

# Annual Report 2011



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

*UNIDO Annual Report 2011*

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## Message from the Director-General

The past year has been a remarkable one for many reasons. In both quantitative and qualitative terms, UNIDO surpassed its excellent performance of 2009 and 2010, attaining a project portfolio of \$448.8 million, an increase of \$63.3 million over the already impressive figure reached in 2010. At \$166.7 million, the volume of project services delivered exceeded the previous record of \$159.6 million achieved in 1990 when the Organization had twice the number of staff. This demonstrates in the clearest manner possible how much further we have improved our efficiency and effectiveness.

We have reason to be very proud of these achievements, but we cannot afford to be complacent. While many countries, including least developed and middle-income countries, have voiced their profound appreciation for the support of UNIDO, we must always bear in mind that, as the specialized agency for sustainable industrial development, we must remain alive to the needs and requirements of all our Member States. In the 45 years that UNIDO has been in existence, there have been, I am glad to say, some dramatic improvements in the economies of many countries and a corresponding shift in what Member States expect from organizations like our own. Many no longer require our strategies aimed primarily at poverty reduction, but are looking for high-tech solutions to complex development challenges. In particular, many want to discard their old technologies in favour of new, clean ones or wish to put knowledge management systems in place.

In the coming year, I will make sure that UNIDO further aligns its services across its four pillars—technical cooperation, policy advisory, normative and convening functions—to the precise level of development of each partner country. I trust that readers will take the time to explore the depth

and breadth of our programmes and projects mentioned in this *Report* and recognize the palette of services that UNIDO can offer not only to the least developed countries, but also to middle income countries that are well advanced on the path to sustainable industrialization. I would like to draw the attention of readers to one of our latest initiatives, the UNIDO Institute for Capacity Development, described in the special feature of chapter 6 of this *Report*. The UNIDO Institute has much to offer countries at all stages of development, including those with strong economies and sophisticated industries.

The year under review was not without its challenges. We recognize that countries that have traditionally invested in multilateral development systems are now facing difficulties in doing so. For our part, this requires a greater commitment than ever before to achieving results, but we must be clear that such results should be in the context of the mandate given to us by all Member States. In this connection, our strong performance of recent years has not escaped the notice of many donors whose confidence in UNIDO has translated into a record level of funds mobilized.

UNIDO's success in 2011 was not serendipitous. It was the result of outstanding efforts on the part of the staff who put in long, hard hours of work at a time when the Organization was in the throes of a major change management exercise. Despite the fact that one sixth of the staff was heavily involved in what proved to be a very rewarding yet time-consuming transition, we achieved amazing results.

The challenges that we faced at our Headquarters in Vienna pale in comparison to the experiences of some of UNIDO's field staff. We kept in close contact with duty stations where the security situation was precarious and I would like to pay tribute to their resilience and



determination to perform to the best of their abilities in the face of personal danger. I was very relieved that no lives were lost or serious injury sustained by UNIDO staff members, but our thoughts are with those other organizations that were not as fortunate.

This year's *Annual Report* contains a wealth of information on the extensive range of services provided and results achieved by UNIDO during 2011, although it must by necessity only feature a representative number of snapshots and not the entire album. While the format of the *Report* is much the same as last year, we have responded to numerous requests for a factual and quantitative description of the impact of our services by including a cross-section of results-oriented factsheets on projects and programmes in different sectors and different regions in chapter 7. In an effort to disseminate the *Report* as widely as possible as well as to enhance the reading experience for our stakeholders, we will be releasing, on a trial basis, an electronic version of the *Report* for e-book readers and tablet devices, initially in three languages. Instructions to download the e-pubs and PDF versions of the *Report* will be made available on the Organization's website. I hope that the new e-pub format will make information on UNIDO even more easily accessible, in the most user-friendly manner possible and I look forward to your feedback.

In addition to describing the Organization's activities in 2011, the *Report* also provides a taste of better things to come. As the new systems brought in by our change management programme become fully operational, I look forward to a more detailed and systematic reporting of results achieved in future editions of the *Annual Report*. The special feature at the end of chapter 2 contains more information on this subject.

One of the highlights of the year that placed the world's spotlight on UNIDO was the convening in June of the Vienna Energy Forum that paved the way for the declaration of 2012 as the International Year of Sustainable Energy for All. Both the Forum itself and its many side events attracted a large audience that included eminent personalities involved in the energy debate. The Vienna Energy Forum is described as a special feature to chapter 5.

Throughout 2011, UNIDO has been fully committed to the forthcoming United Nations Conference on Sustainable Development (Rio+20), scheduled for June 2012 in Rio de Janeiro, Brazil. UNIDO has contributed extensively to the preparatory process and will support the implementation of the Rio+20 outcomes with a particular focus on the two major initiatives of Sustainable Energy for All and Green Industry. As an Organization, we are committed to ensuring that the objectives of these two initiatives are fully reflected in the proceedings and outcomes of the Conference and are incorporated in the Sustainable Development Goals that are expected to emanate from the Rio+20 process.

I would like to close by thanking you for your continued interest in, and support of, UNIDO. As I have already mentioned, 2011 was both a rewarding and a challenging year for UNIDO from which we will draw valuable lessons for the future as we strive to meet the expectations of our Member States.

Kandeh K. Yumkella  
Director-General

## MISSION STATEMENT

UNIDO aspires to reduce poverty through sustainable industrial development. We want every country to have the opportunity to grow a flourishing productive sector, to increase their participation in international trade and to safeguard their environment.

## Our Services: Growth with Quality

Growth with Quality means that we continuously improve and grow all our services, which are multidisciplinary and positively transform policies and institutions worldwide.

» WE OFFER SOLUTIONS: Bring global expertise and experience to address complex development challenges through integrated and high-impact services.

» WE ARE FLEXIBLE: Differentiate and adapt our approaches and methodologies according to the needs of countries at different stages of development.

» WE EXPAND OUR SERVICES: Widen our geographic scope and increase our delivery volume to serve more countries and people.

» WE ENSURE EFFECTIVENESS: Measure the impact that our services have on development in order to ensure the best possible results.

## Our Operations: Delivering as One UNIDO

Delivering as One UNIDO means that we are united in purpose and actions.

» WE EMPOWER OUR PEOPLE: Recognize and develop competencies and knowledge, encourage communication and innovative thinking, strengthen integrity and accountability and reward team achievement.

» WE SERVE OUR STAKEHOLDERS: Advance a culture of cooperation, responsiveness and ownership in addressing the needs of all our stakeholders.

» WE LEAD BY EXAMPLE: Demonstrate ethical and gender-sensitive leadership, motivate people, promote innovation and work in flexible and cross-organizational teams.

» WE MANAGE EFFICIENTLY: Improve the timeliness and cost-efficiency of all our services and create and use business processes that minimize bureaucracy.

» This year, partnerships—those in which UNIDO features as a player or those that it nurtures—are particularly significant.



## UNIDO: A valuable partner

The 2010 Annual Report had as a leitmotif running through the different chapters the theme of partnership. This year, partnerships—those in which UNIDO features as a player or those that it nurtures—are no less significant. It is fair to say that in the current global environment, the greatest chance of success in any given field of development cooperation is the result of pooled resources. UNIDO fills a very specific niche and boasts a level of expertise and specialization that is not found elsewhere. It does not run the risk of spreading itself too thinly by attempting to assume responsibilities that are ably dealt with by its partners with different areas of specialization. This chapter describes a number of activities, events and projects in which the partnership role of UNIDO is particularly relevant. It starts with the Organization's all important role as a partner to its Member States.

### Fourteenth session of the UNIDO General Conference

The fourteenth session of the General Conference, the Organization's supreme policymaking organ, took place in Vienna from 28 November to 2 December, 2011 with a thematic focus on making the new industrial revolution sustainable. The General Conference drew more than 700 participants from around the world representing over 140 Member States, including two Vice-Presidents and some 40 Ministers. The presence of senior representatives of several major partner organizations, including the European Union and the African, Caribbean, and Pacific Group of States (ACP), underlined the importance that UNIDO attaches to maintaining close links with organizations both within and outside the United Nations whose activities complement its own. Whether within the framework of its plenary and main committee meetings and side events or in the course of less formal meetings between members of delegations and UNIDO officials, the Conference offered a unique opportunity for UNIDO to benefit from a dialogue with its Member States.

The General Conference was officially opened by Michael Spindelegger, Vice-Chancellor and Federal Minister for European and International Affairs, on behalf of the host country, Austria. He underlined the importance of sustainable industrial development strategies in the present international development context. By integrating the concept of sustainability, UNIDO had placed industrial development in the context of the complex economic, environmental, social and security challenges that characterized the present era of globalization. In his opening comments, the Director-General referred to the strong strategic partnerships that UNIDO enjoyed both with its Member States and development agencies and donors such as the

European Union, the Global Environment Facility and the Multilateral Fund for the Implementation of the Montreal Protocol. UNIDO's partners, he affirmed, recognized the relevance of both the Organization's mandate and expertise to the changing development landscape. Bilateral partnerships, already strong, would grow considerably in the coming years, he added. In a statement delivered on his behalf, the United Nations Secretary-General, Ban Ki-moon, noted that the shift to a global green economy would require a new industrial revolution involving a large-scale transition to lower carbon emissions and resource-efficient growth. As part of this transition, the Secretary-General stressed the need to ensure that the benefits and opportunities resulting from this new model of growth and prosperity would be shared by all peoples.

In line with the thematic focus on the sustainability of industrial development, a number of technical sessions and round tables helped to share knowledge and expertise within the different regions (see "UNIDO's regional focus" below).

In the meetings of the Plenary and Main Committee, Member States adopted a number of important decisions and resolutions central to the operational activities of the Organization, including a resolution aimed at strengthening UNIDO activities in energy and environment. The resolution noted that the United Nations Conference on Sustainable Development (Rio+20), to be held in June 2012 in Rio de Janeiro, Brazil, offered a unique opportunity to secure political commitment for sustainable development and acknowledged that UNIDO had a valuable contribution to make to

the Conference, particularly in the promotion of green industry and sustainable energy options.

Other equally significant resolutions adopted by Member States dealt with reinforcing the role of UNIDO in the provision of advice to developing countries on industrial strategies and policies that promote competitiveness, economic diversification and structural change, and thus contribute to the economic, social and environmental sustainability of the industrial sector and to social inclusion. In addition, Member States decided to establish a UNIDO trust fund for programmatic activities in Latin America and the Caribbean that would target poor countries in the region. The trust fund will provide support for services in thematic areas of particular interest to the region, including support for strategies to meet challenges in global, regional and subregional trade and economic integration; support for the building and sharing of industrial policies and industrial knowledge; and assistance in the efficient use of energy for productive activities.

During his closing statement, the Director-General expressed his appreciation for the overwhelming support for UNIDO's green industry initiative and energy activities and assured Member States that UNIDO would continue to work closely with them in all project areas to achieve positive development results in the years ahead. He also referred to a favourable evaluation of UNIDO by the Norwegian Agency for Development Cooperation (Norad) (described in greater detail in the special feature, chapter 4) and noted that UNIDO had again been rated the most effective implementing agency by the Multilateral Fund for the



Jeremy Rifkin, author of *The Third Industrial Revolution*, addressing the General Conference.  
Photo: UNIDO

Implementation of the Montreal Protocol for the eighth time in the past 10 years.

The Conference was preceded by the Fourth Ministerial Conference of the Least Developed Countries that took place in November. Discussions on the theme “LDC structural transformation and UNIDO support for the implementation of the Istanbul Programme of Action”, led to the adoption of the 2011 Least Developed Countries Ministerial Plan of Action. The Plan of Action was based on seven commitments aimed at improving the living conditions of LDC populations through the framework of a global partnership.

## UNIDO and the United Nations family

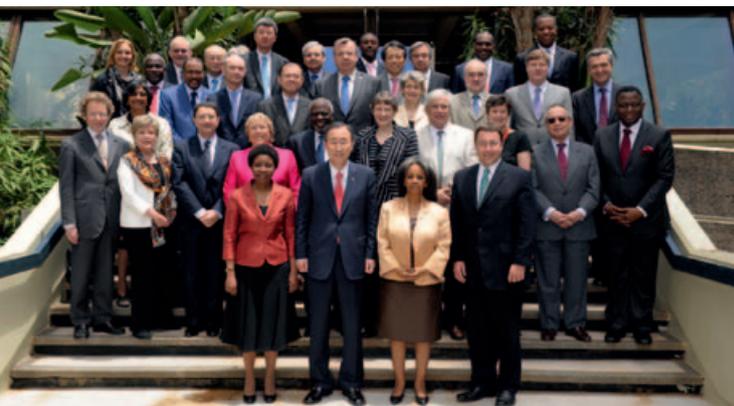
During the course of 2011, UNIDO played a key role in a number of inter-agency processes aiming to promote coherence within the United Nations; similarly, the Organization took part in intergovernmental conferences looking at improved effectiveness and efficiency in the wider international development system.

### United Nations Chief Executives Board for Coordination and its subsidiary bodies

UNIDO continued to participate actively in the work of the United Nations System Chief Executives Board for Coordination (CEB) that provides a forum for the chief executives of the various bodies of the United Nations to review global

issues of common interest and establish joint positions. The Organization was also closely involved in the work of the three CEB subsidiary bodies: the High-Level Committee on Programmes (HLCP), dealing with global policy issues, the High-Level Committee on Management (HLCM), covering administrative matters and the United Nations Development Group (UNDG) that promotes development objectives at the country level within the United Nations system. UNIDO contributes to the work of each of these working mechanisms through its participation in regular meetings, input into papers and common positions and the preparation of system-wide guidelines and advocacy tools.

At the Spring 2011 session of the CEB, held in Nairobi in April, the Director-General introduced the retreat discussion on the topic of “Beyond Rio+20”, covering issues related to the green economy, access to energy and ways in which the 2012 United Nations Conference on Sustainable Development (Rio+20) could herald a new era of sustainable and inclusive growth. In the aftermath of the CEB session, the Secretary-General invited the Director-General to participate in a dedicated Principals Group he had established to advise him on the contribution of the United Nations system to the two themes of Rio+20: the green economy in the context of sustainable development and poverty eradication, and the institutional framework for sustainable development. At the 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Durban, South Africa, in December, the Director-General joined the Secretary-General in a panel discussion at a CEB side event.



The United Nations System Chief Executives Board for Coordination, under the chairmanship of Secretary-General Ban Ki-moon, met in Nairobi in April.  
*Photo: UN Photo/Mark Garten*



The Director-General displays the green passport distributed to those attending COP17 in Durban, while visiting the UNIDO booth.  
*Photo: UNIDO*

The participation by UNIDO in the deliberations of the High-Level Committee on Programmes extended both to its regular twenty-first and twenty-second sessions, held in March and September in New York, and to additional discussions aimed at developing a common position towards the Rio+20 Conference and the climate change issue. At the twenty-first session, the Committee commended the UNIDO Director-General for his leadership in promoting the energy agenda.

At the twenty-first session of the High-Level Committee on Management, held in Paris in March, UNIDO was represented on a subcommittee on improved efficiency and cost control measures, charged with preparing recommendations on how the United Nations system could improve efficiency and control costs that do not translate directly into results. The subcommittee's initial recommendations were discussed by the CEB at its April session, at which time the Secretary-General requested HLCM to support the overall change management process in the United Nations by undertaking further work on how the United Nations could do more with less. Over the following months, UNIDO continued to contribute to the work of HLCM and the subcommittee, as well as to the change management process for the United Nations system initiated by the Secretary-General.

The year under review saw a high-profile involvement of UNIDO in the work of the United Nations Development Group (UNDG) as the third pillar of CEB (next to HLCP and HLCM), with the mandate to guide and coordinate the United Nations system's operational development work at the country level.

UNIDO staff assumed responsibility as the Vice-Chair of UNDG and the Chair (and Vice-Chair) of the Steering Committee of the Expanded Delivering as One Funding Window for Achievement of MDGs, as well as the Co-convenor(s) of the Resident Coordinator System Issues Group and the Joint Funding Sub Committee of the Joint Funding and Business Operations Network. A meeting of all convenors of UNDG working groups and networks was held in Vienna on 19 May 2011.

UNIDO worked closely with the United Nations Department of Economic and Social Affairs and sister agencies in the UN system to prepare for the triennial comprehensive policy review of operational activities for development (TCPR) of the United Nations system that was presented to the Economic and Social Council (ECOSOC) in July. The current report also serves to report on UNIDO operational activities in line with the TCPR. In the latter

half of the year, UNIDO embarked on preliminary discussions with sister agencies on the process of formulating the quadrennial comprehensive policy review (QCPR) that will be finalized at the United Nations General Assembly in 2012.

In terms of system-wide efforts to improve the effectiveness of aid and development, UNIDO played an active part in the UNDG/HLCM task team on results reporting. The Committee produced a paper on best practices as an input to the Fourth High-level Forum on Aid Effectiveness that took place in November/December in Busan, Republic of Korea. The Forum established for the first time in its outcome document—the Busan Partnership for Effective Development Cooperation—an agreed framework for development cooperation that embraces traditional donors, emerging economies such as Brazil, China, India and South Africa, civil society organizations and private funders. The Forum examined the vital and ever-growing role of the private sector in development cooperation and by way of example cited the partnership between UNIDO and the Swedish International Cooperation Development Agency (Sida) on the one hand, and the Swedish manufacturer of commercial vehicles, Scania, in Iraq on the other. A UNIDO side event entitled “Networks for Prosperity: Using Knowledge Networks to Achieve Development Goals” was well attended and generated a great deal of interest. A publication of the same name was issued under the funding window “Development and the Private Sector” of the Spanish MDG Achievement Fund (MDG-F). Through this window, the Spanish Government together with the United Nations addresses the urgent need for supporting a vibrant and responsible private sector in development processes in order to achieve agreed development objectives, including the MDGs (see also chapter 6).

Looking at the United Nations system's efforts to achieve the Millennium Development Goals and prepare for the post-2015 framework, UNIDO continued to contribute to the Secretary-General's MDG Gap Task Force, with particular emphasis on achieving the targets of Goal 8 concerning market access (trade), access to affordable essential medicines and access to new technologies. In December, UNIDO joined the United Nations System Task Team on the Post-2015 United Nations Development Agenda, which will produce a report in mid-2012. The report will serve as the foundation for work to be undertaken by a new high-level panel on the post-2015 agenda, to be established by the Secretary-General in 2012. Separately,

UNIDO is also contributing to the post-2015 Task Team established by the Inter-Agency and Expert Group on MDG Indicators.

### Delivering as One

The Delivering as One (DaO) initiative allows the United Nations family to deliver its services in a coordinated manner through a consolidated presence in each country. With one programme and one budgetary framework, the initiative gives an enhanced role to the United Nations Resident Coordinator, while building on the strengths and comparative advantages of participating organizations. One of the benefits is the avoidance of duplication and eventually a reduction of transaction costs, leaving more resources available to support partner countries in the achievement of their development goals. Eight countries are currently part of the initiative: Albania, Cape Verde, Mozambique, Pakistan, Rwanda, United Republic of Tanzania, Uruguay and Viet Nam. In addition, some 40 countries have voluntarily adopted the DaO approach.

During 2011, UNIDO reviewed the status of its commitments under DaO and identified possibilities for further development during monitoring missions in Mozambique and Viet Nam as well as four self-starter countries: Botswana, Lesotho, Malawi and Namibia. Headquarters staff visited the UNIDO field office in Cape Verde to assist in the preparation of the new One Programme for the cycle beginning 2012. Work continued on a project launched in 2008 entitled “Enhancing the support and coordination of UNIDO involvement in United Nations Delivering as One and PRS/CCA/UNDAF processes”. The support programme was designed to increase the United Nations contribution to the

economic and industrial development priorities of Member States through an even more effective involvement by UNIDO in country-level activities. UNIDO technical cooperation activities can now be appropriately reflected in the United Nations response to national development plans and priorities and the achievement of internationally-agreed development goals including the MDGs.

### Sustainable Energy for All

In September 2011, the United Nations Secretary-General launched a pioneering new initiative—Sustainable Energy for All—to mobilize urgent global action. The initiative brings all sectors of society to the negotiating table: business, governments, investors, community groups and academia. Its three interlinked objectives are to ensure universal access to modern energy services, double the rate of improvement in energy efficiency and double the share of renewable energy in the global energy mix. The Secretary-General nominated Kandeh K. Yumkella, Director-General of UNIDO, and Charles O. Holliday, Chairman of the Board of Directors of the Bank of America, as co-chairs of a newly established High-Level Group on Sustainable Energy for All. Together with other distinguished members, they will mobilize commitments from all sectors of society to expand energy access, improve energy efficiency and increase the uptake of renewable energy.

The United Nations General Assembly designated 2012 as the International Year of Sustainable Energy for All. In his capacity as Chair of UN-Energy—established in 2004 to ensure coherence within the United Nations family of

“Energy is the golden thread that connects economic growth, increased social equity and an environment that allows the world to thrive ... Development is not possible without energy, and sustainable development is not possible without sustainable energy.”

Ban Ki-moon, Secretary-General of the United Nations

**“The Secretary-General’s initiative on Sustainable Energy for All** presents a new path to partnership to create the conditions for successful investment in the energy transformation that the world requires. Supplying modern energy services to the billions who now lack electricity and clean fuels is not just a moral imperative but a unique business opportunity—a huge market in itself and one that will create new levels of prosperity and demand for goods and services of all kinds. Equipping the rest of the world with low-carbon energy technologies for a sustainable planet is an even bigger, trillion-dollar opportunity. If we work together—businesses, investors, governments, and civil society—to create these markets and reduce risk, investment will surely follow.”

Charles O. Holliday and Kandeh K. Yumkella, Co-Chairs of the High-level Group on Sustainable Energy for All



Charles O. Holliday, Chairman of the Board of Directors of Bank of America and Kandeh K. Yumkella, Director-General of UNIDO, co-chair the High-level Group on Sustainable Energy for All. The United Nations General Assembly named 2012 as the International Year for Sustainable Energy for All (see [www.SEFA2012.org](http://www.SEFA2012.org)).  
*Photo: UNIDO*



The Círculo de Montevideo—a prestigious think-tank of leaders of financial, development and social institutions in Latin America and a valued partner of UNIDO—held its annual session in Vienna in June, during the Vienna Energy Forum. Discussions focused on current global changes and trends and the role of the countries in the Latin American region.  
*Photo: UNIDO*

organizations in the field of energy—the Director-General has been closely involved in preparatory activities leading up to the Year.

The Vienna Energy Forum, held in June and featured in chapter 5, brought together more than 1,200 participants from 125 countries. It addressed a range of issues, including the key building blocks for developing a strategy for prioritizing the energy access agenda, as well as energy efficiency and reducing global energy intensity. Taking place concurrently with the Forum was a round-table Ministerial Meeting on Energy and Green Industry that enabled ministers to share experiences including best practices, programmes and other steps in support of scaling up of clean energy and greening industrial development.

## UNIDO Offices

### Brussels

Throughout 2011, the UNIDO Brussels Office kept the door open for a policy dialogue between UNIDO and European Union (EU) institutions. In March, the Director-General met senior officials of the European Union Commission. The Vice-President of the EU Commission and Commissioner for Industry and Entrepreneurship, Antonio Tajani discussed cooperation in support of Africa's industrial development. At the invitation of the Director-General, he delivered a keynote speech to the 19th session of the Conference of African Ministers of Industry (CAMI) meeting later that month in Algiers in which he proposed the organization of a joint AU-EU-UNIDO high-level Conference on Industrial Cooperation in 2012. The EU Commissioner for Development, Andris Piebalgs expressed interest in developing cooperation with UNIDO within the context of the new EU "Agenda for Change" that will place more emphasis on jobs and wealth creation through the development of the private sector, while the Commissioner for Climate Action, Connie Hedegaard, confirmed the need to include "Sustainable Energy for All" as an essential component of climate change related policies and negotiations. The Director-General also met representatives of the EU's recently created diplomatic service, the European External Action Service, to discuss UNIDO-EU cooperation at the field-level.

UNIDO-EU collaboration currently focuses on trade capacity-building, including establishing industrial norms and standards for competitiveness and consumer protection,

as well as on modernizing the private sector for jobs and wealth creation in poor countries. UNIDO hopes to expand this collaboration to other areas, such as sustainable production and consumption, energy efficiency and promoting renewable energy for productive use. The presence of a UNIDO representative in Brussels has enabled joint EU-UNIDO programming with a strong regional focus on Africa and thematic focus on the environment.

**“Over the years UNIDO has proven itself a reliable and effective partner, acting as a catalyst in transforming developing countries’ economies by reinforcing productive capacities and fostering investments that add value to local production, stimulate economic diversification and strengthen local competitiveness.”**

**Andris Piebalgs, European Commissioner for Development**

The UNIDO Office is a member of the United Nations Brussels Team (UNBT) composed of 27 agencies, funds and programmes represented in Brussels that contributes to a dialogue on various EU policies. The UNIDO Office coordinated the UNBT approach to the EU Directorate-General for Research and Innovation that paved the way for a strategic dialogue and closer future cooperation and prepared the ground for the signature of a relationship agreement with the Secretariat of the African, Caribbean, and Pacific Group of States (ACP) at the UNIDO General Conference (see section on Africa below). Africa Industrialization Day was celebrated at the ACP premises.

The Office organized numerous meetings between UNIDO directors and other staff and counterparts at the European Union. It also ran training sessions for some 200 staff members at Headquarters on effective collaboration with the Organization's main donor.



Signing of a memorandum of understanding between UNIDO and the African, Caribbean, and Pacific Group of States in Brussels in March, which led to the conclusion of a relationship agreement in November.  
 Photo: Courtesy ACP Secretariat

The Office facilitated the participation of UNIDO in various “green” events including the EU Green Week in May under the motto “getting more out of using less”; the ’11 Green Growth Investment Forum, organized in October by the Mission of the Eastern Caribbean States to the European Union; and the one-day conference organized by the ACP Secretariat in November on renewable energy. Together with colleagues from UNIDO Headquarters, the Office participated in the Brussels launch of special events. At the launch of the UNIDO/UNCTAD report *Economic Development in Africa Report 2011: Fostering industrial development in Africa in the new global environment* a high-level discussion took place that brought together eminent panelists including the ACP Secretary-General, the President of CAMI and senior representatives of the EU and European Commission. The Office also organized a panel discussion with a high-level attendance at the launch of the UNIDO report *Networks for Prosperity*.

The *2011 Africa Investor Survey* was presented at the second meeting of the SME Finance Forum organized in March with the support of the Vice-President of the EU Commission and Commissioner for Industry and Entrepreneurship. In September, the Head of the UNIDO Brussels Office made a keynote speech at the opening of an exhibition of the European Parliament on the growing role of South Africa in the United Nations. On the opening day of the fourteenth session of the General Conference of UNIDO in November, the EU and UNIDO presented a report entitled *The cooperation between UNIDO and the*

*European Union: A partnership for inclusive growth and sustainable development.*

## Geneva

One of the principal duties of the UNIDO Office in Geneva is to liaise closely with the 22 international organizations based in Geneva as well as 23 Permanent Missions to UNIDO. By acting as a conduit for information between these bodies and UNIDO Headquarters and field offices, the Geneva Office was able to make a valuable contribution to the work of the Organization, whether in the formulation of strategies and approaches, technical cooperation projects or global forum activities. The Office also provided support and backup for some 60 missions undertaken by UNIDO staff to Geneva.

Among the United Nations bodies and specialized agencies in Geneva, it maintained particularly close contact with the United Nations Economic Commission for Europe, United Nations Conference on Trade and Development, International Trade Centre, International Labour Organization, International Telecommunication Union, World Intellectual Property Organization and the World Trade Organization, not only by attending regular or ad hoc meetings, but also through discussions with specific units and services on opportunities for cooperation with UNIDO.

Despite a 50 per cent cut in its professional staff, the UNIDO Office in Geneva participated in over 130 events in 2011 organized by the international community in Geneva including a range of conferences, workshops and seminars.

It met regularly with United Nations working groups, such as the CEB Inter-Agency Cluster on Trade and Productive Capacity and the United Nations Special Programme for the Economies of Central Asia that in turn led to the formulation of at least 10 technical cooperation projects in which UNIDO was involved. The Geneva Office had an opportunity to promote UNIDO and its services at more than 20 side events and technical presentations held in the course of the year on the occasion of major international meetings. These included an introduction to the UNIDO Contaminated Site Investigation and Management Toolkit (see chapter 5) and the training module on risk assessment for priority chemicals. Both initiatives were presented at a UNIDO side event held during the Fifth Meeting of the Conference of the Parties to the Stockholm Convention on Persistent Organic Pollutants, held in Geneva in April.

The Geneva Office provided support for a presentation on energy management for industries in developing countries and emerging economies at the launch of the new ISO 50001 Energy Management Standard in June (see chapter 5). It also assisted in the launch of a joint UNIDO-UNCTAD publication entitled *Fostering Industrial Development in Africa in the New Global Environment*, during the 58th Trade Development Board of UNCTAD in September. The latest issue of the *Trade Capacity-Building Resource Guide* was presented to the Third Global Review of Aid for Trade in July.

The Geneva Office collaborated with other organizations on a number of inter-agency papers and assisted in the preparation of major documents, such as the joint concept note on the *Development of Productive Capacities and Trade: The Key to Inclusive and Sustainable Growth*, issued by the United Nations Cluster on Trade and Productive Capacity for the Fourth Conference on LDCs that took place in Istanbul, Turkey, in May. The Geneva Office maintained close contacts with the Standards and Trade Development Facility as well as with the Executive Secretariat of the Enhanced Integrated Framework.

Contacts were not limited to international organizations. The Geneva Office participated in a number of local events organized by the private sector of interest to UNIDO including a meeting of Business Africa Strategic Partners on “Advancing Private Sector Development and Governance in Africa”, held in May; a seminar in September organized by the Global Network of Export-Import Banks and Development Finance Institutions on “Enhancing South-South Cooperation: Promoting SMEs Finance”; and the Salterbaxter Sustainable Business Forum 2011, also in September.

Regular meetings with the Permanent Missions to UNIDO located in Geneva helped improve the flow of communications with Headquarters and facilitated their participation in the fourteenth session of the General Conference.

## New York

The strategic location of its Office in New York ensures UNIDO a permanent place at the international negotiating table. The Office represented UNIDO during the sixty-sixth session of the United Nations General Assembly and its various committees, in particular the Economic and Financial Committee (Second Committee). The Director of the New York Office attended meetings of the CEB and HLCP (see above). The Office provided support to the Director-General during his missions to New York, especially in his functions as Chair of UN-Energy and Co-Chair of the Secretary-General’s High-level Group on Sustainable Energy for All. It also kept UNIDO Headquarters staff informed of system-wide trends and developments within the United Nations family.

Through its New York Office, UNIDO continued to provide strategic and substantive support to UNDG and was able to assume a lead role in its various subsidiary bodies. The Director of the New York Office serves as Co-Convenor of the UNDG Working Group on Resident Coordinator System Issues. He was also selected by UNDG to chair its Reference Group on the United Nations’ management and accountability system, the key guidance and accountability tool for the United Nations system.

The New York Office participated in regular meetings of the Inter-Agency Advisory Panel that reviews and advises the UNDG Chair on candidates for Resident Coordinator vacancies.

Throughout the year, the New York Office contributed to critical development issues, among other things, in the areas of sustainable energy for all, sustainable development (Rio+20) and green industries, by organizing or participating in high-level events and providing inputs to pertinent United Nations system-wide reports. Together with Headquarters colleagues, it also represented UNIDO in consultations on the 2012 quadrennial comprehensive policy review of the United Nations system.

The New York Office organized or co-organized six events during the year, all of which had a thematic focus on environment and energy and served to draw the attention of Member States and the international community to issues such as

universal access to energy, energy efficiency, the role of renewable energy, greening and green industries, resource efficiency and cleaner and sustainable production. During an event organized in March by the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States on promoting universal access to essential services in least developed countries, UNIDO hosted an energy panel to discuss the linkage between energy and economic, environmental and development issues.

In anticipation of the 19th Session of the Commission on Sustainable Development (CSD), UNIDO and the Permanent Mission of the Philippines to the United Nations organized a seminar in April to discuss ways to ensure that the needs of developing and transition countries and emerging economies are effectively addressed in the 10-Year Framework of Programmes on Sustainable Consumption and Production. The seminar confirmed that international efforts to speed up the transition to sustainable consumption and production patterns should build on existing experience and institutions, such as the Resource Efficient and Cleaner Production Programme (RECP) of UNIDO and the United Nations Environment Programme (UNEP). During the May session of CSD, a side event organized by UNIDO and UNEP informed delegates of key achievements and lessons learned from sustainable production initiatives over the past two decades and provided a platform to discuss opportunities and mechanisms for scaling up such initiatives. This was closely followed by another joint UNIDO-UNEP event on the occasion of World Environment Day on 2 June on the theme of green economy: ecosystem services and resource efficiency with special focus on forests and forest industries.

In September, UNIDO worked together with the United Nations Global Compact on the United Nations Private Sector Forum 2011. The Forum focused on the role of the private sector in supporting the Secretary-General's strategy on sustainable energy for all. Finally, Africa Industrialization Day on 22 November was the occasion of a further UNIDO energy-related event. An interactive panel on the theme of "Sustainable Energy for Accelerated Industrial Development in Africa" evaluated past efforts and looked at future needs in this crucial area. The panel agreed that African governments must develop policies that insist on local or regional processing of their abundant energy resources for local or regional distribution and global use.

The New York Office played an important role in helping to raise the profile of UNIDO through a number of outreach activities. These included presentations at various forums in and around New York and Washington, D.C. on topics ranging from new industrial challenges facing the Baltic Sea region after the financial crisis at a panel discussion organized by the Permanent Mission of Germany and the Baltic Sea Forum, to a keynote address on the critical role of science and technology in Africa, delivered at a colloquium on "Education, Science, and Technology in African Development" held at Princeton University. UNIDO initiatives on gender-sensitive industrial development were highlighted through a presentation on the issue of women's economic empowerment at the Tenth Session of the Inter-Agency Network on Women and Gender Equality in February.

## UNIDO's regional focus

UNIDO regional programmes are the first port of call for Member States seeking UNIDO support. Their role is largely one of coordinator, advocate and intermediary. They work in partnership with governments, development agencies, national and regional institutions, academic bodies, the public and private sector and other counterparts in the countries within their purview and coordinate with both the substantive offices of UNIDO and its field offices. It is their responsibility to analyse and process country requests, identify and develop technical cooperation projects in response to the needs of specific countries and mobilize funds from donors in the region. They also initiate global forum activities, provide policy guidance and support to UNIDO Field Offices and play an important advocacy role. The following paragraphs describe briefly some of the achievements of the regional programmes during 2011, although most of the projects and events described elsewhere in this report rely on their support.

### Africa

Once again, 2011 saw a number of events that highlighted the importance given by UNIDO to its Africa programme. The 19th Conference of African Ministers of Industry (CAMI 19) held in March, had as its theme "Enhancing the competitiveness of African Industries through increased and improved value addition". Taking place in Algeria for the very first time, CAMI 19 was hosted by the African Union

Commission for Trade and Industry and the Department of Trade and Industry of Algeria and attracted the participation of over 32 ministers and deputy ministers, regional economic communities and financial institutions.

At the centre of the debates was the Africa Agribusiness and Agro-industries Development Initiative (3ADI) targeting in a first batch ten countries in Africa. Launched in August 2010, the 3ADI programme implements the agribusiness component of the Action Plan for the Accelerated Industrial Development of Africa (AIDA) adopted at CAMI 18 in 2008 in South Africa. The Conference also reviewed the various operational annexes of AIDA including a monitoring and evaluation framework, resource mobilization strategy and steering committee mechanism. During the Conference, Algeria agreed to work together with UNIDO on activities to support the development of the pharmaceutical industry. In addition a pledge was made by the Vice-President of the European Commission and Commissioner for Industry and Entrepreneurship to work more closely with UNIDO to accelerate the industrialization of Africa (see quotation). The European Commission and UNIDO discussed holding a high-level conference in 2012 on industrial cooperation that would bring together the African Union (AU), the EU and UNIDO.

During the fourteenth session of the General Conference, a regional Africa round table on “Economic diversification strategies: a key driver in Africa’s new industrial revolution” benefited from the expertise of its eminent panellists and attracted a particularly large and enthusiastic audience. Other highlights in 2011 included a workshop hosted in Vienna in June for representatives of regional economic communities on the implementation of the African Union Action Plan for the Accelerated Industrial Development of Africa (AIDA). In partnership with African Permanent Missions based in Vienna, UNIDO organized a panel discussion on energy access in Africa as part of the Africa Industrialization Day celebrations in November, the theme of which was “Sustainable Energy for Accelerated Industrial Development in Africa”.

As a reflection of its continuous efforts to support the least developed countries, UNIDO organized an LDC Ministerial Conference in November in Vienna, a few days before the opening of the General Conference (see above). The 48-strong list of least developed countries counts 33 African countries, although it is interesting to note that of the three countries that have graduated out of the LDC category in the past 30 years—Botswana, Cape Verde and

Maldives—two are in Africa. For more information on the Conference, see chapter 3.

During the General Conference, a relationship agreement was signed between UNIDO and the ACP Secretariat whereby UNIDO will support ACP countries in developing policies, institutions and capacities to eradicate poverty through the development of industrial activities. ACP-UNIDO cooperation in recent years has led to the development of a programme to reinforce the capacity of African Investment Promotion Agencies (IPA) and to the preparation of the *Africa Investment Report 2011* based on private sector surveys in 20 African countries.

**“The UNIDO-EU partnerships during the last decade have been successful in making progress in numerous areas towards the goal of accelerating sustainable industrial development in Africa. Let us not forget, Africa needs Europe and Europe needs Africa.”**

**Antonio Tajani, Vice-President of the European Commission**

Working hand in hand with the Food and Agriculture Organization of the United Nations (FAO), UNIDO developed a project for South Sudan on sustainable food security through community-based livelihood development and water harvesting. The ultimate outcome of the joint project will be a sustainable improvement in the food security situation of women, men, youth and children living in the most food-insecure and conflict-affected areas in South Sudan.

### **Arab States**

Many Arab States have taken vast strides forward in recent years in terms of economic growth, although the speed of progress has varied considerably from country to country. Several countries in the region suffered a severe setback in 2011 not only as a result of the global financial crisis but of internal conflicts ranging from civil unrest to revolution, triggered by unequal access to economic opportunities and

social welfare as well as unemployment among young people. According to the UNDP report *Population Levels, Trends and Policies in the Arab Region: Challenges and Opportunities*, 54 per cent of the population in the Arab world is under the age of 25—the figures are 48 and 29 per cent respectively for developing and developed countries—placing a heavy strain on governments to create jobs for young people. An expert group meeting held at UNIDO Headquarters in November discussed youth participation in the inclusive economic development of the Arab region (see chapter 3). UNIDO has initiated pro-youth projects in Egypt, Sudan and Tunisia. In the latter country, UNIDO has been involved in the MDG Achievement Fund project “Engaging Tunisian Youth to Achieve the MDGs”, a three-year programme with a budget of \$3.12 million designed to improve the income generating capacities of rural communities through the promotion of skills needed to develop rural enterprises. The project addresses the specific needs of unemployed university graduates as well as low-skilled youth.

Other key projects in the region included the Egypt Green Trade Project initiative, designed to boost trade between Egypt and countries of the European Union and a project in Iraq, funded by Sida in support of the country’s national quality infrastructure.

**“UNIDO’s commitment to the Arab Region is to provide support to developing countries in their efforts to upgrade their industries by developing the appropriate technology that will lead to cleaner production and will enhance their competitiveness.”**

**Kandeh K. Yumkella, Director-General of UNIDO**

In response to the new political environment in Egypt, UNIDO has also prepared a number of other initiatives in Egypt that are at various stages of development. Those that have reached the formulation stage include a project financed by the Global Environment Facility (GEF) on industrial

energy efficiency as well as a renewable energy project on low-carbon technologies for cooling and heating applications.

Food security is a recurring problem in Sudan that was addressed in several new projects launched by UNIDO in 2011. The population in many parts of the country faces chronic food insecurity and malnutrition as a result of persisting humanitarian crises. Building on the success of its Community Livelihoods and Rural Industry Support project, UNIDO started a new project in 2011 that will enable young people to acquire practical manufacturing skills, thereby contributing to poverty alleviation in a post-crisis situation by increasing food production and providing income generation opportunities. Projects are currently being developed in several other countries of the region to address the specific problems of youth (see also chapter 3).

