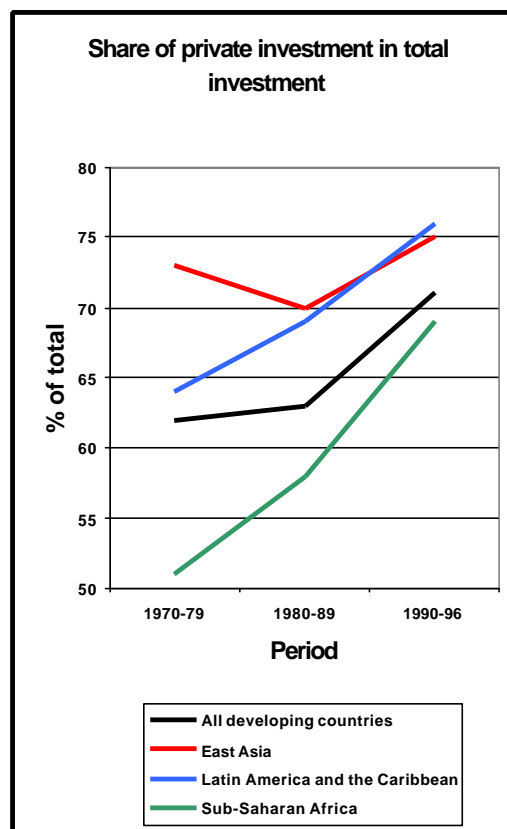


Figure2



2. The importance of global value chains

The ongoing process of globalization, i.e. the increasingly international organization of economic production systems, is reflected in a rapid intensification of cross-border economic transactions, in particular, as shown in the preceding section, in terms of FDI. International investment and technology flows, driven largely by long-term strategies of transnational corporations as major players, have reduced the economic significance of geographical distances. Countries around the globe find themselves in competition with each other as potential investment locations. This competition is determined by a variety of factors. Generally, it can be observed that the economic regulatory frameworks governing the attraction and operation of foreign investment in various countries have converged substantially thus losing their significance in shaping corporate investment strategies. At the same time, simple labour cost advantages are losing in relative importance, with the result that it is non-price factors (such as product quality and reliability and the related skill requirements) which assume a greater role.

Within this global economic scenario, the challenge for the majority of developing countries is twofold: first, not to be bypassed by internationally mobile investment flows², and second, to ensure that foreign investment is brought to bear on the domestic economy in terms of generating broader developmental impact. In a nutshell: not to get caught in a situation where enhanced integration into the global economy would lead to increased development disparities within the domestic economy. Being part of the global economy - if it is to be politically and socially sustainable - must tangibly affect the economic realities and the lives of people in the developing countries in terms of additional employment, broad-based regional development and eventually poverty alleviation.

At present, available data point in the opposite direction. Income inequality tends to increase both between and within countries. Income differentials between the richest and the poorest fifth of the world population are increasing at an accelerating pace: from 30: 1 in 1960, to 60: 1 in 1990, and to 74 in 1997. Within countries, the trend towards more pronounced income inequality applies to such divergent cases as China (as a latecomer to global markets), Chile (as an early liberalizer), and the transition economies of Central and Eastern Europe, not to speak about the worsening situation in most African countries.³

A key mechanism for coupling global integration with domestic development is the promotion of linkages between investing transnational corporations on the one hand and local small and medium enterprises on the other with a view to pulling them into international value chains as suppliers of parts, components and services. Tens of thousands of companies are active in investing across national borders thereby generating more than three quarters of world trade. Clearly, many of these companies have a genuine economic interest in enhancing the sourcing of production inputs from the local economy and thus in upgrading the required capabilities of small and medium enterprises which are part of their vertical supply chain. This in turn leads to demanding managerial and technical requirements being placed on those SME suppliers which are integrated into global just-in-time delivery systems.

In this context, there is a clear trend to be observed of TNCs favouring long-term, trust-based and stable relationships with a limited number of SMEs. There is a premium on reliability and adherence to quality standards and most TNCs are actively pursuing strategies to cut down the number of direct SME suppliers and rely on vertical tiering structures. The implications for SMEs are twofold. On the one hand, barriers to entry are rising for SMEs seeking to become

² According to the latest available data, the whole of Africa continues to attract only an insignificant portion of all FDI flows: 1.2 per cent of the total and 5 per cent of FDI flowing into developing countries. See UNCTAD, World Investment Report 2000: Cross-border Mergers and Acquisitions and Development, New York 2000

integrated into global value chains. On the other hand, opportunities for market creation and eventual technological upgrading are significant for a select number of more sophisticated SMEs. “Many TNCs switch from multi-domestic organization patterns to more complex forms of global networking among their affiliates. As a consequence, they urge some of their suppliers to become global players, thus raising the barriers to entry for local SMEs. On the other hand, TNCs tend to specialize in certain core capabilities and outsource the provision of non-core products and services, thus creating new opportunities for ancillary (mostly small and medium-sized) companies.”⁴ At the same time, competitive pressures are stronger than ever before within an overall environment that does no longer allow recourse to trade-related investment measures (TRIMs) such as mandatory local content regulations.