A second phase of the successful I’M UP project in the Syrian Arab Republic was launched in 2011 to continue efforts to make the country’s manufacturing sector more competitive with a focus on the textile, garment and agro-food industry value chains. A project launched in Kuwait to develop the export capacities of manufacturing SMEs will be funded initially by the relevant Kuwaiti authorities.

Partnerships with Arab regional organizations, commissions and other financial institutions during 2011 were particularly valuable and included the League of Arab States, the Cooperation Council for the Arab States of the Gulf, the Islamic Development Bank Group, the Arab Industrial Development and Mining Organization, the Gulf Organization for Industrial Consulting and the OPEC Fund for International Development.

UNIDO participated in the First Arab International Forum for Young Entrepreneurs and Businesspersons, held in June in Lebanon and committed its support for activities geared to creating employment opportunities for youth and women. Other events attended by UNIDO in 2011 in the Arab region were the Oman Capital Markets Forum in September; the Green Middle East exhibition held in October in the United Arab Emirates; the Eco-cities of the Mediterranean Forum, in October in Marseille, France (see chapter 5); and the Third Intellectual Youth Forum of the Gulf Cooperation Council that took place in November in Bahrain.

## **Asia and the Pacific**

In a region as extensive and diverse as Asia and the Pacific, it makes good sense to work together with local or regional partners. Under a memorandum of understanding signed in 2010, UNIDO has been collaborating with the United Nations

Economic and Social Commission for Asia and the Pacific in the areas of capacity-building, technology transfer, the promotion of investment and technology and the development of agro-based industries. In January, UNIDO and the Association of South-East Asian Nations (ASEAN) held a seminar in Jakarta to help both create awareness and encourage green industry in the region. Discussions at the seminar demonstrated how enterprises and governments in South-East Asia have benefited from the application of resource-efficient and cleaner production practices and technologies (RECPT). Negotiations are under way for a formal relationship with the South Asian Association for Regional Cooperation.

In 2011 UNIDO embarked on a tripartite research project with the Institute of Developing Economies, a semi-governmental research institute under the Ministry of Economy, Trade and Industry of Japan, and the Economic Research Institute for ASEAN and East Asia that draws on the strengths of each organization to formulate policy recommendations for green growth in ASEAN countries.

The policy paper, *Strategic Directions on Industrial Policy in Mongolia*, featured in last year's Annual Report, was launched in February by the Director-General of UNIDO and the Permanent Representative of Mongolia.

In March, UNIDO and the Ministry of Knowledge Economy of the Republic of Korea signed a memorandum of understanding for increased cooperation in the fields of green growth technology and low-carbon industrial development. Joint research on the impact of green industrial investment on global employment will be carried out by UNIDO and the Global Green Growth Institute. UNIDO is also working to expand collaboration with the Korea Research Institute of Standards and Science in the field of metrology. Later in the year, UNIDO once again joined forces with the Republic of Korea to develop anti-poverty policies in Africa and at the same time expand the framework of cooperation that African countries have enjoyed with the Republic of Korea in the area of industrial development. Working with the Korea Institute for Industrial Economics and Trade and the Ministry of Knowledge Economy, UNIDO co-organized a seminar in November in Seoul on the industrialization of Africa and partnership with the Republic of Korea. Participants discussed setting up a knowledge sharing platform that would form public-private partnerships to develop policies and actions and engage in efficient and effective partnership with African countries.

In November, the Director-General participated in the Tokyo Green Industry Conference 2011 that brought together some 500 participants from countries of the region to discuss the progress of green industry (for further details, see chapter 5). The Conference, organized by UNIDO, ITPO Tokyo and the Ministry of Economy, Trade and Industry of Japan was linked to the INCHEM Tokyo 2011 exhibition featuring advanced technologies for environmentally sustainable industrial production, where UNIDO showcased some of its success stories. During the year, senior UNIDO officials also held a series of consultations with their Japanese counterparts on ways to increase cooperation between UNIDO and Japan in such areas as green growth, private sector development and investment promotion and the Tokyo International Conference for African Development process.

**“ASEAN together with India and China constitute around half of the total world population. If this potential is put as a market base for production output and sources of production input of the region, they could serve as the economic propellers of the Asia-Pacific economy”** Fahmi Idris, Minister of Industry of Indonesia

During 2011, UNIDO stepped up its relationship with the world's most populous country, China. The Minister of Industry and Information Technology attended the Vienna Energy Forum and agreed to establish a long-term cooperation framework with UNIDO. Representatives of the Shanghai Municipal Government, the University of International Economics and Business in Beijing, and the Research Department of the Ministry of Commerce, expressed their readiness to increase cooperation with UNIDO in areas such as investment promotion, research and global forum activities.

In September, the Director-General participated in the 15th China International Fair for Investment and Trade in Xiamen, China, while a UNIDO delegation attended the

First China-Eurasia Expo in Urumuqi, China as well as the Shanghai Cooperation Organization Day. UNIDO has also undertaken to collaborate with a number of other institutions and universities in China. In May, a delegation from UNIDO and the Foreign Economic Cooperation Office of the Ministry of Environmental Protection of China reviewed cooperation between the two bodies that spans two decades. A new memorandum of understanding was signed paving the way for future cooperation on projects under the Montreal Protocol on Substances that Deplete the Ozone Layer.

A memorandum of understanding was signed in November during the General Conference with the China International Center of Economic and Technical Exchanges of the Ministry of Commerce, aiming at expanding cooperation between the two organizations.

### Europe and Newly Independent States

The region of Europe and Newly Independent States (NIS) embraces 29 countries and is highly diverse in terms of size, location, population and social development. The challenges facing the region are anchored in a unique and unprecedented transformation process starting in the early 1990s that affected the overwhelming majority of countries. Transition from a centrally-planned economic model to the establishment of a well-functioning market economy is the overarching goal of the region.

**“Economies with a solid manufacturing base face less volatile output conditions, remain more stable and have a greater potential for employment generation and accelerated economic growth. In this context, UNIDO’s ability to deliver has never been more relevant.”** Hanna Trojanowska,

Undersecretary of State, Ministry of Economy of Poland

In 2011, UNIDO assessed the development needs of recipient countries in the region as well as the development assistance priorities of emerging donors. The assessment was

based on a range of resource documents, correspondence with the countries concerned, UNIDO evaluation reports and United Nations and European Commission documentation. This led to the identification of potential regional projects in the automotive and agrifood industries and the development of firm projects in Armenia, Belarus, Kazakhstan, Republic of Moldova, Russian Federation and Ukraine.

UNIDO has been further developing its partnership with the group of emerging donors from the region that include the new EU member countries as well as the Russian Federation and Turkey. By the end of 2011, there were 112 ongoing technical cooperation projects in the region, with a total budget of \$71 million.

The round table for Europe and the NIS countries, held during the General Conference, was designed to stimulate discussions on innovative industries and technologies for a sustainable future. The panel was drawn from government, business, academia and international organizations. A key issue was how to monitor and evaluate progress towards a green industrial transition in the region. Comparable datasets provided a baseline for an assessment of where the region stands in terms of energy and resource efficiency and eco-innovation. An analysis was provided in five working papers.

UNIDO helps countries of the region to create new or strengthen existing policy and regulatory frameworks that lead to energy efficiency and the increased use of renewable energy and low-carbon emissions technologies. It helps build the necessary capacities and increase the competitiveness of enterprises, particularly SMEs, through better management and optimization of energy consumption and increased use of renewable energy. During 2011, UNIDO was active in five countries of the region in the area of renewable energy and energy efficiency. A project in Ukraine sought to improve energy efficiency and promote renewable energy in the agro-food sector and in other SMEs. Projects in the Republic of Moldova and the Russian Federation involved the reduction of greenhouse gas emissions through improved energy efficiency in the industrial sector. In Armenia, the project aims to assist vulnerable families by reducing poverty through, among other means, access to diversified energy services, most notably biogas. A project in Serbia to develop geothermal and bio-energy for industry has assessed 12 pilot projects for their economic and technical viability. A number of additional projects and initiatives in the region are currently in the design phase.

When the global network for Resource Efficient and Cleaner Production (RECP Net) was established in late 2010

(see chapter 5), eight countries in the region became founding members: Bulgaria, Croatia, Czech Republic, Lithuania, Serbia, the former Yugoslav Republic of Macedonia, Ukraine and Uzbekistan. In Serbia and the former Yugoslav Republic of Macedonia, UNIDO has contracted existing National Cleaner Production Centres (NCPCs) to conduct in-plant assessments and related activities in selected industries, including several with a specific focus on chemicals management and leasing and on low-carbon industrialization, respectively.

UNIDO hosted a delegation from Kazakhstan in April as a follow up to two meetings that took place in June 2010 and March 2011 between UNIDO and the Vice-Prime Minister and Minister of Industry and New Technologies. The Kazakh delegation had an opportunity to learn about UNIDO technical cooperation services, particularly those that had been identified as best meeting the requirements of the country. Discussions between UNIDO officials and the delegation on potential areas of cooperation could serve as a framework for a UNIDO Country Programme for Kazakhstan. Once the programmes presented have been reviewed by the appropriate authorities in Kazakhstan, UNIDO will send a programming mission to Kazakhstan to continue technical consultations on the selected priority issues.

UNIDO is the leading implementing agency under the Multilateral Fund for the Implementation of the Montreal Protocol in the Europe and NIS region with 53 ongoing projects in 12 countries of the region (Albania, Armenia, Bosnia and Herzegovina, Croatia, Kyrgyzstan, Montenegro, Romania, Russian Federation, Serbia, the former Yugoslav Republic of Macedonia, Turkey and Turkmenistan).

### Latin America and the Caribbean region

Over the past years, countries in the Latin America and Caribbean (LAC) region have demonstrated steady economic growth as a result of an increasing number of trade and investment opportunities. This has translated into increased employment and improved living standards although there remain growing pockets of poverty in most if not all countries of the region. UNIDO acts as a catalyst, helping to generate economic growth and raise industrial capacity by supporting governments and the private sector to achieve competitive industrial production, develop international industrial partnerships and promote socially equitable and environmentally friendly industrial production.

Partnership is the key to future success in this fast developing region. In 2006/2007, two expert group meetings of the Group of Latin American and Caribbean States

(GRULAC) held in Vienna agreed on a regional programme that defined specific areas of interest in terms of technical cooperation for the 19 participating countries. A third UNIDO-GRULAC expert group meeting, held in Costa Rica in early 2011, to discuss agro-industrial competitiveness, agreed on the development of a web-based platform to share knowledge between and among UNIDO and the main institutional and technical partners in the region. This will include information on the technical services offered by UNIDO in areas such as trade capacity-building, environmental management, the development of export consortia and the promotion of business, technology, investment and renewable energy, as well as information on financial services offered by associated development institutions. The new platform will be online and open for public use in 2012. It will also demonstrate how to use the UNIDO LAC Industrial Knowledge Bank to promote South-South cooperation. A further expert group meeting will be hosted by Ecuador and held in Quito on the subject of resource efficiency and industrial policies.

**“The Industrial Knowledge Bank has demonstrated its worth as a mechanism of South-South cooperation of great value ... It has expanded to other regions and now involves institutions and enterprises with different experience and expertise from that of Latin America and the Caribbean.”**

#### GRULAC statement to the General Conference

The UNIDO LAC Industrial Knowledge Bank provides opportunities for the pooling of knowledge and resources in the region and plays an important role in promoting UNIDO services. The Knowledge Bank, set up in 2009, has generated 23 transactions of knowledge, equivalent to 60 weeks of technical advice by experts in different areas of industrial development. In 2011, for example, Costa Rica received help

from an Austrian company in the area of cleaner production. Within the Latin American continent, Teucali Flowers in Colombia provided expert advice through the Ministry of Industry and Commerce to an association of producers in Paraguay on the development of the value chain of flowers (cut, post-harvest and finished product). In the area of industrial chemistry, the University of Barcelona, Spain, supported the National Institute of Industrial Technology in Argentina with improved practices in the production of food and chemicals. Investment promotion and trade related issues were the subject of cooperation between the National Investment Information Network of Brazil's Ministry of Development, Industry and Commerce and the Center for Investment and Trade of Sinaloa State, Mexico, in December. Also in December 2011, STE France (a voluntary association of retired professionals) assisted the Chamber of Commerce of Cuzco, Peru, to enhance the competitiveness, sustainable management and development of SMEs producing textiles and garments.

Another important South-South cooperation initiative in the region was the Seminar on Geothermal Energy in Mexico and study tour for participants from different East African countries as part of the UNIDO intraregional renewable

energy cooperation initiative for industrial and productive uses. Detailed information is given in chapter 5 in the section on renewable energy.

To make sure that its services are carefully tailored to the needs of its clients, UNIDO keeps abreast of political, social and economic developments within individual countries. In order to better respond to the concerns of GRULAC countries, UNIDO decided to hold regular national and regional consultations with the *Círculo de Montevideo*, a permanent forum of academics, policymakers, leaders of international agencies and global leaders. It was in this context that UNIDO invited the *Círculo de Montevideo* to hold its annual session in Vienna at the time of the Vienna Energy Forum and the UNIDO Industrial Development Board. A high-level delegation from Austria, including President Heinz Fischer and the Federal Minister of European and International Affairs in Austria, Michael Spindelegger, attended some of the sessions together with representatives of the private sector. Recommendations emanating from the meetings focused, inter alia, on paving the way for a green economy through enhanced international cooperation and partnerships, tackling poverty in a targeted manner in the productive sector, and energy



A project launched by UNIDO in Nicaragua in 2011 will help the country's vulnerable communities to achieve a greater degree of self-sufficiency in food production. Food security is a challenge for poor communities that are ill-equipped to cope with economic, climatic and health-related shocks. UNIDO aims to develop their productive and processing skills to heighten their chances of employment both in on- and off-farm activities and to strengthen their capacity to integrate in local and regional markets.

*Photo: UNIDO*

access for all. As a follow up, a round table was held in December on the topic of green industry as one of the events of the fourteenth session of the General Conference. The round table was organized with the cooperation of regional and international institutions, including the Latin American and Caribbean Economic System and the Organisation for Economic Co-operation and Development. High-level authorities from Austria, Brazil and Mexico as well as Ministers of Industries of Costa Rica and Ecuador participated as speakers.

A UNIDO trust fund for programmatic activities that target poor countries in Latin America and the Caribbean, established at the General Conference, will support services in those areas of particular interest to the region (see above).

## UNIDO and the media

The year 2011 offered numerous opportunities to place UNIDO prominently in the public eye. Millions of viewers the world over watched the Director-General take part in a cutting-edge debate on ways to power development in the 21st century. Moderated by the BBC's Zeinab Badawi, the debate

was filmed during the Vienna Energy Forum in June, and was aired both on the BBC World News television channel and on BBC World Service radio in August. The panellists and many members of the audience were authorities on energy-related issues and contributed to a lively exchange of views. The Vienna Energy Forum (see special feature, chapter 5) itself attracted wide media attention, with over 200 press accreditations and 40 camera teams who covered the keynote address by the former Governor of California, Arnold Schwarzenegger. UNIDO enjoyed world television coverage once again towards the end of the year when CNN aired its public service announcement on green industry both before and during COP17 (see above).

Heightened media interest in UNIDO led to a series of interviews with the Director-General arranged with key TV broadcasters. Working with TV production companies allowed for the production and broadcasting of a number of video news releases that highlighted UNIDO's achievements on the ground through stories on different continents that emphasized the human angle.

Throughout the year, UNIDO drew the attention of the media to a number of major events including the Conference of African Ministers of Industry in March, the Fourth



2011 saw the launch of the Chinese version of UNIDO's quarterly magazine *Making It*.



The BBC World News debate, moderated by Zeinab Badawi, featured South Africa's Energy Minister Dipuo Peters, Chairman of India's Atomic Energy Commission Srikumar Banerjee, President of Eurosolar Peter Droege and the Director-General of UNIDO.  
*Photo: UNIDO*

United Nations Conference on the Least Developed Countries in May (LDC IV), the United Nations Private Sector Forum in September, the launch of the new UNIDO Institute in September (see special feature, chapter 6), the fourteenth session of the UNIDO General Conference and COP17. UNIDO was also closely involved in preparations for 2012 as the International Year of Sustainable Energy for All. Promotional material was distributed at specific events, including the Tokyo Green Industry Conference and Africa Industrialization Day. *Agribusiness for Africa's Prosperity*, a new UNIDO study released in 2011, was successfully launched in Paris, Tunis and Washington, D.C., as part of a worldwide advocacy campaign to build the case for agribusiness development as a path to Africa's prosperity. At the same time, the UNIDO Advocacy and Communications Group worked closely with the Office of the Spokesperson for the Secretary-General and the Department of Public Information in New York.

In the course of the year, UNIDO distributed over 150 press releases and feature stories to the media. It updated its website to include a greater amount of multimedia material, including videos, podcasts and pictures; the UNIDO website ([www.unido.org](http://www.unido.org)) is now available in French and Spanish as well as English. The year under review also saw an expansion of UNIDO presence in social media (Facebook, YouTube), while its Twitter account attracted over 4,000 new followers.

Printed information material during the year included new editions of the highly acclaimed magazine *Making It* (recently translated into Chinese in addition to French and Spanish) and the *UNIDO Times* quarterly newsletter, while new feature stories were available on the website. A series of brochures were prepared highlighting partnerships with the European Union and the African Union, as well as with key donors.

One of the year's innovations was the preparation of factsheets on projects undertaken by UNIDO. To date, over 80 factsheets have been prepared, with many more to come. Work continued on a forthcoming book on UNIDO, to be published by the Routledge publishing house in June 2012.

UNIDO made presentations to over 1,000 visitors at its Vienna Headquarters, allowing them to gain more insight into the operations of the Organization. To ensure that news of UNIDO's achievements is carried to the furthest-flung corners of the globe, UNIDO offered a training course on effective media handling and communication for UNIDO Representatives in November/December.

## UNIDO and the private sector

Cooperation between UNIDO and the private sector has been growing steadily year by year. The following paragraphs contain a few examples of instances where this cooperation has, or will, make a striking difference to the lives of some of the poorer sections of society. Other examples can be found in subsequent chapters of this report.

With just over 5.7 million people, El Salvador has a housing deficit of nearly half a million dwellings. In the San Salvador metropolitan area, home to a quarter of the country's population, authorities have identified more than 1,700 settlements that fail to offer even the most basic services. In July, UNIDO, together with UNDP and the United Nations Human Settlements Programme (UN-HABITAT), signed a cooperation agreement with the Swiss multinational firm Holcim—one of the world's foremost suppliers of cement, aggregates, ready-mix concrete and asphalt—to demonstrate sustainable construction methods to workers and shops selling construction materials. A micro-financing company was set up to provide credit to low-income families interested in improving their own homes. The project was funded by the Millennium Development Goals Achievement Fund established by the Government of Spain and was ranked best among private sector development projects by the MDG Fund Secretariat. Some of the Organization's most effective projects are those that address two problems. In El Salvador, for example, assistance to small and medium enterprises selling construction materials not only helps improve the productivity of the enterprises and fosters local economic development, but enables the poorer sections of the community to improve their living conditions by constructing or upgrading their own homes. The experience in El Salvador may well pave the way to future partnership arrangements with the UN-HABITAT in the formulation of similar pro-poor programmes.

UNIDO and METRO Group took their joint commitment up a notch in an official ceremony held in Düsseldorf, Germany in September. The Director-General of UNIDO and the Chairman of the Management Board and Chief Executive Officer of METRO AG, Eckhard Cordes, signed a new agreement on a pro-poor and inclusive public-private partnership development scheme, where suppliers gain access to profitable new market opportunities and establish long-term business linkages with potential buyers. The direct impact of this cooperation is to increase job and income opportunities and the availability of safe food and products. The scope of the new agreement was expanded to include

The Director-General of UNIDO and the Chairman of the Management Board and Chief Executive Officer of METRO AG, Eckhard Cordes, signed a new agreement on a pro-poor public-private partnership development scheme in September.

*Photo: METRO*



social, ethical and environmental sustainability, in addition to upgrading quality and safety in order to foster suppliers' access to markets. To showcase its partnership with UNIDO, the METRO Group produced a five-minute video that features prominently on its website.

Building on their experience in Egypt, and more recently in India and the Russian Federation, UNIDO and METRO Group agreed to extend training for producers and suppliers both in the food and non-food sector, in China, Indonesia, Kazakhstan, Pakistan, Turkey and Viet Nam. In South Africa, UNIDO has helped a cooperative of local small producers of wine and horticulture products to establish business linkages with METRO and is linking up its assistance to emerging agri-business clusters with the South African Agri Academy, a local non-governmental organization, through pro-poor supply chain development, supplier upgrading and traceability. The 2010 South African shiraz produced by the cooperative is now available at METRO stores in Europe.

UNIDO is expecting to launch a new sustainable supplier development programme in South-East Asia in 2012, expanding the scope to new countries and buyers. Currently UNIDO is negotiating with other leading retailers and manufacturers such as AEON, the Auchan Group, Migros and Walmart to establish partnerships for sustainable supplier development in Malaysia, Russian Federation and a number of countries in Africa.

Proper packaging not only helps preserve and protect food, but also facilitates its transportation, distribution and marketing. Promoting food safety technologies in developing countries is the aim of a new award launched in May by the UNIDO Investment and Technology Promotion Office in Italy, in collaboration with the World Food Programme. The Technology Innovation Award for Food Safety in developing countries was announced at the Processes and Packaging Trade Fair (Interpack) in Düsseldorf, Germany.

## » UNIDO leads the Greening of COP17

The 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 7th Session of the Conference of the Parties serving as the Meeting of the Parties (CMP7) to the Kyoto Protocol took place from 25 November to 9 December in Durban, South Africa. It was the second largest meeting of its kind and marked the first time that the Conference of the Parties was held in sub-Saharan Africa. In many ways, it marked a significant turning point in global climate change negotiations. It concluded with a decision by Parties to adopt a universal legal agreement on climate change as soon as possible, and no later than 2015. The President of COP17/CMP7 Maite Nkoana-Mashabane said: “What we have achieved in Durban will play a central role in saving tomorrow, today.”

The monumental task given to UNIDO by the Government of South Africa and GEF before the conference was essentially to “green” the event, and in particular its venue, while demonstrating South Africa’s commitment to reducing greenhouse gas emissions. UNIDO and the Government of South Africa worked in record time to realize what was to become a highly visible project covering communication and awareness raising; non-motorized public transportation; a “clean-tech” competition; and solar water heating for rural clinics. UNIDO was involved in a range of activities in and outside the city of Durban.

### Getting the word out

The first project component was designed to increase awareness among COP17 participants, local inhabitants and other stakeholders of opportunities for minimizing the ecological footprint of the event. It also highlighted the activities and achievements of the South Africa-GEF partnership, looked at best practices of South Africa’s National Greening Programme, and examined both the global and local environmental benefits of ongoing activities including energy efficient lighting and appliances, low-carbon urban transport systems, resource efficiency including clean water and increased use of renewable energy. A green passport was printed and distributed to COP17 delegates and members of the public as well as to the President of South Africa and other senior officials. A video on GEF projects implemented in South Africa proved very popular at the UNIDO stand during the event. As part of the legacy projects, UNIDO and GEF supported the Living Beehive, an innovative project based at the Durban Botanic Gardens involving the South African National Biodiversity Institute (SANBI), eThekweni Municipality and the Durban Botanic Gardens Trust. It is a self-sustaining ecosystem in the shape of a traditional Zulu beehive hut. The steel and concrete framework will become “living walls” with a spectacular array of local foliage. The Living Beehive demonstrates how healthy ecosystems can enable society to cope with the impacts of climate change.

## Clean-tech competition

Under the second component of the project, the South African National Cleaner Production Centre organized a Clean Technology Innovation Competition to identify “clean-tech” small and medium enterprises. Entrepreneurs were invited to submit proposals that would lead to job creation, the delivery of improved products and the introduction of new services. The competition was designed to encourage the potential for innovative clean technology in South Africa. The 2011 competition covered three categories: energy efficiency, renewable energy and green buildings, with two possible tracks: breakthrough technologies and innovative technology adaptation. Finalists were awarded prizes at a gala dinner attended by dignitaries from governments, the private sector and development partners, including a package of grants and free business support services provided by private sector partners in South Africa and elsewhere. UNIDO and GEF are now working to replicate this success at a broader level by organizing a Global Clean-Tech competition. For its part, the Clean-Tech competition will now be held as an annual event in South Africa, a legacy project of COP17, with the support of national counterparts as well as international clean technology networks and partners.

## Cycling today for a better tomorrow

Delegates attending COP17 had a chance to do their bit towards minimizing the ecological footprint of the conference. In place of motorized transportation around the conference area and to and from the inner city, delegates could hire one of the 300 bicycles

provided by a GEF grant in collaboration with eThek-wini Municipality. After the conference, some of the bicycles were distributed to local schools and communities, while the remainder became a feature of Durban’s initiative to green inner city transport. The city hopes to set up a public-private partnership to promote the bicycle rental business to tourists and local inhabitants. The project will also explore long-term prospects for the manufacture, distribution and servicing of bicycles and other low-carbon alternative transport systems in resort areas.

## The power of the South African sun

Under the fourth component of the UNIDO project, solar water heating systems were installed for 19 rural health clinics in the province of KwaZulu-Natal. On 8 December, the President of South Africa, Jacob Zuma, UNDP Administrator Helen Clark and the Director-General of UNIDO visited the village of Llembe that served as a showcase for the project. Located some 70 kilometres from Durban, it features solar water heating systems for schools and hospitals and is a fine example of the role of renewable energy in improving the delivery of health services while at the same time reducing the ecological footprint of COP17. Households close to the clinic also benefited from renewable energy and energy-efficient technologies. COP participants were able to appreciate the impact of the installations and were asked to contribute on a voluntary basis to the scale up of this type of project in order to offset further emissions related to COP participation and encourage the installation of renewable energy in the whole province as well as other provinces of South Africa.

»» **UNIDO is making a real difference** to the lives of people in countries across the globe. With strong administrative support and guidance, UNIDO is able to deliver its programmes effectively.



## UNIDO: An effective manager

As an organization providing development services, UNIDO devotes most of its resources to the provision of technical cooperation and policy advice to its client countries. An overview of these activities is provided in the following chapters, with numerous examples of where UNIDO is making a real difference to the lives of people in countries across the globe. Without strong administrative support and guidance, however, UNIDO would be unable to deliver its programmes effectively. The present chapter describes the crucial role played by different aspects of management in UNIDO.

### Executive management

The Executive Board, established and chaired by the Director-General, is the highest UNIDO secretariat body for consideration of, and decision on, policy, programme and management issues. In 2011, it convened 25 meetings to decide upon UNIDO-wide policies, strategies and priorities, and to monitor and review the Organization's performance in all its activities. In addition, a Board of Directors meets under the chairmanship of the Director-General approximately every three months.

Senior staff attending the 2011 Board of Directors retreat in February discussed six new management priorities presented by the Director-General. These related to the effective implementation of the change management programme; the integration of UNIDO field offices into the Programme Development and Technical Cooperation Division and their increased participation in technical cooperation delivery; the consolidation of the newly established Strategic Research, Quality Assurance and Advocacy Division; the enhancement of UNIDO's visibility in United Nations system-wide mechanisms and at the country level; and the strengthening of the UNIDO ethics and accountability systems. This resulted in an action plan that was agreed by the Executive Board in March and posted on the UNIDO Intranet in April. Throughout the year, the Director-General monitored progress of the implementation of the action plan, with a full-scale review scheduled for 2012.

### Technical cooperation management

For the second year in succession, the year under review showed an all time high for the level of funds mobilized. The net increase of funds in current project budgets amounted to \$247.5 million, an increase of 36 per cent over what was already a record level in 2010 and by far the highest recorded in the history of UNIDO. Similarly, the volume of funds mobilized,

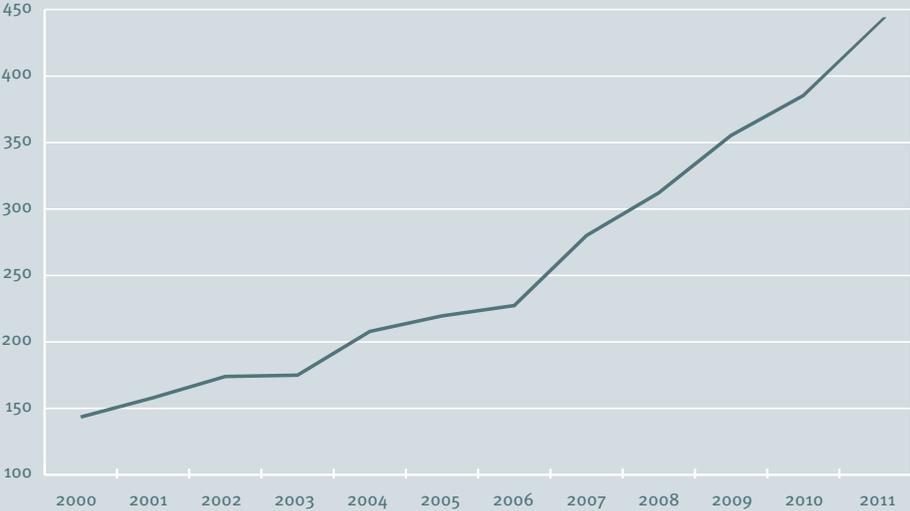
including future payments under signed agreements and with the addition of programmable donor funds available, increased by more than 25 per cent, from \$183.6 million in 2010 to \$230 million in 2011.

Despite an increase in the actual volume of project services delivered during the year from \$153.5 million to \$166.7 million, the highest ever recorded in the history of UNIDO, this increase in funds mobilization allowed the portfolio of projects and programmes in hand to increase by a record \$63.3 million to \$448.8 million. This impressive level set the

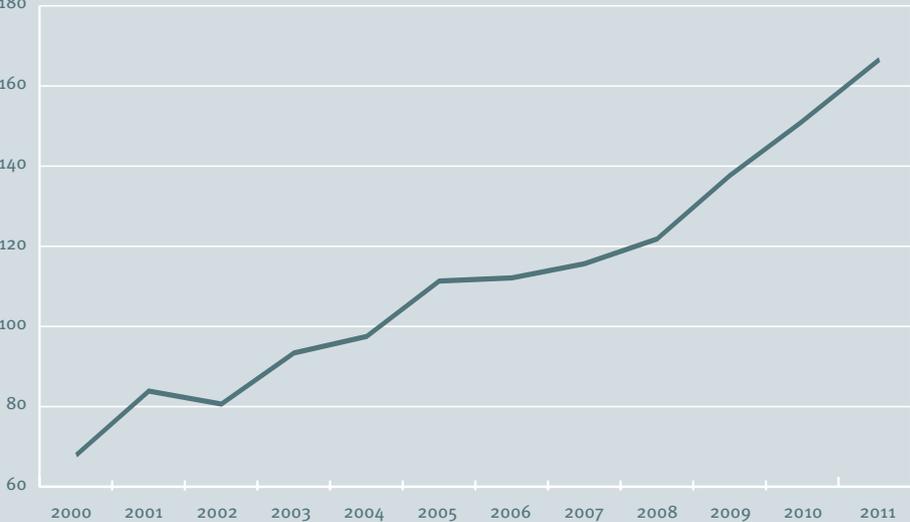
scene for another healthy increase in the volume of technical cooperation services delivered in future years.

In the course of the year, the Programme Approval and Monitoring Committee (AMC) reviewed fully formulated project and programme documents as well as major project budget revisions. In 34 meetings, the committee reviewed 211 project and programme proposals with a compound approval rate of 79 per cent. The table below gives a breakdown AMC decisions; figures 3 and 4 show the distribution of submissions by region and by thematic area.

**Figure 1. UNIDO FUNDS AVAILABLE FOR FUTURE IMPLEMENTATION** (millions of US dollars)



**Figure 2. UNIDO TECHNICAL COOPERATION DELIVERY** (millions of US dollars)



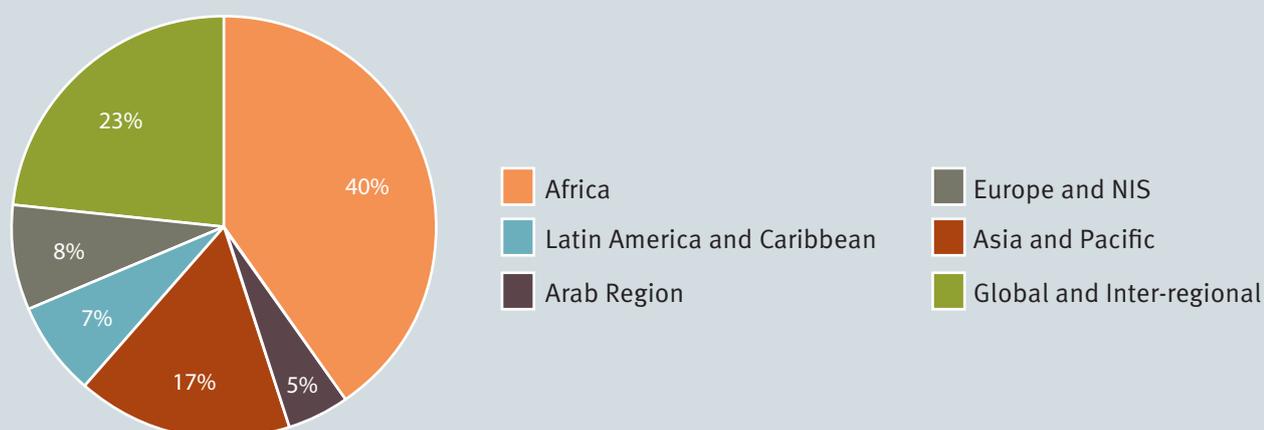
**Table 1. SUBMISSIONS REVIEWED BY AMC IN 2011**

**(a): Type of submissions to AMC**

**(b): Decisions taken by AMC**

Type	Number of submissions	Percentage	Decisions		Number of submissions	Percentage
			Approved	Not approved		
New projects	136	64%	as submitted		97	46%
			subject to revision		70	33%
Project revisions	4	2%	Resubmission requested		9	4%
Funding requests	71	34%	Decision postponed		31	15%
			Not approved		4	2%
<b>TOTAL:</b>	<b>211</b>	<b>100%</b>			<b>211</b>	<b>100%</b>

**Figure 3. AMC 2011: SUBMISSIONS BY REGION**



**Figure 4. AMC 2011: SUBMISSIONS BY THEMATIC AREA**



## Financial management

2011 was another remarkable year for UNIDO in terms of funds mobilized, following the upward curve witnessed in recent years. The total volume of funds mobilized for the delivery of priority services to Member States continued to grow. In particular, funding from the Multilateral Fund for the Implementation of the Montreal Protocol and from the Global Environment Facility (GEF) showed a marked increase. Funding from governmental sources and multi-donor trust funds stabilized at the high level attained in the past few years, with a very healthy pipeline of projects awaiting approval in 2012. It should be noted that these figures do not include the unutilized balances of appropriations that Member States agreed to use for the funding of specific projects to be approved in 2012. The record level of new funding made available to UNIDO for specific projects bears testimony to the high regard in which UNIDO services are held.

»» The record level of new funding made available to UNIDO for specific projects bears testimony to the high regard in which UNIDO services are held.

After the multilateral funds mentioned above, the largest contributor in 2011 was once again the European Commission, with a net increase (excluding support costs) in project budgets of \$15.9 million, followed by Japan with \$13.6 million, including \$1 million through the United Nations Trust Fund for Human Security. Other major contributors with net contributions above the \$1 million mark included Spain with \$8.2 million, mainly through the Millennium Development Goals Achievement Fund (MDG-F), Italy with \$5.1 million, Norway with \$4.7 million, Canada with \$4.5 million, Austria with \$4.3 million, Switzerland and the United Kingdom of Great Britain and Northern Ireland,

each with \$2.5 million, Germany with \$2.1 million, and Bahrain, France, India, Russian Federation, South Africa, Sweden and Zambia each contributing between \$1 million and \$2 million. Appendix B shows the distribution of Industrial Development Fund and trust fund approvals by region and thematic priority.

Indirect government funding of UNIDO technical cooperation through various United Nations multi-donor trust funds amounted to \$14.3 million. In addition to the MDG-F and the United Nations Trust Fund for Human Security, net increases under the “Delivery as One” funds amounted to \$3.4 million while funding from post-crisis multi-donor trust funds amounted to \$2.2 million.

As reported in the 2010 Annual Report, a considerable number of large-scale projects were under development in 2010 for GEF funding, many of which were approved in 2011. The total value of net new funding approved by GEF amounted to \$72.5 million, setting an all-time record. As the portfolio of projects under development continues to increase, a high level of new approvals can be anticipated in 2012 and beyond. It should be understood that the figure quoted in this *Report* concerns the direct contribution to projects from GEF. As GEF projects almost always require substantial additional co-funding and investment funding, the volume of activity is a multiple of the \$72.5 million GEF grant. Mobilizing the grant co-funding and the investments required represent a major challenge for UNIDO, but at the same time offer an excellent opportunity to step up cooperation with public and private partners. Meanwhile, funding from the Montreal Protocol also reached a record in 2011 with \$76.4 million.

Looking at the distribution of funding by thematic priority, environment and energy once again attracted the greatest share of overall funding with a total of \$171.6 million, largely as a result of the high level of approvals from GEF and the Montreal Protocol, described above. Poverty reduction through productive activities received \$49.2 million while trade capacity-building attracted \$23 million, although under the latter thematic priority there is a healthy pipeline of projects and payments due under signed agreements that will materialize in 2012.

In the course of the year, only limited funds were received for the three programmable trust funds operated by UNIDO principally for the development of new projects and programmes. Contributions were received from

Finland (€250,000) and Sweden (€434,183) to the trade capacity-building trust fund, while Finland (€250,000) and France (€150,000) contributed to the agri-business trust fund. No further contributions were received for the renewable energy trust fund.

The General Conference at its fourteenth session encouraged Member States to consider voluntarily renouncing their shares of the unutilized balances of appropriations to strengthen the programmes of UNIDO (decision GC.14/Dec.14). As a result, it was decided to establish a special trust fund for Latin America and the Caribbean without delay. Targeted particularly at the poorest countries in Latin America and the Caribbean, the purpose of the Special Fund will be to provide support for services in thematic areas of particular interest to Member States from the region, including, inter alia, support for strategies to meet challenges in global, regional and subregional trade and economic integration; support for the building and sharing of industrial policies and industrial knowledge; and assistance in the efficient use of energy for productive activities. Up to the end of 2011, allocations to the amount of €639,815 were received from four Member States—Brazil, Colombia, Ecuador and Panama—that will be used to leverage the mobilization of additional resources.

Nine Member States (Côte d'Ivoire, Denmark, Finland, Lebanon, Malta, Mauritius, Mozambique, New Zealand and Norway) allocated their share of the unutilized balances amounting to a total of €768,265 specifically to the four programmatic areas defined in document GC.14/18: (a) strengthening food security in least developed countries through the implementation of initiatives in agro-industry development; (b) securing access to energy for productive uses, with particular emphasis on access to energy by women; (c) supporting economic diversification to create employment in the productive sectors, particularly targeting vulnerable groups, including youth, in countries emerging from crisis; and (d) increasing the competitiveness of industries in developing countries through compliance with standards and demands concerning, inter alia, sustainable industrial development, green industry and energy efficiency. While trust funds already exist for areas (a), (b) and (d) above, a new trust fund is being established covering area (c) on youth employment. Each of the four trust funds will therefore receive €192,066 although further contributions would greatly facilitate the development of suitable

high-priority projects and, where required, provide for UNIDO cost-sharing.

Another fourteen Member States informed the Organization that they would use all or part of their respective shares of the unutilized balances for specific projects to be finalized in 2012. In addition to major amounts from France, Germany, Italy and Japan, this included the shares from China, Democratic People's Republic of Korea, India, Indonesia, Israel, Poland, Republic of Korea, Switzerland, Syrian Arab Republic and Thailand, for a total of €12,479,516.

The outlook for 2012 is again encouraging. Despite record levels of approvals in 2011, the portfolio of projects at an advanced stage of preparation is healthy, especially in the areas of energy and climate change, environment and trade capacity-building. The thematic priority of poverty reduction through productive activities is expected to benefit once again from various multi-donor trust funds as well as direct donor funding of projects; particular interest is apparent in the agri-business initiative where a large portfolio is under development, supported by a dedicated trust fund.