What the above brief analysis implies is that the integration of SMEs into global value chains is by no means an automatic process. Obviously, a lot depends on the specific industrial sector involved: whether value chains are producer-driven (like in automobile production) or buyer-driven (like in clothing), whether one looks at high-tech or low-tech production processes. By and large, however, the demands on SMEs in terms of skills, technology mastery, quality and reliability have greatly increased.

This in turn implies that the interaction between the business community, specialized support institutions and government becomes a crucial factor in generating a national, or often local, competitive system that is attractive enough to induce the integration of SMEs into global value chains. In a strategic perspective⁵, this would, inter alia, entail:

- A clearly spelled out industrial vision in terms of sectoral and technological priorities allowing a targeting of specific types of FDI and value chains
- Provision of critically important infrastructure, both in terms of physical infrastructure (including telecommunication facilities) and institutional infrastructure (e.g. technology institutions, provision of business development services, creation of business centers or incubators, standardization and metrology bodies, quality certification bodies etc.)
- Supplier development programmes, through assistance in quality management, continuous improvement techniques, and skill upgrading programmes.

³ See Magarinos, Carlos A., Marginalization versus Prosperity. Reflections on the Development Agenda, Vienna (mimeo), September 2000, p.21; Kaplinsky, Raphael, Spreading the Gains from Globalization: What Can We Learn From Value Chain Analysis?, IDS Working Paper 110, Brighton 2000, p. 5.

⁴ Altenburg, Tilman, Linkages and Spill-overs Between Transnational Corporations and Small and Medium-sized Enterprises in Developing Countries – Opportunities and Policies, German Development Institute, December 1999 (mimeo), p.4.

⁵ This relates to what Lall calls the ‘strategic DFI dependent’ development path. See Lall, Sanjaya, Learning from the Asian Tigers: Studies in Technology and Industrial Policy, London 1996.

In view of the above requirements, the importance of various dimensions of governance in global value chains becomes obvious. From here it is only a small step to make a convincing case for public-private partnerships, i.e. for concerted efforts by all stakeholders involved. This is a reflection of the increasing complexity of governance structures which, within global value chains, involve dimensions of global standards, national laws and policies, and industry-specific monitoring and execution.

Examples of legislative, judicial and executive value chain governance⁶

	Exercised by parties internal to chain	Exercised by parties external to chain
Legislative governance	<ul style="list-style-type: none"> • Setting standards for suppliers in relation to on-time deliveries, frequency of deliveries and quality 	<ul style="list-style-type: none"> • Environmental standards • Child labour standards
Judicial governance	<ul style="list-style-type: none"> • Monitoring the performance of suppliers in meeting these standards 	<ul style="list-style-type: none"> • Monitoring of labour standards by NGOs • Specialized firms monitoring conformance to ISO standards
Executive governance	<ul style="list-style-type: none"> • Supplier chain management assisting suppliers to meet these standards • Producer associations assisting members to meet these standards 	<ul style="list-style-type: none"> • Specialized service providers • Government industrial policy support

3. The role of Public-Private Partnerships

Government-industry partnerships⁷ – or, more broadly, public-private partnerships (PPPs) - have come to be recognized worldwide as very effective strategic approaches to enhance competitiveness. They can be applied, and are actually applied, at different levels:

- In their most ambitious manifestation, such partnerships can be at the **national level**: aimed at improving macro-economic framework conditions through the consensus of government, industry, trade unions and relevant research institutions;
- PPPs can also be applied at the **regional level**, as e.g. so well demonstrated by certain regions of Italy in the context of SME cluster development. Here, the typical practice has been for local governments to work with industry associations and local

⁶ See Kaplinsky, op.cit., p.13.

⁷ For a systemic account of the issues related to the growing role of development partnerships, see: UNIDO, Public-Private Partnerships for Economic Development and Competitiveness, Vienna, April 2000.

support organizations, such as financial institutions and specialized research centers, to upgrade regional and local economic systems;

- PPPs can also be aimed at **specific sectors** seeking to jointly initiate upgrading and restructuring programmes; and, finally,
- Partnerships between the business community and the **United Nations** add a relatively new dimension which the Secretary-General, Kofi Annan, has recently advocated as part of his so-called Global Compact (see section 4 below).

The surging interest in PPPs can be explained by many reasons. In addition to those referred to above in the context of the increasing importance of global value chains, the following reasons are noteworthy:

- There is the recognition that governments alone can set policies but may often lack the financial resources, administrative capacity and technological know-how to ensure their effective implementation. In short, they can guide but not drive economic development – a point which became almost universally accepted in the 1980s.
- It was only more recently that also the reverse got acknowledged, namely the limitations of a purely market-based development paradigm. While liberalization and deregulation of economies do provide powerful incentives and pressures to upgrade and improve, they do not by themselves create the capabilities required to do so.
- Closely related, a critical insight that has emerged in recent years, is the systemic nature of competitiveness. Enhancing competitiveness is as much a question of getting framework conditions and prices right at the macro-level as it is a question of corporate strategies at the micro-level, and – in between at the so-called meso-level - of the manner in which an economy organizes the generation and application of knowledge. Unless these elements move hand in hand, unless they are based on a joint vision and shared principles, at the end of the day all efforts may turn out to be futile.

One response to these insights has been an increase in the use of public-private consultation mechanisms and partnerships in areas that used to be reserved to the public sector. The idea is that there are certain policy areas in which inputs from the private sector can make a difference in terms of both better design and better implementation. A related reason is that consulting the private sector on policy initiatives allows for some contentious issues to be negotiated before they become policy. Obviously, this can serve to reduce opposition and ease the implementation of policies.

Like any other partnership, public-private partnerships need to fulfill certain conditions in order to function properly, be effective and yield results. Any partnership has at least three defining characteristics and three 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

The further preconditions for a partnership to actually work would appear to be:

- to consider it as an instrument, a modality – often time-bound - and not as 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.

4. UN/Business cooperation: A new alliance

In this changing global environment, linking its own dwindling resources to the surging resources of private business has become a strategic necessity for the UN development system. Clearly, the reasons for such a linkage extend beyond the mere objective of attracting additional funding to the UN. More importantly, building partnerships with the private business sector could help to leverage UN support programmes by enhancing their access to markets, technologies, and specialized expertise. In this broader perspective, fostering UN/business cooperation becomes an issue of effectiveness and impact; it turns into a question of sustainability of development cooperation efforts within the market logic.

Conversely, the business community has begun to recognize the potential benefits of entering into partnerships with international development institutions, both bilateral and multilateral. Inter alia, this reflects a growing need on the part of large transnational corporations (TNCs) to respond to social pressures and demands for greater accountability to diversified groups of stakeholders. Increasingly, major TNCs – in measuring and publicizing the impact of their worldwide activities - are now complementing conventional indicators of financial profitability

with indicators accounting for environmental sustainability and social responsibility (concept of the “triple bottom line”).

While a formal agreed definition of corporate social responsibility is yet to be found, the concept can be tentatively defined as “the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society as large.”⁸ Its key dimensions thus are related to human rights, decent work conditions, environmental protection, community involvement, and supplier relations – along with established procedures allowing continuous monitoring and reporting to all stakeholders. Building partnerships between business and those affected by its operations constitutes an integral element in this new inclusive approach to corporate strategy making.

This gradual convergence of interests between public-sector development agencies and the corporate world is giving rise to a growing emphasis on public-private partnerships (PPPs) as a vehicle for promoting economic and social development. This interest is being expressed both at the bilateral level by many national development cooperation institutions, and at the multilateral level by agencies and organizations both inside and outside the UN system. At the same time, private sector enterprises are also showing a rapidly growing interest in such partnerships, both at an individual level and through their representative organizations.

In the bilateral arena, a significant example of such a commitment to the PPP concept is given by Germany, where the Minister for Economic Cooperation and Development has declared that her ministry will make such partnerships a firm component of Germany’s bilateral development cooperation activities. In justifying this approach, she has pointed out that the international community will not be able to overcome the social, ecological and political problems of the world without mobilizing the economic and technical resources of the private sector. To be able to confront the challenges facing it in the future, it will have to seek the contribution of other relevant players – such as SMEs, local community groups, international NGOs and transnational corporations – in the future development of the world.⁹

In the multilateral sphere, the Secretary-General of the United Nations has frequently reiterated his strong commitment to the development of such partnerships between the UN system and the private sector as an integral part of his reform programme for the UN. This approach was put forward particularly strongly at the World Economic Forum in Davos in

⁸ World Business Council for Sustainable Development (WBCSD), Stakeholder Dialogue on CSR, The Netherlands, 6-8 September 1998

⁹ Wiczorek-Zeul, H., Entwicklungszusammenarbeit und Privatwirtschaft – Strategische Partnerschaft für eine nachhaltige Entwicklung, Entwicklung und Zusammenarbeit, Vol. 41, No. 2, February 2000, p. 36.