» At \$166.7 million, the volume of project services delivered exceeded the previous record of \$159.6 million achieved in 1990, when the organization had twice the number of staff.

## Managing effectiveness

The United Nations General Assembly at its fifty-ninth session in 2004, reaffirmed that “the effectiveness of operational activities should be assessed by their impact on the poverty eradication efforts, economic growth and sustainable development of recipient countries” and requested “the United Nations development system to conduct evaluations of its operations at the country-level, in close consultation with national Governments”. The UNIDO evaluation policy complies with

**“Our new business processes** and enterprise resource planning system will enable improved decentralization, easy monitoring by providing consistent and real-time information, as well as systematic risk management and better knowledge sharing, communication and teamwork ... My staff has been working tirelessly to design, learn and implement a range of new systems that are coming on stream now, and that will equip us to act more efficiently and effectively than ever before.”

Kandeh K. Yumkella, Director-General of UNIDO in his opening address to the fourteenth session of the General Conference

the norms and standards for evaluation in the United Nations system with a focus on independence, credibility and utility. Independent evaluation provides evidence-based information that is reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making process.

During 2011, UNIDO was an active member of the United Nations Evaluation Group, assuming the vice-chair in May. It also participated actively in the Network of Networks on Impact Evaluations, set up to promote quality impact evaluation within the United Nations system.

UNIDO conducted country evaluations in 2011 in China, Morocco, Nigeria, Rwanda, South Africa and Viet Nam. An additional three thematic evaluations were carried out on enterprise upgrading, the elimination of persistent organic pollutants and the UNIDO field offices and their contribution both to the Delivering as One mechanism and the Millennium Development Goals. UNIDO was also engaged in the evaluation of individual projects and concluded the evaluation of the UNIDO online procurement training (see below). All evaluation reports are publically disclosed and available at the UNIDO website.

## Managing change

The Programme for Change and Organizational Renewal (PCOR) is an organization-wide change initiative to ensure UNIDO is fully equipped to meet the needs of the future. The three-year programme looks at ways to further improve UNIDO’s role as a partner for prosperity including its response to the needs and expectations both of recipient and donor countries and its ability to maintain an efficient and proactive working environment. Steps taken include a re-engineering of the Organization’s business processes and the introduction of an enterprise resource planning (ERP) system. Throughout the process, UNIDO has taken care to ensure that results-based management, risk and knowledge management, staff development and improvements in the working culture are an intrinsic part of UNIDO operations.

Following extensive preparatory work in 2010, which included a comprehensive business process re-engineering exercise, the implementation of the ERP system was launched in January. Throughout the year, major changes contributed to greater efficiency and effectiveness. The



Extensive training in 2011 ensured that staff members are equipped to work with the new enterprise resource planning system, a crucial component of the Programme for Change and Organizational Renewal.

*Photo: UNIDO*

introduction of electronic workflows and electronic approvals, for example, not only empowers staff, both at Headquarters and in the field, but simplifies processes and procedures. As of 2013, all UNIDO operations will be streamlined and supported by the fully integrated ERP system. Major efficiency gains are expected to be achieved in the areas of core business/technical cooperation activities and the management of consultants and experts, travel, procurement and time management as well as financial management.

As a result of the high level of commitment of staff from all parts of the Organization, all milestones foreseen for 2011 were achieved on time. An independent assessment carried out in 2011 deemed the implementation of ERP to be both on track and highly professional.

The ERP system is being implemented in four releases, the first being the new system for core business/technical cooperation activities, now known as portfolio and project management (PPM), which became operational in October. The PPM system enables the Organization to manage its entire project cycle from identification of a request, through project design, implementation and monitoring to assessment, reporting and sharing of lessons learned within a globally

accessible single system. All ongoing projects were moved to the new system to enable the management of projects in PPM early in 2012. During this exercise, ongoing projects will follow the results-based management logical framework approved in PPM, which requires that outcomes, outputs and activities along with key performance indicators and risks are clearly spelled out. Managing the entirety of UNIDO projects under the PPM system will bring a number of benefits, including institutionalization of results-based management, systematic management of project risks, increased transparency of portfolios and better reporting on results. This will in turn enable the Organization to better deliver as “One UNIDO”, as outlined in its mission statement.

The second release deals with human capital management, payroll, performance and travel management. From 2012 onwards, all activities related to human resources management will be carried out under the ERP system. Further details, including details of staff training, are given in the following section. The third release, to be in place by early 2013, covers finance, procurement and logistics and the fourth release on knowledge management is being realized in parallel with the other releases.

Staff members from all parts of the Organization have been working jointly on the implementation of the new processes and the ERP system. Their joint efforts resulted in positive cultural changes in the areas of collaboration and communication as well as teamwork and knowledge-sharing, a change that is expected to continue throughout the implementation process. For instance, the introduction of the new performance management system (see below) or online collaboration spaces are expected to further encourage staff development, teamwork, knowledge and information sharing.

Both internal and external stakeholders are kept fully informed about the progress of PCOR through a number of communication channels including the PCOR Newsletter and an intranet page, while Member States have access to a dedicated extranet page. Regular articles on PCOR can also be found in the *UNIDO Times*. Finally, a PCOR web page was created to ensure transparency and easy access to information for all stakeholders ([www.unido.org/changemanagement](http://www.unido.org/changemanagement)).

## Managing human resources

In common with other areas of UNIDO activities, the move to the ERP system of the various processes associated with human resources management, although very rewarding, called for a major commitment on the part of staff in terms of time and effort. As stated above, from 2012 onwards all activities related to human resources management, such as recruitment of staff and consultants/experts, performance management, payroll, travel management and other related processes will be carried out under the ERP system. Extensive training in 2011 ensured that staff members are equipped to work with the new system. It included classroom instruction, guided sessions, access to help desks as well as UNIDO-specific e-learning material, and will continue throughout the implementation period.

During 2011, a second pilot was carried out on the new performance appraisal system, which involved a random selection of staff at different levels and included all features of the new appraisal system. This followed a pilot in 2010 that was limited to the 360 degree feedback component for staff members at the Director level. The fine-tuning of the new system following the pilot trials was the culmination of a three-year process of consultations between staff and management on a performance appraisal system that would stand the test of time. It includes a number of innovative features

such as the 360 degree assessment for core values and competencies by a minimum of five and maximum of ten feedback sources. The latter feature provides for a greater degree of anonymity on the part of those peers, supervisors or counterparts involved in the assessment. It ensures the staff member a fairer and more objective evaluation since staff are involved in drawing up a list of people in a position to assess their work. In addition to looking at the individual competencies of the staff member, the new performance appraisal system examines to what extent he/she has been able to meet the goals and results foreseen for that particular post, as part of the goals and priorities of the unit, branch, division and ultimately the Organization. This compact between the Organization and staff members enables them to see clearly their place in the broader picture. From now on, the results of performance appraisal will be linked systematically to a number of administrative decisions including the extension of contracts. The new system will be introduced on an organization-wide basis in March 2012.

At the end of the year, UNIDO issued a new competency framework that identifies three core values, six core competencies and four managerial competencies as key behaviours and practices critical to organizational success. The framework was discussed extensively at the Organization's highest staff-management body, the Joint Advisory Committee, and was subject to two pilot exercises in 2011. It will be used for recruitment, staff development, career planning and performance management. Above all, it is expected that it will help reinforce a common culture within UNIDO.

The recruitment policy for individual international, national and local consultants and experts (so-called "non-staff personnel"), most of whom are employed for UNIDO technical cooperation projects and activities, underwent a major adjustment during 2011. The new policy is expected to be promulgated in the first quarter of 2012, underpinned by the same ERP platform that will support the management of all UNIDO human resources as well as the management of technical cooperation projects. One of the main improvements over the earlier policy is added flexibility for project managers to employ their consultants and experts for periods of one year at a time and up to four years without a mandatory break in service. Non-staff personnel with longer contracts will now share many of the entitlements of their colleagues holding a letter of appointment, such as paid annual, sick and maternity/paternity leave, or special supplementary benefits for serving in hardship and hazardous locations and duty stations.

## Our values and competencies



At the end of the year, UNIDO issued a new competency framework that identifies three core values, six core competencies and four managerial competencies as key behaviours and practices that are expected to reinforce a common culture within UNIDO.

A composition of the UNIDO Secretariat at the end of 2011 by grade, location and gender is given in appendix J to this report. In this connection, it is worth pointing out that 2011 witnessed the appointment or reassignment of women as the head of a number of important organizational units traditionally occupied by men: the Buildings Management Service, the Arab Programme and the Europe and Newly Independent States Programme.

## Managing gender balance

UNIDO set up a Gender Mainstreaming Steering Committee in 2010 to ensure full implementation of the Organization's policy on gender and the empowerment of women. The gender policy commits the Organization to mainstreaming gender equality in all technical cooperation policies, programmes and projects that touch on the economic empowerment of women. Another aim of the Gender Committee is the achievement of gender balance within UNIDO, in particular at the decision-making level. It sets a timeline and assigns responsibility for various activities

captured in its implementation strategy and action plan. With an organization-wide membership, UNIDO is ideally placed to ensure that gender balance is reflected in programmes, policies and organizational practices, as far as resources allow.

The Committee's implementation strategy and action plan for the period 2011-2013 was adopted by the Executive Board in March. A number of tasks were completed during the year. The Committee made sure that during the ERP design stage, gender specific disaggregated data collection was enabled for outcome and output indicators, particularly for baselines and targets to be achieved. It also appointed one of its members as a gender adviser to the Appraisal Group set up in 2010 and tasked, inter alia, with reviewing the economic, financial, social, institutional and gender aspects of UNIDO programmes and projects.

The Committee made recommendations to management on measures to improve gender balance within the Organization. In response, it was agreed to incorporate gender mainstreaming training into the Organization's 2012 induction courses. Beyond UNIDO, the Committee contributed to United Nations-wide gender mainstreaming

With an organization-wide membership, the Gender Mainstreaming Steering Committee is ideally placed to ensure that gender balance is reflected in programmes, policies and organizational practices.

Photo: UNIDO



activities and was involved in consultations for Europe-based entities on the System-wide Action Plan, a United Nations global initiative on gender equality and women's empowerment, held in Geneva in September. The Committee prepared two UNIDO inputs to the forthcoming fifty-sixth session of the Commission on the Status of Women on women's economic empowerment and the empowerment of rural women and their role in poverty and hunger eradication, development and current challenges. Another task of the Committee is to keep staff informed on the activities of the Inter-Agency Network on Women and Gender Equality, particularly those with a bearing on the work of UNIDO.

The fourth issue of UNIDO's quarterly magazine *Making It: Industry for Development* that appeared at the end of 2011 had gender equality as its theme and an article on gender-sensitive industrial development, contributed by the Committee, helped draw readers' attention to the subject.

## Managing accountability and ethics

The Office of Internal Oversight Services was established in 1998 with responsibility for improving the reliability, integrity, efficiency and effectiveness of UNIDO's operations and

ensuring organization-wide compliance with its rules and regulations. As part of ongoing efforts to strengthen ethics and accountability in UNIDO, a comprehensive programme was put in place for mandatory online training on ethics related issues, supplemented by classroom sessions. Over 40 staff members including field representatives and unit chiefs took part in training sessions organized in 2011. The Office of Internal Oversight Services in coordination with the Ethics Office, also carried out an awareness campaign during International Fraud Awareness Week in November, promulgated by the Association of Certified Fraud Examiners for organizations and enterprises around the world.

In 2011, UNIDO implemented the financial disclosure programme for the first time. A total of 216 declaration of interests forms were reviewed by the Office, based on which financial declaration statements submitted by 51 staff members were identified and reviewed.

## Managing staff safety and security

The year under review witnessed an increase in security challenges for UNIDO activities and operations. The Organization successfully ensured the security and safety of its staff who were assigned, or temporarily on mission, to countries facing a variety of crises and emergency situations. Following

## “2011 saw a number of security challenges

for many of our field staff in the wake of emergency and crisis situations, and I am proud of the courage, professionalism and responsibility shown by our UNIDO staff under those circumstances.”

**Kandeh K. Yumkella, Director-General of UNIDO, at his opening speech to the fourteenth session of the General Conference**

a violent attack on the United Nations premises in Abuja, Nigeria in August, the staff counsellor was sent to Nigeria to support affected staff and their families. Feedback confirms that this assistance was timely and effective.

2011 saw the implementation of the UNIDO Accountability Framework for Security Management and the incorporation of a security component in UNIDO programmes, projects and other activities. This enabled UNIDO to embark on, or resume, technical cooperation projects and programmes in countries where a serious security situation prevailed. The establishment of a robust and coherent security management system in UNIDO was finalized in 2011 involving staff throughout the Organization, both at Headquarters and in the field.

At the system-wide level, UNIDO was fully integrated in the United Nations Security Management System (UNSMS) and was actively involved in the elaboration of new security policies. UNIDO has maintained regular contact with all parts of the UNSMS including the United Nations Department of Safety and Security. At the Headquarters level, fruitful cooperation continued both with the Security and Safety Service of the United Nations Office at Vienna and representatives of other Vienna-based organizations (VBOs). A set of new security policies promulgated by UNSMS was successfully introduced in UNIDO in 2011 to enhance the security of UNIDO operations and activities.

UNIDO staff members have acquired a growing awareness of security issues through regular training, security briefings, presentations, consultations, information exchange, updates of the Administrative Handbook and the security page on the UNIDO Intranet. Field operations have become more secure as a result of better security preparedness on the part of staff.

### Managing the Vienna International Centre

Under the terms of a memorandum of understanding on common services, UNIDO is responsible for the operation and maintenance of the Vienna International Centre (VIC) for and on behalf of the VBOs. These include, in addition to UNIDO, the United Nations Office at Vienna, the International Atomic Energy Agency and the Preparatory Commission for the Comprehensive Nuclear Test-Ban Treaty Organization. With the addition of Building M in 2009, the VIC has a gross area of almost 380,000 m<sup>2</sup> and grounds of 180,000 m<sup>2</sup>.

The UNIDO Buildings Management team comprises specialized units for civil engineering, electrical and air conditioning engineering and electronics engineering, as well as general engineering and administrative services. Its body of



UNIDO Headquarters at the Vienna International Centre  
Photo: UNIDO

9 Professional and 125 General Service staff includes technicians in different fields of expertise from a wide range of countries, committed to providing a safe and hospitable environment for both occupants and visitors to the VIC while ensuring the cost effectiveness of services and the reliability of equipment and facilities.

Work continued in 2011 on the removal of asbestos from the VIC, an extensive project that has been successfully concluded in most of the VIC towers and is nearing completion in Building C. To avoid duplication of work at a later stage, UNIDO took advantage of the asbestos removal exercise in 2011 to carry out modernization and refurbishment work including the replacement of fire retardant coating, cabling, lighting, air ducts and tiling.

Most of the equipment housed in Building C, particularly the technical installations for conferences, dates back to the time of the construction of the VIC in the 1970s. While the walls, ceilings and floors were open during asbestos removal work in the conference area, UNIDO decided to replace the outdated technology with state-of-the-art conference facilities. In close cooperation with the other VBOs, UNIDO awarded a contract for the replacement of the old equipment following an extensive bidding exercise in 2011 and work is expected to be finalized by the end of 2012. In the course of 2011 and again in conjunction with the asbestos removal project, UNIDO technicians successfully replaced most of the water piping systems in Building C.

In a technically challenging exercise that should lead to significant savings in energy consumption, UNIDO carried out a bidding exercise in 2011 for the refurbishment of the

facade of Building C and the connecting tunnels. Funded by, and in coordination with, the Government of Austria, the new facade will include modern thermal insulation and state-of-the-art design. In November, a contract was signed with the selected company and work is expected to be completed by late 2012.

In another move to improve energy efficiency in the VIC, the technical specifications for the replacement of the air-conditioning plants in Building C were also finalized in 2011. The expected savings will be in the range of 320,000 kWh in heating energy (or 42 tCO<sub>2eq</sub>) and 200,000 kWh in cooling energy (or 43 tCO<sub>2eq</sub>). The project should be concluded by the end of 2012.

## Managing contracts, services and systems

### Procurement

The introduction of the new ERP system will make a significant difference to the Organization's procurement activities. During the first four months of 2011, staff engaged in procuring goods and services for UNIDO were closely involved in developing a blueprint for the procurement module. By the time the new system is launched on an organization-wide basis in 2013, there will be a number of far-reaching changes in the Organization's procurement procedures, processes and practices, two of which are described below.

The formal introduction of the concept of long-term agreements will allow for a streamlining of the Organization's

supply chain management and operations. Under long-term agreements, specific goods, works and services can be ordered repeatedly by UNIDO at pre-agreed rates and terms, avoiding time-consuming and manual bidding processes for frequently used items or services.

Another innovation is the introduction of e-procurement that facilitates a seamless exchange of bid-related data and information, reduces manual data entry work and, together with the knowledge management functionality, ensures an integrated audit trail. Its live auction functionality has the potential to yield substantial cost savings.

UNIDO also introduced a novel concept in the form of a performance-based implementation functionality by which, under certain conditions, procurement will be conducted by project beneficiaries. An arrangement of this kind has been made with the Foreign Economic Cooperation Office of the Ministry of Environmental Protection of China. This functionality will be applied for activities for the phase-out of ozone-depleting substances, covering preparatory projects, stand-alone projects (including demonstration projects) and sector plan projects.

In the course of the year, a number of staff members involved in procurement attended an advanced professional procurement certification course. The course was part of a formal procurement certification training programme developed for staff of all United Nations bodies and specialized agencies and based on a worldwide recognized certification scheme offered by the Chartered Institute of Purchasing and Supply in the United Kingdom. Staff of the substantive divisions also continued to take advantage of online procurement training that received a positive evaluation in 2011 (see above).

In May, UNIDO reorganized staff involved in procurement activities into three thematic teams in order to create a one-stop shop for all procurement and contracting matters related to a specific substantive area. This arrangement ensures the cross-fertilization of technical expertise and knowledge between the substantive branches of UNIDO and the corresponding procurement teams and focuses on greater value-addition and collaboration throughout the various stages of project implementation. A better understanding by the Organization's procurement staff of the operational requirements of programmes and projects under the three thematic priorities of UNIDO will contribute towards a smoother implementation of technical cooperation projects in the future.

### Other services

The imminent application of the ERP system to all administrative units led to the simplification of a number of procedures in 2011. The most far-reaching of these concerned the management of travel. A new ERP travel management system was tested during the year and a training manual prepared for staff on the proposed online booking tool. UNIDO is taking the lead in drafting new terms of reference for a travel contract that will include an online booking scheme.

Other steps taken in 2011 to simplify procedures and save costs involved the digitalization of archives and the publication of an archives manual and retention schedule; the revision of guidelines and procedures for the issuance of mobile phones; a review of terms of reference for a photocopying contract, in cooperation with UNOV; and the launch of a General Support Services helpdesk in July.

## SHARING THE COST: THE FULL PICTURE

**“This year also marks another important milestone** in GEF’s history: it was five years ago this December when our Council recognized UNIDO’s own comparative advantage linking energy efficiency and sustainable development in the industrial sector. Since then UNIDO has enhanced our portfolio in a myriad of ways—specifically by ensuring green industrial growth across the developing world.” Monique Barbut, CEO and Chairperson of the Global Environment Facility

For over 25 years, UNIDO has faithfully reported on the implementation of its programmes and projects based on the voluntary and assessed contributions received from its Member States as well as special contributions offered by donors and earmarked for a specific project. This was, however, just part of the story. In many instances, the financial input from UNIDO is matched, or even exceeded, by parallel financing provided by the recipient country itself, another Member State or group of States, the private sector, bilateral and multilateral organizations, civil society or other development partners. In 2011, a glance at the overall portfolio of UNIDO would suggest a ratio of 1:1 between grant financing, i.e. direct contributions from donors, and co-financing from external stakeholders. Under its current reporting system, UNIDO is neither required nor in a position to monitor the actual co-financing figures in a uniform manner except in the case of large donors such as the Multilateral Fund for the Implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer. In cases where the reporting of co-financing is mandatory or where it can be estimated,

the ratio between grant financing and co-financing would appear to be more in the region of 1:4.

Co-financing is an extremely valuable option. Within the context of its partnership with GEF, for example, UNIDO was responsible for a large portfolio of projects during the two last GEF replenishment cycles. Under GEF-4, UNIDO has 54 ongoing projects with a total project volume of over \$900 million, including a GEF grant total of \$200 million and a leveraged co-financing amount of \$700 million. Looking to the future, UNIDO has a substantive project pipeline solely for the GEF-5 June 2012 Work Programme resulting in a submission of 21 projects, amounting to a total volume of more than \$450 million with a GEF grant total of \$87 million and co-financing contributions of \$370 million.

Yet activities carried out under co-financing arrangements—whether in the form of direct grants, parallel financing, investment or contributions in kind—are not reported as part of the overall fiscal value of a particular project or programme and, with the above

exceptions, the Organization is not required to report on them. Similarly, UNIDO is only recognized for managing that part of a project financially administered by UNIDO, despite the fact that it oversees the entire project.

All this is about to change. With the integration of the portfolio and project management (PPM) and the grants management modules of the new ERP system at the end of 2012, UNIDO will be in a position for the very first time as of January 2013 to plan, monitor and report on the total volume of technical cooperation financing committed to its programmes and projects, including funds, goods or services used in the implementation of the project under co-financing arrangements.

The new PPM module that is already in place enables systematic reporting of the results, outcomes and outputs for each project including indicators on how these are being achieved, broken down by country or region, thematic area, donor and other criteria. This means that in future UNIDO will not only be in a position to report on qualitative and quantitative information for each individual project, but also at portfolio level. With the integration of the grants management module, co-financing will be seen as an integral part of the overall intervention and will be taken into account during each step of the project, from the earliest design and planning phase, through project implementation to the monitoring of the actual deliveries and, finally, the evaluation of the project's results and impact.

In many cases, co-financing contributions by the various partners represent important milestones during project implementation, which if not delivered on time and to the required standards, jeopardize the overall success of the project. By way of example, a project aiming to establish a fully functional industrial

skills training centre could be designed with a variety of contributions. The Government might provide a building, an industrial association could offer the operational and teaching staff, while UNIDO with the assistance of funding partners would renovate the building, install training equipment and organize the training of trainers and beneficiaries. If the sequence of project inputs provided by the various partners is not properly planned, implemented and monitored, the actual objective of the project will not be achieved.

The advantages of the new reporting system will be manifold. The incorporation of multiple sources of co-financing and in-kind contributions into the UNIDO project management system will fundamentally change the way Member States and development partners look at the Organization. Already today, there is a need for stakeholders to commit resources during the planning and negotiation phase of the project cycle. Recipient countries that have made a commitment to provide major inputs to a project, whether in cash or kind, will be able to better monitor their own contribution and follow its progress along the life of the project. This will instill a stronger sense of ownership that will in turn encourage other countries to share in the financing of their own projects. With this demonstration of ownership by the target countries and national stakeholders, the chances of long-term project sustainability will greatly increase. For all parties, it will provide greater transparency and enable a more effective results-based budgeting for projects and programmes.

Next year's *Annual Report* will provide further information on the development of this new approach. Eventually UNIDO stakeholders will also be able to access information online via a centralized One Stop Information Shop to retrieve comprehensive portfolio information directly from the system through a user interface and reports.

## » Industrial development

can help bring about structural change to set the economies of poor countries on a path of sustained economic growth.



## Poverty reduction through productive activities

“Without any doubt, the Millennium Development Goals represent the very best of United Nations ideals, ambitions and efforts to establish a fair, prosperous and secure world for all. On the one hand, they are the most important collective promise ever made to the world’s most vulnerable people. On the other hand, they represent an internationally agreed framework of quantified and time-bound targets which are an excellent tool for addressing the most pressing issues of extreme poverty, hunger and disease, and for promoting gender equality, education and environmental sustainability.”

Heinz Fischer, President of Austria, addressing the United Nations General Assembly

Under its thematic priority of poverty reduction through productive activities, UNIDO helps developing countries in their efforts to reach the targets enshrined in the Millennium Development Goals (MDGs). As the primary driver of economic growth and employment creation, productive activity plays a central role in poverty reduction and the achievement of the MDGs. Industrial development can help bring about structural change to set the economies of poor countries on a path of sustained economic growth. Industry provides a seedbed for entrepreneurship, promotes business investment, fosters technological upgrading and dynamism, improves human skills, creates jobs and establishes the foundation on which both agriculture and services may expand.

The public and private sectors play mutually supporting roles: it is the responsibility of governments to foster the development of productive capacities through their regulatory and policymaking functions while the private sector needs to pay special attention to the small and medium enterprises (SMEs) that in developing countries generate the economic activities that in turn help reduce poverty. This is nowhere more true than in the agriculture-based economies of Africa and the least developed countries (LDCs), where the development of agro-based enterprises can enhance productivity and reduce poverty, provided there is adequate investment. It is up to UNIDO and other global players to make potential investors aware of opportunities for partnership with national producers.

Despite considerable progress in improving the status of women through access to education and employment, they often remain excluded from mainstream economic activities and suffer disproportionately from poverty. Youth are also among the most marginalized groups of society in poor countries; they are more likely to be affected by unemployment than adults and are similarly more vulnerable to economic downturns. Populations in developing countries that have recently

emerged from different crisis situations likewise face daunting challenges and turn to the international community, particularly where governmental structures have been weakened by the crisis.

The following chapter describes some of the steps taken by UNIDO in 2011 to tackle the poverty imperative under four thematic programme components: business, investment and technology services; agribusiness and rural entrepreneurship development; human security and post-crisis rehabilitation; and women and youth in productive activities.

## Business, investment and technology services

The first programme component under the thematic priority of poverty reduction through productive activities concerns business, investment and technology services for development, including private sector development and the promotion of clusters and business linkages.

The foremost prerequisite for economic growth in the world's poorer countries is investment, both in terms of capital and technology, much of which needs to be attracted from outside these countries themselves. Yet precisely those countries most in need of foreign direct investment to help lift them out of poverty often lack a business climate conducive to the promotion of investment and technology, largely as a result of government and market failures and weaknesses in institutional capacity.

With a large team, both at Headquarters and in the field dedicated to investment and technology, UNIDO is well equipped to tackle the challenge. It systematically addresses government and market failures in order to overcome some of the problems faced by developing countries and those with economies in transition in acquiring the investment and technology appropriate for their particular needs.

Much of UNIDO's work in this area in 2011 focused on Africa, where the Organization concluded an extensive investor survey that it had started in 2010. Covering 19 sub-Saharan African countries and over 7,000 companies, the survey provides investors with the information required to make sound investment decisions. A new web tool provides access to visualize the data for analysis and enables investors and policymakers to map investment flows in Africa. The Investment Monitoring Platform (IMP) is a tool developed by UNIDO to provide investors with the information they need to make sound decisions as well as record information on the characteristics of foreign investors and domestic enterprises. Data from the IMP will help stakeholders identify the different types of investors, their performance, their influence on economic change, their perception of investment parameters as well as their expectations from local institutions in terms of services. The IMP will also assist governments and investment promotion agencies to measure the impact of foreign investment on development objectives, provide guidance for evidence-based policy formulation as well as facilitate the rational use of resources to target investors. The new platform was launched in September in



» AfrIPANet is a UNIDO programme that provides African investment promotion agencies with a common platform to discuss and design investment promotion strategies. The network aims to change the culture of investment promotion agencies by building their capacity to provide accurate, up-to-date investor information through the Investment Monitoring Platform. Technical assistance also helps them to readjust investment promotion strategies towards the implementation of customized business support services in order to reap the benefits of international investment and link local productive sectors to the global economy.

Xiamen, China, at the Sixth General Congress of African Investment Promotion Agency Networks (AfrIPANet), held during the China International Fair for Investment and Trade. It resulted in an upgrading by UNIDO of 16 African investment promotion agencies.

During 2011, UNIDO set up subcontracting and partnership exchange (SPX) centres in ten African countries: Cameroon, Ethiopia, Ghana, Kenya, Mozambique, Nigeria, South Africa, Uganda, United Republic of Tanzania and Zambia. The centres identify benchmarks and match local SMEs as suppliers and subcontractors to foreign investors, thus enhancing the development impact of foreign direct investment. UNIDO also established new centres in Iraq and supported the operations of enterprise development units in three governorates of the country that provide services to 350 Iraqi entrepreneurs, including counselling, business plan development, investment promotion, financial linkages and matchmaking. With the support of UNIDO, 150 companies were either created or expanded, providing an estimated 800 new jobs. In cooperation with the Italian International Telematic University (UNINETTUNO), UNIDO equipped the centres with e-learning infrastructure and provided distance education courses on issues related to enterprise development and investment promotion. Funded by the Italian Development Cooperation of the Ministry of Foreign Affairs, the aim of the project is to encourage the development of new businesses. UNINETTUNO supplies the technology to implement distance education courses on the Internet and on satellite television, while UNIDO is responsible for the

course content and coordination. Loans were extended to 89 entrepreneurs through the Enterprise Development and Investment Promotion (EDIP) credit facility. An additional 32 EDIP centres were created in countries in Africa, the Arab region and Asia and the Pacific with a view to leveraging foreign direct investment and creating wealth.

There are 13 UNIDO Investment and Technology Promotion Offices (ITPOs) in 11 countries. Each office was closely involved in 2011 in events taking place throughout their respective region. UNIDO and the People's Republic of China signed a \$1 million agreement in May for the third phase of a project supporting the Shanghai Investment Promotion Centre. The agreement will promote the inflow of foreign capital to Shanghai as well as the outflow of Chinese investments to developing countries, in particular those in Africa and countries with economies in transition. Under the agreement, the Shanghai Investment Promotion Centre will assist the Shanghai Municipal Commission of Commerce in expanding cooperation between Shanghai-based industries and foreign partners. In parallel, the Centre will help Chinese investors to identify opportunities for industrial partnerships and develop business proposals.

A regional workshop took place in September in Kenya on benchmarking for SME supplier development in East Africa within the framework of the UNIDO SPX programme. Business advisers from Ethiopia, Kenya, Uganda, United Republic of Tanzania and Zambia were offered an interactive training experience in which they learned about the UNIDO benchmarking tool currently available to the



UNIDO and China signed a \$1 million agreement in May for the third phase of a project supporting the Shanghai Investment Promotion Centre. The Director-General of UNIDO congratulates the Deputy Secretary-General of the Shanghai Municipal People's Government and Chairman of the Shanghai Municipal Commission of Commerce, Sha Hailin.

*Photo: UNIDO*

»The objective of the SPX programme is to help local enterprises to meet the challenges of globalization and to take advantage of the emerging opportunities that evolve from industrial subcontracting, outsourcing and supply chain systems. Over the past 25 years, UNIDO has established some 60 centres in over 30 countries. The target beneficiaries are small and medium enterprises that through exposure to large private enterprises and public procurement bodies eventually improve the quality and volume of their output. Large enterprises acting as contractors and buyers benefit from increased levels of local content that in turn reduces their procurement costs.

emerging SPX network in Africa. By the end of the workshop, they had gained the knowledge and competencies required to carry out all stages of the benchmarking process effectively with businesses in their respective countries.

The second Eco-Cities of the Mediterranean Forum on water and waste management, held in October in Marseille, France, set a platform for municipalities and the private sector to exchange experiences on the most critical environmental issues facing the Mediterranean region and discuss business opportunities, including environmental services and best available technologies. The Forum described existing technological solutions available to cities and provided examples of successful public-private partnerships (for further details, see chapter 5).

ITPO Japan was closely involved in the organization of the Tokyo Green Industry Conference, held in November. The Conference highlighted available environmental and resource conservation techniques and practices that are good both for business and the environment, as well as for employees, communities and consumers. Discussions focused on policy and business solutions to achieve a widespread uptake of proven techniques and technologies, as well as to encourage innovative solutions leading to even greater reductions in resource use and pollution intensity (see also chapter 5).

Agriculture and investment opportunities in sub-Saharan African countries were the topic of a special forum organized by ITPO Italy in cooperation with the Ministry for Foreign Affairs and the Ministry for Agriculture, Food and Forestry Policies of Italy. The Forum brought together the ministers of agriculture of several sub-Saharan African countries with representatives of major Italian business associations and institutions in the agribusiness sector with the aim of encour-

aging a greater involvement of Italian enterprises in the agribusiness and fishery sectors of sub-Saharan Africa.

The first Arab-International Forum of Young Entrepreneurs and Business Persons, described in greater detail below, was co-hosted by ITPO Bahrain. ITPO Walloon region of Belgium helped organize a two-day Armenia-Belgium Business Forum, held in Yerevan in November during the Belgian Business Week in Armenia. The event helped forge economic and trade relations between the two countries and provided an opportunity for 54 business-to-business meetings between Armenian and Belgian companies during the course of which Armenian entrepreneurs were able to present investment proposals.

ITPO Russian Federation was one of the co-organizers of the Fourth Nevsky International Ecological Congress, held in St. Petersburg, Russian Federation, in May (see chapter 5). In 2011, project offices were set up in Armenia, Belarus, Kazakhstan, Kyrgyzstan and Tajikistan under a \$2.2 million project, funded by the Russian Federation to develop investment and technology promotion networks for the Eurasian Economic Community (EurAsEC) member and observer countries. Under the terms of the project, the five project offices will eventually become UNIDO Centres of International Industrial Cooperation, supported financially by their respective Governments. The centres will concentrate on the development of institutional infrastructure, information and methodological software and education, and the development and implementation of pilot projects. The UNIDO Centre for International Industrial Cooperation in the Russian Federation has been in existence since 1989 and has acted both as an investment and technology promotion office and UNIDO focal point.

» Under an MDG-F joint programme, UNIDO in cooperation with FAO and ILO is helping to increase the productivity and competitiveness of oilseed producers in Ethiopia, boost the capacity for processing edible oil seeds and improve access to local and international markets. This is being achieved by integrating the private sector into the entire edible oil seed production value chain.

Photo: UNIDO



Three advisory board meetings of the UNIDO project to enhance the industrial integration of EurAsEC countries were held in the secretariat of the EurAsEC Integration Committee.

A training workshop on investment project preparation and financial appraisal was held in July at UNIDO Headquarters in cooperation with the Gulf Organization for Industrial Consulting. The financial analysis workshop aimed to provide participants—industry professionals, investors and others who are actively involved in the preparation or appraisal of investment projects—with the tools required to contribute to shaping the future of industrial development in countries in the region and acquaint them with the latest international developments through forecasts on key economic indicators.

In November, UNIDO hosted one-to-one investment meetings in Abu Dhabi for investors and food manufacturers aspiring to set up food businesses. The aim of the meetings was to encourage investment in food manufacturing in the region in order to reduce reliance on imports, contribute to food security and create job opportunities. Some 50 companies met industrialists and investors seeking new manufacturing projects in the food industry from Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

### Cluster and business linkages

In developing countries, the private sector consists mainly of micro, small and medium enterprises that generate the lion's share of employment and income opportunities, particularly in rural areas. Surprisingly, however, their development potential often remains untapped. Small firms tend to operate in isolation or are locked into uncompetitive production patterns

while at the same time, they are unable to approach business partners who could bring in new expertise and know-how.

UNIDO has designed a methodology for the formulation and implementation of cluster development projects that begins with the selection of the clusters and includes a diagnostic study of their strengths and weaknesses, a development strategy based on a shared vision, the management and coordination of activities outlined in the action plan and finally, monitoring and evaluating the qualitative and quantitative outcomes of projects. This methodology helps trigger the process of cluster development. To ensure the sustainability of its methodology, UNIDO helps strengthen the capacity of local institutions to assume leadership of the process and support cluster firms in their future endeavours.

In 2011, UNIDO continued strengthening its tools for cluster development. Its stronger focus on Africa and LDCs responded to a growing demand from sectors such as food, textile and garments, leather and footwear, wood and furniture, construction materials and the automotive sector. New requests for UNIDO to support the development of cluster policies as an integral part of industrial innovation and regional policies was addressed through capacity-building and advisory services.

In 2011, UNIDO developed a training manual for cluster development, to be issued in 2012, and held a number of training courses on cluster development and SME consortia. Monitoring and evaluation for cluster development was the subject of a course that took place in February at UNIDO Headquarters. It focused on the identification of indicators, data collection and reporting procedures, existing monitoring and evaluation practices and improvement needs within the Organization's cluster and business linkages programme.

A training of trainers course on planning and monitoring for cluster initiatives was held in Vienna in September. Thirty project and technical experts as well as Headquarters staff validated the project monitoring guidelines and manual and upgraded their skills. They also reviewed a pilot implementation of the monitoring and evaluation manual for cluster development, private sector development and supply chain development projects in Egypt, Ethiopia, Serbia and Turkey. The monitoring and evaluation methodology will be applied in UNIDO projects related to cluster development and SME consortia.

Regional training on SME consortia took place at the International Training Centre of the International Labour Organization (ILO) in Turin, Italy, from July to November. Organized in cooperation with the Centre and Federexport, the Italian Federation of Export Consortia, it saw the participation of 20 representatives of public and private sector organizations in Latin America and the Caribbean. The Turin training was followed by a four-month e-learning phase, in the course of which participants received online coaching in the development of consortia proposals through the UNIDO consortia e-learning platform. This resulted in new consortia initiatives in six countries of the region. Most of those participating in the training course will join the Latin American network of SME consortia promoters, currently being set up under a new interregional project to promote SME origin and export consortia.

In October, an expert group meeting took place in Vienna on fostering sustainable linkages in the automotive supplier industry. It brought together 20 experts representing key

actors in the automotive industry from governments and industry (original equipment manufacturers and tier 1 companies), support service providers and international experts and researchers. The workshop reviewed and benchmarked UNIDO projects and activities and outlined a comprehensive strategic approach to supporting the automotive industry in developing and emerging economies. Participants were able to assess key trends affecting the automotive industry in the areas of supplier development, business linkages and low-carbon industrial development; review different UNIDO services to the industry and identify the potential for integration in a broader programmatic approach; and make concrete suggestions on how to integrate a pro-poor perspective in UNIDO technical cooperation projects targeting the automotive industry. A new integrated approach for sustainable supplier development for the automotive industry will be finalized in 2012.

UNIDO was represented in numerous forums throughout the year where it was able to promote its cluster development approach. At an international conference held in Tallinn, Estonia in March on “Inspiring Clusters in the Beginning of the New Decade”, it was invited to make a presentation on the cluster development approach as a win-win solution for SMEs, sustainable competitiveness and market access. UNIDO addressed the fifth International Conference on Clusters, held in Croatia in May, on regional challenges and possibilities of cluster development in South-East Europe. The UNIDO origin consortia approach was the topic of a keynote speech given at the Worldwide Symposium on Geographical Indications, organized by the World



Twenty experts in the automotive industry attended an expert group meeting in October to review and benchmark UNIDO projects and activities and agree on a strategic approach to supporting the automotive industry in developing and emerging economies.

*Photo: UNIDO*

Intellectual Property Organization in Lima, Peru in June and the ensuing National Seminar on Geographical Indications, held in Kuala Lumpur, Malaysia in November.

### **Competitiveness upgrading and partnership**

When developing countries produce pharmaceuticals locally, they are not only providing a ready supply of medicines to combat disease on their own doorstep, but creating the much needed jobs that will bring income and help fight poverty. UNIDO has identified a clear niche in strengthening the local production of high-quality essential medicines that will help enable countries to meet public health objectives, including Goals 4 and 6 of the MDGs.

In order to increase the competitive local production of essential medicines, it is not simply a question of providing technical assistance to the enterprises concerned. Steps need to be taken at the policy, institutional and company level. At the policy level, UNIDO can help to formulate strategies for developing a country's pharmaceutical industry and ensure that these strategies are acceptable to all stakeholders. At the institutional level, UNIDO can offer assistance in strengthening training institutions while at the company level, it can support pilot companies to demonstrate the economic viability of local production.

A workshop was held at UNIDO Headquarters in September on the implementation of the Pharmaceutical Manufacturing Plan for Africa (PMPA). The workshop marked the start of formal collaboration between UNIDO and the African Union Commission (AUC) to introduce

a continent-wide policy on local pharmaceutical production, extending beyond the original outreach of the project to strengthen the local production of essential generic drugs in developing countries that was limited to national and regional levels. The foundation of the partnership between UNIDO and AUC was laid earlier in the year at an International Conference on Local Pharmaceutical Production in Africa, jointly organized in Cape Town, South Africa, by UNCTAD, UNIDO, the German international cooperation agency GIZ and Action against AIDS Germany.