January 1999, when he called upon world business leaders to “unite the powers of markets with the authority of universal ideals” and to “reconcile the creative forces of private entrepreneurship with the needs of the disadvantaged and the requirements of future generations”. To achieve these objectives, he invited business to “embrace and enact” a Global Compact based on nine principles covering human rights, labour and the environment, both in their individual corporate practices and by supporting appropriate public policies.¹⁰

This new approach calls for a significant deepening of the traditional links between the UN system and the private sector, which in the past have essentially been confined to commercial transactions whereby the latter was regarded as no more than a supplier of the goods and services required by the former. Various proposals have been put forward within the UN system to achieve this deepening of its relationships with the private sector with the aim of “finding new synergies and learning how to make the most of each other’s comparative advantages”, as the Secretary-General has noted.

The Secretary-General’s call for a Global Compact with the international business community has received a positive response from significant parts of the business community. In September 1999 the International Chamber of Commerce (ICC) organized a meeting, the Geneva Business Dialogue, to bring together business leaders and the heads of the United Nations agencies and other intergovernmental organizations to debate the impact of globalization on the world economy. Another organization representing the corporate sector that has taken a strong lead in promoting the realization of firm partnerships between the multilateral development agencies and the business community is the Prince of Wales Business Leaders Forum (PWBLF), which is actively participating in a number of joint projects with UN agencies, including UNIDO, and other multilateral organizations. Most recently (in July 2000), the Secretary-General convened a meeting in which some 30 globally operating corporations subscribed to the principles contained in the Global Compact.¹¹

¹⁰ These principles comprise: Support and respect for the protection of international human rights within its sphere of influence of business; ensure that corporations are not complicit in human rights abuses; freedom of association and the effective recognition of the right to collective bargaining; elimination of all forms of forced and compulsory labour; effective abolition of child labour; elimination of discrimination in respect of employment and occupation; support for a precautionary approach to environmental challenges; initiatives to promote greater environmental responsibility; and encouragement for the development and diffusion of environmentally friendly technologies.

¹¹ For a broader perspective on the conceptual issues related to the Global Compact, see: Kell, George and Ruggie, John, Global Markets and Social Legitimacy: The Case of the ‘Global Compact’, paper presented at an international conference on “Governing the Public Domain beyond the Era of the Washington Consensus? Redrawing the Line between the State and the Market, York University, Toronto, 4-6 November 1999.

5. The role of UNIDO

With its mandate and focus on industry, UNIDO is the quintessential UN agency working for the benefit of and directly with the private sector. The Organization offers a wide range of services, variously delivered at the policy, institutional and enterprise level, which are aimed specifically at supporting the development of the private sector in its client countries. These services include policy advice, institutional capacity building in such fields as cleaner production and QSM, and entrepreneurship development through such measures as enterprise networking, the provision of business development services, and investment and technology promotion. In providing these services, UNIDO works very closely with such business groups as industrial associations and chambers of commerce and industry.

However, UNIDO's close relationships with the business sector have hitherto been predominantly linked to the recipient countries, with limited efforts made so far to systematically enter into partnerships either with globally operating corporations from OECD countries or with global business representative organizations. The most significant such partnership to date has been the one aimed at promoting the automotive components industry in India, which was launched in 1998 in collaboration with FIAT S.p.A. Significant achievements in enhancing the productivity of the participating component manufacturers have been recorded in the recently concluded first phase of this project (see chapter IV. below).

At the same time, the need for such partnerships in the industrial field is being heightened by the rapid spread of globalization. This is bringing considerable new challenges as well as opportunities to manufacturing enterprises in the developing countries. The challenges arise from the increasing liberalization of international trade flows under the terms of the WTO agreements, which are exposing these enterprises to ever greater international competition in domestic as well as foreign markets. The opportunities, by the same token, arise from the increasing ability of these enterprises to integrate themselves into global value chains and penetrate export markets as a result of the steady reduction in regulatory controls on world trade.

In this context, macro-economic stabilization and the putting in place of an effective institutional architecture are clearly not sufficient for making SMEs prosper. It has been observed over and over again, above all in Africa but also elsewhere, that macro-level policy reforms – as essential as they certainly are – do not automatically trigger the expected growth

response. They need to be complemented by measures aimed at strengthening supply capacities, by improved access of SMEs to technical and managerial skills, to sources of information and knowledge, research and development. While access to various types of finance is also important, the key constraints to SME growth rest with their limited ability to access and absorb technology-related learning allowing them to produce specialized products in the quality demanded by today's markets. If the objective is to connect SMEs to global markets and to counter the threat of their marginalization in many developing countries - then technological and managerial competence are crucial for these firms to reach the required threshold level of competitiveness.

In a nutshell: For SMEs in developing countries, enhanced competitiveness provides the answer both to overcoming the challenges and exploiting the opportunities offered by the new environment of trade liberalization and globalization. One avenue to achieve this is by engaging in partnerships with international corporations, who can provide the financial and technological resources to help developing country enterprises raise their competitiveness while at the same time helping them to gain access to new markets. For UNIDO, with its mandate to support the industrial development of developing countries and economies in transition, it therefore becomes a natural corollary of the changed dynamics of the new international economic environment to bring transnational corporations into the ambit of its activities and promote such partnerships.