Participants at the ten-day UNIDO-AUC workshop developed a common approach to the promotion of the local pharmaceutical manufacturing sector in Africa, elaborated in a concept paper on the implementation of the PMPA. UNIDO-AUC collaboration will initially focus on the formulation of a business plan for adoption by African Union policymakers in 2012 to pave the way for implementation of the project over the coming five years. The business plan will include a technical cooperation component to support individual countries in developing a pharmaceutical industry that will benefit both public health and economic growth. Partners including the Joint United Nations Programme on HIV/AIDS, the World Health Organization, the United States Pharmacopeial Convention and other relevant entities will be invited to participate both in the formulation and implementation of the project. Initial steps were taken under the global UNIDO project, financed by Germany, to strengthen the local production of pharmaceuticals in developing countries.

In a multi-agency project that links the development of culture-based industries with poverty reduction in Bhutan, UNIDO is responsible for including an entrepreneurial and business component in existing vocational training curricula. UNESCO is undertaking cultural resource mapping and a survey on culture industries while UNDP is putting in place systems to monitor and recognize craft excellence.

*Photo: UNIDO*



»»The goal of 3ADI is to have an agriculture sector in Africa and the LDCs by the year 2020 that is made up of highly productive and profitable agricultural value chains. The initiative aims to accelerate the development of the agribusiness and agro-industries sectors that ensure value-addition to Africa's agricultural products. As part of the initiative, the three organizations involved assess constraints to the expansion of the value chain, from farmer to consumer, and propose solutions to overcome those constraints.

Under a project launched in Viet Nam in 2010, UNIDO is helping the country to undertake a nationwide reform of its business registration system. As a result, enterprises will be able to register for business, tax code, statistics and seals through a single-point, using a consolidated form and obtain a unique enterprise identity. National capacities are being developed to simplify the legal framework, processes and procedures and to set up and operate the computerized national business registry system that by the end of the year contained 650,000 company records. Results to date show a considerable improvement in the time taken to complete business registration. Almost 90 per cent of business registration applicants were issued with enterprise codes and registered within five working days compared to 15 days before the start of the project.

## Agribusiness and rural entrepreneurship development

Poverty reduction is intrinsically linked to rural development; most of the world's poorest populations live in rural areas and depend on agriculture for their livelihood and even urban poverty stems from a dearth of employment opportunities in the rural hinterland. There is a profound economic, social and environmental justification for a thorough and comprehensive transformation of the rural sector—one that not only raises the productivity of agriculture, forestry and fisheries but also increases the local processing and domestic value addition of commodities.

These are the fundamental tenets of the Accelerated Agribusiness and Agro-Industries Development Initiative (3ADI) that draws on the combined technical resources of the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD) and UNIDO to support the expansion of agribusiness value chains in developing countries (see box).

In the Democratic Republic of the Congo, cassava, a staple product which provides food and income for 70 per cent of the rural population, is one of three products earmarked under the 3ADI, along with palm oil and wood. It is intended to improve supplies to Kinshasa and expand the provision of palm oil and cassava in three provinces around the capital. The Government of Japan provided \$1.3 million for the set up of a pilot food processing facility in Kimpese, in the province of Bas Congo, as part of the programme. From mid-2011, UNIDO hopes to increase the number of countries involved in the initiative and further develop downstream activities.

To enhance its effectiveness in an evolving environment, UNIDO must target public and private investment. During the year under review, UNIDO developed strategic partnerships with a number of finance providers and is now involved in a technical advisory capacity with several funds offering private equity finance to agribusiness entrepreneurs across Africa. On the occasion of the LDC Ministerial Conference in November, UNIDO hosted a debate on realizing synergies between technical assistance, public investment and private finance (for more information on the LDC Ministerial Conference, see special feature at the end of this chapter).

**“As agricultural producers** and custodians of a large share of the world’s natural resources, poor rural people have key roles to play, contributing not only to global food security and economic growth, but also to climate change mitigation efforts.”

**Kanayo F. Nwanze, President of the International Fund for Agricultural Development**

With a world population crossing the seven billion mark in 2011, food security was high on the development agenda. UNIDO complements and supports the work of dedicated United Nations bodies such as FAO and the World Food Programme through its unique contribution to food security that focuses on availability, accessibility, quality and predictability.

In line with its strategy to help form public-private partnerships, UNIDO cooperated in 2011 with foreign equipment manufacturers in Ethiopia and Iraq to the mutual benefit of both partners. Private multinational producers of trucks, transport technology and other capital goods wishing to strengthen their operations in emerging markets require a local supply of qualified mechanics backed by a network of suitably equipped workshops to ensure the necessary servicing and maintenance of their equipment. Through its early involvement in vocational training and its links with the national skill development infrastructure, UNIDO can facilitate the build-up of local capacities and ensure their effective integration in national human resource strategies.

In response to a growing number of requests from client countries, UNIDO is currently involved in several projects to promote the development of cultural assets through creative industries. During 2011, UNIDO encouraged entrepreneurs in rural areas to capitalize on traditional goods and services, ranging from textiles, jewellery, leather, wooden furniture, ceramics and metalwork to food products. The aim of UNIDO is to help put in place strategies for the development of creative enterprises that will provide employment

and income for those who have few assets to build on, other than their creative talent, cultural heritage and knowledge-based traditional skills. During 2011, projects were under way in Bhutan, Bolivia (Plurinational State of), China, Egypt, Ethiopia, Pakistan and Peru. New projects are being formulated for Pakistan and Egypt to develop a programme for creative entrepreneurship, targeting specifically women and youth.

The creative economy and the green economy are mutually supportive. Together with UNESCO, UNIDO held several consultations in 2011 with a view to improving quality, original and innovative design, branding, labelling and marketing, thereby fully respecting cultural heritage. In today’s competitive world where concerns for harnessing environmentally-friendly resources are paramount, the development of creative industries is considered a key sector to introduce new perspectives and technologies, through sustainable national and industrial development strategies for poverty reduction.

### **Agribusiness**

In November, television viewers the world over had an opportunity to hear the Director-General discuss agribusiness in Africa in an interview for CNN’s Marketplace Africa entitled “Growing Africa beyond agriculture”. The Director-General stressed the need for African countries to add value to their natural resources as a way out of poverty. He saw a great potential for growth in agribusiness and pointed out that since the continent is home to 60 per cent of the planet’s uncultivated land, it could become the breadbasket for the rest of the world.

In the area of agribusiness development, UNIDO concentrates on strengthening the food processing sector in developing countries in order to market wholesome and nutritious food for local consumption as well as for export. Although UNIDO pays special attention to rehabilitation projects in post-crisis countries (see following section), the main thrust of its activities is directed to Africa.

## Value chains

The agro-food industry has recently undergone fundamental changes on a global scale, presenting at the same time opportunities and challenges for developing countries. While market liberalization has encouraged new investment flows and facilitated access to advanced technologies that in turn provided opportunities for agro-industrial enterprises in terms of product and process innovations, it has also exposed domestic producers to a number of risks.

In order to maximize the benefits deriving from agro-industrialization, greater attention needs to be paid to changes in the structure of value chains in terms of safety and quality criteria in the production and transformation of agro-food products. In order to respond to the substantial increases in demand expected in the future, agricultural and food industries need to reduce post-harvest losses by improved storage, packaging and transportation. Their ability to achieve this will be highly dependent on the wider application of existing technologies as well as the exploitation of new and innovative technologies. In this context, packaging is one of the most challenging cross-cutting constraints to the development of agro-industries. Packaging not only preserves and protects food, but facilitates its transportation, distribution and marketing.

For some years, UNIDO has been working with the Italian trade exhibition organizer IPACK-IMA that runs events for the processing and packaging technology industries and in 2010 signed an agreement to strengthen collaboration. One ongoing initiative is the creation of a joint packaging centre in sub-Saharan Africa. On the occasion of Interpack, the foremost trade fair for the packaging industry, held in Düsseldorf, Germany in May, UNIDO announced that it would be convening a symposium on "Packaging Technologies to Enhance Food Safety and Food Security in African Countries" at the IPACK-IMA International Trade Fair in Milan, Italy in 2012. At the same time, UNIDO set up an award to recognize the innovative content proposed by worldwide stakeholders both in research and the technical and commercial aspects of technologies to enhance food

safety and improve the management of food supply, transport and distribution as well as consumption in humanitarian crises and emergency situations.

As is the case in Africa, agro-industries in the poorer areas of Latin America and the Caribbean represent the greatest potential for wealth creation and employment. The agro-industrial sector in the region suffers from the absence of economies of scale and product diversification at different levels of the value chain. To complement individual projects that focus on selected steps of the value chain, UNIDO is proposing integrated solutions to support every step of a given value chain. An expert group meeting organized by UNIDO in cooperation with the Group of Latin American and Caribbean States (GRULAC) on the competitiveness of agro-industrial value chains took place in Costa Rica, in January/February. The aim of the meeting was to improve the competitiveness of the agro-industrial products of the region by strengthening local value chains and by establishing synergies with other regional UNIDO initiatives. During the expert group meeting, representatives of the participating institutions from the region presented selected value chains. A number of international development and financial aid institutions introduced their respective mechanisms to support the productive and rural sectors of the region as well as their aid programmes. Ten factors were identified that inhibit the competitiveness of agro-industrial value chains. One of the principal recommendations emanating from the meeting was the development of a web-based platform to enable the exchange of knowledge between UNIDO and the main institutional and technical partners in the Latin American and Caribbean region and to use the UNIDO Industrial Knowledge Bank to promote South-South technical cooperation.

The promotion of mechanization technologies to increase agricultural productivity and support community stabilization in post-crisis countries continued to be a priority for UNIDO in 2011. After the successful completion of mechanization projects in Afghanistan and Sri Lanka, further technical assistance in mechanization and food processing is being provided in Afghanistan to support the reintegration process initiated by the Government (see section below).

*What every tanner should know about effluent treatment* was the subtitle of a publication issued by UNIDO in 2011 to acquaint tannery managers with basic principles and methods. The book was complemented by an animated visual training tool, the impact of which led to a quicker grasp of techniques involved in the treatment of effluents. UNIDO



»A new 347-page study issued by UNIDO in 2011 looks set to become the entrepreneur's guide to setting up agribusiness in Africa. It has been positively appraised by independent reviewers and hailed as a leading publication in its field. *Agribusiness for Africa's Prosperity* targets policymakers, agribusiness managers and researchers in agribusiness development. It analyses the challenges, potential and opportunities of African agribusiness at a time of dramatic change in global agro-industrial markets, and builds a convincing case for agribusiness development as a path to Africa's prosperity.

Covering all major agro-industrial subsectors, including the non-food and service industries, the book examines the major drivers of agro-industrial development and the human capacities needed for its acceleration. Edited by an interdisciplinary research team led by the Director-General, the book draws on the knowledge of eminent economists and development experts working in agriculture, academia and international organizations. It was produced in collaboration with reputable development institutions including the African Development Bank, the Commonwealth Secretariat, the Danish Institute for International Studies, Michigan State University, the Overseas Development Institute and the University of Warwick. In his foreword, the President of IFAD, Kanayo F. Nwanze, lists the seven most urgent steps required to transform subsistence agriculture into productive agribusiness: enhanced productivity, upgraded value chains, exploitation of demand, strengthened technology, promotion of innovative sources of financing, stimulation of private sector participation and improvement in infrastructure, and access to energy. Building on these seven pillars of

agribusiness development, the book lays out an agenda for action and a practical framework to guide efforts on the part of the entire range of stakeholders.

*Agribusiness for Africa's Prosperity* was launched in 2011 in Freetown, Paris, Tunis and Washington, D.C., to be followed in 2012 by its launch in Abuja and Addis Ababa. The various events organized around the launch took place with the close involvement of UNIDO's partners and its representatives in the field in order to derive the maximum public relations and policy benefits. The book has been translated into French for the benefit of francophone countries in Africa.

As a companion to *Agribusiness for Africa's Prosperity*, UNIDO issued a series of case studies on eight African countries—Cameroon, Ethiopia, Kenya, Mali, Nigeria, Senegal, South Africa and Zambia—that describe, inter alia, the rationale for agro-industrial and agribusiness development, as well as the structure and dynamics of the process.

## »» South-South cooperation

“1.75 billion people in 104 countries remain unable to meet some of their basic needs ... The number of undernourished people in the world remains unacceptably high, at close to 1 billion—including more than one in four children under the age of five in the developing world. The impacts of climate change, humanitarian crises and armed conflicts only exacerbate the plight of the world’s poorest and most vulnerable people. South-South cooperation is a vital component of the world’s response. Developing countries that pool know-how, exchange ideas and coordinate plans can attain much greater gains than they ever would on their own.”

**Ban Ki-moon, Secretary-General of the United Nations**

Developing countries can draw valuable lessons from the experience of those that trod the path to industrial development before them, avoiding some of the pitfalls and aspiring, from the outset, to environmentally-friendly and sustainable development. UNIDO has since its inception recognized technical cooperation among developing countries as a key driver to effective industrial development and it is firmly embedded in UNIDO projects and programmes across its entire slate of technical cooperation activities.

In parallel with efforts made in 2011 to reinforce the South-South cooperation element of its technical cooperation activities, UNIDO also took steps to strengthen two institutions set up for the express purpose of harnessing the successful results of the more advanced developing countries for the benefit of those at an earlier stage of development. The first UNIDO Centre for South-South Industrial Cooperation was launched in New Delhi in 2007 followed a year later by a second centre in China. Both centres have made an important contribution to South-South cooperation in the area of agribusiness, new and renewable energy technologies, trade capacity-building and technology transfer as well as policy advice and institutional capacity-building. The centres also facilitate investment and manufacturing trade partnerships between host countries and other developing countries, as well as enhancing the dissemination of valuable development

experiences and technological progress. The centres have initiated, and in some cases already completed, projects in Bangladesh, Benin, Cameroon, Côte d’Ivoire, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Mozambique, Nigeria, Senegal, Sierra Leone, South Africa, Sudan, Timor-Leste, Uganda, United Republic of Tanzania and Zambia. The projects focus on entrepreneurial capacity-building, low-cost housing and support for infrastructure in agri-processing, amongst others.

Both in its statement to the United Nations General Assembly and its involvement in the 2011 Joint Inspection Unit report *South-South and triangular cooperation in the United Nations system*, UNIDO has positioned itself as a strong champion of South-South cooperation. UNIDO was closely involved in the Global South-South Development Expo, hosted by FAO at its headquarters in Rome in December. During the four-day event, exhibitors showcased successful examples of southern-led solutions to global development challenges, with particular focus on the issues of food production, agricultural technology and nutrition in developing countries. Participants included former Heads of State, prominent government officials, senior officials of the United Nations system, Permanent Representatives to the United Nations and heads of industry from around the world. As part of the event programme, there were six solution forums of which UNIDO led one on the topic of agribusiness, food security and renewable



energy where it highlighted recent projects that have enabled developing countries to shift to higher value-added production, processing and marketing systems. At the High-level Development Cooperation Directors-General Meeting held at the Expo, the UNIDO approach to South-South cooperation was outlined.

A special exhibition included five UNIDO booths: agribusiness for Africa's prosperity; renewable energy for revival of the dairy value chain and better nutrition; wild shea tree: new gold for women of West Africa; mini hydro-power plants: effective energy access solutions for productive activities in rural communities from China to Rwanda and Burundi; and solar power for irrigation in remote areas of Mozambique. UNIDO also participated in a South-South

Stakeholders Meeting that brought together focal points from United Nations agencies, regional development banks and regional economic commissions. The UNIDO/FAO Joint programme on Solar Power for Irrigation in Mozambique won the annual South-South award for innovation, one of three awards made each year by the Global South-South Development Expo (for more information, see chapter 5). UNIDO will host the 2012 Global South-South Development Expo at its Headquarters in November.

South-South cooperation success stories also featured in an exhibition held during the fourteenth session of the General Conference, while the LDC Ministerial Conference 2011 (see special feature below) included a high-level panel discussion on the topic.

*Left:* Bamboo grows widely in Timor-Leste and is used for a multitude of purposes. Following the completion of a pilot Bamboo Production Centre in Tibar with its own bamboo nursery and vocational training centre, UNIDO is now demonstrating technologies for product diversification and skill enhancement for craftspeople and small- and medium-scale entrepreneurs in the bamboo and wood sector of Timor-Leste.

*Centre:* The UNIDO/FAO Joint programme on Solar Power for Irrigation in Mozambique won the annual South-South award for innovation, one of three awards presented each year by the Global South-South Development Expo.

*Right:* "Our aspirations are great because we see the industrial revolution as the greatest opportunity for creating wealth, creating jobs and moving our people out of poverty". Richard Konteh, Minister of Trade and Industry of Sierra Leone, addressing the General Conference. The picture shows solar panel installations at the Binkolo Growth Centre where UNIDO is helping Sierra Leone to introduce renewable sources of energy. Four engineering experts were sent by UNIDO to India to be trained in renewable energy technology.

*Photos: UNIDO*

also presented a paper in September during the XXXI World Congress of the International Union of Leather Technologists and Chemists Societies in Valencia, Spain, on energy savings in Bangladeshi tanneries through the use of solar energy and improved electrical performance.

## Human security and post-crisis rehabilitation

Human security is a concept that addresses both the protection of well-being from chronic threats and vulnerabilities that are either structurally embedded in people's lives—poverty, precarious livelihoods, unemployment, diseases, disabilities are common examples—or the result of external crises, such as pandemics, financial and economic downturns, natural disasters and armed conflict. Conflict and crisis tend to affect the weakest and most vulnerable sectors of society. Productive capacity is destroyed or at least compromised and frequently families are dislocated. The fate of recovery efforts in post-crisis situations is largely determined by the degree of success in making the transition from the initial emergency and relief stage to rehabilitation and reconstruction and ultimately to development.

The General Conference, at its tenth session in 2003, encouraged the Director-General “to take the necessary steps to ensure, in collaboration with other United Nations agencies, the continuation of UNIDO involvement in designing and, when the necessary conditions are secured, in implementing sustainable industrial development projects in countries emerging from crisis situations, in full consultation with the appropriate authorities” (GC.10/Res.6). Since then, UNIDO's portfolio of post-crisis projects has been constantly growing. At its thirty-ninth session in June, the Industrial Development Board approved the programme and budgets proposed by the Director-General for the biennium 2012-2013 that placed human security and post-crisis rehabilitation as one of the four components of its thematic priority of poverty reduction through productive activities. The aim of this component is to stabilize and rebuild productive capacities in industry following civil conflict or natural disaster, thereby enhancing the human security of vulnerable groups.

Mechanization technologies to increase agricultural productivity and support community stabilization are crucial for countries emerging from a crisis and this continued to be a priority for UNIDO in 2011. Building on the success of its recovery assistance in other crisis-affected regions, UNIDO

launched a new project in Afghanistan in 2011, funded by the Government of Japan. The project, which supports the Government's reintegration efforts, is designed to help increase the capability of marginalized and poor rural communities in Nangarhar Province to engage in viable farming and non-farming enterprises, thus reducing their dependency on relief aid and helping them to move towards sustainable livelihoods.

During 2011, UNIDO was involved in vocational training programmes with special emphasis on reconstruction efforts in post-crisis countries. Programmes in Afghanistan, Democratic Republic of the Congo, Iraq, Lebanon, Pakistan, Somalia and Sudan helped develop technical skills in a range of sectors, raised the employability of youth and nurtured a spirit of entrepreneurship in rural areas, while formal curriculum development initiatives were successfully pursued in Angola, Cape Verde and Mozambique.

UNIDO was actively involved in the promotion of 3ADI in selected countries and deployed considerable efforts to secure funds for project implementation. Technical cooperation services in Somalia in the area of agro-based industries focused on economic recovery and increased resilience to drought among marginalized groups involved in the food-processing and non food-processing, textiles and leather sectors. Under a new project launched in 2011, a vocational and business skills training programme will be put in place aiming to train between 700 and 800 people, including displaced women and youth. Currently 3ADI projects of this nature are under implementation in Côte d'Ivoire, Iraq, Pakistan, Somalia, South Sudan and Timor-Leste.

A report released in May by the European Court of Auditors highlighted the performance of UNIDO in the implementation of an €11 million programme in Sudan entitled “Enhancing the capacity of Khartoum State in the delivery of vocational training services”. The project, completed in April, was able to build infrastructure and apply a new approach for vocational training centres. It also helped improve the overall socio-economic standard of living of young entrepreneurs and women who had lost their livelihoods as a consequence of the conditions prevailing in the region at the time and who needed the means to become self-sufficient. For the past three years, UNIDO and the European Commission have been working hand-in-hand with the Khartoum State Government to set up support services for competency-based training and new infrastructures to address the productive work and

entrepreneurial potential of young people. March saw the opening of a new vocational training and entrepreneurship centre in Halfait Almuluk, Khartoum State, the fourth of its kind, provided by UNIDO as part of its Young Entrepreneurship Development programme.

A new multi-agency human security project was formulated in 2011 to provide humanitarian assistance to three municipalities in northern Ghana. The project is designed to enhance human security by developing local capacity for holistic community-based conflict prevention in the region. UNIDO will be involved in vocational and business training for rural communities. Ghana hosts approximately 48,000 refugees in camps or urban settlements throughout the country including the Buduburam refugee settlement with over

40,000 Liberian refugees at its peak, and the Krisan refugee settlement with 2,000 refugees from more than ten different neighbouring countries in the region. Each camp faces similar problems of a lack of both the resources and opportunities that enable people to become self-reliant. The camp at Buduburam suffers from chronic water shortages, electricity supply constraints and a growing hygiene problem. In Krisan, the camp lacks the necessary equipment, facilities, contacts with markets and energy supply for those entrepreneurs who have already been trained to launch viable businesses. Food rations are supplied to relatively few people in Buduburam, and the rations in Krisan are insufficient to feed a typical family. The project addresses ways to provide for the short-term needs of refugees as well as the skills and experience they will

**“Populations in developing countries** that have recently emerged from crises also face grave challenges, often against the debilitating backdrop of relatively weak governmental structures. While crisis situations may arise from man-made or natural causes, one common factor is the serious threat to human security as a result of severely depleted productive capacities, environmental degradation, destroyed livelihoods, lack of physical or social infrastructure and the erosion of social capital. One of the cornerstones of creating resilient societies and preventing crises is, inter alia, socio-economic development. This programme component responds to such complex situations through activities that contribute to livelihoods and economic recovery as well as energy security and environmental preservation. It thus helps to build the resilience of institutions and of the productive sector in the face of serious challenges, as well as targeting the most vulnerable segments of the population, including youth and women.”

(Programme and budgets 2012-2013: Revised proposals of the Director-General, document IDB.39/13.Rev.1)



In February, UNIDO launched a project in Nangarhar, Afghanistan, to help small farmers and cottage-based agro-industries, in particular those run by women working at home, to develop and market their products.

*Photo: UNIDO*



In a project to promote micro industries in Iraq, UNIDO aims to increase the capabilities of poor and marginalized war-affected communities to engage in economically viable small-scale productive activities that will generate employment and income.

Photo: UNIDO

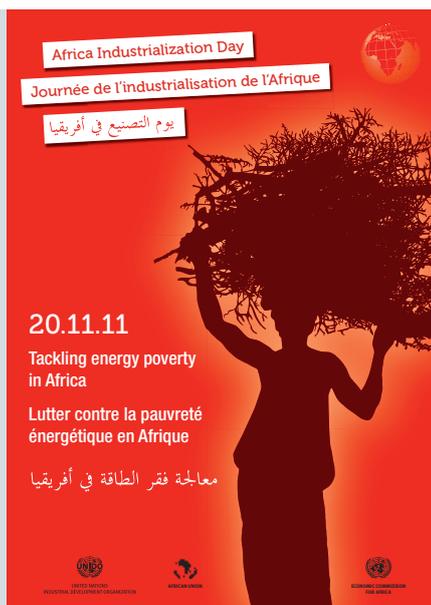
require to be productive following their repatriation, relocation, or integration into the local community.

Seven years of war in Iraq destroyed many of the country's SMEs, leaving countless thousands unemployed. In a project launched in 2008 and completed at the end of 2011, UNIDO was able to rehabilitate 98 enterprises involved in agro-industry and equip three vocational training institutes. It provided training for 870 people, including 402 women, in a range of marketable vocational skills. Over 75 per cent of those receiving training were in the 18-49 age bracket. UNIDO also improved the livelihoods of a further 750 households in rural areas through appropriate technology transfer and the promotion of non-farm income-generating activities. In selecting SMEs, UNIDO first assessed both the needs of the community and the market and earmarked in particular those that offered opportunities to women. The precarious security situation prevailing in Iraq during the implementation of the project not only led to delays as a result of the imposition of curfews, roadblocks and other restrictions, but represented a real risk to the lives of all those involved. UNIDO is one of a small handful of organizations that maintain a field presence in Fallujah.

A brochure published in 2011, entitled *Development after devastation*, describes the highlights of a UNIDO project in Sri Lanka to help farmers and artisans re-establish their livelihoods in the aftermath of civil war and the 2004 tsunami. Launched in 2007 with funding from the Government of Japan through the United Nations Trust Fund for Human

Security, the project helped 3,000 households in rural communities to revitalize agricultural activities and increase productivity by replacing traditional, mostly manual methods with efficient crop-tending practices and mechanized operations. It ran training programmes for farmers as well as for displaced people and returnees, many of whom were women.

A new project, launched in 2011, targets vulnerable communities in Liberia. With the end of the civil war in 1996, the country has been making a concerted effort to accelerate its development and achieve sustainable economic growth. These efforts have been thwarted by high unemployment among youth as well as the precarious situation existing in neighbouring countries. Added to this, Liberia has been struck by a number of natural disasters such as flooding and locust plagues that have threatened human security in recent years. This project aims at strengthening the socio-economic resilience of vulnerable communities by developing the skills that will enable young people to find employment. More specifically, the project will train young people in the north-eastern town of Ganta by conducting on-the-job training programmes in rubber processing, rubberwood processing, entrepreneurship and basic computer literacy and will provide the required tools and equipment. In March, work began on the construction of a rubber science and technology institute. UNIDO will help develop a curriculum for training in rubber and rubberwood processing and train the faculty, provide basic equipment and



UNIDO is committed to advancing Africa's industrial development so that the continent can lift itself out of poverty.

install a 20 kilowatt photovoltaic solar energy system to supply energy to the institute.

Similar projects were also implemented in a number of other countries in 2011. In Tunisia, the Organization is addressing the problem of severe unemployment among youth in the poorest areas of the country and has launched a pilot project for entrepreneurship development in Gafsa that targets youths, in particular young graduates. Projects are under consideration for the rural areas of Upper Egypt, following the economic repercussions of the revolution while discussions are under way for technical assistance to Libya.

## Women and youth in productive activities

### Women

Although Goal 3 of the MDGs deals specifically with gender equality and the empowerment of women, the issue is relevant to most, if not all, other Goals. Countries that eliminate gender disparities in primary and secondary education will indirectly accelerate progress towards the eradication of poverty and hunger, the improvement of child health and a reduction in maternal mortality. All organizations within the UN family need to step up efforts to ensure equal rights and opportunities for women. Wherever women have access to

credit to invest in business ventures, markets to sell their products and knowledge to expand their businesses, they will be in a position to better contribute to economic growth and development. In the execution of virtually all its projects, UNIDO takes pains to ensure that women and girls are given the opportunity to benefit from industrial development activities.

In October, UNIDO participated in a three-day conference in Ottawa on women's economic empowerment, jointly organized by Canada and UN Women. The conference focused on ways to open economies for the full participation of women as well as on the tools needed by women to take advantage of, and benefit from, these economic opportunities. It brought together representatives from the donor community and academia as well as a large number of successful women entrepreneurs from developing countries, some of whom had acquired their business skills through UNIDO entrepreneurship development projects.

It is widely recognized that the empowerment of women—in particular economic empowerment—has a positive impact on sustainable economic growth and sustainable industrial development. In its programmes in Afghanistan and Mali, UNIDO targets the integration of women into the growth and development process, yielding positive multiplier effects for households, communities and ultimately national economies. In February, UNIDO launched a project in Nangarhar, Afghanistan, that addresses the needs of small farmers and cottage-based agro-industries, in particular those run by

## “Expanding the economic opportunities

available for women is vital for poverty eradication and requires a strong emphasis on gender-sensitive employment creation, the provision of productive resources such as land, credit, technology and skills, and simultaneous investment in care services that reduces the burden on women’s unpaid domestic and care work.”

Kandeh K. Yumkella, Director-General, on the occasion of International Women’s Day 2011

»Shea butter is extracted from the nut of the African shea tree that grows in semi-arid savannahs of Western and Central Africa.

It is widely used in cosmetics but is also edible and may be used in food preparation. For centuries the shea tree and the butter produced from its fruits have been vital for the life of rural communities in Mali—and mainly for the women, for whom the shea butter has been central to their survival. In response to a request from the Government of Mali in 2008, UNIDO launched a five-year project that aimed at securing a sustainable income for some of the poorest rural communities by helping them to produce goods made with shea butter instead of simply exporting the shea nut or butter in its raw state. The common objective of the project was to encourage income-generating activities among women and contribute to the local economy. In partnership with the Ministry of Women, the Ministry of Industry and the United Nations Development Programme, and with additional funding from Luxembourg, UNIDO set up three pilot centres in the regions of Dioila, Sikasso and Segou. The project is set to run until 2013 with funding of around €1 million. Reaching about 1,000 women from some of the poorest villages in the south,



the project is already yielding impressive results. SIMALI Cosmetics, the company set up by UNIDO and run by women in Mali, has begun exporting shea butter products to Europe. In partnership with a private sector company in France, Chimitex, some 40 tons of shea butter soap were exported in 2011, with a further 100 tons foreseen for 2012. The project is expected to serve as a catalyst for similar ventures.

*Photo: UNIDO*

women working at home. The resource-rich and fertile region of Nangarhar, once home to vast poppy fields to supply the illegal drug trade, had suffered devastation from both natural disasters and conflict. UNIDO is providing the equipment necessary to develop alternative products and is training local farmers, and in particular women, in the entrepreneurial skills needed to bring their produce to market. Around 1,800 people will benefit directly, with knock-on effects reaching many more in the region.

In many developing countries, women and children still spend long hours every day in the backbreaking task of collecting firewood and other material to fuel the primitive stoves used in their villages for cooking and heating. If that were not enough of a health risk, exposure to smoke from traditional stoves and open fires—the primary means of cooking and heating for nearly three billion people in the developing world—causes 1.9 million deaths annually, with women and young children the most affected. Traditional stoves also increase pressure on local natural resources and contribute to climate change.

The Global Alliance for Clean Cookstoves is a public-private initiative launched in 2010 by a consortium of governments, multilateral organizations and corporate sponsors in order to save lives, improve livelihoods and combat climate change by the adoption of cleaner, safer and more efficient household cooking solutions. It calls for 100 million homes to adopt clean and efficient stoves and fuels by 2020. The Alliance works with public, private and non-profit partners to help overcome the market barriers that currently impede the production, deployment and use of clean cookstoves. UNIDO is one of the founding partners and during the Vienna Energy Forum in June (see special feature at the end of chapter 5), the Global Alliance hosted a side event on universal access to energy and energy efficiency, where participants learned of the opportunities and challenges involved in the introduction of clean cookstoves.

A four-day training and entrepreneurship workshop was organized by UNIDO in March on the analysis and design of pro-poor value chain development projects in Asia and the Pacific. Held in India in cooperation with the Kerala State Poverty Eradication Mission with financial support from IFAD, the workshop brought together some 30 project managers working on value chain development initiatives in India, Indonesia, Sri Lanka and Viet Nam. Particular attention was given to gender mainstreaming and the empowerment of women.

In 2011, UNIDO prepared a documentary film illustrating how the joint United Nations human security programme in Ghana, mentioned in the section above, transformed the lives of Liberian refugees. Some 65 per cent of those benefiting from vocational skills training were women. The documentary showcases two Liberian women (one current and one former refugee) who were able to achieve the economic self-reliance and security they needed to get back on their feet.

Countries in the Arab region are witnessing a surge in the number of women entering the business world. Several associations and networks of women entrepreneurs, executives and professionals have approached UNIDO for assistance in starting up new micro, small and medium enterprises or for support for existing businesses. In April, UNIDO and the Lebanese League for Women in Business embarked on an enterprise development and investment promotion programme to support business start-ups and existing businesses from a range of sectors. The UNIDO Investment and Technology Promotion Office in Bahrain has been successfully promoting women's entrepreneurship and the role of women in economic development for a number of years and has established a close partnership with the Businesswomen Network for the Middle East.

In recent years, the Government of Viet Nam has focused efforts on tapping women's potential as an engine of economic growth and social development. It has done so by improving the regulatory business environment as well as implementing a law on gender equality and other legislation in order to level the playing field for women's entrepreneurship. In 2008, UNIDO was requested to assist the Viet Nam Chamber of Commerce and Industry through its Viet Nam Women Entrepreneurs Council to conduct research to identify gender-based obstacles that affect women entrepreneurs throughout the business life cycle and recommend remedial action. UNIDO policy recommendations for the National Strategy on Gender Equality (2011-2020) on gender in entrepreneurship development were based on a survey among 240 entrepreneurs in six provinces, one national and three regional consultation workshops as well as input from the United Nations Country Team. UNIDO also extracted lessons, training materials and methodologies to replicate successful experiences of another of its projects on an entrepreneurship development programme for women in food processing in central Viet Nam. This work was undertaken in close consultation and coordination with the participating United Nations agencies, in particular the United Nations Population Fund and ILO.

## Youth

Youth unemployment remains a major challenge to governments and economies the world over: The ILO *Global Employment Trends 2012* report says 74.8 million youth aged 15-24 were unemployed in 2011, an increase of more than 4 million since 2007. UNIDO programmes help harness the capacities of youth as a potential social and economic resource for peace, stability and socio-economic development. The overarching goal is to create decent and durable employment through productive activities. Given the often limited absorptive capacity of formal labour markets, youth entrepreneurship is a feasible option to create employment. Entrepreneurship and self-sustainable businesses contribute to poverty reduction as they are the main source for economic activity that supports bottom-up economic growth, job creation, structural change and innovation.

Wide-scale unemployment among the world's youth places young people among the most marginalized groups of society and the most vulnerable to changing economic conditions. Without decent and productive work or integration in employment programmes, they can become an unstable element in society, particularly in countries with a high proportion of young people between the ages of 15 and 25. Over the past two decades, UNIDO has paid special attention to the challenge of youth unemployment. Numerous projects bear witness to its efforts to improve both the entrepreneurial and artisanal skills of young people in developing countries, many of which sought to instill an entrepreneurial approach in children of school age by equipping them with the skills to launch their own businesses or work with others to improve life in their own communities.

The very successful UNIDO Entrepreneurship Curriculum Programme (ECP) is currently in operation in several African countries (Angola, Mozambique, Namibia, Rwanda, Uganda and United Republic of Tanzania) as well as Timor-Leste and will be launched soon in Cape Verde. The Programme shows students how to identify business opportunities with growth potential in their communities and assess the resources that can be mobilized within their environment. A number of other entrepreneurship development projects are in the pipeline for Cambodia, Côte d'Ivoire, Mongolia and Nepal. Preliminary discussions on entrepreneurship courses for higher education are ongoing with other countries.

Building on successful cooperation in Africa and the Middle East, the UNIDO-Hewlett Packard (HP) partnership programme now covers Asia and the Pacific and Latin America and the Caribbean through HP's Learning Initiative

for Entrepreneurs. The programme teaches both aspiring and established entrepreneurs hands-on business and information technology solutions relevant for business management. The UNIDO-HP partnership programme has set up 93 centres in 13 countries (Algeria, Brazil, China, Egypt, India, Kenya, Morocco, Nigeria, Saudi Arabia, South Africa, Tunisia, Uganda and United Arab Emirates), certified 270 trainers, trained more than 42,000 students and created over 17,000 jobs.

November saw the launch of the first Microsoft Innovation Centre in Uganda in cooperation with the Government of Uganda and Makerere University. The centre, the result of an expanded partnership agreement between UNIDO and Microsoft, will focus on skills development and aims to educate local students to help improve their knowledge of information technology. It will also provide assistance and resources to small and medium enterprises to create new and innovative products and services and bring those products to the market in order to make their businesses more competitive.

According to World Bank sources, 62 per cent of the population in West Africa is under the age of 25 and of those employed, most earn less than the minimum wage. This leads to frustration and anger amongst youth in the subregion, which in turn can result in political instability and widespread migration, an issue of particular concern in the four Mano River Union (MRU) countries: Côte d'Ivoire, Guinea, Liberia and Sierra Leone. 2011 saw the start of a new initiative in favour of youth in West Africa. The Youth-to-Youth Fund competition in Sierra Leone was launched in February. UNIDO joined forces with the Youth Employment Network (YEN)—set up as a partnership between the United Nations, ILO and the World Bank—to enable youth-led organizations to actively participate in employment-generating projects for young people. The Sierra Leone Youth-to-Youth Fund followed a successful pilot round in December 2008 in the four MRU countries, funded by the Government of Japan, the World Bank and the Swedish International Development Cooperation Organization as part of the Multi-stakeholder Programme on Productive and Decent Work for Youth. The Sierra Leone Fund is supported by the German Federal Ministry for Economic Cooperation and Development and the Government of Austria.

Candidates entering the Youth-to-Youth Fund competition received support in preparing their proposals. A shortlist of nine projects was drawn up from a total of 150 applications through a competitive selection process and finalists were invited to a capacity-building seminar in Freetown in May,

“Unemployment, particularly of youth, represents one of the most important challenges of our times. Effective job creation is a strategic element empowering individuals to move out of poverty.”

Statement of Poland on behalf of the European Union and its Member States to the General Conference

Piassa Daniel helps at her father's workshop, in Nampula, Mozambique. At 19, she has learned about running a metalwork business. She also knows about business plans, budget control and balance sheets and plans to start her own business one day. Piassa benefited from entrepreneurship training received under the UNIDO ECP Programme

Photo: UNIDO



where they received training in business skills and monitoring and evaluation techniques. In May, the seven most innovative projects were selected. The winners will receive grants ranging from \$5,000 to \$20,000 in addition to capacity-building support. In 2011, a brochure was published by UNIDO and YEN, entitled *The Youth to Youth Fund in West Africa* detailing the scheme and describing the impact of its activities on the lives of 13 young beneficiaries.

A content management strategy for the MRU Youth Platform (<http://my.mruyouthplatform.org>) allows the organization, structuring and filing of relevant data uploaded to the platform, including details of ongoing projects, activities and other relevant information. Activities

that can be localized in a certain spot are visible on the regional map integrated in the site-home of the platform, giving an overview of ongoing activities in the region.

Youth unemployment is not only a problem in sub-Saharan Africa. UNIDO is involved in several pro-youth initiatives in Arab countries where a large percentage of the population is under 25. Technical cooperation programmes are in place in Egypt, Sudan and Tunisia. In the latter country, UNIDO has been involved in the MDG Achievement Fund project “Engaging Tunisian Youth to Achieve the MDGs”, a three-year programme with an estimated budget of \$3 million designed to adjust youth and employment policies and programmes to trends in the labour market.



Photo: UNIDO

» The Entrepreneurship Development and Investment Promotion Programme is organized by UNIDO through its Arab Regional Centre for Entrepreneurship and Investment Training (ARCEIT) in association with the Ministry of Industry and Commerce of Bahrain, the Bahrain Development Bank, the Bahrain Businesswomen's Society and Bahrain Young Entrepreneurs Association.

The programme, which focuses on the SME sector, consists of classroom training followed by business counselling, in the course of which entrepreneurs receive support in project planning and implementation. ARCEIT has so far trained some 200 Bahraini entrepreneurs, leading to the establishment of 96 small and medium

enterprises. About 270 potential Bahraini entrepreneurs were given advice on business opportunity identification, market analysis, business plan preparation and technology tie-up, which may lead to full-fledged joint ventures and financial support by the Bahrain Development Bank.

The project addresses the specific needs of unemployed university graduates as well as low-skilled youth.

The Arab region as a whole counts a large number of young university graduates entering the job market. Training on ways to promote domestic investment through entrepreneurship development, conducted by UNIDO in May/June in Bahrain, drew 15 representatives of investment promotion agencies or small and medium enterprises from Azerbaijan, Brunei Darussalam, Kazakhstan, Malaysia, Pakistan, Saudi Arabia, Tajikistan, Turkey and Uzbekistan. Participants were introduced to the Bahrain model of entrepreneurship development for youth for implementation in their respective countries.

The first Arab International Forum for Young Entrepreneurs and Businesspersons was held in October in Beirut under the patronage of the President of Lebanon. Co-organized by UNIDO and chambers of commerce, business associations and development authorities in the region, the forum drew over 500 participants from 52 countries,

including entrepreneurs, international non-governmental organizations, financial and educational institutions, regional and international developmental organizations and investment promotion representatives.

Later in October, UNIDO organized an expert group meeting in Vienna on the participation of youth in the inclusive economic development of the Arab region, focusing on lessons learned in the region and future opportunities for ensuring youth participation in economic development and growth. The meeting brought together qualified experts representing key players in the inclusive economic development of the Middle East and North Africa region, including high-level government officials in particular from the Arab region, senior representatives of United Nations organizations, as well as high-level experts and prominent leaders from the private sector, civil society and academia.

Youth participation in the inclusive economic development of the Arab region was also the topic of a round table

organized for delegates attending the fourteenth session of the General Conference in Vienna. The round table offered a platform for discussions and experience-sharing on the role youth could play in inclusive growth and economic development. It provided policy advice for Arab countries and stakeholders on promoting the principles of industrial development that ensures the safety of human health and the ecological integrity of the planet. Sustainable industrial development that contributes to job creation was seen as one solution. The round table was an opportunity to promote the concept of small-scale and youth-led initiatives financially supported through micro-credit schemes that play a vital role in poverty reduction.

UNIDO delivered a presentation on “A strategy for rural development: promoting entrepreneurial behaviour among the youth of Mozambique” at the annual Conference on Tropical and Subtropical Agricultural and Natural Resource Management, held in Göttingen, Germany, in September. The presentation detailed empirical evidence on the effectiveness of entrepreneurship education for youth, based on

the case of Mozambique, where an entrepreneurship development curriculum was introduced by UNIDO in 2007 with the financial support of Norway. The analysis revealed that the active engagement of students in business activities (i.e. entrepreneurial behaviour) was significant and, more importantly, that statistically there was no significant difference between girls and boys or between rural and urban or general and technical schools in terms of employment preparedness. However, the quality of teaching seemed to be a significant factor in determining the emergence of entrepreneurial behaviour among students. The policy implication is that entrepreneurship development curriculum in secondary schools is a powerful tool to promote entrepreneurial attitudes and skills among girls and boys, as well as in rural and urban areas. UNIDO will conduct similar surveys in other countries, including tracer studies with control groups, in order to shed further light on the institutional and pedagogical processes to improve school performance and, in turn, increase students’ entrepreneurial opportunities.

## »» The Least Developed Countries

The least developed countries (LDCs) represent the poorest segment of the international community. While they comprise more than 880 million people, or about 12 per cent of the world population, they account for less than 2 per cent of the world's gross domestic product and about 1 per cent of global trade in goods. They have been the object of particular concern to the United Nations system since the late 1960s. In 1971, the General Assembly drew up a list of LDCs, reviewed every three years, to encourage international support for the most vulnerable and disadvantaged members of the United Nations family. There are currently 48 least developed countries of which 33 are in Africa, 14 in Asia and 1 in Latin America and the Caribbean. In January, the Maldives graduated from least developed country to developing country status.

Over forty years later, many of the challenges facing LDCs at the time of their independence, continue to hamper their social and economic development. To make matters worse, they have come up against a number of new hurdles such as globalization, reduced inflows in foreign direct investment and remittances, a slowdown in exports, the volatile price of commodities and the recent financial and economic crisis. While these developments represent daunting challenges for LDCs, they also present significant opportunities if responded to in an appropriate manner.

It is the responsibility of organizations such as UNIDO to turn these opportunities into reality. UNIDO has a long history of involvement in addressing

poverty in LDCs through its activities in agribusiness, trade capacity-building and access to clean energy. Its programmes aim at building resilience by boosting productive capacities and promoting access to regional and global markets.

Two major events took place during the year that drew attention both to the challenges facing the LDCs and the part played by UNIDO and its sister organizations in helping to address them. The Fourth United Nations Conference on the Least Developed Countries (LDC-IV) met in Istanbul, Turkey, in May and the UNIDO Least Developed Countries Ministerial Conference was held in Vienna in November.

### Fourth United Nations Conference on the Least Developed Countries

The overall goal of LDC-IV was to assess the 2001-2010 Brussels Programme of Action for LDCs and adopt new measures and strategies for their sustainable development. The outcome document—the Istanbul Programme of Action for the decade 2011-2020—contains enhanced commitments from both the LDCs and their development partners, including the United Nations system, the Bretton Woods institutions, other multilateral bodies and regional development banks. Of the eight development priorities articulated in the Istanbul Programme of Action, seven constitute the core elements of UNIDO operations in the least developed countries, including productive capacity-building, trade, energy, technology, private sector development and South-South cooperation.

During LDC-IV, UNIDO co-hosted a debate with the Turkish International Cooperation and Development Agency on enhancing the role of small and medium enterprises in global agribusiness value chains as a contribution towards shaping a new development agenda for LDCs. The debate was moderated by the Director-General. Developing productive capacities and trade as a key component of inclusive and sustainable growth was the focus of an event organized by UNIDO and the United Nations Conference on Trade and Development, on behalf of the United Nations System Chief Executives Board inter-agency cluster on trade and productive capacity. A number of pre-conference events included a workshop in February to identify the needs of LDCs in the domain of science and technology that was organized in cooperation with the Scientific and Technological Research Council of Turkey.

One of the most significant outcomes of LDC-IV for UNIDO was the 3ADI Initiative: expansion of capacity-building work in the area of policy formulation for small and medium enterprises in LDCs in all stages of the agribusiness value chain. The goal of 3ADI is to develop an agricultural sector in LDCs by the year 2020, to the point that they can participate in highly productive and profitable agricultural value chains that effectively link small and medium size agricultural producers to markets, supply higher-value food, fibre, feed and fuel products, contribute to increasing farmers' incomes, utilize natural resources in a sustainable manner and generate increased and high-quality employment. The model of development applied in 3ADI takes a broader view of economic development and poverty reduction, with UNIDO acting as a catalyst to mobilize resources from development finance institutions and, most importantly, attract private sector investment.

## Fourth LDC Ministerial Conference

The Fourth LDC Ministerial Conference was convened in Vienna in November to discuss ways in which UNIDO could best contribute towards an effective implementation of the Istanbul Programme of Action. The two-day event brought together 41 delegations of the 48 least developed countries, as well as United Nations agencies, regional economic commissions, donors, financial institutions and private sector entities in order to promote partnerships for future action. The Conference was attended by the Under-Secretary-General and High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States.

The LDC Strategy and Operational Plan 2012-2020 adopted by the Conference sets out a comprehensive road map for UNIDO programmes and thematic initiatives in favour of LDCs and enumerates practical interventions in the sphere of enhanced economic efficiency, ecological compliance and social inclusion. It further presents UNIDO's vision and action towards implementing the industrial agenda of the Istanbul Programme of Action within the next decade. It should lead to the creation and strengthening of industrial infrastructure in terms of information dissemination, technology upgrading, investment facilitation, technical skills enhancement, promotion of innovation, public and private sector capacity-building, increased access to energy for productive use and greater access to external markets.

## » Enhancing the capacity of developing countries and countries

with economies in transition to participate in global trade is critical for the future economic growth of these countries



## Trade capacity-building

**We endeavour to be a globally recognized provider of innovative trade development ... driven by the private sector and delivered in synergy with other partners.**

The ability of developing countries to participate meaningfully—and profitably—in international trade rests on a number of prerequisites. Different organizations, both within and outside the United Nations, are involved in one or more aspects of trade capacity-building. As the United Nations organization responsible for industrial development, UNIDO encourages and supports productive activities in its client countries and then ensures that the goods produced meet the quality standards required to compete on national, regional and global markets. In its trade capacity-building programme, UNIDO complements the work of its sister organizations by strengthening competitive productive capacities for international trade; developing national and regional legal and institutional frameworks for quality, standards, metrology, conformity assessment, accreditation and technical regulations; facilitating the efforts of its client countries to promote industrial exports and create export consortia; and assisting small and medium enterprises to meet the standards and requirements of corporate social responsibility (CSR) in their home and export markets. Many of its activities are undertaken in partnership with other organizations both within the United Nations family and outside that are involved in trade-related issues.

As is the case with all three of UNIDO's thematic priorities, most of UNIDO's projects and programmes provided under the theme of trade capacity-building have a cross-cutting element. It is indeed fair to say that the majority of the projects described in chapters 1, 3 and 5 of the present report all involve building the capacities that will enable developing countries and economies in transition to increase their industrial exports on regional and international markets. In addition to highlighting a number of large projects and programmes executed during 2011, this chapter describes some of the global forum functions of UNIDO related to trade capacity-building including UNIDO publications that have become, or are set to become, leading reference works.

## Competitive productive capacities for international trade

During 2011, UNIDO's trade capacity-building activities focused on strengthening strategic partnerships and expanding the geographical coverage of its services while increasing the volume of technical assistance delivered. UNIDO also developed operating procedures for its core business activities and identified new services related to food safety, private standards and sustainability issues.

During the Fourth United Nations Conference on the Least Developed Countries, held in Istanbul, Turkey, in May, the Director-General of UNIDO and the Secretary General of the United Nations Conference on Trade and Development hosted a special event during which the fifteen United Nations bodies and specialized agencies that form the United Nations Cluster on Trade and Productive Capacity presented a joint concept note entitled *Development of Productive Capacities and Trade: the Key to Inclusive and Sustainable Growth*. The note outlined the importance of trade and productive capacity for LDCs, maintaining that socio-economic progress in LDCs has often been hampered by insufficient attention to the productive sectors as the basis of social and economic development. It also stated that the creation of decent employment should be at the centre of a holistic and coherent strategy for trade and the development of productive capacities. At the end of the special event, the United Nations Cluster signed a framework document with Switzerland as the donor, for a new multi-agency trade support project in the Lao People's Democratic Republic.

The most significant trade-related global event of the year was undoubtedly the World Trade Organization's Third Global Review of Aid for Trade that took place in Geneva in July. UNIDO prepared a brochure for the event on *Global Challenges, Global Responses: Delivering results in Aid for Trade*, as well as a folder with 14 project fact sheets. It also took part in a panel discussion on access to global private sector value chains. A special side event was dedicated to the launch of the *Trade Capacity-building Resource Guide 2010*, which maps the trade-related support services of 25 United Nations agencies, five development banks, seven cross-agency programmes and 24 bilateral donors. It outlines clearly and comprehensively the services provided by each agency and the strategies and programmes of each donor, and classifies and cross-references this information to allow the easy linking of services to needs. The primary categories are: global advocacy; trade policy development; legal and regulatory frameworks; supply capacity; compliance support; trade promotion; market and trade information; trade facilitation; physical trade infrastructure; and trade-related financing. The *Resource Guide* has already led to a better understanding of the individual role of agencies and donors and makes a valuable contribution to the achievement of a coherent global partnership to reduce poverty through trade-driven economic growth.

Another publication that reinforces the Organization's global forum and advocacy work and positions UNIDO as a key source of expertise in the field of trade and standards compliance is the Trade Standards Compliance Report (TSCR) *Meeting Standards, Winning Markets*. The first in a planned series of reports, it documents the incidence of border rejections, estimates export losses resulting from

“Globalization of the value chains and increasing awareness of quality and safety in world markets bring new challenges to developing country producers as they are required to comply with the wide array of standards that govern these value chains.”

Kandeh K. Yumkella, Director-General of UNIDO

non-compliance and describes the implications for trade capacity-building. In the globalized market where products originate from different countries, governments have a responsibility to ensure the health and safety of consumers, animals and the environment before these products enter their markets. National authorities closely scrutinize incoming shipments at their borders—food products, in particular, receive special attention—and reject consignments that fail to meet their standards. Both the United States Food and Drug Administration and the European Union Directorate General for Health and Consumers have in place alert systems on border rejections that provide data on inspections and the reasons for rejections, information that can be vital for exporters and would-be exporters. The TSCR series is an innovative policy guidance tool for developing countries, donors and technical agencies alike. The second issue will be published in the second half of 2012.

As a major engine of growth and economic development for developing countries, trade plays a vital role in poverty reduction and their economic growth is largely determined by their ability to access wider markets. Despite the introduction of duty- and quota-free initiatives, many developing countries, particularly the least developed among them, do not yet enjoy equitable participation in global trade. They are hampered by the absence of a supply capacity and quality infrastructure to prove compliance with market requirements, especially standards and technical regulations. Since 2007, UNIDO has been the executing agency of phase 2 of the West Africa Quality Programme, funded by the European Union, with the overall objective to increase the export competitiveness of the entire region

through the strengthening of national and regional quality infrastructure.

Countries of West Africa can no longer secure their economic growth by selling their goods and services within the Economic Community of West African States (ECOWAS), with intraregional trade accounting for just 10 per cent of the region's total volume. In Liberia, for example, the relatively low volume of commercial exchange within West Africa has little impact on the country's economy. Well-functioning quality infrastructure is a prerequisite to expanding export markets, but until recently, Liberia did not have the facilities to ensure the conformity of its products with international standards. In 2006, the Government of Liberia called on the services of UNIDO to establish national testing laboratories and to strengthen the national capacity in the area of quality assurance.

The new National Standards Laboratory—as established within the framework of the West Africa Quality Programme and complemented by a national UNIDO project—was completed in 2011 and inaugurated in September by the President of Liberia, Ellen Johnson Sirleaf. UNIDO has been involved in building capacities in its three departments of chemistry, microbiology and metrology. The laboratory has been provided with state-of-the-art equipment and is staffed by highly qualified personnel trained both within and outside the region. In addition to certifying the quality of goods leaving the country, the new laboratory is also addressing a major public health concern, namely the safety of both imported and locally produced goods.

The Egyptian Traceability Centre for Agro-Industrial Exports (E-trace) was established in 2004 as a joint effort



“Let me extend, on behalf of the whole country, our gratitude to UNIDO for supporting this excellent initiative and for being a committed partner to the Government all these years.” Ellen Johnson Sirleaf, President of Liberia and Nobel Peace Prize Laureate

Photo: UNIDO



The AFRIMETS Metrology School, held at the Red Court Hotel in Nairobi in February, was attended by 85, mainly African, participants following a rigorous selection process. Among the participants were seven young metrologists from Asia and the Americas to encourage international networking and the exchange of knowledge.

*Photos: UNIDO*

by the Egyptian Ministry of Trade and Industry and the Italian Development Cooperation in Egypt (Italian Egyptian Debt for Development Swap Program). E-trace's mission is to strengthen the Egyptian food value chain by providing technical and financial assistance to ensure that, in terms of quality, safety and traceability, Egyptian food products are safe for consumption and do not encounter barriers to trade. The actions taken aim at improving the conditions for workers and businesses, and in generating and equitably distributing export-generated income along the food value chain, thus achieving safer jobs and safer products.

Egypt's ability to increase exports of its abundant medicinal and aromatic plant products would be greatly improved through higher quality and safety standards and professional advisory services to what is still an underdeveloped value chain. Most of the production of medicinal and aromatic plants in the country is located in Upper Egypt, considered a priority development area by the Government. The sector employs more than 140,000 workers. Under a UNIDO project that began in 2010, UNIDO aims to improve the competitiveness of Egyptian medicinal and aromatic plants products on export markets and develop its internal supply chain. The proposed activities will help integrate a large number of small growers and SMEs into export

value chains. The project will also leverage the technical infrastructure of E-trace in an attempt to improve supply chains of medicinal and aromatic plants. It will follow the UNIDO trade capacity-building approach for developing countries, which is closely aligned with the policies of the donor, Switzerland's State Secretariat for Economic Affairs.

In September, UNIDO signed a memorandum of understanding with METRO Group to build the capacity of suppliers along supply chains bearing in mind the need for social, ethical and environmental sustainability (for more details, see chapter 1).

## Quality and compliance infrastructure

Many trade capacity-building programmes in UNIDO result in better consumer health and safety through the correct use of measurements in the market place as well as the application of internationally accepted food safety standards. In Sri Lanka, UNIDO helped the Ceylon National Chamber of Industries and the National Chamber of Exporters to create a food safety certification and training body that can provide credible and accredited certification and training



A seminar entitled “The industrialization of Africa and partnership with Korea”, organized in Seoul in November, reflects the policies of the Government of the Republic of Korea to expand its official development assistance to help reduce poverty in developing countries.

*Photo: Courtesy of KIET*



The Director-General and Jörn Stenger, Member of the Presidential Board of the Physikalisch-Technische Bundesanstalt (PTB) of Germany, signed a memorandum of understanding at the fourteenth session of the General Conference for cooperation in a range of areas including research and advocacy-related activities. PTB is the national metrology institute of Germany.

*Photo: UNIDO*

services at low cost to small and medium enterprises (SMEs). Under a programme funded by the Norwegian Agency for Development Cooperation (Norad), the newly created Indexpo Certification Ltd conducted conformity assessments and granted certification to Sri Lankan industries in compliance with national and international standards. Indexpo is now an international training centre, accredited by the Chartered Institute of Environmental Health and has recently concluded a partnership agreement with the Sri Lanka Tourism Development Authority for food safety training and certification in the hotel industry.

It is as important for UNIDO to be able to draw on the experience and expertise of others involved in quality and standards as it is for the Organization to share its wealth of knowledge with partner organizations. The successful application of food safety standards in developing countries owes much to UNIDO’s partnership with the Global Food Safety Initiative (GFSI), a non-profit private-sector foundation that benchmarks existing food standards against food safety criteria. UNIDO cooperation and partnership with GFSI concentrated in 2011 on the development and implementation of the food safety Global Markets Protocol, moving from the pilot application of the protocol in Egypt, India, Russian Federation and Ukraine to the development of a comprehensive technical

cooperation programme to be implemented in Africa in partnership with GFSI and a number of leading African retailers. UNIDO continued to play an active role on the GFSI Advisory Council as well as the GFSI Technical Committee.

UNIDO also took steps during the year to strengthen its collaboration with the Centre for the Promotion of Imports from developing countries, an agency of the Ministry of Foreign Affairs of the Netherlands under the scope of its private standards programme, as well as with the International Trade Centre on its Trade for Sustainable Development programme.

In February, a new international metrology training initiative welcomed its first intake of students as part of a project for the institutional strengthening of the Intra-Africa Metrology System (AFRIMETS) funded by Norad. The ten-day AFRIMETS Metrology School 2011 was held in Nairobi in February and aimed to give young metrologists from Africa an introduction to the components that make up a sound measurement system for a country, as well as hands-on experience in a number of technical fields. In addition to laboratory classes, students visited several industries to assess the implementation of quality, standards and metrology and their effect on the success of the industries concerned. The school was hosted locally by the Kenya Bureau of Standards and the

Kenyan Weights and Measures Department. The aim of the school is to equip a younger generation of specialists with the knowledge necessary to build the African metrology infrastructure to an internationally accepted level. A total of 76 students from 38 countries benefited from the experience of 17 internationally renowned scientists who were invited to share their knowledge in their particular areas of expertise.

At UNIDO Headquarters, in-house training in 2011 enabled a number of staff members to deepen their knowledge of quality management systems based on ISO 9001 in order to develop standard operating procedures in trade capacity-building within UNIDO.

In May, UNIDO signed an agreement with the Korea Research Institute of Standards and Science (KRISS) to increase cooperation on technical assistance activities related to metrology, standards and conformity assessment. As part of the joint action-plan, the first UNIDO-KRISS metrology training programme was conducted in September. A good proportion of women candidates are expected throughout the training programmes.

UNIDO projects demonstrate that support to testing laboratories towards international accreditation is also beneficial to local enterprises in achieving export growth: laboratories gain international recognition of the accuracy and credibility of their services, while exporting companies profit from the reduced testing time and lower costs of locally available, internationally accepted testing services. In Sri Lanka, UNIDO, with financial assistance from Norad, upgraded seven laboratories so that they could obtain accreditation from the Swedish Board for Accreditation

and Conformity Assessment. Similarly, a European Union-funded programme was implemented by UNIDO in Pakistan, where 19 laboratories in chemical and microbiological testing, calibration, textile/apparel, leather and electrical testing were upgraded in order to obtain accreditation from the Norwegian Accreditation. The increased capacity for internationally recognized local testing and calibration in both countries has been a boon to exporting companies accessing global markets, while the laboratories themselves have shown a marked increase in their business.

## Industrial export promotion and SME consortia

Small firms attempting to “go it alone” run the risk of being sidelined by globalization and the wealth of opportunities it offers. Under a special programme devoted to the development of SME clusters and networks, UNIDO helps small and medium enterprises to combine their strengths in order to take advantage of market opportunities. SMEs are often deterred from exporting by the complexities of the export business and the high risks involved. Evidence suggests that, especially during the early stages of exporting, failure tends to be relatively common. The successful development of export markets calls for a high degree of know-how, major efforts on the part of the enterprise and adequate financial resources. Firms wishing to export must identify suitable foreign markets, contact local distributors and/or major consumers, learn about

UNIDO is helping strengthen networks of producers of handicrafts in Peru—in particular women in remote areas of the country—to improve the marketing of their products.

*Photo: UNIDO*



their clients' preferences and adapt the quality and price of products accordingly. The skills needed and the costs of meeting these challenges are often beyond the capacities of individual SMEs.

One effective approach is to encourage SMEs to form export consortia. This not only helps them attain greater access to export markets, but ensures quality improvements and more efficient production methods.

Twenty representatives of public and private-sector organizations in Latin America and the Caribbean, involved in the establishment of SME groups, took part in a training course on SME consortia, organized by UNIDO in cooperation with the International Training Centre of the International Labour Organization in Turin, Italy and the Italian Federation of Export Consortia (Federexport) that has been a valuable supporter of the UNIDO export consortia programme since its inception. The course consisted of a four-day on-site training at the International Training Centre followed by 60 hours of online instruction, spread over four months, offered by the UNIDO consortia e-learning platform. The subsequent launch of new consortia initiatives in six countries of the Latin America and Caribbean region bears testimony to the success of the training. Most of the participants in the training are expected to join a new Latin American Network of SME consortia promoters to be set up under a new interregional project to promote SME origin and export consortia. The project is financed by the Italian Development Cooperation.

A second component of the same project involves assistance at the country level to promote consortia in Ecuador, Morocco and Peru. In April, UNIDO oversaw the signing

of partnership agreements between Federexport and associations and institutions promoting export consortia in Morocco (Moroccan Association of Export Consortia) and Peru (the Lima Chamber of Commerce and the Peruvian network of regional Chambers of Commerce). In Egypt, SME consortia and market access are being promoted in the framework of a project aiming at upgrading the medicinal and aromatic plants sector. This project, which began in 2011, is funded by the Swiss State Secretariat for Economic Affairs.

## Corporate social responsibility for market integration

Corporate social responsibility (CSR) is a management concept that encourages enterprises to be more aware of the impact of their business on the rest of society, including their own stakeholders and on the environment. It contributes to sustainable development and social welfare by delivering economic, social and environmental benefits for all stakeholders.

Hewlett Packard—one of the world's foremost information technology corporations—is committed to the principles of CSR, exemplified in its global social innovation programmes. In its Learning Initiative for Entrepreneurs (LIFE) programme, aspiring young entrepreneurs the world over can acquire the skills needed to start, run and expand their own businesses, including information technology, marketing, communication and finance. UNIDO has been working with HP since 2008 and together with

## » UNIDO promotes two distinct types of SME-based consortia aimed at promoting access to external markets: export consortia and origin consortia.

An *export consortium* is a voluntary alliance of firms with the objective of promoting the export of goods and services of its members through joint actions. It is a formal organization to promote medium- to long-term strategic cooperation among firms, and it organizes joint activities to facilitate access to foreign markets. An *origin consortium* is a voluntary

alliance of individual producers, companies or cooperatives in the same value chain that are involved in the production of the same traditional agro-food or artisan product of regional origin. The main objective of the origin consortium is to add value to a traditional product of regional origin and to increase its reputation on local and possibly international markets.

“We need business to give practical meaning and reach to the values and principles that connect cultures and people everywhere.”

Ban Ki-moon, Secretary-General of the United Nations

the Micro-Enterprise Acceleration Institute and the Education Development Center—two international, non-profit organizations dedicated to promoting knowledge and learning—has created over 17,000 jobs, trained more than 42,000 students, set up 93 LIFE centres in 13 countries and has certified more than 270 trainers. The LIFE programme has been extended to countries across the continents and the new LIFE curriculum is available in Arabic, Chinese, English, French, Portuguese, Russian and Turkish. In 2011, UNIDO and HP launched a new training initiative in Ebonyi State, Nigeria, to help unemployed professional young people to become farmers. Ebonyi is a largely agrarian part of Nigeria where agribusiness can provide employment opportunities for those with the right qualifications.

Another important activity launched in 2011 was the publication of *Making Private Standards Work for You: A guide to private standards in the garments, footwear and furniture sectors*. The guide offers producers an insight into the landscape of private standards as well as guidance for turning private standards to their advantage. Information is drawn from questionnaires and interviews with a sample of exporting companies from the footwear sector in India, the textiles and garments sector in Turkey, and the furniture sector in Brazil.

The textile and clothing sector is one of the most critical industrial sectors of Turkey in terms of its contribution to gross domestic product, employment generation and net exports. A joint three-year programme was developed by UNIDO in collaboration with the United Nations Development Programme (UNDP) and ILO, financed under the UNDP/Spain MDG Achievement Fund (MDG-F), to enhance the competitiveness on international markets of SMEs in the textile and clothing sector of Turkey.

The programme targets in particular enterprises located in poor and vulnerable regions in order to integrate them into domestic, regional and global value chains. The textile and clothing sector is an area where CSR and private standards are indispensable for doing business and accessing global supply chains.

One of UNIDO's responsibilities within the joint programme is to help SMEs to integrate social and environmental standards and principles into their business processes and operating practices. An Expert Group Meeting on Corporate Social Responsibility and Private Standards was held in March in Istanbul, Turkey and brought together multinational firms sourcing from Turkey—Marks and Spencer, Otto Versand and H&M were among the international brands represented—as well as large national textile companies and representatives of the local private sector. The aim of the meeting was to develop a support programme for SME suppliers based on UNIDO's Responsible Entrepreneurs Achievement Programme (REAP).

REAP is at the heart of UNIDO's approach to CSR. It is a CSR-based management and reporting tool that supports SMEs to implement CSR concepts, thereby aligning economic, social and environmental aspects of business. In 2011, UNIDO began work on a revised REAP+ methodology that would respond to the needs of both suppliers and buyers by complementing the existing REAP training package with a mentoring and assessment scheme. In 2012, the REAP+ package will be tested in the context of UNIDO's partnership with METRO Group in Egypt and India and will also be applied in a new partnership with the Japanese retailer group AEON in South-East Asia. Cooperation began in 2011 between REAP+ and the Global Social Compliance



A joint UNIDO, ILO and UNDP project is targeting SMEs in the textile sector, the largest and most labour-intensive sector in Turkey. This innovative joint programme aims at enabling the local business community to reach a state of “responsible competitiveness”, involving both upgrading the productivity and market access of firms as well as benefiting local disadvantaged communities in poor areas.

*Photo: UNIDO*

Programme (GSCP), a business-driven programme for the continuous improvement of working and environmental conditions in global supply chains. This will foster inclusive business linkages between clusters of suppliers and GSCP members—world leading manufacturers and retailers—through a capacity-building programme and pre-audit scheme to be applied at the level of suppliers. This sustainable supplier development approach, pursued through public-private partnerships with multinational corporations, represents a core component of UNIDO’s plans to gain a stronger presence in the CSR debate in the coming years.

Another successful project under implementation in 2011 assists SMEs in Viet Nam to adopt a CSR approach as a prerequisite to accessing global supply chains. As part of the European Union-funded Switch Asia programme to promote sustainable consumption and production in Asia, UNIDO aims to instil a holistic approach to CSR at the level of SMEs in three sectors of Viet Nam’s growing economy: the textile and garment, leather and footwear and electronics industries, as well as to strengthen intermediary institutions. In addition to covering the environment and employment, five new topics were introduced to businesses as well as to national CSR experts: governance, human rights, fair operating practices

(including anti-corruption and intellectual property rights), consumer concerns and community development. The CSR Calendar Forum, introduced in early 2011 in Viet Nam, proved to be an effective awareness-raising tool. This series of regular multi-stakeholder events on relevant topics developed throughout the previous year attracted high media attention. The series will continue in 2012, once again covering emerging issues such as intellectual property rights, data privacy and toxic waste. One significant impact of the CSR Calendar Forum was the commitment of government agencies to take steps to adopt the voluntary international standard ISO 26000:2010 of the International Organization for Standardization, guidance for social responsibility. Over 50 events such as workshops, training courses and seminars, attracting around 2,500 participants, also contributed to this important step.

Based on the valuable experiences and findings in the last two years, the UNIDO REAP tools were reviewed and are being adjusted to reflect the latest trends in CSR. Towards the end of 2011, the new REAP26 approach was successfully developed and pilot tested in several training sessions for consultants, business membership organizations and companies in Viet Nam.

## VALUE FOR MONEY IN THE FIELD OF STANDARDS AND QUALITY

» In a recent independent study of nine multilateral organizations involved in trade-related technical assistance, UNIDO was singled out as “delivering good value for money in the field of standards and quality, an area where the organization has a unique competence internationally”.

*Norway's Trade Related Assistance through Multilateral Organizations: A Synthesis Study* was commissioned by the Norwegian Agency for Development Cooperation (Norad) and carried out by a Swedish firm of consultants. The study identified UNIDO's main strength as the provision of high quality technical expertise, and the ability to respond to urgent problems at the country level.

Norway is among the Organization's largest donors and the second largest donor in the area of trade capacity-building. Since 2007, it has supported 11 trade-related projects or programmes through UNIDO, with a total cost in the order of NOK 110 million (2007-2011). These projects focus almost exclusively on trade capacity-building and standards, metrology, testing and quality assessment in LDCs in Asia and Africa. After an analysis and evaluation of its trade-related technical assistance channelled through multilateral organizations, the study revealed UNIDO to be “the one agency where Norway has most additivity”, i.e. where the contribution of Norway is the most complementary.

UNIDO, the Norad study affirmed, has an extensive technical assistance programme in trade capacity-building with a focus on standards and quality. The

study also emphasizes the close partnership Norway has enjoyed with UNIDO since the late 1990s and refers to the exposure that the country has been given by the Organization as well as its role in the overall organizational development of UNIDO's trade capacity-building programme. The study mentions that Norway was the first donor in the 1990s to focus on trade standards and that UNIDO for its part has appreciated the support of Norway. At the World Trade Organization's Aid for Trade review in July, UNIDO presented 23 of its projects, of which 9 were funded by Norway.

Norway has long recognized the importance of trade for development and trade-related assistance is not a new feature of Norwegian aid. With the launch of the Aid for Trade initiative in 2005 and the establishment of Norway's Aid for Trade Action Plan in 2007, this commitment was reinforced and aid was increasingly channelled through multilateral organizations. The nine organizations and programmes that feature in the study have together received 97 per cent of Norway's multilateral trade-related support since 2007. While the Enhanced Integrated Framework (EIF) is the most important channel for Norwegian aid, UNIDO follows in second place and, in relative terms, was recently given an even stronger role.

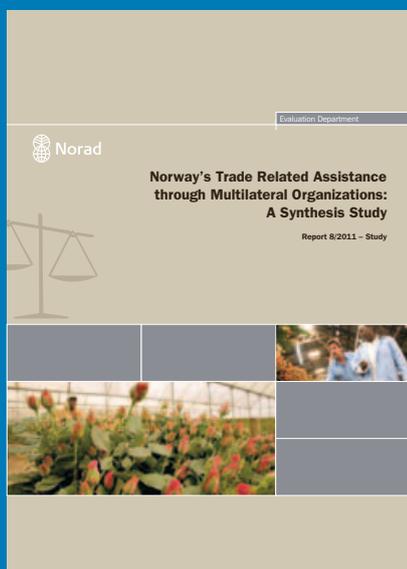


Photo: ©Istock.com/Colin & Linda McKie

The assessment of UNIDO's ability to implement and report on performance in Norwegian trade-related priority areas confirms the Organization's unique international competence in the area of standards and quality. Norway was, in fact, the first donor to focus on standards in a trade context, which led to a strong partnership between UNIDO and Norad. This thematic orientation was later followed by Switzerland and the European Union.

The Norad study also commends the "high degree of transparency in the evaluations undertaken by UNIDO", both those carried out by the Organization itself or by third parties. For its part, Norway supported a thematic evaluation of UNIDO's technical

interventions in the area of standards, metrology, testing and quality in 2009 that emphasized the relevance of this type of projects and drew attention to UNIDO's ability to provide high quality technical expertise and to respond to urgent issues.

In evaluating UNIDO as a "learning" organization, it noted the positive developments that have taken place over the past decade. The encouraging findings of UNIDO's performance in the Norad study led to an overall recommendation to continue the Norwegian support to UNIDO. The full Norad report can be downloaded here:

[www.Norad.no/no/resultater/publikasjoner/evalueringer/publikasjon?key=387196](http://www.Norad.no/no/resultater/publikasjoner/evalueringer/publikasjon?key=387196)

» The need for environmentally sustainable modes of production and a more efficient use of resources is no longer in question.



## Environment and energy

Against a background of widespread poverty and economic disparity, the volatile cost of energy, raw materials and food, combined with alarming climate swings and a marked decline in the health of the world's ecosystems, has catapulted the issues of energy, productivity and resource security to the forefront of the global political agenda. Policymakers are faced with a quandary: they are committed to economic growth and an improvement in living standards but at the same time are compelled to scale back the unrestrained resource consumption that has in the past been the very driver of economic growth.

The need for environmentally sustainable modes of production and a more efficient use of resources is no longer in question. This is especially true in the developing world that can avoid the environmental pitfalls encountered by developed countries and use past experience to build from the outset a more green industrial infrastructure.

In its green industry initiative, launched in 2009, UNIDO adopted a two-pronged strategy to create an industrial system that neither depletes the world of its natural resources nor burdens it with pollution. On the one hand, it helps existing industries, regardless of their sector, size or location, to green their operations, processes and products and on the other it helps countries to create new green industries by stimulating the development and creation of industries that deliver environmental goods and services. Under the umbrella of its green industry initiative, UNIDO is, to an ever increasing extent, directing its technical cooperation and global forum activities towards assisting policymakers, industry and the international community to adopt best available techniques (BAT) and best environmental practices (BEP) for energy efficiency, resource productivity and climate change mitigation through effective market-based tools, mechanisms and partnerships.

Today, with UNIDO's sound track record in responding to threats to environmental stability, the initiative is receiving concrete support and commitment from Member States, sister agencies within the United Nations family and other relevant stakeholders who stand ready to advance the green industry agenda. The enthusiastic response to UNIDO's green industry approach in 2011 has enabled the Organization to better position itself in negotiations leading up to the 2012 United Nations Conference on Sustainable Development (Rio+20) and beyond. This chapter describes the ways in which UNIDO was able to strengthen its activities and services in the industrial environmental area under the three thematic components of its environment and energy programme: resource-efficient and low-carbon industrial production, clean energy access for productive use and capacity-building for the implementation of multilateral environmental agreements.

## Resource-efficient and low-carbon industrial production

### Global forum and activities under the green industry initiative

During 2011, UNIDO's green industry initiative was given high recognition at a number of international forums. In April, UNIDO organized an event on the advancement of resource-efficient and cleaner production strategies and programmes in developing and transition countries, together with the Permanent Mission of the Republic of the Philippines to the United Nations. The event sought to provide a stepping stone for Member States to develop a political consensus on green industry at the 19th session of the Commission on Sustainable Development and at the United Nations Conference on Sustainable Development (Rio+20), to take place in June 2012 in Rio de Janeiro, Brazil. Discussions centred on ways to ensure that the needs of developing and transition countries and emerging economies are effectively addressed in the 10-year framework of programmes on sustainable consumption and production under consideration by Member States at the session. Participants acknowledged that international efforts to speed up the transition to sustainable consumption and production patterns should build on existing experience and institutions, such as the National Cleaner Production Centres Programme of UNIDO and the United Nations Environment Programme

(UNEP). It also concluded that since the resource efficient and cleaner production (RECP) approach is applicable to all countries at all stages of development, it should aim for a global outreach.

In May, UNIDO presented its green industry concept at the Fourth Nevsky International Ecological Congress, convened to address global environmental challenges and to promote environmental security through strengthening trans-border cooperation and developing environmental legislation in the member nations of the Commonwealth of Independent States (CIS) (see also chapter 3). The event, held in St. Petersburg, Russian Federation, was co-hosted by the Interparliamentary Assembly of the CIS, the Federation Council of the Federal Assembly of the Russian Federation and UNIDO. The Forum resulted in a declaration on green industry for environmental protection that reflected the commitment of the Newly Independent States (NIS) to the initiative and will support both them and the United Nations system and its specialized agencies in their preparations for Rio+20.

In June, the United Nations General Assembly held a debate on the Green Economy: A Pathway to Sustainable Development. As part of the thematic debate and to mark World Environment Day on 5 June, UNIDO and UNEP organized a side event on Green Economy: Ecosystem Services and Resource Efficiency with Special Focus on Forests and Forest Industries, on 2 June at the United Nations



The Fourth Nevsky International Ecological Congress, co-organized by UNIDO, was held in the amphitheatre of the Tavrisheskiy Palace in St. Petersburg, Russian Federation, in May.

*Photo: UNIDO*

Headquarters. Discussions focused on the need for resource efficiency while at the same time recognizing that ecosystem services play a critical role in the production of many of the goods and services essential to the world's growing population.

In October, UNIDO and the Ministry of Environment of Jordan organized the Eco-Cities of the Mediterranean Forum on water and waste management in Marseille, France, as part of the Mediterranean Economic Week (see also chapter 3). It marked the second in a series of forums aimed at strengthening the capacity of cities in the Middle East and North Africa to address their most critical environmental issues. Municipalities of the region came together with representatives of the public and private sectors to find solutions to the various environmental challenges faced by urban centres, promoting both economic growth and social responsibility. In addition to the Forum's main topic of water and waste management, participants also discussed cross-cutting issues such as energy efficiency and financing mechanisms.

Another important international event was the Tokyo Green Industry Conference, held in November, where some 500 participants described the progress of green industry in their respective countries (see chapters 1 and 3). The three-day high-level conference, moderated by the Director of the UNIDO Office in New York, served to foster the transfer and implementation of BAT and BEP for the

development of green industry. It also encouraged an exchange of experiences on green industry programmes and initiatives involving the public and private sectors.

In September, UNIDO collaborated with the Economic and Social Commission for Western Asia, UNEP, the Arab Industrial Development and Mining Organization, the League of Arab States and the German Agency for International Cooperation to draw up an action plan for the development of green industries in the Arab world. The conference entitled "Green Industries for the provision of employment opportunities", held in Beirut, was attended by national experts from Arab countries, as well as international experts in the field, representatives of relevant regional and international organizations and civil society organizations working in the areas of industry and the environment.

### Resource-efficient and cleaner production

Following the 1992 United Nations Conference on Environment and Development, UNIDO and the United Nations Environment Programme (UNEP) launched pilot cleaner production projects to showcase a more environmentally friendly production process in selected developing countries. The success of the pilot exercise led, two years later, to the launch of the joint UNIDO-UNEP programme to establish National Cleaner Production Centres (NCPCs). There are currently 47 centres and programmes

The UNIDO booth at the Tokyo Green Industry Conference was organized by ITPO Tokyo. Through related activities organized in collaboration with the INCHEM 2011 environmental technology exhibition, the Tokyo Conference offered opportunities to match the environmental technology needs of participating developing countries with the international supply of best available techniques and best environmental practices.