If carefully designed and managed, cooperative endeavors between UNIDO and the business community can hold a great promise for realizing win-win-scenarios with tangible benefits for both sides – and above all, for SMEs in developing countries. “The scope for partnerships between the public and the private sector goes well beyond the level of policy formulation. Indeed, private business, including transnational corporations, can also be mobilized as an effective partner for the promotion of SMEs.”¹²

¹² Magarinos, Carlos, Speech delivered at the OECD Ministerial Conference on SMEs, Bologna, 13 June 2000.

Win-Win Scenario

UNIDO

- Leveraging scarce resources
- Enhanced impact by linking technical cooperation with commercial resource flows
- Improved access to markets, technology and specialized information
- Working with cutting-edge industry experts
- **Ultimately: providing a better service and greater impact for recipient countries**

Business

- Image-building through UN linkage
- Access to UNIDO's global information networks and contacts
- Dialogue with support institutions and policy-makers
- Support in accessing difficult markets (e.g. LDCs)
- **Ultimately: combining profitability with increased corporate social responsibility**

Recipient Countries

Better quality foreign investment combining competitiveness with broader local development impact

III. The UNIDO Partnership Programme: Objectives and general approach

In response to the challenges of globalization, and recognizing the significant benefits to be reaped from a constructive goal-oriented partnership between UNIDO and actors from other domains, UNIDO has launched an innovative approach to build multi-sector partnerships between private sector actors – both industrial corporations and civil society organizations – country governments and business and support institutions, and UNIDO itself.

The objective of the UNIDO Partnership Programme is to improve the structure of an industrial sector in a particular country and to enhance the performance of the domestic SMEs in this sector to transform them into globally competitive suppliers. As a result, foreign investment flowing into the country would be able to benefit from stronger backward linkages with a pool of indigenous local component suppliers thus increasing overall development impact. This is also to be seen in the perspective of the entering into force of new WTO provisions prohibiting mandatory local content rules.

The Programme pioneers an ambitious multi-sector partnership with clear benefits for all partners involved. In particular, the build-up of efficient domestic supporting industries in the selected sector will bring:

- Additional productive employment and income generation
- Increased local production content and, thus, reduced import requirements
- Broad technological and managerial learning effects.

The Programme takes advantage of the wealth of know-how, technology and experience of each partner. They are used as building blocs for formulating and delivering an integrated package of support services. Through a demonstration approach, expert advice in areas such as management, quality upgrading, productivity enhancement, market access and supply chain management are provided to carefully selected enterprises.

The involvement of the most important sectoral industry institutions ensures dissemination and wider impact of specific advice and support rendered at company level.

UNIDO itself brings to the Programme its multi-dimensional expertise and existing networks. At headquarters, a cross-organizational team has been set up under the lead of the Private Sector Development Branch to ensure that all relevant parts of the Organization contribute to the

success of the Programme. In addition, UNIDO's extensive network of Investment and Technology Promotion Offices is a key player to promote investment opportunities emerging from the Programme.

Last, but not least, international civil society organizations and research institutions, bring their knowledge and expertise in responsible business practices, global benchmarks and best practice solutions to SMEs in the automotive component sector to help improve their competitiveness in international markets.

Thus, each of the partners plays an important and distinct role within the Partnership. Only the combination of the specific strength and expertise of each of them guarantees the sustainable success of the Partnership Programme for the benefit of small and medium sized enterprises.

- *The Government* provides political endorsement and recognition for the Programme as well as financial support as a manifestation of national ownership.
- *Industrial Corporations* provide inputs on technical and managerial know-how and skills relevant to the sector and introduce aspects of international best practice.
- *Civil Society Organizations (CSOs)* are the voice of its membership and provide access to existing database and information systems on the target sector. International CSOs ensure that "proper investments" are made within the context of a positive public policy dialogue with the Partners. National CSOs are crucial for the location and sustainability of the service in the target market.
- *Research Institutions* expose managers of participating enterprises to international best practices and provide technical training and diagnostic studies at the enterprise level.
- *UNIDO* plays an important role in identifying potential partners negotiating agreements between the various partner and serving as a central information nod for the Programme to ensure that relevant information and data is distributed to the Partners. Furthermore, UNIDO contributes its special expertise in SME development, quality management, investment and technology promotion and cleaner production.
- *Target Companies* do not only receive shop-floor training but participate actively in the development of the Partnership. As they are the ultimate beneficiary it is imperative to integrate them into the partnership process at the earliest stage.
- *International top engineers*, accessed through the participating multinational corporations, are responsible for both guiding the design and implementation of the enterprise oriented shop-floor and training events and training the national junior engineers. This setup not only enables concrete improvement of enterprise competitiveness but guarantees a sustainable service in the long-term for participating SMEs.

IV. A case study: Supporting the automotive component industry in India

1. Partners and support services

It was in November 1998 that the UNIDO Partnership Programme for the automotive component industry in India was launched. This Programme has as its two main objectives, to improve the structure of this sector and to enhance the performance of second and third tier, small and medium component manufacturers. The Programme has united a number of important actors from different domains (both public and private) behind this common purpose. In addition to UNIDO, these are

- the Government of India which provides overall guidance and support
- the Automotive Component Manufacturers Association (ACMA) and the Automotive Research Association of India (ARAI) as representative bodies and voice of the Indian industry
- FIAT, represented through Magneti Marelli, contributing their global expertise in building up local supply chains
- INSEAD, one of the leading international management schools, contributing global best practices and benchmarks in supply chain management, and
- the Prince of Wales Business Leaders Forum (PWBLF) bringing to the Programme their significant expertise in designing Partnership Programmes and specifically in applying socially responsible business practices.

The Programme went through a first demonstration phase in the Western region where in 1999 twenty companies benefited from intensive expert interventions at the shop floor, complemented by classroom training, and national and international study tours. The focus was on bringing about process improvements based on world class manufacturing methods. The international experts working under the Programme were given explicit instructions to define and promote non-capital changes which would have the greatest impact on enhancing enterprise competitiveness.

2. Impact achieved in phase I

The Partnership Programme in India has provided small- and medium-scale automotive-component enterprises with hands-on technical help by a multidisciplinary team consisting of representatives from all participating Partners. The aim of Phase I was to develop a sustainable and economically viable model for transferring methodologies and know-how to such enterprises. Recipients can then improve their performance to compete more effectively in the global market.

The Partnership Programme 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 and leading to a far-sighted market vision and marketing strategies capable of creating sourcing and joint venture opportunities.
- 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.

2.1 Productivity gains and heightened awareness

a) Methodology

The collective expert approach to detecting, defining and solving shop-floor problems accelerated the development of a "culture of continuous improvement" in the enterprises receiving assistance. To this end, emphasis was put on facilitating recipients' access to modern production and management methods and tools that have a lasting impact on the way they do business. Technical assistance was delivered to the participating enterprises in three ways: intensive expert interventions; seminars and workshops; and national and international study tours.

Phase One of the Partnership Programme in India focused on bringing about non-capital changes by using world-class manufacturing (WCM) methods such as single minute exchange of die (SMED), 5S activities (organization, neatness, cleaning, standardization,

and discipline), variations of the Kanban system and other recognized methods of generating productivity gains. In some instances the application of these methods and tools led to immediate and visible changes on the shop-floor; other techniques will require more time to be fully incorporated into the daily operations of an enterprise.

Given that sustainable change can only come about when worker behaviour adjusts to the rationale behind modern production methods, the Partnership Programme formulated two separate sets of impact indicators to measure changes that took place during the course of the Programme: performance indicators and awareness indicators.

The Programme deployed four international experts: two specialists in automobile manufacturing; one specialist in plastics; and a fourth expert with extensive experience in rubber and rubber-extrusion products. Each of them was given explicit instructions to define and promote non-capital changes that, in their opinion, would have the greatest impact on improving enterprise competitiveness.

While the implementation of Phase One of the Programme ran for nearly nine months, shop-floor interventions took place over a six-month period, between May and October 1999. Following basic training in modern manufacturing methods in March and initial plant visits in April, shop-floor interventions began in May. Up to ten days of direct expert assistance was delivered in three rounds with a minimum three weeks in between to allow enterprises to assimilate the lessons learned and adapt to them. During these six months, one workshop on lean manufacturing methods and marketing, and three study tours (two national and one international) took place to help solidify the knowledge gained during shop-floor interventions.

Performance indicators

To measure the quantitative changes resulting from the Programme, the Partners defined eight critical areas where change was important for improving competitiveness (improvements in these areas were measured using 21 variables and 32 sub-variables):

- Shop-floor space utilization and management
- Time utilization
- Product quality
- Worker skills and formation of multiple skills
- Communication flow
- Changes in technology and processes

- Factor environment and safety
- Market knowledge

Awareness indicators

To measure and monitor changing levels of awareness regarding the importance of continuous improvement and strategic planning, the Programme designed a set of awareness indicators to detect changes in the mindset of managers and workers. Using 18 variables and 24 sub-variables, awareness of the importance of continuous improvement was measured in four areas:

- Logistics
- Efficiency in production
- Quality
- Production and process adaptation

Using a single data-collection form, the experts gathered data for the awareness indicators at the beginning, in the middle and at the end of the demonstration phase.

The resulting data are intended to serve at least three purposes by being used as:

- Monitoring and planning tool for managers and supervisors
- Feedback system allowing workers to see the impact that certain changes have on their daily work
- Method by which experts can identify areas where further technical assistance is required.