*Photo: UNIDO*





**The National Cleaner Production Centres,** Energy Technology Centres and other initiatives have proven that taking care of resources, energy and the environment is generally good for business, the environment and development at large. The UNIDO-UNEP approach has proven to be highly effective because it is based on long-term sustained support and the facilitation of access to knowledge and information as well as capacity-building and the transfer of skills. UNIDO's experience shows that practical on-site training, assessments, user-friendly tools and guidance and national support systems are the most effective way of creating an understanding for, and enabling enterprises to actively work towards, increasingly sustainable production. Collectively, the centres have created thousands of enterprise-level examples demonstrating the benefits of resource-efficient and cleaner production. In many cases, businesses involved in green industry approaches have assumed a leading role in spreading awareness and providing guidance and assistance to other businesses within their sectors or value chains.

worldwide.<sup>1</sup> They provide a range of services to governments, the business community, educational institutes and other stakeholders in cleaner production methods, practices, policies and technologies. They also act as public advocates for cleaner production. Initially set up as projects hosted by national industry associations, technical institutes or universities, the NCPCs have gradually become both administratively and financially independent from UNIDO and UNEP.

The ability of NCPCs to make a difference relies largely on effective networking and knowledge management among the centres and other organizations that deliver resource efficient and cleaner production (RECP) services. An initial UNIDO-UNEP RECP-Networking meeting was hosted by the Government of Switzerland in October 2009, when a global network of resource-efficient and cleaner production services was established. Both UNIDO and UNEP provide support for the network through their joint RECP Programme. In 2011, the Global Network for Resource-efficient and Cleaner Production (RECPnet) began operations with an initial membership of 41 NCPCs and other national, subnational and regional RECP service providers. The Executive Committee met twice in 2011. RECPnet is now open for new members in each of its three categories: regular, associate and observer membership.

A global RECP Knowledge Management System to support the operation of RECPnet was launched in June at a meeting held in Tunis, with an initial focus on the Arab region. The first Members' Assembly of the RECPnet and second UNIDO-UNEP RECP-Networking Conference took place in October in Nairobi. The Nairobi RECPnet declaration on Global Network for Resource Efficient and Cleaner Production in developing and transition countries was signed by representatives of 32 members and 10 other providers of RECP services.

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<sup>1</sup>UNIDO-UNEP National Cleaner Production Centres and Programmes worldwide- Africa and Arab Region: Cape Verde, Egypt, Ethiopia, Kenya, Lebanon, Morocco, Mozambique, Rwanda, South Africa, Tunisia, Uganda, United Republic of Tanzania and Zimbabwe; Asia and Pacific: Cambodia, China, India, Lao People's Democratic Republic, Republic of Korea, Sri Lanka, Viet Nam; Europe and Central Asia: Albania, Armenia, Bulgaria, Croatia, Czech Republic, Hungary, Montenegro, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, the former Yugoslav Republic of Macedonia, Ukraine, Uzbekistan; Latin America: Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru.

A regional meeting on Resource-efficient and Cleaner Production in Member States of the Association of Southeast Asian Nations (ASEAN) was organized by UNIDO and the ASEAN Secretariat in January in Jakarta to create a better awareness of green industry in the region. The meeting presented the achievements of the RECP Programme in ASEAN member countries (in particular Cambodia, Lao People's Democratic Republic and Viet Nam) and looked at opportunities and strategies for expanding and mainstreaming RECP into other ASEAN countries. The meeting was opened by the Deputy Minister of Industry of Indonesia and the Deputy Secretary-General of ASEAN and benefited from inputs from representatives of the main donors of the RECP Programme, Austria and Switzerland.

## Chemical leasing

Chemical leasing is a service-oriented business model that shifts the focus from increasing the volume of sales towards a value-added approach. The producer sells the functions performed by the chemical rather than the chemical itself. It is fully in line with the UNIDO green industry approach. Combining RECP and chemical leasing has proven to be a win-win situation for the economy and the environment and can be applied to industries of different sizes in developing and transition countries. Beneficiaries include industrial and sectoral associations, research institutions, governmental institutions and national consultants and experts. UNIDO has a dedicated chemical leasing website ([www.chemicalleasing.com](http://www.chemicalleasing.com)) and has produced other publicity material to promote the concept.

Chemical leasing is UNIDO's response to the unsustainable management of chemicals in industries and the lack of cooperation among chemical producers and users. Based on the preventive RECP concept, it provides practical advice on ways industry can become more efficient while at the same time reducing the consumption of hazardous chemicals that damage both human health and the environment. UNIDO launched its first chemical leasing demonstration projects in 2004, with the support of the Government of Austria, in close cooperation with the National Cleaner Production Centres in Egypt, Mexico and the Russian Federation, followed by Colombia, Serbia and Sri Lanka in 2008 when Germany also joined the initiative. In 2011, a number of regional activities began in cooperation with NCPCs in Brazil, Croatia and Nicaragua.

One of the most visible results of the Organization's activities in this area in 2011 was the production of a toolkit that offers a step-by-step approach to chemical leasing. It outlines the main tasks required for the smooth and efficient

application of chemical leasing to industries from different sectors and countries and sets out monitoring procedures. Starting from a detailed market analysis and screening process, to defining the most suitable sectors and companies in a given country, the toolkit provides support for the implementation and monitoring of chemical leasing business models at the plant level. Experience has shown that chemical leasing is best applied to processes that are not the core know-how of the chemical user, such as cleaning, degreasing or painting.

Chemical leasing addresses the seventh Millennium Development Goal that targets environmental sustainability. The implementation of chemical leasing and related concepts, practices and technologies reduces levels of waste, pollution and resources, contributes to slowing down environmental degradation and addresses the issue of sustainability of natural resources. UNIDO creates a demand for chemical leasing by setting up demonstration projects, raising awareness, disseminating technical information and training. Chemical leasing is also in line with Goal 8, which sets out to develop a global partnership for development, by motivating and supporting enterprises and other organizations considering chemical leasing. This creates or strengthens partnerships at several levels. At the global level, an international working group replicates best practices, methods and approaches for the implementation of chemical leasing, with the full support of UNIDO and the network of National Cleaner Production Centres.

A meeting of the International Working Group on chemical leasing was held in May in St. Petersburg, Russian Federation, to discuss the application and potential of innovative business models in various countries and sectors. At the country level, national working groups strengthen collaboration with relevant stakeholders, including the private sector, national and local governments, research organizations and academia. Chemical leasing lends itself to South-South cooperation: the exchange of know-how and experiences gained by participating countries provides a platform for replication in neighbouring countries. The NCPCs in Colombia and Serbia that have had a marked success in chemical leasing activities approached other NCPCs in their respective regions and carried out national information workshops in Croatia and Nicaragua.

### **Management of hazardous substances**

In March, UNIDO hosted an international workshop in Vienna on hazardous substances within the life-cycle of electrical and electronic products, in cooperation with the Basel

Convention Secretariat and the Stockholm Convention Secretariat. The workshop was a follow-up to the Second International Conference on Chemicals Management held in 2009 in Geneva. A number of working groups looked at different points in the life cycles of electrical and electronic products and approved a set of recommendations pertaining to upstream, midstream and downstream issues.

The tenth meeting of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was held in October in Cartagena, Colombia. The theme of the meeting was the prevention, minimization and recovery of wastes. UNIDO organized a successful side event on chemical leasing as a service-based business approach to sound chemicals management and waste minimization.

### **Water management**

A dedicated water management unit enables UNIDO to offer a range of services designed to improve water productivity in industry and prevent the discharge of industrial effluents into international waters. Its goal—the protection of water resources for future generations—calls for a three-pronged approach: the sustainable management of ecosystem resources, the transfer of environmentally sound technologies (TEST) and the protection of the environment and human health from toxic pollutants.

### **Sustainable management of ecosystem resources and services**

UNIDO made strides in 2011 on a number of projects executed under the Global Environment Facility (GEF) on the large marine ecosystems of the Guinea Current. An evaluation of the Guinea Current Large Marine Ecosystems (GCLME) was presented to major stakeholders. This led to a number of actions by countries in the region: all in all, there were 9 reports on coastal monitoring, 11 on pollution, 12 on biodiversity and 10 new coastal profiles, as well as 16 national plans of action on land-based activities and 15 national action plans. Ghana established a demonstration project for entrepreneurial coastal poly/aquaculture. Nigeria identified priority sites for mangrove restoration following a demonstration project in the estuary of the Cross River, the principal river in the south-east of the country; in Cameroon, a demonstration project on the management of coastal areas was completed and the results discussed at a workshop in September. Special efforts were made in 2011 to involve more women in activities generated

by the GCLME projects with the aim of achieving an equal gender balance.

UNIDO organized, or co-organized, numerous GCLME-related meetings and events during the year including the technical segment of the ministerial working group meeting in January in Brazzaville; the first GCLME Partners' Conference in February in Douala, Cameroon; a subregional workshop on aquaculture and mariculture, held in February in Accra, Ghana; the Ninth Meeting of Contracting Parties to the Abidjan Convention Protocol Concerning Cooperation In Combating Pollution in Cases of Emergency, in March in Accra; the 8th GCLME Regional Steering Committee, held

in Accra in May; a regional workshop on dispersants use policies in West and Central Africa, held in June, also in Accra; a seaboard training course on pollution monitoring techniques in near shore waters of the Gulf of Guinea in July in Lagos, Nigeria; and a Regional Training Workshop on Compliance, Monitoring and Enforcement of the Ballast Water Management Convention, held in September in Lomé, Togo.

### Transfer of environmentally sound technologies

UNIDO has extensive experience in dealing with pollution hotspots in the world's waterways using TEST. The Organization's assistance to countries bordering the River

Many of Cambodia's 15 million inhabitants are farmers and fishermen who rely on the resources of the Mekong River for their livelihood. Rapid economic growth and industrialization, coupled with a rising population, are degrading the environment and in particular the water resources of the country. Funded by the Korea International Cooperation Agency, UNIDO is implementing a project to improve the water quality of the Mekong River and its tributaries and reduce the negative impacts of industrial activities. The project will demonstrate to national institutions, national experts and enterprises how to use the TEST approach to transform existing environmental challenges into business opportunities. It will also help increase the competitiveness of enterprises while improving their environmental performance. The project got off to a good start in 2011 with the completion of hotspot implementation and the general introduction of the TEST integrated approach in selected companies and is already showing some impressive results.

UNIDO's water management programme benefits populations around the world.

Photo: UNIDO



Danube at the beginning of the millennium proved highly successful and paved the way for similar projects in different regions. The project effectively targeted 17 large industrial polluters, helping them reduce their impact on the river basin. It was followed by similar projects in the southern Mediterranean and in Central America. In 2011, a further TEST project was introduced in Cambodia (see box).

### Protection of the environment and human health from toxic pollutants

Mercury is listed by the World Health Organization as one of the ten chemicals posing the greatest danger to public health. Human exposure to mercury can damage the nervous system and cause behavioural disorders. When released, it persists in the environment where it circulates between air, water, sediments and soil. Mercury can have a highly toxic effect on humans and wildlife and can enter the food chain through contaminated fish. In 2005, the UNEP Governing Council set up the UNEP Global Mercury Partnership, comprising seven partnership areas, to protect human health and the global environment from the release of mercury and its compounds by minimizing and, where feasible, eliminating global, anthropogenic mercury releases to air, water and land. UNIDO is the lead agency of the partnership area of artisanal and small-scale gold mining. The partnership area has set a target of a 50 per cent reduction in mercury demand in artisanal and small-scale gold mining by the year 2017.

In 2011, UNIDO confirmed its lead in the artisanal and small-scale gold mining area with the development of a new

mercury treaty at a meeting held in November in Nairobi. A Strategic Approach to International Chemicals Management project was approved for Mali and GEF approved the financing of a regional project in three francophone countries of West Africa: Burkina Faso, Mali and Senegal.

UNIDO was also able to build upon the success of the Global Inventory Project, carried out in partnership with the European Commission and Blacksmith Institute, an international not-for-profit organization dedicated to eliminating life-threatening pollution in the developing world. A follow-up project was developed with a six-fold budget increase.

### Clean energy access for productive use

More than ever before, Member States are turning to UNIDO to help them rise to the seemingly irreconcilable challenges of providing a livelihood for their growing populations while at the same time fighting against a depletion of the world's resources, the destruction of the environment and irreversible climate change. This represents a formidable burden for the least developed countries (LDCs) in particular. UNIDO is committed to offering them every support in their efforts to access clean and environmentally-friendly forms of energy for their industries. As is true of all countries at an early stage of industrial development, there are two paths open to them and they need to pursue both: a switch to new, renewable and above

## Solutions for sustainable industrial development

UNIDO provides integrated renewable energy and energy efficiency solutions for sustainable industrial development. It strives to promote a clean and efficient use of energy, to facilitate productive activities in rural areas by providing modern and renewable forms of energy, and to enhance the use of renewable energy for industrial applications. UNIDO works at helping developing countries and countries in transition to:

- Enhance the competitiveness of industry by increasing its energy efficiency and productivity;
- Reduce the carbon emissions of industry by promoting efficient, renewable and low-carbon energy technologies;
- Enhance access by the poor to modern energy services based on renewable energy technologies; and
- Increase the viability of enterprises by augmenting the use of locally available renewable energy sources.

all sustainable sources of energy and a more efficient use of existing energy sources.

While negotiations continue towards a new international climate treaty that would establish targets for the reduction of greenhouse gas emissions, it remains imperative for public and private sector organizations, whether national or international, to pursue the goal of climate change mitigation while carefully balancing development objectives such as global economic growth, universal energy access and progressive poverty reduction with the need for environmental sustainability.

Global challenges require a global response and UNIDO has done much to advance the international agenda on energy and climate change mitigation. UNIDO's key activities and contributions in this respect in 2011 include: the Vienna Energy Forum 2011, featured at the end of this chapter; release of the international standard on energy management (ISO 50001); the launch of a technology road map for carbon capture and storage (CSS) for industry; and Greening the 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC) in Durban, South Africa (see chapter 1, special feature and below).

Throughout 2011, UNIDO sought to consolidate its programmes on industrial energy efficiency and renewable technologies for productive uses and applications in industry, especially in energy-intensive small and medium manufacturing enterprises (SMEs). Energy management standards and renewable energy technologies offer great opportunities to developing countries for a low-carbon development pathway that combines energy efficiency with energy production and fuel switching based on renewables, with increased competitiveness of the productive sector and wealth creation. UNIDO has continued to move forward in the development of low-carbon clean technologies, process and product design. It has disseminated industrial applications of solar photovoltaic systems, solar thermal energy, biomass and waste use for energy. Low-carbon technologies remain an important area of focus, with programmes related to hydrogen technology applications for power management, stationary and mobile fuels cells, and CSS technologies in selected industrial sectors. UNIDO's energy portfolio with GEF has increased rapidly, and during 2012-13, the target for GEF funding to be mobilized for new energy projects will be over \$100 million. Several GEF-funded energy efficiency and renewable energy projects are under implementation and UNIDO has been able to mobilize the necessary co-financing

from the respective country counterparts, local and regional financing institutions and the private sector.

UNIDO has initiated the implementation of renewable energy and energy efficiency projects in nine countries under the GEF Strategic Programme on Energy in West Africa, as well as a regional coordination project fostering knowledge management, capacity-building, coherence and coordination. In the area of industrial energy efficiency, UNIDO has concentrated efforts and resources on the promotion and support of BAT and BEP such as energy management systems, energy system optimization and benchmarking.

This year also saw impressive cross-cutting developments with the release of the international energy management standard ISO 50001 in Geneva. ISO 50001 shows the importance of standards as key best practices that can underpin stronger energy efficiency policy frameworks, enact management and behavioural change for industrial energy efficiency, and ultimately optimize resource allocation and investment.

UNIDO continues to support countries through its technical cooperation activities in both mitigation of greenhouse gas emissions and improving policy frameworks to encourage the use of renewable energy technologies for energy generation and energy efficiency standards. In the coming year, the focus will be on increasing private sector participation, promoting innovative low-carbon energy technologies, encouraging cooperation with regional development banks and supporting the energy access agenda.

## Renewable energy

Renewable energy sources and technologies offer an opportunity for developing countries to work towards sustainable development by creating local employment through off-grid energy access and pursuing a low-carbon pathway that translates into increased competitiveness of the productive sector, a reduction of poverty and a rise in living standards.

In January, UNIDO published its analysis of the long-term potential for renewable energy in industrial applications. This analysis suggests that by 2050, up to 21 per cent of all energy and feedstock use in manufacturing industry can be based on renewables; the agro-food industry sector accounts for half of this potential, owing to the high demand for low temperature process heat. By far the largest potential for renewable energy for industrial applications lies in biomass, i.e. almost 900 million tons of oil equivalent of primary biomass (feedstock and process energy) and about 250 tons of process heat from solar, thermal and heat pumps. The use



In Rwanda, efforts to reduce poverty and achieve greater economic growth are hindered by the absence of electricity. Thanks to the newly installed small hydro plant in the village of Kitabura—part of UNIDO's successful small hydropower projects in Rwanda—school children are now the proud users of laptops that run on hydropower.

*Photo: UNIDO*

## At the 2011 Global South-South Development Expo of the United Nations, held in December at the Rome headquarters of the Food and Agriculture Organization of the United Nations (FAO), the UNIDO/FAO Joint Programme on Solar Power for Irrigation in Mozambique received the South-South Award on Innovation.

The 1,000-strong Ndombe community lives in Chicualacuala district, some 500 km north-west of Maputo in one of the driest and most isolated districts in Mozambique. Recently, they have witnessed extreme weather patterns that have been attributed to climate change. In order to better manage what little water they have, the community formed a garden farming association of 64 members, each with a plot collectively irrigated with a diesel generator powered water pump drawing water from a crocodile infested lagoon. Mechanical faults and a shortage of fuel meant, however, that the irrigation scheme frequently broke down and the villagers had to risk their lives by fetching water directly from the lagoon. Under the One UN Joint Programme on Environmental Mainstreaming and Adaptation to Climate Change, FAO and UNIDO installed a solar photovoltaic pumping system in the Ndombe community garden. The polycrystalline Chinese manufactured solar module panels now enable water to be pumped from

the lagoon to three 10m<sup>3</sup> storage tanks that are manufactured locally. The water is then pulled by gravity over 200m in flexible pipes irrigating the individual plots. The system has been in operation since December 2009. The Ndombe Association growers can now farm all year round thanks to this South-South technology transfer solution ensuring a steadier supply of food for the community throughout the year, generating income from sales both within the community and to outlying areas and providing employment to women who represent the majority of the growers. It has also eliminated the drudgery of women and children associated with carrying water from the lagoon, as well as safety concerns. As part of this project, the community was trained in the operation and maintenance of the system. The collection of usage fees ensures that they are able to pay for maintenance and operation costs, but most importantly, to expand the system to meet their growing needs.

of biogas from agro-food industries, such as cattle and poultry farms, is a striking example, but other industrial sectors also offer interesting opportunities for electricity and heat generation, or the production of biofuels and biochemicals from biomass. Biomass can also be a key resource for synthetic organic products such as fibres, detergents, lubricants and solvents. About 10 per cent of all feedstock for synthetic organic products is of natural organic origin. This includes cellulose from wood and natural oil for polyols and other chemical feedstocks. In conclusion, renewable energy can contribute about 10 per cent to the reduction of greenhouse gas emissions from industrial processes. This equals nearly two gigatons of CO<sub>2</sub>, or a quarter of total CO<sub>2</sub> reduction in this sector.

In April, experts in geothermal energy from the nine countries of the East African Rift System—Burundi, Comoros, Democratic Republic of the Congo, Eritrea, Kenya, Rwanda, Uganda, United Republic of Tanzania and Zambia—visited Mexico, on a week's study tour that was part of the UNIDO intraregional renewable energy cooperation initiative for industrial and productive uses, launched in the geothermal area. During their time in Mexico, participants attended an intensive seminar on geothermal energy at the country's Electric Research Institute in Cuernavaca and took part in a number of field trips to laboratories and geothermal installations. The tour was arranged and supported by UNIDO in collaboration with the Government of Mexico, in particular the Ministries of Energy and Foreign Affairs and the Federal Electricity Commission. It was preceded by an international expert meeting at UNIDO Headquarters in Vienna and a technical workshop at the UNIDO International Centre for Science and High Technology in Trieste, Italy. The programme established the basis for triangular cooperation between Africa, Mexico and UNIDO in the area of geothermal energy exploitation, knowledge transfer and technology development. It is also a powerful example of South-South cooperation at its finest.

In 2011, UNIDO completed two separate One UN-funded renewable energy projects in Burundi and Sierra Leone and was awarded additional funding for a 300 kW extension of the Mutobo plant, one of UNIDO's successful small hydro-power projects in Rwanda. The project in Burundi was a 300 kW small hydropower extension to support productive activities. The project in Sierra Leone involved the provision of electricity to existing UNIDO growth centres using solar photovoltaic technology. The electricity provided enhanced

the quality and quantity of productive activities and demonstrated a potential for rapid replication. These successful One UN Fund projects follow a similar project in Mozambique in 2010 that won an award at the 2011 Global South-South Development Expo (see box).

The Renewable Energy Trust Fund (RETF) was established by UNIDO primarily to develop projects for scaling up renewable energy for productive activities in developing countries, with particular emphasis on promoting the involvement of the private sector. The RETF has achieved a wide geographical coverage of 22 projects in 15 countries. The RETF investment of \$240,000 will potentially mobilize GEF funding of \$50 million and leverage co-financing of \$176 million.

## Energy efficiency

The UNIDO industrial energy efficiency programme builds on the Organization's lifetime experience in the field of industrial development and technology transfer. It represents one of the key pillars of the green industry paradigm promoted by UNIDO. Combining the provision of policy and normative development support services and capacity-building for all market players, UNIDO aims at improving energy efficiency in industry and ultimately transforming the market. The UNIDO energy programme is structured around four core thematic areas: energy management systems and standards; energy system optimization; low-carbon and advanced process technologies; and benchmarking, monitoring and verification.

Over three decades of energy efficiency programmes in industry have demonstrated that opportunities to use energy more efficiently continue to be wasted because of poor management and operational practices. For the past four years, UNIDO has been working towards a standard for the management of energy that would provide public and private sector organizations with management system best practices to increase energy efficiency, reduce costs and improve energy performance. A number of regional and international meetings were held in order to sound out prospective standards users and policymaking and standards institutions. UNIDO also carried out surveys on energy management practices in industry in selected emerging economy countries.

Based on the recommendations of an expert group meeting, held in March 2007, that brought together representatives of 14 developed and developing countries and the International Organization for Standardization (ISO), UNIDO put forward

a recommendation to ISO for the development of an international energy management system standard. It was favourably received and in 2008 ISO set up a project committee to develop the standard. As part of the committee, UNIDO actively contributed to the development process by presenting data from both its surveys and workshops and providing inputs to the drafting of standards. The combined efforts of national standards bodies, with UNIDO support, culminated in the launch on 17 June of ISO 50001 at the ISO headquarters in Geneva, Switzerland. In anticipation of the adoption of the new standard, UNIDO put together a portfolio of projects in countries where energy management systems for industry and ISO 50001 would be most relevant and welcome. The year under review saw projects and capacity-building programmes starting in six new countries. Over the next three years, UNIDO will be working in over 15 countries to build the technical capacity of enterprises, markets and national institutions for the implementation of energy management systems and ISO 50001.

The achievement of ambitious greenhouse gas emission reduction targets calls for a new energy system in which

energy efficiency, renewable energy and carbon storage technologies are mainstreamed within the supply and the demand side. While new technologies will certainly have to be developed, the reduction of emissions will depend in large part on the accelerated dissemination of existing BAT and BEP. In 2011, UNIDO increased its efforts to assist policymakers, industry and the international community in accelerating the pace of dissemination and deployment of energy and climate change mitigation BAT and BEP through effective market-based tools, mechanisms and partnerships.

### Low-carbon technologies

UNIDO is closely involved in the development and dissemination of low-carbon technologies. The International Centre for Hydrogen Energy Technology (ICHET) was formally established in 2003 with the signing of a trust fund agreement between the Government of Turkey and UNIDO to promote innovation and the use of hydrogen technology for generating energy. In December, ICHET organized the first Black Sea Hydrogen Sulphide Workshop in Istanbul, Turkey,

**In May, the Director-General signed a new partnership agreement with the Austrian Energy Agency (AEA), a non-profit scientific association, to help promote and support the efficient use of energy, especially of renewable sources of energy and of innovative technologies, with special focus on the mitigation of climate change.**

Collaboration between UNIDO and AEA will focus on the development and support of sustainable energy supply at national, regional and international levels, increased energy efficiency on the supply and demand side, and renewable energies for productive uses and income generation at the level of industry and households. It will also help in the

development of sustainable energy policies and regional partnerships, capacity-building in the field of renewable energy, energy efficiency and climate change. The UNIDO-AEA partnership will also help in strengthening local capacities in the field of energy efficiency and renewable energy in developing countries and countries with economies in transition.

to look at the feasibility of extracting on an industrial scale gaseous hydrogen from the hydrogen sulphides dissolved in the Black Sea. Hydrogen as a fuel is at the core of innovative low-carbon technologies that will facilitate the transition to a low-carbon economy in the future. Its most common production process is through electrolysis and has an energy cost comparable to its yield. It is nowadays often envisaged as a medium for the temporary storage and transportation of the energy produced from renewable sources such as wind and sun.

The widely publicized success of ICHET fuel cell powered products came to the attention of the European Union in 2011. Through the Fuel Cells and Hydrogen Joint Undertaking—a public-private partnership supporting research, technological development and demonstration activities in fuel cell and hydrogen energy technologies in Europe—ICHET was granted three research and development projects, two involving fuel cell powered forklift trucks and fuel cell powered uninterruptible power supply and back-up systems. ICHET will be co-responsible for providing 10 fuel cell powered forklifts for testing under

industrial conditions in selected European countries and for carrying out durability testing and life cycle assessment on the uninterruptible power supply and back-up systems to be deployed in 19 sites across the EU. The third project concerns fuel cell education and training. The overall allocation is \$1.17 million. ICHET has one of the most advanced fuel cell laboratories in Europe. The three-wheeler project in India, with partners Mahindra and Mahindra, Air Products and the Indian Institute of Technology in New Delhi, has completed the conversion of 15 vehicles to hydrogen.

Carbon capture and storage (CCS) technology is crucial if the world is to tackle the ever growing challenge of climate change. Recent studies suggest that CCS could contribute 19 per cent of the total global mitigation needed to halve greenhouse gas emissions by 2050. Until recently, the extensive research carried out on CCS technologies concentrated on the power sector and failed to touch on industry. UNIDO stepped in to fill the gap and together with the International Energy Agency and the Energy Research Centre of the Netherlands—one of the largest energy



The H<sub>2</sub> EcoCaravan attracted considerable attention on its round trip from Istanbul to Vienna for the Vienna Energy Forum. The vehicle—the first of its kind—is a self-sustained living space that runs off wind, solar, battery and hydrogen energy systems. It is a joint demonstration project run by the International Centre for Hydrogen Energy Technologies (ICHET) and the Natural Gas Vehicles Association. ICHET is a UNIDO project founded in Istanbul in 2004 and supported by the Turkish Ministry of Energy and Natural Resources. Its role is to support, demonstrate and promote viable hydrogen energy technologies, with the aims of enhancing future economic development, particularly in emerging countries and preventing the widening of the energy and technology gap while helping to skip over the fossil fuel phase.  
*Photo: UNIDO*

**Carbon capture and storage** is a technology to prevent large quantities of carbon dioxide, a greenhouse gas, from being released into the atmosphere from the use of fossil fuels in power generation and other industries. The technology involves collecting or capturing the CO<sub>2</sub> produced at large industrial plants using fossil fuels (coal, oil and gas); transportation to a suitable storage site and pumping it deep underground to be securely and permanently stored away from the atmosphere in rock.

research institutes in Europe—has led the development of a technology road map for the application of CCS in industry to advance the global uptake of low-carbon technologies, particularly in developing countries and transition economies. The CCS Roadmap in Industrial Applications, released in September in Beijing at the meeting of the Carbon Sequestration Leadership Forum, offers a convincing argument for putting CCS in industry high on the policy and research agenda. First, lower costs and more easily accessible options for CCS tend to be found in industry and not in the power sector. Secondly, industry, in contrast to coal-fired plants, often lacks alternatives for realizing CO<sub>2</sub> emission reductions of 80 per cent or more. Thirdly, CCS in biomass applications has an additional benefit: it could lead to the net removal of CO<sub>2</sub> from the atmosphere, an option that may prove very useful should climate change continue unabated. The road map was also supported by the Norwegian Ministry of Petroleum and Energy and the Global CCS Institute.

### **Global Environment Facility**

The success of UNIDO energy projects within the GEF portfolio continued to grow in 2011. Over the next two years, UNIDO plans to develop 37 projects, leveraging GEF funding to the tune of \$150 million. Several GEF-funded energy efficiency and renewable energy projects are currently under implementation and UNIDO has been able to mobilize the necessary co-financing from the respective

country counterparts, local and regional financing institutions and the private sector.

The seventeenth Conference of the Parties to the United Nations Framework Convention on Climate Change (COP17) was held in Durban, South Africa from 28 November to 9 December (see chapter 1, special feature). Under the GEF-5 funding cycle, the first UNIDO energy project entitled “Greening the COP17 in Durban”, was approved in April. The project, which is being executed in close cooperation with the Government of South Africa, demonstrates the way South Africa, GEF and UNIDO are cooperating to reduce greenhouse gas emissions, promote renewable energy, demonstrate low-carbon technologies and best practices, and raise levels of awareness of the climate change challenge among decision makers and the general public.

Another major project coordinated by UNIDO is the GEF Strategic Programme on Energy in West Africa, involving 18 countries of the region. Working with the World Bank, the United Nations Development Programme, UNEP, FAO, the African Development Bank and the International Fund for Agricultural Development, UNIDO is aiming to promote energy access in rural areas through renewable energy and energy efficiency projects. The programme demonstrates the technical and economic feasibility of renewable energy and energy efficiency technologies. Projects include a variety of approaches ranging from minigrids powered by renewable energy, to



Delegates attending COP17 chose bicycles as an eco-friendly way of getting from one meeting room to another (see special feature in chapter 1).

Photo: UNIDO



Monique Barbut, Chief Executive Officer and Chairperson of the Global Environment Facility, receives her bicycle.

Photo: UNIDO

sustainable forms of transport, or energy efficiency measures in industry.

At UNIDO Headquarters in March, three separate events put GEF in the limelight. The Scientific and Technical Advisory Panel of the Global Environment Facility (STAP) held one of its biannual meetings in Vienna to discuss its work and future activities. The Panel considered ways to translate its recent work into policy, discussing and presenting concrete measures for GEF project interventions in developing countries and countries in transition. It also examined environmental priorities to be addressed in the coming year, including the interlinkages between chemicals management, water use and management, and their impact on ecosystems. At a parallel meeting, directors of international technology centres and training workshops on GEF and STAP, invited to Vienna by UNIDO and the International Centre for Science and High Technology, had a unique opportunity to share information and best practices on key activities that are being implemented by each Centre. Finally, to ensure that its own staff was fully conversant with GEF-5 policies and procedures, UNIDO also organized a dedicated seminar for selected technical, managerial and field staff.

## Regional centres

One of several striking results achieved by UNIDO's energy programme in 2011 was the growth and expansion of regional knowledge management and network initiatives. After just

three years in operation, the Observatory for Renewable Energy in Latin America and the Caribbean now encompasses 12 countries: Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Mexico, Nicaragua, Paraguay, Peru and Uruguay (see chapter 1). It has also shown some very positive results in strengthening cooperation among counterparts, including ministries of energy, and in promoting renewable energy in the region. At the country level, the initiative has generated a number of specific proposals, based on sound technical reports. In June, senior officials from participating countries met to discuss its eventual transition from an observatory to a fully-fledged Renewable Energy Centre of Excellence that would provide specialized services to the countries of the region in the field of renewable energy. The proposal met with an enthusiastic response from the Latin American Energy Organization, the Spanish Agency for International Development Cooperation as well as representatives from participating countries. UNIDO collaborated with both organizations in identifying services to be rendered by the proposed Centre of Excellence as well as its specific structure.

The Regional Centre for Renewable Energy and Energy Efficiency of the Economic Community of West African States (ECREEE), set up by UNIDO at the end of 2009, has, with continued support from UNIDO, shown an outstanding start-up performance. It has attracted further funding from international as well as local partners, including Austria, Brazil, Nigeria, Spain, the European



Arnold Schwarzenegger, former Governor of the State of California, United States of America, and a strong proponent of action to combat climate change, addressed participants on the first day of the Vienna Energy Forum 2011.

*Photo: UNIDO*

**“We need to do a better job at communicating.** Far too often, the arguments for the environment and green energy are made by talking about global climate change and melting ice caps, and rising sea levels and beetle infested trees and more forest fires ... If you live in Texas, what do you care about the polar ice caps you’ve never seen? If you’re completely landlocked and miles from the ocean in Salzburg, do you really get passionate about rising sea levels? If you’re in Copenhagen, what do you care about the beetles in the Colorado trees? We have to talk about things that matter to people.” **Arnold Schwarzenegger**

Commission and the United States Agency for International Development. In less than one year, the Centre was able to more than triple its budget for programmes and projects. UNIDO is currently assisting the Centre to develop its own internal procedures and management structures. The Centre aims to increase access to modern energy services by tackling some of the obstacles that currently hamper the adoption of renewable energy and energy efficiency solutions in West Africa. In particular, it is targeting the areas of policy development, capacity-building, knowledge management and investment promotion. As part of its strategy to ensure the long-term sustainability of ECREEE, UNIDO is to an increasing extent working in partnership with ECREEE on projects in the region, including two GEF-funded programmes for which UNIDO is the lead agency.

### **Vienna Energy Forum**

The Vienna Energy Forum 2011 was hosted by UNIDO in June 2011. The Forum brought together more than 1,200 participants from 125 countries including Heads of State, policy-makers, experts, civil society and the private sector. For more information, see the special feature at the end of this chapter.

### **Capacity-building for the implementation of multilateral environmental agreements**

Although generations past have, to a greater or lesser degree, shown concern for the environment, it was not until the United Nations Conference on Environment and



With the help of UNIDO, farmers in the SurAgroh Company in Choluteca on the Pacific coast of Honduras are able to grow melons and watermelons using technologies that avoid the use of methyl bromide, a prominent ozone depleting substance used as a fumigant for soil and stored goods. Alternatives include various combinations of soil solarization, grafting, green manure (biofumigation) and biological control.

*Photo: UNIDO*

Development, held in Rio de Janeiro, Brazil, 20 years ago, that this concern took on global proportions. The Rio Summit spawned a multitude of activities relating to the environment that in turn resulted in a number of multilateral environmental agreements, covering different aspects of environmental protection. Multilateral environmental agreements require participating countries to develop specific implementation mechanisms and fulfil obligations involving reporting, training, public education, and other activities. Multilateral environmental agreement themes lie at the heart of global environmental issues such as CO<sub>2</sub> reduction, eco-efficiency, land degradation, energy systems and technology innovation.

In 2009, UNIDO produced a two-part manual for project managers and UNIDO staff on implementation modalities of the Montreal Protocol, as well as practical guidelines for

the preparation of a national implementation plan (NIP) and for post-NIP activities under the Stockholm Convention on Persistent Organic Pollutants funded by GEF.

### Montreal Protocol

The Montreal Protocol on Substances that Deplete the Ozone Layer is an international treaty designed to protect the ozone layer. It opened for signature in 1987 and entered into force on 1 January 1989. UNIDO has been one of the principal implementing agencies of the Multilateral Fund of the Montreal Protocol since 1992, assisting developing and transition economy countries to meet their obligations under the Protocol. UNIDO has topped the list of implementing agencies for a total of eight years, since independent evaluations of the agencies began in 2001. The Fund is managed by an Executive Committee assisted by the Fund Secretariat.

The phase-out schedules for hydrochlorofluorocarbons (HCFCs) are on the horizon. The first stage consists of the 2013 freeze and the 10 per cent reduction in consumption by 2015 from baseline levels, calculated as the average of the 2009 and 2010 HCFC consumption in each country. In 2011, UNIDO continued to develop HCFC phase-out management plans (HPMPs) with national ozone units. A total of 31 HPMPs were approved by the Executive Committee of the Multilateral Fund, of which six involved new countries added to UNIDO's Montreal Protocol portfolio, namely, Central African Republic, Equatorial Guinea, Guinea Bissau, Rwanda, Saint Lucia and Saint Vincent and the Grenadines.

The Montreal Protocol has already made a significant contribution towards reducing greenhouse gas emissions directly and indirectly through the phase-out of chlorofluorocarbons (CFCs). CFCs not only harm the ozone layer but also have high global-warming potential. In order to guarantee that projects are both holistic and sustainable, plans and projects submitted to the Executive Committee for approval are expected to integrate climate change concerns by selecting low-carbon technologies, as well as sourcing possibilities of tapping into green funds and the carbon market. For example, in some manufacturing sectors, such as the air-conditioning sector, the feasibility of available technology has yet to be demonstrated and accepted. This is of particular concern to certain countries in the Middle East where air-conditioning units operate at high ambient temperatures all year round.

UNIDO continued work on the design of demonstration projects to destroy ozone depleting substances (ODS) in Algeria, China, Lebanon, Nigeria and Turkey that could be replicated in other countries in their respective regions and extended within the country to ODSs not specified in the project. In April, the Executive Committee approved the ODS destruction project for Mexico and in November requested UNIDO to develop a regional ODS destruction project in Europe. The Multilateral Fund generally meets the cost of the destruction activity itself but does not cover the costs of collection and transport of ODS and obsolete equipment containing ODS. The means that co-financing has to be secured.

UNIDO seems set to meet the 2015 deadline for the total phase-out of methyl bromide, an ozone depleting fumigant used for horticulture and grain storage uses. Projects in countries whose gross domestic product depends on agriculture—particularly in Africa and Latin America—are gradually drawing to a close. In 2011, UNIDO completed its multi-year methyl bromide phase-out projects in

Honduras and Morocco well before the compliance deadline for complete phase-out.

## Stockholm Convention

The Stockholm Convention on Persistent Organic Pollutants is a global, environmental treaty, ratified in May 2004, to help protect human health and the environment. The Convention requires Parties to take measures to eliminate or reduce the release of persistent organic pollutants (POPs) into the environment. POPs circulate globally causing damage wherever they travel and remain intact in the environment for years. They accumulate in the fatty tissue of living organisms and are toxic to humans and wildlife. POPs have been widely used as pesticides. They are also used in industrial processes and in the production of a range of goods such as solvents, polyvinyl chloride and pharmaceuticals. In accordance with Article 7 of the Stockholm Convention, each Party to the Convention is required to develop a plan for the implementation of its obligations under the Convention and to transmit its plan to the Conference of the Parties within two years of the date on which the Convention enters into force for it. Eligible countries can seek financing through the Global Environment Facility to support the development and implementation of national implementation plans (NIPs).

Throughout 2011, UNIDO held a series of workshops designed to encourage the formulation of NIPs in different regions of Africa as well as their timely and efficient implementation. These in turn led to a number of requests for UNIDO assistance. An inception workshop for a UNIDO project to provide technical assistance to countries in Africa for the adoption of NIPs took place in June in Pretoria.

Workshops in Europe and the NIS included two in Armenia on the application of BAT and BEP in the disposal of polychlorinated biphenyls; another in Armenia on risk assessment/reduction and management; and an international conference on contemporary approaches to rubber goods and tyre recycling and disposal, held in June in Moscow. Other activities in the region included an electronic map of waste generation, transportation, storing and recycling in the Tatar Region of the Russian Federation and an extensive inventory of polychlorinated biphenyls (PCB) waste in Azerbaijan.

During the course of the International Workshop on Hazardous Substances within the Life Cycle of Electronic Products, held in March at UNIDO Headquarters, a special working group of East and South-East Asian countries met

to draft a project proposal on the environmentally sound management of waste electronic and electrical equipment in Asia. The meeting included presentations from China, Indonesia, Philippines and Viet Nam as well as experts from Japan and UNIDO.

In July, UNIDO successfully completed a GEF-funded project in Viet Nam to introduce BAT and BEP to demonstrate the reduction or elimination of unintentionally produced persistent organic pollutants (uPOPs), such as dioxins. It was the first GEF-supported project completed under the GEF-4 project cycle in Viet Nam. Rapid growth of the country's economy and industry called for the introduction of pollution prevention methodologies that would keep pace with industrialization. The project aimed to establish the required human resources and infrastructure to implement the obligations of the Stockholm Convention, to which Viet Nam has been a party since the inception of the Convention. It addressed the reduction of uPOPs in key source categories through BAT and BEP methodologies. Four priority sectors were selected for the pilot demonstration cases: waste incineration, cement kilns, pulp and paper, and iron and steel production.

The project achieved all its envisaged objectives. Primarily a capacity-building project, UNIDO held training courses, workshops and in-plant assessments in order to develop self-reliant managerial and technical staff with professional competencies in applying BAT/BEP to priority industrial source categories to reduce the release of uPOPs. UNIDO was able to conduct baseline assessments of the four industries involved and published technical BAT/BEP guidelines for each sector. Available funding from both the project and co-financing from the facilities allowed the introduction of BEPs while BATs were proposed to the pilot industries for consideration. Through the intensive training provided by

UNIDO, local counterparts are now in a position to implement recommended improvements, ensuring the sustainability of the project and Viet Nam is a step closer to meeting its obligations under the Stockholm Convention.

Polychlorinated biphenyls (PCBs) are man-made organic chemicals used in a multitude of industrial and commercial applications including paints, plastics, rubber products, pigments and dyes and electrical and hydraulic equipment. They do not break down easily in the environment and can accumulate in plants and food crops as well as fish. PCBs have been demonstrated to cause cancer, as well as a variety of other adverse health conditions. Although their manufacture was banned in many countries over thirty years ago, estimates place the total global production of PCBs at some 1.5 million tons.

The National Implementation Plan for the Stockholm Convention for The former Yugoslav Republic of Macedonia identified the problem of PCBs as a top priority requiring immediate action. This led UNIDO in 2008 to launch a project that would help the country to comply with its obligations under the Stockholm Convention on Persistent Organic Pollutants and contribute, through this, to an improvement of the environmental situation and eventually reduce and eliminate the threats that PCB pollution represents for human health. An international bidding process was concluded in 2011 for the environmentally safe destruction of transformer oil contaminated by PCBs. The renovation of a transformer maintenance facility has already begun. A non-combustion process to treat PCB-contaminated transformer oil will be installed in 2012 and training provided to local staff who will treat 150 tons of contaminated oil. The decontamination operation is scheduled for completion in 2013.

# Vienna Energy Forum 2011

In June, Vienna was the stage for an international event that brought together 1,200 participants from 125 countries to debate one of the most pressing global challenges of today: universal access to energy. The two-day event was organized by UNIDO in collaboration with the Austrian Federal Ministry for European and International Affairs and the International Institute for Applied Systems Analysis (IIASA) in the city's Hofburg Palace. It followed a succession of important meetings on energy in Austria, from the first Global Forum on Sustainable Energy, held in Laxenburg in 2000, to the Vienna Energy Conference in 2009. The Forum will take place every two years to look at global energy issues.

Drawing high-level participants from government, academia, international organizations and civil society, the Forum was opened by Irene Giner-Reichl, the then Director General, Austrian Development Cooperation, Austrian Federal Ministry for European and International Affairs. Johannes Kyrle, Secretary-General for Foreign Affairs of the same ministry reiterated that political support for the energy access agenda was vital for poverty reduction. Detlof von Winterfeldt, Director of IIASA, underlined the importance of research in developing clean energy sources. Kandeh Yumkella, Director-General of UNIDO, stressed the importance of energy access for the poor and outlined three attainable goals to be met by 2030, related to universal energy access, increased energy efficiency, and an increase in the share of renewable energy in the global energy mix. In a video message, United Nations Secretary-General Ban Ki-moon listed equity, environmental urgency and economic opportunity as the driving forces behind the campaign for the attainment of those goals.

A keynote address was given by Arnold Schwarzenegger, former Governor of the State of California, United States of America and a strong proponent of action to combat climate change.

He emphasized that universal energy access was not simply about lighting a dark room, or cooking on a better stove adding "It's about the freedom that energy—and especially renewable energy—gives us".

During five of its six plenary sessions, participants discussed a definition and measurement of energy access, goals and targets for energy access, renewable energy and its potential for energy access, a new global agenda for the 21st century and ways to finance universal access to energy.

In addition to its plenary sessions, the Forum featured two high-level panels and six round table discussions, all of which involved moderators, panellists and speakers who were eminent personalities and experts in various aspects of energy. The panel on the topic "Paving the way for universal energy access" was moderated by BBC news presenter and interviewer Zeinab Badawi. The second panel discussed sustainable energy for a green economy and was moderated by Rajendra Pachauri, Chair of the Intergovernmental Panel on Climate Change. The six round tables looked at the issues of: concrete energy action to address climate change, pathways to sustainable energy systems, the role of energy efficiency

for productive uses, low-carbon transformational technologies, addressing basic rural electrification needs in a regional context and partnerships for financing.

Another key event of the Vienna Energy Forum was a parallel high-level dialogue on strategies and solutions, including the role of the public sector and international cooperation in support of the energy-related goals mentioned above. The Ministerial Meeting on Energy and Green Industry, attended by 100 participants including ministers and high-level officials, helped to prepare the ground for the 2012 United Nations Conference on Sustainable Development (Rio+20). Under the chairmanship of Elizabeth Thompson, Executive Coordinator of the Rio+20 Conference, participants discussed global objectives for access to clean energy, energy and resource efficiency and promoting green industry as an integral component of the overall strategy. Ms. Thompson subsequently presented a chair's summary of the outcome of the Ministerial Meeting to the 39th session of the Industrial Development Board that met during the same period.

At the closing plenary of the Vienna Energy Forum, Carsten Staur, Permanent Representative of Denmark to the United Nations, said that the Ministerial Meeting had reaffirmed the 2030 energy goals. He further indicated that ministers had welcomed the priority that the United Nations is giving to renewable energy through the launch of a global

campaign to raise awareness ahead of the Rio+20 Conference.

The Vienna Energy Forum provided a backdrop for a number of other events. The annual meeting of the Círculo de Montevideo that acts as a permanent forum to review and identify strategies and means for promoting sustainable industrial development in the Latin American region took place in Vienna alongside the Forum. Other interesting side events were hosted by the German Federal Ministry for Development Cooperation, the Austrian Development Cooperation, the Global Network on Energy for Sustainable Development, the Global Alliance for Clean Cookstoves (see chapter 3) and FAO. Consultations were held by the International Advisory Board for the Oslo Conference on Financing Access for the Poor, the Paris-Nairobi Initiative on Clean Energy for All in Africa and the Global Energy Assessment Council.

A BBC World Debate "Powering Development in the 21st Century", was recorded on 21 June and aired on BBC World News and BBC World Service on 11 August. Chaired by Zeinab Badawi, the debate featured South Africa's Energy Minister Dipuo Peters, Chairman of India's Atomic Energy Commission, Srikumar Banerjee, President of Eurosolar, Peter Droege and the Director-General of UNIDO. It attracted a high-level audience and there was a lively exchange of views throughout the debate.

» Many countries, particularly those that have achieved an impressive level of industrialization, view UNIDO as a valuable adviser on industrial development and related policies.



## Research and analysis

UNIDO has a long record of expertise in statistics, research and analysis, on which its policy advice is founded and many countries, particularly those that have achieved an impressive level of industrialization, view UNIDO as a valuable adviser on industrial development and related policies. In order to continue to provide the very best services to its Member States, the Organization regularly reviews and fine-tunes its strategic research and policy advisory services. The year under review was no exception.

The year 2011 saw an evolution of the Organization's research and policy advisory activities. In line with his earlier statements to the Member States and his emphasis on the need for UNIDO to rebalance its activities across its four constitutional functions (technical cooperation, research and policy advice, convening and normative), the Director-General started the year with a high-level internal retreat on the future of research activities in UNIDO that resulted in a number of changes. The retreat advocated steps to further strengthen the Organization's research activities to better align them with the need for solid and evidence-based policy advice to UNIDO Member States. It laid the foundations for a fundamental review of its programme to provide strategic research and policy advisory services. The programme involves two components: strategic industrial policy advice, especially in the diagnostic and design stages of the industrial policymaking process, and capacity-building activities, focusing on enabling and upgrading public and private institutions to fulfil their respective roles and take over full control of industrial policymaking. During the year, the objectives and deliverables of a new programme on policy advisory services were agreed, as well as a thematically focused programme of global research and analysis. The fourteenth session of the General Conference approved the new programme, thereby sanctioning a strengthening of the Organization's industrial policy support to its Member States.



The first executive programme of the UNIDO Institute for Capacity Development, entitled “On top of the game: global strategies and negotiations towards green growth”, was organized in cooperation with the Saïd Business School, University of Oxford, and the Federal Ministry for European and International Affairs of Austria.

Photos: UNIDO

## Statistics

Both research and policy advice can only be sound if they are grounded on a reliable statistical base. In 2011, UNIDO continued to collect data on major indicators of industrial statistics and disseminated its statistical products worldwide. As in previous years, data collection was carried out in cooperation with the Organisation for Economic Co-operation and Development (OECD). UNIDO has the international mandate from the United Nations Statistics Commission for collecting, compiling and disseminating industrial statistics globally. Country data received from National Statistics Offices (NSO) were validated and supplemented with UNIDO estimates and improved in terms of their international comparability. Data are disseminated through the publication of the *International Yearbook of Industrial Statistics* (see below), the production of data on CD-ROM and online access to the statistical country briefs available at the UNIDO website. Within the framework of the international data exchange programme, statistics produced by UNIDO are also disseminated through UNdata, a new Internet-based data service launched by the United Nations Statistics Division of the Department of Economic and Social Affairs.

Statistical tables for recent years were compiled and presented in one of UNIDO’s flagship publications, the *International Yearbook of Industrial Statistics*, the principal statistical product of UNIDO. Published in March by UNIDO and Edward Elgar Publishing Limited, the *International Yearbook* once again provided economists, planners, policymakers and the business community with worldwide statistics on current performance and trends in the manufacturing sector. Even more comprehensive than previous issues, the latest *Yearbook* can be used to analyse patterns of growth and related long-term trends as well as structural change and industrial performance in individual industries. It also facilitates international comparisons relating to manufacturing activity and industrial development and performance. The 2011 volume contains detailed up-to-date information from national industrial surveys conducted in more than 75 countries.

The 2011 edition of the *Yearbook* also provides estimates of world manufacturing growth for 2010 by region as well as by country. According to UNIDO estimates, total manufacturing value added (MVA) worldwide grew by 5.3 per cent in 2010, an indication that global manufacturing is in the process of recovery from the recent financial crisis. Industrialized countries, which were most affected by the financial crisis,



Launch of the *International Yearbook on Industrial Statistics* in New Delhi in March.  
Photo: UNIDO

have witnessed a growing trend in industrial production since 2009. Their manufacturing output grew by 3.4 per cent in 2010. Over the past 15 years, manufacturing has been the major driver of economic growth in developing countries and helped to deliver a strong performance in industrial growth in 2010, while estimates of industrial growth in newly industrialized countries indicate a marginal decline. Although the MVA of developing countries grew at a significantly lower pace during the financial crisis, figures were still positive; the year 2010 saw a sharp rise to 9.4 per cent over the figure of 2.7 per cent in 2009. This resulted in a significant reduction in the gap between the share of MVA in industrialized and developing countries. Developing countries now account for 32 per cent of world MVA, as opposed to 20 per cent a decade ago. Three developing economies—Brazil, China and India—have been ranked among the top 10 manufacturers of the world. The *Yearbook* also provides detailed statistics on the structure of manufacturing sectors by employment, output and other major indicators of industrial statistics.

### Quarterly indices of industrial production

In 2010, UNIDO started to compile quarterly indices of industrial production on a pilot basis in order to monitor current trends in the growth of manufacturing output.

National indices were obtained for sample countries through secondary data sources. UNIDO developed a concept for a regular quarterly publication to provide facts and figures on the state of world manufacturing and began work on a new series of reports about current growth trends of world manufacturing production by country and sector, based on production data collected and published by NSOs. A preliminary report was prepared earlier to check the availability of data and efficiency of the statistical methods employed.

Starting in 2011, reports on world manufacturing production were published for worldwide dissemination. The reports, the first three issues of which were issued in 2011, complement the annual data provided in the *International Yearbook of Industrial Statistics*. The new initiative was well received by data users—policymakers, media and business associations in particular—who require a more recent assessment of production growth trends than can be provided in an annual publication. Results obtained from an analysis of the indices of industrial production have shown that the world manufacturing output had an impressive start in the first quarter of 2011, indicating a recovery from the recent financial crisis; this process has come to a halt since the second quarter, largely as a result of a deteriorating financial situation in the Euro-zone countries.

## The International Standard Industrial Classification of All Economic Activities

The International Standard Industrial Classification of All Economic Activities (ISIC) is the international reference classification of productive activities within the United Nations and the basic tool for studying economic phenomena, fostering international comparability of data, providing guidance for the development of national classifications and for promoting the development of sound national statistical systems. First adopted in 1948, countries around the world use ISIC as the classification system for analysing their national activity or have developed national classifications derived from ISIC. It has been revised four times since its inception. The latest revision is the outcome of a review process that spanned several years and involved contributions from many classifications experts and users around the world.

UNIDO began work in 2011 in close cooperation with OECD and different national statistical offices on the implementation of ISIC Revision 4. The first country tables using Revision 4 were published in the 2011 *International Yearbook of Industrial Statistics*. Following the redesign of the database, the application software for data collection, validation, transformation and dissemination was adapted to accommodate data in ISIC Revision 4. Currently more and more countries, including the majority of OECD countries, provide data in the new format; the 2012 edition of the *International Yearbook of Industrial Statistics* will contain more than 40 country tables in ISIC Revision 4.

The transition to a new classification is a lengthy and complex process as it involves virtually all aspects of the compilation and presentation of the relevant statistics. Adapting ISIC to the specifics of the national economy while maintaining

## UNIDO not only has a mandate to maintain an international industrial statistics database, but also to share its expertise with Member States.

Services provided by UNIDO in the field of statistics aim to help build the statistical capacity of Member States, including strengthening the skills in statistical offices, ministries of industry and other relevant institutions. Training provided includes topics such as industrial statistics, business registers, industrial censuses and surveys, short-term indicators of industrial statistics and the dissemination and analysis of data.

At the request of the Ministry of Industry of Lebanon, UNIDO launched a project in 2004 to conduct the country's first survey of manufacturing establishments and create an industrial database system within the ministry. The project reached a successful conclusion in 2011 with the publication of the *Industrial Sector Statistical Study*, prepared jointly by UNIDO, the Ministry of Industry and the Association of Lebanese Industrialists and involving more than 7,000 manufacturing establishments. It comprises a descriptive part for all surveyed industries and a detailed

analysis of over 4,000 larger manufacturing establishments. The study underlines that manufacturing is a key activity of the Lebanese economy and accounts for almost 10 per cent of GDP. For larger firms it revealed that the production of food and beverages was the largest manufacturing sector, accounting for 26.9 per cent of value added and 25.3 per cent of industrial employment. The representative of the Association of Lebanese Industrialists pointed to the fruitful cooperation between both public and private sectors, and the technical support of UNIDO in undertaking the study. An extension of the project is under consideration to build analytical capacities in the Ministry of Industry.

Upon completion of the project, the study was presented at a seminar organized by UNIDO in Beirut in May for representatives of the public and private sector. Participants were given an analytical report based on the database as well internationally comparable data on the industrial sector.

international comparability requires the observation of a number of rules. Ideally, countries should be able to provide data according to ISIC at all levels of the classification for the purposes of international comparability and it is the task of UNIDO to assist countries to achieve this objective whenever assistance is required.

## Thematic research

At the core of the revised UNIDO research programme lies an analysis of the patterns of structural change. Capitalizing on its comprehensive database on MVA covering 120 countries over a period of 43 years, UNIDO is in a unique position to contribute to the evolution of development economics and stimulate the global debate on industrial development. Two related strands of applied research derive from the above, namely research on the determinants and contours of structural change towards resource-efficient, green industry and research on the diversification options faced by countries exporting primary commodities. Both strands, which generated the outputs and partnerships detailed below, play a key role in the contemporary debate on development in the run up to the United Nations Conference on Sustainable Development, to take place in Rio de Janeiro, Brazil, in June 2012.

As part of its strategic research programme in 2011, UNIDO published 15 working papers prepared by eminent specialists from a range of academic and economic institutions including the Catalan Institution for Research and Advanced Studies (Spain), the Fraunhofer Institute for Systems and Innovation Research (Germany), Jadavpur University (India), the Overseas Development Institute (United Kingdom), Policy Research International (Canada), the University of Cape Town (South Africa), the University of Sussex (United Kingdom) as well as the global business school INSEAD. Thirteen of the working papers touched on different aspects of energy efficiency; one concerned commodities for industrial development (described below) and one addressed industrial policies for prosperity.

Industrial policy has made a major comeback in academic and policy circles in the past few years, although its nature has changed as it has become more strategic, more participatory, more evidence-based and more results-oriented. Based on this new thinking, the working paper *Industrial Policy for*

*Prosperity: Reasoning and Approach* provides the rationale for UNIDO's emerging industrial policy activities; identifies potential services that can be provided by the Organization at different stages of policymaking and suggests three modes of service operation for UNIDO: advice, facilitation and capacity-building.

A new three-year research project focusing on structural change towards green industry priorities in the countries of the Association of Southeast Asian Nations (ASEAN) was launched in 2011. Expert group meetings were held in March, July and November to decide on the project strategies and the schedule for the next three years. The project is the product of collaboration between UNIDO, the Economic Research Institute for ASEAN and East Asia and the Institute of Developing Economies of the Japan External Trade Organization. The two-day March meeting was concerned with promoting the green economy concept in East Asia and ASEAN Member States through an exchange of experiences in scaling-up competitiveness and domestic innovation capabilities. Experts from the three organizations agreed that the development of green industry and structural change go hand in hand. They concluded that sustainable economic growth in countries of the region relies on synergies between development priorities and the implementation of energy efficiency, efficient resource utilization and industrial upgrading and diversification.

The project will result in evidence-based policy recommendations that address specific challenges in each ASEAN country. The project will formally submit policy inputs to ASEAN through its Senior Economic Officials Meeting, its Economic Ministers Meetings and its Summit. Policy forums will also be convened during the three-year project, to facilitate regular dialogues and receive inputs and feedback directly from policymakers.

In 2011, UNIDO and the Global Green Growth Institute in the Republic of Korea agreed to undertake joint research on the impact of green industrial development on employment, specifically whether current green growth efforts towards low-carbon resource-efficient industrial development would lead to the sustained generation of new jobs. The findings and policy recommendations produced by the research project should enable entrepreneurs and policymakers involved in green industrial development to understand the prospects of employment creation, opportunities and constraints, as well as the conditions necessary for successful investments. The one-year project will begin early in 2012.

## The year 2011 saw the completion of the *Industrial Development Report 2011* as part of the series of this UNIDO flagship publication.

Published at the end of 2011, the new publication will be officially launched at the World Future Energy Summit, to take place in Abu Dhabi in January 2012. Entitled *Industrial energy efficiency for sustainable wealth creation: capturing environmental, economic and social dividends*, the publication postulates that increased industrial energy efficiency is one of the most promising routes to worldwide sustainable industrial development, particularly in developing countries. Industry remains among the most energy-intensive sectors although its contribution to global GDP is lower than its global share of energy consumption. Industrial processes have an estimated efficiency improvement potential of 25 to 30 per cent. That means that adopting best available technologies and related business and engineering practices could eventually enable industry to lower emissions of greenhouse gases and combat climate change at the same time as reducing other pollutants. The energy savings could be redirected to meeting social needs for access to energy, particularly acute in developing countries, and could help companies everywhere to improve their bottom line.

The report provides further evidence that over the past 20 years, developed countries—that consume the most energy—have improved their energy efficiency. Large

developing countries have also realized the importance of boosting efficiency early in the industrialization process and have begun to adopt technologies and other measures that have led to unprecedented gains in energy efficiency. Low- and middle-income developing countries, which are gradually assuming more and more of the world's manufacturing production, are also looking at ways to become more energy-efficient.

The report argues that the key to sustaining these gains continues to be industrial technological change and the related economic and policy incentive system. It suggests that overcoming barriers to industrial energy efficiency will require public policy measures.

The report calls for international collaborative research and development and the establishment of information clearing houses and information exchanges to identify best practices and compare the performance of different technologies under varying conditions. Since the adoption of energy-efficient technologies involves the acquisition of increasingly sophisticated technological capabilities, the report points at ways in which the international community can assist in capacity-development. It also discusses the need for a well-developed framework for international financing of industrial energy efficiency.

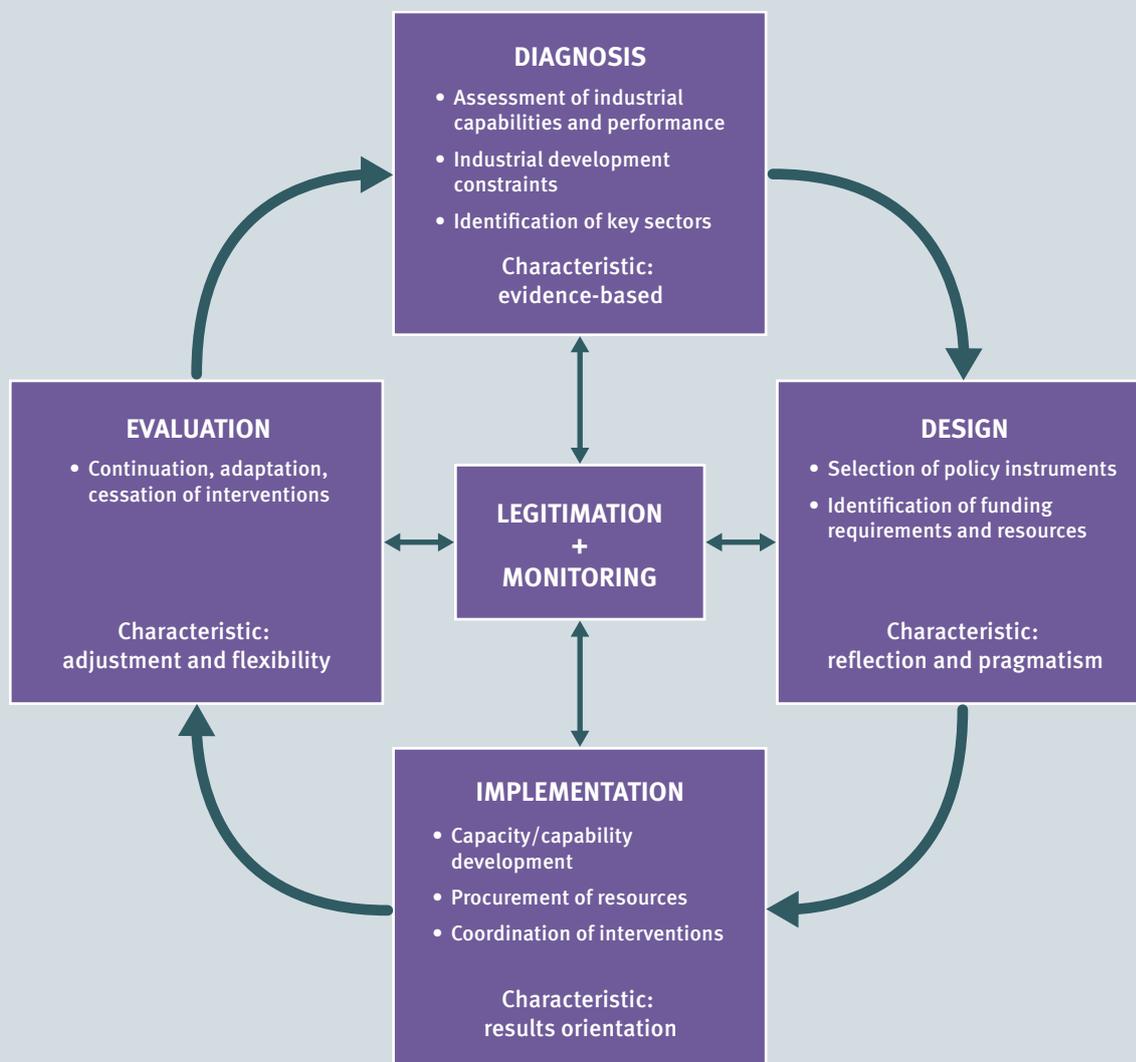
### Industrial policy advice

Through its policy advisory services UNIDO is in a position to offer strategic advice to its Member States on ways to accelerate industrial development and increase the competitiveness of their industries. The advice consists, on the one hand, of advocating sustainable industrialization strategies at the global, regional, and country level based on applied economic research on the patterns and drivers of structural

change. On the other hand, support is provided to Member States to ensure that they have adequate capacities to design and then implement sustainable industrialization policies and strategies.

In September, UNIDO issued a brochure entitled *Industrial Policy for Prosperity: UNIDO's Strategic Support* describing the Organization's strategic approach to industrial policy. A revised brochure was also produced for the strategic industrial intelligence programme, which was

### The strategic industrial policy process



very well received, particularly by lower-middle income countries.

A major landmark during 2011 was the October launch of the UNIDO Institute for Capacity Development. The Institute is one of the Organization's main instruments for building capacities in Member States for the design and effective management of the industrial development process. It aims to enhance the quality of industrial policy by generating, disseminating and sharing world-class knowledge

resources and building Member States' capacities for sustainable industrial development, poverty reduction and accelerated economic growth (see special feature at the end of this chapter).

July saw the publication of the *Economic Development in Africa Report 2011*, jointly produced by UNIDO and the United Nations Conference on Trade and Development (UNCTAD). The report, subtitled *Fostering Industrial Development in the New Global Environment*, draws attention

to emerging regional industrial development and policy trends. This joint project made use of UNIDO and UNCTAD intelligence to analyse the industrial performance and capabilities of African countries and identify feasible future paths towards sustainable industrial development. The report calls for a strategic approach to industrial policy that emphasizes economic, social and environmental sustainability. Notably it highlights the argument that in order to succeed, African industrialization has to follow its own unique design, underpinned by tailor-made industrial policies that recognize domestic conditions and identify untapped potential. This is in line with the recognition that country ownership of development strategies and policies is essential for development effectiveness and sustainability.

A seminar hosted by UNIDO in cooperation with the Korea Institute for Industrial Economics and Trade and the Ministry of Knowledge Economy took place in Seoul in November on the industrialization of Africa and partnership with Korea. Participants discussed the creation of a knowledge-sharing platform that would encourage public-private partnerships for the formulation of innovative policies and actions, in partnership with African countries. The platform would bring together experts from international organizations such as UNIDO and the Common Fund for Commodities, as well as the private sector. Participants also looked at ways to provide networking opportunities to domestic and foreign stakeholders

in the industrial development of Africa. Before the seminar, UNIDO and the Korea Institute for Industrial Economics and Trade signed an agreement for joint research on industrial development approaches and strategies for developing countries and countries with economies in transition. The new partnership will allow the exchange of industrial development data and information and staff of the two organizations will work together on industrial development studies.

In May, UNIDO attended the high-level Policy Dialogue Conference on the East African Community (EAC) Industrialization Policy and Strategy in Nairobi and contributed a presentation on the Organization's strategic approach to industrial policymaking. The objective of the conference was to provide a forum for engaging stakeholders from the public and private sectors in a regionally coordinated industrialization policy, strategy and programme. As a valued partner of EAC, UNIDO helped in the elaboration of the Industrialization Policy and Strategy and participated in its final drafting at an expert meeting in October in Kampala. This led to an expression of interest on the part of the EAC Secretariat to deepen its cooperation with UNIDO in the area of regional industrial policymaking, in particular with regard to EAC's analytical and institutional capacity development requirements.

UNIDO was invited by the Southern African Development Community to contribute to its regional workshop on

## Oil for—not instead of—industry

UNIDO and the Ministry of Trade and Industry of Ghana joined forces in March to host a two-day policy conference under the title “Competitiveness and Diversification: Strategic Challenges in a Petroleum-Rich Economy”. The Conference attracted public officials, researchers, and business experts in the oil and gas industry and included both open plenary sessions, which drew a large audience and resonated strongly in the national press, and closed sessions for high-level policymakers of Ghana. One of the main topics of discussion was the impact that the

discovery of substantial oil reserves could have on existing industry in the country as well as on industrial development policies. It was imperative to avoid the so-called “resource curse”, i.e. the often observed phenomenon of an increase in the exploitation of natural resources leading to economic inefficiencies and political rent-seeking. African countries, the participants insisted, had to ensure that new wealth did not destroy existing opportunities but rather that they be in a position to diversify beyond oil and gas.

industrial development policy and strategies, held in November in Johannesburg, South Africa, with a presentation on key elements of industrial policies and strategies. In the same month, UNIDO assistance was sought by the Economic and Monetary Community of Central Africa on a regional industrial policy initiative, expected to become operational in the first half of 2012 under the framework of a European Union-funded project.

During 2011, staff of the Economic Commission for Latin America and the Caribbean (ECLAC) spent several months at UNIDO Headquarters familiarizing themselves with the Organization's work on structural change and industrial statistics. This was part of an important new partnership aimed at promoting industrial diversification in the Latin American and Caribbean region through joint research and advocacy, the elaboration of industrial policy measures and the organization of regional and global forums. Together, UNIDO and ECLAC researchers prepared a draft report on industrial diversification in Latin America that will be discussed at a joint UNIDO-ECLAC meeting to be held in Rio de Janeiro, Brazil in 2012. The meeting is being organized with the Brazilian Development Bank that has played a fundamental role in stimulating the expansion of industry and infrastructure in Brazil since its foundation in 1952. It will bring together policymakers and academics from industrialized and industrializing countries in order to identify strategic directions for industrial diversification in the region.

UNIDO organized a side event during the thirty-ninth session of the Industrial Development Board in June on "Making the Most of a Commodity Boom: The Case for Industrial Diversification". The Minister of Trade and Industry of Ghana, the Minister of Industry, Energy and Mining of Uruguay, the former Executive Secretary of ECLAC and the Director-General of UNIDO provided their comments and views under the guidance of moderator Raphael Kaplinsky from the United Kingdom's Open University. Professor Kaplinsky had an opportunity to present his work with UNIDO on the theme of diversification strategies for commodity-exporting countries, described in a brochure published in 2011 on *Commodities for Industrial Development: Making Linkages Work*.

The topic was discussed again at the 2011 General Conference at a round table on "Economic Diversification Strategies: A Key Driver in Africa's New Industrial Revolution". An issue paper was prepared by Helmut Asche, at that time Professor for Economy, Politics and Society in

Africa at the University of Leipzig in Germany and Managing-Director of the Institute for African Studies.

Policy advisory services were provided in a number of countries in 2011, including Cape Verde, Colombia, Côte d'Ivoire, Democratic People's Republic of Congo, Gambia, Mongolia, United Republic of Tanzania, Viet Nam and Zimbabwe. Across these countries, UNIDO deployed a range of services including needs assessment and review of draft industrial policies, support for the creation of industrial intelligence units and support to ministries in the formulation and implementation of industrial strategies and policies.

Drawing on its considerable expertise and experience in building capacity among policymakers for economic analysis, UNIDO has been helping the Ministry of Industry and Commerce of Viet Nam to strengthen its internal capacities in order to drive the industrial policy process. In the course of 2011, UNIDO trained a carefully selected group of young professionals in industrial diagnosis, sectoral analysis of competitiveness and value chain analysis. Training modules covered UNIDO's methodology for the diagnosis of the industrial sector as a whole as well as sectoral and value chain analysis with a strong focus on trade competitiveness. Following the training, UNIDO set up an industrial competitiveness group within the Ministry to monitor industrial and trade performance on a permanent basis and prepare a Viet Nam industrial competitiveness report, sectoral and value chain analyses and short information notes on topical subjects of strategic relevance to trade and industry in Viet Nam. The country's first competitiveness report, *Viet Nam Industrial Competitiveness Report 2011*, was launched in December. It provides a conceptual framework for understanding the drivers of industrial competitiveness, positioning Vietnamese industries in the international context, identifying industrial bottlenecks that can be addressed by policy, and presenting specific recommendations for the leaders of the country. It represents an essential tool for policymakers in the formulation of industrial and trade policies that meet the new challenges and realities of the country's fast-moving industrial development. Building on UNIDO's well-established methodology, the report focuses on the manufacturing sector to assist in identifying key areas of intervention to boost industrial competitiveness. It compares Viet Nam's industrial performance to other countries in the region and sheds light on strategic paths to deepen the industrialization process in Viet Nam.

**“New and innovative solutions** will be needed to overcome development challenges as we approach 2015. *Networks for Prosperity* provides solid recommendations for such solutions in the area of development and the private sector.” **Sophie de Caen, Director of the MDG Achievement Fund**

UNIDO launched a new quarterly publication in 2011. *Policy Brief* presents topical issues in non-technical terms as a tool for policymakers. The first issue that appeared in November focused on Africa’s future potential for economic development and examined the industrial performance of different African countries.

## **Knowledge networks: A new initiative:**

In the development sector in particular, organizations realize that they have to handle and share information more effectively and learn to adapt more quickly to external circumstances in order to address complex and often difficult realities on the ground. A number of factors—the distance between headquarters and field offices, missed opportunities to learn from failures and the high turnover of staff, particularly consultants—are some key areas where a knowledge management and sharing strategy can have significant impacts on the capacity and effectiveness of an organization. It can also benefit development agencies involved in similar research by avoiding duplication of effort.

The report *Networks for Prosperity: achieving development goals through knowledge sharing*, is part of a UNIDO initiative, developed in 2011 and funded by the Spanish MDG

Achievement Fund (MDG-F), to establish a global knowledge system for private sector development. Launched in November in Vienna, the report lays the basis for policy recommendations that will help developing countries acquire and adapt private sector development know-how. The *Networks for Prosperity* initiative addresses Goal 8 of the Millennium Development Goals, which calls for the establishment of Global Partnerships for Development.

In collaboration with the Centre for Global Governance Studies in Leuven, Belgium and drawing on valuable inputs from public and private institutions in fourteen countries, the report discusses the crucial contribution of knowledge networks to the success of private sector development policies and economic performance. Networks are emerging as a distinct form of governance that involves public and private actors within and across organizational and national boundaries. They can be engaged in learning, information exchange or knowledge creation and have important potential for knowledge creation and development performance.

A key outcome of the report is a comprehensive Connectedness Index, which covers 132 countries, using the most relevant available data from a wide range of sources. Initial findings through the Connectedness Index clearly demonstrate that networks matter for development effectiveness. The results show a significant variation in networks across countries and also across levels of networks within countries. There is a

**“There is strong demand among policymakers** to learn from best practices on network management and the development of network strategies, and this can be achieved via study visits, workshops, mentoring, case studies and social networking. These activities can contribute to identifying success factors for network management and international organizations can support such effort as catalysts and facilitators where network structures and human and financial resources are limited.”

**Carmen Buján Freire, Ambassador and Permanent Representative of Spain to UNIDO**

strong positive correlation between the Connectedness Index and government effectiveness, industrial development and economic development.

The report is the culmination of several events and initiatives that took place in 2011. An initial discussion on knowledge management in development activities took place during a global workshop among MDG-F programme coordinators in March in Panama City. UNIDO subsequently embarked on a series of study missions to 12 joint programme countries—including Bolivia (Plurinational State of), Costa Rica, Cuba, Dominican Republic, Egypt, El Salvador, Ethiopia, Panama, Peru, Serbia, Turkey and Viet Nam—meeting stakeholders and counterparts in each country. The data collected and case studies are reflected in the report that highlights good practices from all 12 programme countries.

The report was subsequently launched in Brussels and New York and its conclusions discussed during a debate at the Fourth High-Level Forum on Aid Effectiveness in Busan, Republic of Korea, in November (see also chapter 1). The initiative was endorsed by Member States at the fourteenth session of the General Conference, that mandated UNIDO to continue to develop and foster activities that promote international knowledge networking and knowledge governance structures (GC.14/Res.2).

Based on the mandate received by the General Conference, UNIDO will continue its knowledge management and sharing activities in 2012 with particular focus on knowledge networking in economic and private sector development policy, economic, environmental and industrial governance, and aid and development effectiveness.

## »»The UNIDO Institute for Capacity Development

is dedicated to enhancing the quality of industrial policy by generating, disseminating and sharing world class knowledge resources and building capacities for sustainable industrial development, poverty reduction and accelerated economic growth. UNIDO Institute Mission Statement

*The mandate of the UNIDO Institute is to provide and facilitate training to a diverse and globally dispersed set of individuals, organizations and communities whose capacities and actions influence sustainable industrial development. Together with other methods of intervention, the Institute employs innovative and appropriate distance education and learning methods to accomplish its strategic objectives.*

The significance of human capacities for more effective industrial policy management has long been recognized by UNIDO and training is an integral part of most projects. At the same time, it has been also recognized that a more systematic approach is required where the skills and capacities are not only developed at the level of governments and policymaking bodies, but also to address the needs of young professionals and students, who, in a few years time, will play a central role in governments, public agencies and the private sector. In order to build the skills and capacities for tomorrow, UNIDO must start today.

The UNIDO Institute for Capacity Development was established in 2011 as a global centre of excellence for learning, joint research and capacity-building in the area of industrial development. It provides learning opportunities for policymakers, industrial development practitioners, researchers and people working in the industrial development community as well as students who aspire to a career in that field. Unlike traditional institutes, the UNIDO Institute has

no extended physical facilities but operates through web-based knowledge sharing, communication and distance learning activities as well as the organization of regular activities in both developed and developing countries.

The Institute is engaged in the following activities:

- Training and education: to increase the knowledge and skills of stakeholders to enable them to engage more effectively in industrial development processes;
- Joint research: to initiate research projects in collaboration with individuals and institutions to propose innovative solutions and to improve the implementation of international best practices in industrial development projects;
- Knowledge sharing: to share UNIDO's experience with academics, policymakers, practitioners and other industrial development stakeholders;

- Policy dialogue: to develop effective channels of communication between experts, government officials, senior policymakers, academia and other stakeholders; and
- Strategic networking and partnerships: to link UNIDO activities with partner institutions for sustainable industrial policy design and management

## Programme framework

The UNIDO Institute offers a range of learning options. Its joint research programme fosters collaboration between UNIDO and leading academic institutions to implement joint research projects. Its PhD programme builds partnerships with recognized universities and/or research institutions stimulating rigorous theoretical and empirical research studies that meet the requirements for PhD dissertations in the field of industrial development. Under the Institute's fellowship programme, UNIDO hosts selected individuals at its Headquarters, giving them first-hand access to its expertise and knowledge resources. Its education support programme aims to improve teaching and learning methods by developing courses and degree programmes in industrial development, while under its awards programme, the Institute organizes annual competitions for the best MSc and PhD theses in UNIDO priority areas. The executive training programme enables senior government officials to learn from leading UNIDO practitioners and world class academics. The summer programme offer a dynamic mix of traditional and innovative learning methods for young professionals while the Institute's distance learning programme reaches out to a global audience through targeted e-learning courses.

## Training course

The Institute's inaugural executive training course was held in Austria in October and was entitled "On top of the game: Global strategies and negotiations towards green growth". Senior negotiators, policymakers and executives from developing countries and transition economies were given a strategic insight into state-of-the-art analyses and research on the various options available to developing countries in green growth and energy policy, as well as related green technologies, innovations and multilateral negotiations. The course helped develop the five key skills of a negotiator's toolkit—thorough analysis, rational decision-making, persuasion, innovation and implementation—and combined them with insights on policy positions in current multilateral negotiations on the environment.

The training combined the highest standards of academic rigour of the academic partner, Saïd Business School at the University of Oxford, with the vast industrial policy and technology experience of UNIDO as well as the participants' own experiences in current multilateral negotiations and policy challenges. The course brought together leading figures from multilateral diplomacy, international business, law, academia and the United Nations system who provided participants with an insight into the key processes and the policy space available for developing countries in multilateral environmental and economic negotiations. The training was organized with financial support from the Federal Ministry for European and International Affairs of Austria.

For more information on the UNIDO Institute see <http://institute.unido.org>.

» The factsheets provide easy **access** to clear, concise, factual and up-to-date information on the Organization's activities based on a results-oriented approach and with a regional focus.