The Programme has had a notable impact on the performance of the participating enterprises as well as in raising awareness among manager and shop-floor workers regarding the relevance of applying advanced production and management methods in order to ensure continuous improvement.

Wherever possible, the Programme has tracked quantitative changes. In instances where quantitative data was not obtainable, a qualitative description of the impact was provided.

The following section offers a consolidated assessment of the impact that the Programme has had on 20 enterprises that participated in Phase one. For a closer look at the

Programme's impact, an enterprise-by-enterprise analysis is available on request to UNIDO.

b) Impact measured by performance indicators

As part of performance monitoring, sample data was collected on the impact of the Programme on company turnover. For the six enterprises where such data was tracked, the average increase in turnover was approximately 40 per cent during the six-month period of technical assistance. A summary of technical improvements at shop-floor level is presented below.

Faster and more efficient production

The average lead-time required for production and completion of goods was reduced by 52 per cent. Thanks in part to the application of world class manufacturing methods, machine set-up time dropped, preventive maintenance was introduced and expanded, and reaction to repair needs was improved.

The average time required to complete a single product was reduced from 15 to 8 days. This productivity improvement is the reflection of measures to upgrade the condition of existing equipment as well as of improvements in the interaction between workers and their equipment.

Investing in people, the foundation for continuous improvement

The rising awareness regarding the correlation between training and productivity improvements helped convince enterprise managers to make a substantial commitment to improving worker skills. This is reflected in the enormous increase in in-plant training.

While there was virtually no training available to shop-floor workers at the beginning of the Programme, after six months, the participating companies were providing their workforce with an average of some 240 hours of each training month.

Worker absenteeism reduced by 39 per cent

Thanks to improved communication in the factory as well as better safety and working conditions, absenteeism among blue-collar and white-collar employees and contract workers declined substantially.

For enterprises operating in rural areas - where many factory workers must also tend to family farms or shops - reducing absenteeism, particularly during the planting and

harvesting seasons, is of critical importance. The reduction in absenteeism largely contributed to meeting production schedules and improving productivity.

Quality improvements through standard operating procedures

The application of standard operating procedures (SOPs) contributed to improving product quality. In a number of enterprises, returns from customers, rework and scrap were reduced through the establishment of quality circles and other mechanisms.

The most dramatic improvements occurred when enterprises introduced SOPs. Prior to participating in the Programme, only 16 per cent of all operating procedures were standardized and documented at shop-floor level. Following the technical interventions of the experts, more than 69 per cent of all shop-floor operations were standardized and documented.

Better space utilization boosts production capacity

Through 5S campaigns and management and control of stocks, waste and scrap, as well as by applying single-flow as opposed to batch production methods, participating companies achieved an average increase in production space of 25 per cent.

Bridging the communication gap between management and workforce

Before joining the Programme, plant owners and managers rarely walked onto the shop-floor to chat with their workers. The Programme helped sensitize plant managers to the fact that continuous improvement can only be achieved through a close interaction between managers, engineers and shop-floor workers.

Combined with a greater sense of shared responsibility among workers, this realization encouraged managers to call regular meetings both at the shop-floor and the department level. In more than half of the cases, managers used shop-floor and department meetings or training as a venue for interacting with the workforce.

Minor technology changes

Given the key emphasis put on non-capital changes, very little technological improvement was anticipated for Phase One of the Programme. In a number of cases, quality and productivity improvements were achieved through the replacement of dies or other machining parts or modifications of existing equipment. As the Programme enters its second phase and new capital investment is made, an increasing number of technology-driven improvements are expected to take place.

Indian manufacturers show keen awareness of domestic competition

Indian enterprises are keenly aware of competition in the domestic market. The performance index showed very little or no change under the category "market knowledge", as virtually all of the managers responded positively in most market-related performance indicators from the onset of the Programme.

What the indicators did not monitor was whether the same enterprises were aware of trends in foreign markets and even possible threats from foreign competitors, particularly in light of the WTO provisions, which will take effect in 2002. This issue is expected to be taken up more closely in Phase Two of the Partnership Programme.

c) Impact measured by awareness indicators

Sharp increase in awareness of production efficiency issues

Physical changes resulting from the application of world-class manufacturing methods and other tools helped raise awareness among workers with respect to the direct correlation between their initiative on the shop-floor and productivity improvements.

This became a catalyst that helped bring about a change in the workers' mindset. Evidence of this transformation is reflected in the awareness indicators, reflecting a sharp increase in manager/worker awareness of production efficiency issues.

Linking quality to production efficiency

A quality plan and good housekeeping practices - combined with systematic data collection to monitor in-line rejection, customer rejection, rework, scrap, inventory and other production parameters - have helped sensitize managers and shop-floor workers to the linkage between quality and production efficiency.

Whether through the introduction of visual checks or establishment of quality circles, the response of the participating enterprise to the Programme's approach to quality is reflected in the 92 per cent increase in awareness regarding the importance of establishing a quality system.

Improving logistics

Establishing a flow-control information system, monitoring delivery performance, defining a formal purchasing function and establishing an emergency plan are some of the activities that helped improve awareness regarding the importance of company logistics and its effect on competitiveness. While awareness of production-efficiency and quality issues is closely linked to physical change on the shop floor, improvements in company logistics are not that visible. This is a partial explanation why the awareness rate has been steady - with modest improvements- throughout the Programme.

Capability in production adaptation still lagging

Only a few participating enterprises possessed the necessary expertise to facilitate joint design activity with customers. While most firms had enough engineering capability to make minor product adjustments and adaptations, only a few had enough for product design. Improvements in awareness in this field remained at a low level. This is an area to which Phase Two activities are expected to give a higher priority.

2.2 Sourcing and joint venture opportunities

From the beginning of the Programme, partners stressed that participating enterprises must place an adequate emphasis on developing a far-sighted market vision and a sound marketing strategy shared with the workers and accepted by them.

Many enterprises had never been exposed to foreign markets nor were they familiar with the demands of foreign partners. This meant that aside from the technical improvements on the shop floor, the need existed for the Programme to make managers aware of the potential demands of foreign markets and partners.

Through seminars and workshops conducted by the Partners and the Programme experts, the participating enterprises were exposed to the concepts of global sourcing, marketing, accounting and finance, delivery requirements, quality standards and costing. A growing awareness of these issues prompted a number of enterprises to develop marketing material and strategies geared towards meeting the requirements of foreign partners.

Selected enterprises had an opportunity to test their new marketing strategies when they participated in the "EquipAuto '99" in Paris, one of the leading automotive component exhibitions in Europe. All seven Indian enterprises, which participated in the event, identified a number of European companies interested in negotiating sourcing

arrangements. In addition, three companies found potential joint-venture partners, European companies interested in having goods manufactured in India.

2.3 Enterprise network and support group

The success of a demonstration is defined by its catalytic impact. Furthermore, a programme's impact is only sustainable if all partners take the initiative to find systems and procedures for ongoing service delivery and to propagate the lessons learnt both among themselves and to others. During Phase One, in particular during the training events and shop-floor interventions, it became clear that a proactive experience sharing was of utmost importance to the ultimate beneficiaries. Equally important was the expectation that the participating enterprise become showcases for their industry.

Throughout the Programme, Partners consistently encouraged and reinforced interaction among participants companies, but the latter's response was initially somewhat reluctant. Only by the mid-term review meeting did the situation take a sudden turn for the better. At that meeting, each enterprise manager was asked to make a short presentation of the impact that the Programme had had on the shop-floor activities of his or her company and of the difficulties faced in implementing certain recommendations. The exposure of bottlenecks and drawbacks in public generated a swell of interaction among the enterprises, many citing similar problems and explaining how they went about dealing with them.

Since the mid-term review meeting, an increasing number of enterprise managers have met informally, often visiting each others' factories to take a first-hand look at improvements based on technical assistance received under the Programme.

The Programme is using these exchanges to develop a more formalized structure, envisaging a "Partnership Club" for participating enterprises. The Club is expected to be a forum for exchange of technical information and to organize seminars and workshops. Many entrepreneurs already see the Club as a means of joining forces to promote a culture of continuous improvement.

2.4 Phase Two outlook: Emphasis on building institutional capacity

Following the completion of Phase One, the Partnership Programme will move to the Southern Region (Chennai, Bangalore, Hyderabad) to spread the lessons learned. The emphasis will be on institutional capacity building. The programme will work closely with local institutions to build up a cadre of Indian engineers able to provide technical services to SMEs in the automotive component sector. To meet this objective, a number of mentoring and training activities for local engineers, provided by international master engineers, are envisaged. This requires the direct involvement of and sponsorship by multinational industrial corporations operating in India.

Based on the experience gained in Phase One, the programme for Phase Two - and later for a nation-wide coverage - will be based on three principles:

- Direct shop-floor activities by international experts for participant enterprises
- Integration of as many SMEs into the Programme as possible
- Building up an institutional anchor which allows to provide services on a sustainable base.

The overall objective of the Partnership Programme is to complete the demonstration activities at the regional level, ultimately leading towards a national programme. Simultaneously, the Programme will strive to build up local institutional capacity that can function as an adequate supplier of affordable and reliable technical assistance to SMEs in the automotive component industry.

While phase I concentrated on efficiency gains through the introduction of continuous improvement techniques, phase II will give added emphasis to social issues (in particular worker safety, working conditions, and worker training and welfare programmes) and environmental issues (in particular the potential for introducing cleaner production techniques).