## UNIDO: A catalyst for a better future

Over the past four years, UNIDO has been able to increase its delivery of technical cooperation services by over 50 per cent. Readers of this Report will have gained an overview of the thrust of the Organization's activities under its three thematic priorities as well as its response to the changing economic environment. The following final chapter of the Report provides information on what, for constraints of space, can only be a small selection of projects in the form of result-oriented factsheets. The projects selected include some that have been completed and continue to prove their sustainable impact, others that are at various stages of completion but are already yielding impressive results, and yet others that were recently launched but hold great promise for the future. The information is presented in a succinct manner and includes qualitative and quantitative information. Interested readers will be able to follow the progress of these and other UNIDO projects on the Organization's website [[www.unido.org/factsheets](http://www.unido.org/factsheets)].

**Armenia**  
**Bangladesh, Bhutan, Maldives and Nepal**  
**Bolivia (Plurinational State of)**  
**Cameroon**  
**Guatemala**  
**India**  
**Indonesia**  
**Lao People's Democratic Republic**  
**Lebanon**  
**Morocco**  
**Mozambique**  
**Peru**  
**Russian Federation**  
**Sierra Leone**  
**Sudan**  
**Turkey**  
**Viet Nam**  
**Developing countries**  
**Small Island Developing States**

# ARMENIA

## » Transition to a better life



### At a glance

<b>Goal:</b>	Secure livelihoods for vulnerable groups
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women
<b>Thematic priority:</b>	Poverty reduction through productive activities
<b>Donor:</b>	United Nations Trust Fund for Human Security (UNTFHS) initiated by the Government of Japan
<b>Partners:</b>	United Nations High Commissioner for Refugees (UNHCR), United Nations Development Programme (UNDP), United Nations Population fund (UNFPA), United Nations Children's Fund (UNICEF)
<b>Budget:</b>	\$2,259,000 (\$822,500 for UNIDO)
<b>Status:</b>	Ongoing
<b>Duration:</b>	2009 – 2012

### CONTEXT

In Armenia, over a quarter of the population lives below the official poverty line. Severe economic recession, problems related to the transition to a market economy and the dramatic consequences of natural disasters are all factors further impeding the country's own efforts to improve living conditions. Income inequality and lack of opportunities are high, particularly for refugees, internally displaced persons, women and other vulnerable groups.

### STRATEGY

In support of the Government's efforts, numerous United Nations organizations, including UNIDO, the United Nations High Commissioner for Refugees (UNHCR), the United Nations Development Programme (UNDP), the United Nations Population Fund (UNFPA) and the United Nations Children's Fund (UNICEF), developed a project in the Kotayk and Gegharkunik regions to create a basis for sustainable development in local communities by using an integrated approach covering poverty reduction, education, health and local environmental challenges.

In this context, UNIDO supports the empowerment of poor and vulnerable rural households by encouraging their participation in economic life. The focus is on fostering local entrepreneurship by enhancing business competencies of local would-be entrepreneurs, improving access to credit and upgrading local infrastructure. To date, most of the beneficiaries in the target communities have been trained in small business development and have visited established businesses in other regions of the country. A Support Fund for SMEs has been operational since October 2011 and community-owned infrastructural projects have been initiated. UNIDO is also supporting access to modern

and clean energy services through the construction of pilot biogas plants, with specific training activities for the local population in the operation and maintenance of these energy systems.

### RESULTS

- Assessments of business interests and training needs conducted
- Over 100 persons have been trained in entrepreneurial skills, with a 35 per cent participation rate for women
- A support fund for SMEs has been established and 11 loans have been disbursed
- An international equipment supplier of small-scale biogas systems has been chosen
- Collaboration between UNDP, UNIDO, UNFPA and UNICEF has been strengthened

### IMPACT/OUTLOOK

Human security concerns are best tackled when the intervention is multifaceted, with a focus not only on infrastructure rehabilitation, but also on ensuring sustainable income opportunities, as well as by providing quality health care. Accordingly, the agricultural development support provided by UNDP is being used as an economic foundation for the income-generating and biogas activities foreseen by UNIDO. As a result of the project, the target beneficiaries will have sustainable sources of income and will see their health improve. The project is expected to serve as a pilot for replication in the country.

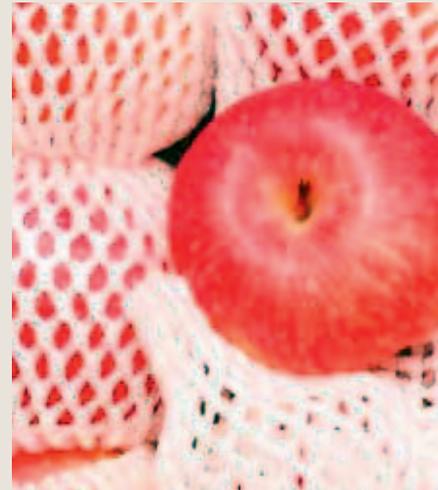
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# BANGLADESH, BHUTAN, MALDIVES AND NEPAL

## »Assuring food safety in the Asian LDCs

### At a glance

<b>Project title:</b>	Market access and trade facilitation support for south Asian LDCs
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger
<b>Thematic priority:</b>	Trade capacity-building
<b>Donor:</b>	Government of Norway
<b>Partners:</b>	Ministry of Industries (Bangladesh), Ministry of Trade and Industry (Bhutan), Ministry of Economic Development and Trade (Maldives), Ministry of Industry Commerce and Supplies (Nepal)
<b>Budget:</b>	EUR 2,260,000
<b>Status:</b>	Ongoing
<b>Duration:</b>	2007 – 2012



### CONTEXT

The countries of the South Asian Association for Regional Cooperation (SAARC) could significantly increase their regional and international trade in agro-based products, a valuable source of exports for least developed countries (LDCs). However, they are challenged by the need to ensure both domestic and export food safety. To meet these challenges, the quality-related institutions of Bangladesh, Bhutan, Maldives and Nepal have to be strengthened.

### STRATEGY

UNIDO, with funding from the Norwegian Agency for Development Cooperation (Norad), has taken a number of initiatives to assist the SAARC countries improve their capacity to produce safe food. In all four countries, the project has provided the following capacity-building interventions:

- Setting up the food safety management system, based on the ISO 22000 standard for agro-processing enterprises;
- Strengthening the institutional structures and national capacities of the four countries in standards, metrology, testing, quality and conformity assessment;
- Assisting a number of pilot food processing units to implement and receive certification to the ISO 22000 standard;
- Promoting a quality culture among policymakers, industrialists and industry managers.

### RESULTS

- Supporting the Bhutan Agriculture and Food Regulatory Authority (BAFRA) to act as a referral laboratory so that importers will accept its test results.

- Assisting the main testing laboratory of the Maldives Food and Drug Authority to gain accreditation to ISO 17025 and the certification of several fish processing companies for ISO 22000 and HACCP, which will allow the country's tuna fish exports to meet quality requirements in the European Union, the United States and other countries.
- Helping to create awareness of food safety and occupational health and safety standards in Bangladesh and assisting the Bangladesh Standards and Testing Institute (BSTI) food testing laboratory towards accreditation to ISO/IEC 17025. This reduces the cost of certification for the country's shrimp processing and exporting units, leading to more economic gains for exporting enterprises.
- Strengthening the product certification scheme of the Nepal Bureau of Standards and Metrology (NBSM) and the food testing laboratory of the Department of Food Technology and Quality Control (DFTQC). This enhances the country's capacity to export processed food to India, and to export honey to Europe.

### IMPACT/OUTLOOK

The UNIDO/Norad project has contributed significantly to reducing technical barriers to trade for Bangladesh, Bhutan, Maldives and Nepal, thereby facilitating their industrial development and export capabilities, while also strengthening their import quality control procedures and awareness of food safety management systems, a significant benefit to domestic society.

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# BOLIVIA (Plurinational State of)

## » Economic Empowerment of Bolivian Women



### At a glance:

<b>Goal:</b>	Economic empowerment of rural women in Bolivia (Plurinational State of Bolivia)
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women
<b>Thematic priority:</b>	Poverty reduction through productive activities
<b>Donor:</b>	Government of Spain through the MDG Achievement Fund
<b>Partners:</b>	United Nations Development Programme (UNDP), Food and Agriculture Organization (FAO), Ministry of Justice
<b>Budget:</b>	\$9,000,000 (\$1,560,000 for UNIDO)
<b>Status:</b>	Ongoing
<b>Duration:</b>	2008 – 2012

### CONTEXT

In the Plurinational State of Bolivia approximately 40 per cent of the population lives below the national poverty line making it one of the poorest countries in Latin America. Poverty levels are highest in the country's rural areas (approximately 90 per cent) and affect its indigenous female population most severely. Despite the existence of a national regulatory framework for equity, and the fact that 60 per cent of rural households are run by women due to the high rate of rural-urban migration by men, women hold a mere 1.2 per cent of the land in their own name. They also have scarce contact with the State and rarely participate in economic organizations, community government or state agencies. Notwithstanding, women often find creative ways to generate incomes. Their potential to develop their business initiatives requires a strengthening of appropriate support institutions and measures to enhance their entrepreneurial skills.

### STRATEGY

Funded by the Government of Spain's MDG Achievement Fund, UNIDO, in partnership with the United Nations Development Programme (UNDP) and the Food and Agriculture Organization (FAO), initiated a joint programme to create economic opportunities for indigenous women living in extreme poverty in the Plurinational State of Bolivia. The programme has three interlinked objectives: guaranteeing the rights of women to possess, inherit and protect their property, guaranteeing the equity between women and men with regard to access to assets, credit

and technology and reducing the population of women in extreme poverty. UNIDO's intervention focuses on supporting women producers to better manufacture and market their cultural products.

### RESULTS

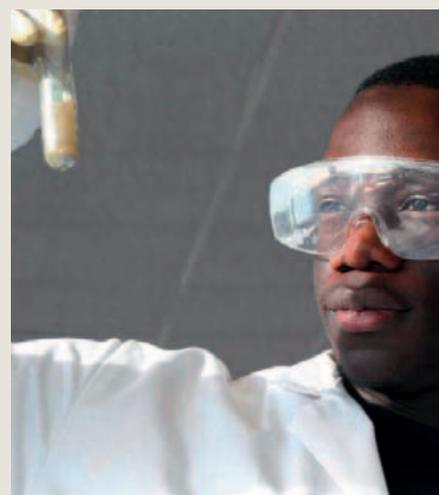
- Some 2,150 indigenous women have been trained in entrepreneurial and business management skills
- Some 1,600 indigenous women have received support services for managing financial matters; 1,300 of whom have obtained microcredit loans
- Some 1,600 indigenous women have received start-up grants in order to start their own businesses

### IMPACT/OUTLOOK

By providing microcredit loans and work opportunities for rural indigenous women, the programme will help to economically empower women to create wealth and employ others and thus contribute to the economic growth of the country. The reduction of poverty is of the highest priority for the Government of Bolivia and the project will provide national operators and beneficiaries with capacities to ensure the sustainability after the programme ends. The programme is part of the MDG-F's efforts to help the country achieve the Millennium Development Goals (MDGs) of eradicating extreme poverty and promoting gender equality (MDG 1/MDG 3).

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## » The National Standards and Quality Agency (ANOR) in Cameroon

**At a glance:**

<b>Goal:</b>	Economic integration
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 8. Develop a global partnership for development
<b>Thematic priority:</b>	Trade capacity-building
<b>Donor:</b>	European Union
<b>Partners:</b>	Ministry of Industry, Mines and Technological Development (Cameroon)
<b>Budget:</b>	EUR 3,538,000
<b>Status:</b>	Ongoing
<b>Duration:</b>	2007 – 2012

**CONTEXT**

Cameroon's markets have long been challenged by low-quality products that are a health hazard to the country's consumers. This is mainly due to the country having limited national infrastructure to assure the quality of its products and services and protect consumer health. Added to this is the diffused multi-ministry responsibility for consumer safety and quality assurance, which results in uncoordinated regulatory actions.

**STRATEGY**

With the assistance of the UNIDO project, funded by the European Union (EU), a national standards body, the Agence de Normalization (ANOR), has been established to bring more centralized responsibility for national standards development, consumer protection and market surveillance, and to ensure Cameroon's effective participation in international standard-setting activities. UNIDO's support for this young institution is critical. This project, drawing on UNIDO's rich experience of supporting national standards bodies, has provided international best practices right from the start, strengthening ANOR's institutional, organizational and human capacities through training and studies. The project's activities also cover planned institution-building, based on a national quality plan that provides ANOR with scenarios for further developing Cameroon's quality infrastructure.

**RESULTS**

ANOR has now established sound national mechanisms for the development, approval and promotion of its standards

and quality control processes. Most importantly, it has involved the private sector and consumer associations in quality promotion and standard-setting activities through regular public-private dialogue and the creation of a quality award scheme. This involvement is crucial for one of ANOR's key aims: building up a quality culture in Cameroon.

The private sector also benefits from the project through the establishment of internationally recognized testing laboratories that provide their services to the private sector and other laboratories. Cameroonian enterprises, in particular in the target sectors of agro-products, textiles and wood, will be able to have their products tested locally and at reasonable prices, which will greatly facilitate regional and international trade and protect domestic consumers, central concerns of both ANOR and the Government.

**IMPACT/OUTLOOK**

The project is, in parallel, strengthening productive capacities, assisting enterprises to upgrade, improving the Cameroonian business environment, and preparing the country to participate in negotiations on its economic integration, both regional and international, which will lead to further economic growth. In the long term these interventions will support Cameroon, a country endowed with significant natural resources and strategically positioned geographically, to better exploit these advantages.

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# GUATEMALA

## » National Cleaner Production Centre



### At a glance

<b>Goal:</b>	Cleaner production in Guatemala
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 7. Ensure environmental sustainability
<b>Thematic priority:</b>	Environment and energy
<b>Donor:</b>	Swiss State Secretariat for Economic Affairs (SECO)
<b>Partners:</b>	United Nations Environment Programme (UNEP), Chamber of Industry of Guatemala
<b>Status:</b>	Completed (ongoing cooperation with UNIDO and third-party funding)

### CONTEXT

In the late 1980s, the concept of “sustainable development” launched by the Brundtland Commission marked a turning point in global development and environmental politics. Then, the international community recognized that development and environmental sustainability are interdependent and must be tackled together. At the 1992 Earth Summit in Rio de Janeiro, industrialized countries reiterated their commitment by adopting Agenda 21, thereby agreeing to foster access for developing countries and economies in transition to sustainable production methods, practices and techniques.

### STRATEGY

After the Rio Summit, UNIDO and the United Nations Environment Programme (UNEP) launched pilot projects in resource-efficient and cleaner production to demonstrate preventive environmental strategies. Upon their successful completion, both partners agreed to sustain such production by establishing national capacities, known as the National Cleaner Production Centres (NCPCs), in developing countries and economies in transition. They focus on reducing the use of energy, water and other natural resources while also reducing the generation of waste and emissions, especially from small and medium-sized enterprises.

In Guatemala, the NCPC was established in 1999, with the financial support from the Swiss State Secretariat for Economic Affairs (SECO). Since its inception, the Centre has rendered a substantial amount of services, both to advance knowledge and information on cleaner production

techniques and to improve business processes of local small and medium-sized enterprises. Today, the Centre is a technical, non-profit institution that receives support from UNIDO and UNEP while enjoying strong collaboration at the national level with institutional partners such as the Del Valle University, the Sugar Manufacturers Association and the Chamber of Industry.

### RESULTS

Since its establishment, the NCPC of Guatemala has:

- Provided technical assistance to more than 100 enterprises from different industrial sectors, including food and beverage, plastics, textiles and leather, metal processing and tourism
- Published several guides and manuals on best practices
- Participated in the development of a national policy on cleaner production technologies
- Conducted numerous awareness-building events and related training workshops

### IMPACT/OUTLOOK

Working closely with the local authorities, the NCPC expanded the range of its activities and services to include support to policymaking processes. Overall, the UNIDO-UNEP National Cleaner Production Centres and programmes have been established in 47 countries. In 2009, the partners agreed to expand and scale-up the global networking activities of the NCPCs.

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### At a glance

<b>Goal:</b>	Market access for automotive component manufacturers
<b>MDG:</b>	8. Develop a global partnership for development
<b>Thematic priority:</b>	Trade capacity-building
<b>Donors:</b>	Government of India, Fiat, UNIDO
<b>Partner:</b>	Indian Automotive Components Manufacturers Association (ACMA)
<b>Budget:</b>	\$1,500,000
<b>Status:</b>	Completed
<b>Duration:</b>	1999 – 2010

### CONTEXT

The automotive supplier industry is of great importance to the Indian economy. The annual turnover of its top 500 companies makes up 4.7 per cent of India's GDP and 19 per cent of the country's indirect tax revenue. However the suppliers face increasing pressure in terms of price, quality and services. Although the price of parts, components and systems that are outsourced by the vehicle manufacturers are also increasing, many small-scale suppliers find it very difficult to take advantage of these opportunities.

### STRATEGY

In 1999, UNIDO, in partnership with the Indian Automotive Components Manufacturers Association (ACMA), introduced an upgrading programme for the Indian automotive supplier industry. The programme assisted small and medium-sized enterprises within the automotive component sector to overcome challenges related to low productivity, insufficient and inconsistent quality and scalability, so that they could become more efficient, reliable and cost-effective suppliers of automotive parts.

Over three phases, the project helped to upgrade 133 component manufacturers. In the same period, more than 50 national counsellors, company experts and quality staff were trained in the UNIDO-ACMA methodology for productivity upgrading.

### RESULTS

As a direct result of the upgrading programme, most of the participating companies have achieved significant improvements in their business performance:

- An average increase in sales of 33 per cent
- An average increase of six new clients per firm
- An average increase of 30 new products per firm
- Average cost savings of \$73,000 per firm
- An average increase of productivity by approximately 70 per cent

### IMPACT/OUTLOOK

Following the conclusion of the project in 2010, a follow-up programme will be launched in 2012 to broaden the outreach and deepen the scope of the original programme services. It will seek to further assist the small and medium-sized enterprises component suppliers in meeting regional and international market and buyer requirements and to enshrine a continuous improvement approach—not only at the company level, but also within a wider circle of support institutions. Ultimately, this will further enhance the market access of these firms and lead to a more sustainable support service infrastructure to service existing and future component manufacturers.

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# INDONESIA

## » Supporting reconstruction efforts



### At a glance:

<b>Goal:</b>	Reconstruction and reconciliation
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women
<b>Thematic priority:</b>	Poverty reduction through productive activities
<b>Donor:</b>	United Nations Trust Fund for Human Security (UNTFHS) initiated by the Government of Japan
<b>Partners:</b>	The International Labour Organization (ILO), Ministry of Industry and Trade, Ministry of Manpower and Transmigration
<b>Budget:</b>	\$2,100,000 (of which \$1,300,000 for UNIDO)
<b>Status:</b>	Ongoing
<b>Duration:</b>	2009 – 2012

### CONTEXT

Between 1999 and 2004, waves of ethnic and religious violence in Indonesia's Maluku Islands severely affected the local economy and the livelihoods of the inhabitants. In addition to the loss of 9,000 lives, the conflict led to the displacement of more than 400,000 people (over 30 per cent of the local population), destruction of schools and medical facilities, more than 40,000 houses, as well as businesses, crops, livestock, fishing boats and equipment.

### STRATEGY

With funds from the United Nations Trust Fund for Human Security (UNTFHS) initiated by the Government of Japan, UNIDO and the International Labour Organization (ILO) are implementing a project to support the islands' reconstruction and reconciliation process. UNIDO has taken the lead in the problem identification and the required technology transfer while ILO has focused on local economic development initiatives. Together, both agencies work on conflict prevention, business management and entrepreneurship development training programmes for 21 villages in Ambon City, Central Maluku and the West Seram Districts.

Together with the local government, UNIDO also set up the Maluku Technology Centre to harness the great potential of local commodities, such as sago palm starch, seaweed, and eucalyptus and coconut oils. Training is mainly conducted on a community level and is already reaping benefits for the islands' artisans as they progressively adopt new technologies, expand the range of their products and

increase their value. Project staff and their trainees also organized the Maluku Cultural and Small-Industry Product Festival, an event that not only showcased the project's achievements, but also gave hundreds of participants from various communities a deeper awareness of their common heritage.

### RESULTS

- Sixteen village productivity groups established
- Some 580 beneficiaries trained including a 30 per cent participation of women
- Hygiene, sanitary standards, and good housekeeping procedures introduced
- New, market-oriented products designed and existing products improved
- Training and counselling in conflict management/prevention provided

### IMPACT/OUTLOOK

Some 3,000 people are expected to benefit directly from the project and approximately 20,000 indirectly. In terms of local ownership, the Maluku Government has shown commitment towards the project by providing office space and by donating \$50,000 during the project's initial phase. Village groups from the 13 villages that benefited from a previous UNIDO project are also being supported by the project.

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# LAO PEOPLE'S DEMOCRATIC REPUBLIC

## » Opium-free livelihoods

### At a glance

<b>Goal:</b>	Alternative source of living for opium dependants
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women
<b>Thematic priority:</b>	Poverty reduction through productive activities
<b>Donor:</b>	United Nations Trust Fund for Human Security (UNTFHS), initiated by the Government of Japan
<b>Partners:</b>	United Nations Office on Drugs and Crime (UNODC), Government of the Lao People's Democratic Republic
<b>Budget:</b>	\$1,300,000
<b>Status:</b>	Completed
<b>Duration:</b>	March 2007 – June 2011



### CONTEXT

In the Lao People's Democratic Republic, nearly one quarter of the population live below the poverty line, earning less than a dollar a day. Poverty reduction efforts in rural areas in the country's northern provinces are hampered by a widespread dependence on the cultivation of poppy. To address this problem, and the related drug addiction, the Government established a national plan to eradicate opium cultivation. Today, the country is close to reaching its goal, however, there is a growing concern about the sustainability of the eradication and about its impact on former poppy-growing communities.

### STRATEGY

In 2007, UNIDO, the United Nations Office on Drugs and Crime (UNODC) and the Government started a project to alleviate opium dependence and elevate living standards in three districts of the Oudomxay Province through crop diversification and value addition to agricultural commodities. The project combined the technical expertise and comparative advantages of both organizations. UNIDO provided technical assistance to enhance productive activities and strengthened capacities for trade at village, district and provincial levels, and UNODC contributed to a drug-free environment and improved living conditions through socio-economic development and viable, legal alternatives to opium.

Within the framework of UNIDO's assistance, more than 30 Village Productivity Groups were created and around 1,000 people trained in basic agro-processing and community

development. They produce and sell sesame oil, hand-made paper, brooms, bags knitted from natural fibres, as well as other products.

### RESULTS

- Some 36,000 persons in 22 villages benefited from the joint assistance
- Some thirty Village Productivity Groups were established in 16 villages, and were provided with tools and processing equipment
- Over 1,000 persons trained in basic agro-processing skills and community development
- Products are now locally produced and successfully sold
- Drug addicts are treated and rehabilitated within the communities

### IMPACT/OUTLOOK

The project recipients have started to share their newly-acquired knowledge with family and friends. A rough estimate shows that this has almost doubled the number of beneficiaries. A key role in the transformation of the local economy is now played by the Productivity and Marketing Centre in Oudomxay City, a much needed link between remote villages and markets and allows the villagers to also sell their products in the capital. Furthermore, they also gained direct market exposure by participating at different fairs, including the Lao Handicraft Festival.

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# LEBANON » LibanPack: Packaging and labelling services to enhance market access of Lebanese industries



## At a glance:

<b>Goal:</b>	Increased access to export markets for Lebanese products and improvement of its quality infrastructure to increase TBT/SPS compliance
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger
<b>Thematic priority:</b>	Trade capacity-building
<b>Donor:</b>	State Secretariat for Economic Affairs (SECO) – Government of Switzerland
<b>Partners:</b>	Ministry of Economy and Trade (Lebanon)
<b>Budget:</b>	\$2,555,950
<b>Status:</b>	Ongoing
<b>Duration:</b>	2006 –2012

## CONTEXT

Packaging and labelling are essential pillars of successful marketing. Attractive packaging appeals to customers, and innovative packaging adds value when for example it meets a consumer need for portion control, recyclability, tamper-proofing, childproofing, easy-open, easy-store, easy-carry and non-breakability, while labels can support advertising claims, establish brand identity, enhance name recognition and optimize shelf space allocations. Packaging and labelling requirements are also key to ensuring food safety and consumer protection.

Packaging and labelling are now, however, subject to importing country regulations aimed at ensuring food safety and facilitating food traceability. These legal requirements are a challenge for exporters. Lebanon's well-established agro-processing sector generates competitive products that are acceptable in international markets but face certain export rejection because of inadequate packaging and labelling.

## STRATEGY

To address this deficiency, UNIDO's MACLE (Market Access and Compliance for Lebanese Export) project, funded by the State Secretariat for Economic Affairs (SECO), has, jointly with the Association of Lebanese Industrialists, founded LibanPack (the Lebanese Packaging Centre), a non-profit private association representing a wide range of industrial packaging stakeholders in Lebanon. LibanPack's objective is to serve as a national central point for manufacturers, producers, packaging specialists and providers of training and educational programmes, and as a resource centre for students. It contributes to

improving the quality of packaging and labelling across Lebanon and to ensuring their compliance with international market requirements.

## RESULTS

LibanPack offers a wide range of services:

- Assistance for packaging and labelling design to reinforce a brand's image and appeal
- Structural design for packaging, providing clients with packaging structures and new moulds for product development and manufacturing
- Consultancies to ensure that the technical information on the labels complies with packaging and labelling regulations in different countries
- Guidance on food safety/packaging management systems, processes, and regulatory requirements to assist compliance with international standards and regulations
- Training and technical support to meet new trends in packaging materials, techniques and technologies and to disseminate information on good manufacturing practices (GMPs), HACCP, BRC and ISO standards
- Promoting sustainable packaging within Lebanese industries

## IMPACT/OUTLOOK

This project is already demonstrating major positive effects on the Lebanese economy by increasing the country's exports, in particular to new markets—and improved packaging has given a boost to the image of Lebanese products in global markets.

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**At a glance:**

<b>Goal:</b>	New income opportunities for women entrepreneurs
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women
<b>Thematic priority:</b>	Poverty reduction through productive activities
<b>Donor:</b>	Spanish Agency for International Development Cooperation (AECID)
<b>Partners:</b>	Ministry of Industry, Commerce and New Technologies (Morocco)
<b>Budget:</b>	EUR 2,600,000
<b>Status:</b>	Ongoing
<b>Duration:</b>	September 2001 – December 2011

**CONTEXT**

Some of the most promising sectors of the Moroccan economy, and those in which women are numerous, can be found in the north, which is also one of the most disadvantaged regions of the country. Inefficient harvesting and production, as well as the lack of managerial skills, have led to a loss of productivity and income opportunities for women entrepreneurs. Cultural constraints are an additional obstacle. This has an adverse effect, not only on women's income opportunities, but also on the country's economic growth.

**STRATEGY**

In collaboration with the Spanish Agency for International Development Cooperation (AECID), UNIDO devised an entrepreneurship programme to improve income opportunities of the rural population whilst enhancing the competitiveness of small-scale olive oil producing, textile and fruits and vegetable drying groups managed by women.

The project focused on improving production processes with new equipment to make production faster, better and safer for the women entrepreneurs. UNIDO also trained over 400 women in management, good manufacturing, traceability systems and food safety. This ensured that the women entrepreneurs could produce safer and more competitive products, and their businesses comply with stringent market standards and regulations, overcome barriers to trade as well as ensure continuity of exports.

UNIDO also helped the women to reinforce their technical and commercial skills, develop further their networks,

diversify production to more value-added products, while training them on finances, marketing and promotion. This allowed the women to export part of their production and to sell the other part throughout the country. In addition, a strong network of local support institutions in production technology, business management and marketing was built. Some businesses run by women were represented in trade fairs throughout Europe.

**RESULTS**

Over 400 women have been trained in production, management, technological improvements and systems, which in turn led to, on average:

- 50 per cent increase in earnings
- 40 per cent increase in productivity
- Improved product quality, organic certifications obtained
- Increase in sales and prices
- Access to export markets

**IMPACT/OUTLOOK**

Today, the women that run businesses in the north of the country are better organized, make better use of local raw materials and sell their products locally and internationally. Further, and while respecting cultural values, the project has also helped to economically empower women: they now create wealth and employ others and their standing within their families/communities has improved.

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# MOZAMBIQUE

## »Closing the gender gap at school



### At a glance

<b>Goal:</b>	Entrepreneurship development for boys and girls
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women
<b>Thematic priority:</b>	Poverty reduction through productive activities
<b>Donor:</b>	Government of Norway
<b>Partner:</b>	Ministry of Education and Culture of Mozambique (MED)
<b>Budget:</b>	\$2,300,000
<b>Status:</b>	Ongoing
<b>Duration:</b>	2007 – 2012

### CONTEXT

The gender gap in Mozambique is lower than in most developing countries and several developed countries. In terms of economic opportunity and political empowerment Mozambique is especially advanced, scoring 5th and 11th in the world according to the Global Gender Gap Report 2009. However, within the category of educational attainment Mozambique is in the 123rd position, with a high gap between female and male literacy and declining participation of females after primary school. Studies have repeatedly shown that girls with lower educational levels are more likely to find themselves in low-income informal employment at the later stages of life.

### STRATEGY

In 2007, with the support of UNIDO and funding from the Government of Norway, the Ministry of Education and Culture introduced an entrepreneurship curriculum programme in secondary and vocational schools throughout the country. Targeting boys and girls equally, the programme aims to increase entrepreneurial attitudes and skills in order to ultimately trigger a nationwide bottom-up economic growth process to reduce poverty.

At first, discussions were held with the students' families and the school authorities on the practical and concrete benefits of young women acquiring entrepreneurial skills. Both female and male teachers and students as well as community members were involved in this process. To challenge existing social and cultural barriers, students engage in groups discussions on how to overcome them. Equipped with a wide set of entrepreneurial skills, these young boys and girls learn how to identify business opportunities and to plan, start up and manage their small businesses.

### RESULTS

- One hundred and sixty schools implemented the programme
- Some 1,185 teachers trained (171 female teachers, equivalent to 16.31 per cent)
- Forty-eight per cent of the 136,000 students taking the course are girls
- In 2010, 85 per cent of students acquired entrepreneurial skills
- Some 225 instructors trained to train pre-service teachers
- Equal representation between boys and girls in starting small business activities
- Students from rural and urban areas show equal commitment to the course

### IMPACT/OUTLOOK

In development discourse today, the role of education as a catalyst for promoting gender equality and empowering women is widely recognized. However, the focus is primarily on achieving universal primary education (MDG 2). Research shows that women are more likely to control their own destinies and contribute to economic growth when they have successfully completed higher levels of education. The project ensures that both sexes are able to benefit from higher levels of education. Due to the very positive impact of the programme, the Ministry of Education and Culture has integrated it into the formal national education strategy.

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**At a glance**

<b>Goal:</b>	Poverty reduction through promotion of creative industries
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women
<b>Thematic priority:</b>	Poverty reduction through productive activities
<b>Donor:</b>	Government of Spain through the MDG Achievement Fund
<b>Partners:</b>	Food and Agriculture Organization (FAO), International Labour Organization (ILO), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Tourism Organization (UNWTO), United Nations Development Programme (UNDP), Peruvian Ministry of Trade and Tourism
<b>Budget:</b>	\$5,000,000 (\$670,000 from UNIDO)
<b>Status:</b>	Ongoing
<b>Duration:</b>	2010 – 2012

**CONTEXT**

The high growth rate experienced by Peru over the last decade allowed the country to move from being a low-income to a middle-income country. Despite the progress, the increase in wealth has not generated enough jobs to reduce poverty to desired levels. In remote rural areas, thousands of Peruvians still strive to earn a living from producing traditional handicrafts and small-scale agro-food production. In order to unleash the potential of these industries, a number of existing barriers need to be addressed. They include inefficient production techniques, an inadequate institutional framework, a cumbersome regulatory environment, limited infrastructure and the lack of finance support schemes.

**STRATEGY**

Funded by the Government of Spain's MDG Achievement Fund, UNIDO, in partnership with five other United Nations agencies, initiated a joint programme to improve the regulatory framework for the promotion of creative industries and to strengthen the productive and marketing capacities of small producers. UNIDO's intervention focuses on strengthening the networks of producers within the crafts sector and assisting producers to better manufacture and market their cultural products. Ayacucho, Cuzco, Puno and Lambayeque are the selected regions as they have the highest levels of poverty in the country.

**RESULTS**

- Producers in all four regions have received technical assistance to improve the manufacturing of such products as handicrafts, dolls, ceramics, belts and garments (ILO has trained 120 certificated trainers that are replicating the training with regional partners)
- New designs have been developed, yet respecting the cultural heritage of the products and are successfully being sold in local markets
- The producers that use alpaca and cotton as raw materials have been introduced to better and safer dyeing techniques

**IMPACT/OUTLOOK**

Promoting creative industries has a great potential, not only for the income opportunities of small-scale rural producers, but also for the country's economic growth. The development of these industries is a priority for the country and the Government is actively promoting these products on local and international markets. Institutions representing the private sector are also being involved in the project activities, as an additional commitment to improve the livelihood of the beneficiaries.

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# RUSSIAN FEDERATION

## »Green industries, clean river



### At a glance

<b>Goal:</b>	Greening industries along the Volga River
<b>MDG:</b>	7. Ensure environmental sustainability
<b>Thematic priority:</b>	Environment and energy
<b>Donor:</b>	Russian Federation
<b>Partner:</b>	The Government of the Russian Federation
<b>Budget:</b>	\$1,310,000
<b>Status:</b>	Ongoing
<b>Duration:</b>	June 2010 – June 2012

### CONTEXT

With a length of 3,660 km and a basin area of 1,380,000 km<sup>2</sup>, the Volga is the longest and largest river in Europe. Characteristically named “Mother Volga”, the river plays an important role in lives of the Russian people; almost half the Russian population (60 million) lives along its riverbanks. Today, the river is highly polluted and responsible for more than 80 per cent of the pollutants discharged into the Caspian Sea. Most of the pollution stems from industrial enterprises, out of which 50 per cent comes from small to medium-sized enterprises (SMEs) that typically discharge their wastewater into the river without sufficient treatment. SMEs face a dilemma as they neither have the ability to sufficiently treat effluents, nor the funds to improve their treatment facilities.

### STRATEGY

From 2001 to 2004, UNIDO successfully executed its Danube-TEST project in five countries of the Danube basin. The project addressed pollution from land-based industrial activities by assisting enterprises, based on a comprehensive diagnosis of their needs, in preparing a long-term sustainable business strategy. In 2011, UNIDO initiated the Volga-TEST project applying the same strategy to the eight regions in the middle and lower parts of the Volga basin.

In its initial phase, the main industrial polluters, or “hot spots”, will be identified and their contamination loads into the Volga assessed. A selection of companies will obtain direct assistance from UNIDO in the implementation of cleaner and environmentally-friendly technologies to minimize pollution. The economic benefits of applying greener technologies will also be demonstrated. The project

is complementary to a number of other initiatives implemented by UNIDO in the Russian Federation. The capacities of two cleaner production centres, previously established by UNIDO (which are now autonomous), will be utilized.

### EXPECTED RESULTS

Through the transfer of environmentally-sound technologies, SMEs can expect the following benefits:

- Change “from loss to profit” by reduced waste raw material and optimized energy consumption
- Adoption of effective clean technology solutions through access to financial mechanisms and incentives
- Reduction in investment and operating costs of wastewater plants
- Increased access to markets for greener products
- Avoidance of fines and penalties levied by regulatory compliance bodies
- Improved credibility and competitiveness of companies
- Reduced pollution discharges into the Volga

### IMPACT/OUTLOOK

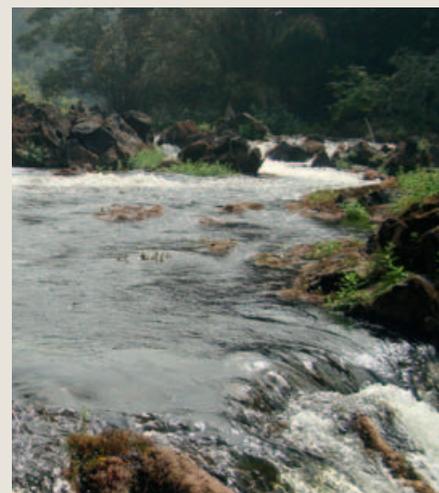
Addressing the problem at its source is vital in dealing with any environmental issue, especially water-related ones. For pollution to be significantly reduced, however, the TEST approach will need to be replicated widely and further investments will be needed. The Russian Federation has already made considerable investments in supporting the development of a regional strategy to mitigate the environmental impacts of pollution in the Volga River.

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## »» Energy access for rural communities

**At a glance**

<b>Goal:</b>	Energy access through hydropower
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger    7. Ensure environmental sustainability
<b>Thematic priority:</b>	Environment and energy
<b>Donor:</b>	Global Environment Facility (GEF)
<b>Partner:</b>	Ministry of Energy and Water Resources of Sierra Leone
<b>Budget:</b>	\$36,000,000
<b>Status:</b>	Ongoing
<b>Duration:</b>	July 2009 – December 2014

**CONTEXT**

As in many other developing countries, efforts to reduce poverty and achieve greater economic growth are thwarted by the absence of electricity. Although Sierra Leone has the potential to produce energy using hydro, geothermal, solar and methane gas resources, many barriers need to be overcome, such as weak technical capabilities, lack of financial institutions in rural areas and weak private sector entrepreneurship.

**STRATEGY**

At the request of the Government, and in line with the National Plan to increase rural access to electricity, UNIDO initiated a project to promote renewable energy development for productive uses. Through the establishment of mini-hydropower stations, the project aims to provide rural communities with access to an affordable, reliable and modern source of energy.

Following the approval of the project and after receiving a preparatory grant from the Global Environment Facility (GEF), the International Centre for Small Hydro Power (ICSHP) of China and the Energy and Resources Institute (TERI) of India assessed on behalf of UNIDO the feasibility of setting-up a mini-hydropower station at Singmi Falls in the Moyamba District of Sierra Leone. At the same time, consultations were carried out with the Government and

other stakeholders, all of which are willing to be active partners in the establishment of the stations.

**EXPECTED RESULTS**

Ultimately, the project will:

- Provide rural communities with an affordable, reliable and modern source of energy
- Build capacities for future mini-hydropower development
- Support the growth of various business enterprises and increase employment opportunities
- Reduce indoor pollution formerly caused by the use of indigenous sources of energy

**IMPACT/OUTLOOK**

The mini-hydropower stations are an affordable approach to rural energy development. If replicated throughout the country, additional stations would greatly contribute to employment creation and poverty reduction. With the requested sum of \$36 million, the project aims to reach 8,500 households and 45,000 people. To date, \$2 million has been approved by GEF, while the ECOWAS Bank for Investment and Development and the European Union have shown interest to co-finance.

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# SUDAN

## » Modernizing the fishing sector in the Red Sea State



### At a glance

<b>Goal:</b>	Sustainable fishing for economic development
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women 7. Environmental sustainability
<b>Thematic priority:</b>	Poverty reduction through productive activities
<b>Donor:</b>	The Canadian International Development Agency (CIDA)
<b>Partners:</b>	Federal Ministry of Industry, the Red Sea State Ministry of Economic Affairs and Investment and the Red Sea State Ministry of Agriculture
<b>Budget:</b>	\$4,687,240
<b>Status:</b>	Ongoing
<b>Duration:</b>	2009 – 2012

### CONTEXT

The Red Sea State is regarded as one of the most disadvantaged regions of Sudan in which the fishing community is particularly in need of support. At the same time, the Red Sea State is endowed with abundant marine and coastal resources which could provide alternative income opportunities for the region's population. However, today, the potential of these resources has not been properly explored. The vast majority of the coastal population focus on livestock herding and have only recently turned to the sea as a means of livelihood and food security. In order to unleash the potential of the fishing industry, technical and management skills need to be improved, market infrastructure needs to be set up and local support institutions need to be upgraded.

### STRATEGY

In an effort to meet these challenges, UNIDO is implementing a project to modernize artisanal fisheries and create new market opportunities in the Red Sea State. Funded by the Canadian International Development Agency (CIDA), the project aims to increase incomes and by extension improve livelihoods for the fishing community in the region. The project addresses each segment of the value chain from harvesting, processing and marketing as well as the inputs required in the process. Direct beneficiaries include fishermen, women in fishing communities and government institutions supporting the fishing industry.

### RESULTS

- Landing sites and marketing facilities have been constructed and are operational in all project locations. Public-private institutions have been established to oversee the business operation of the landing sites.

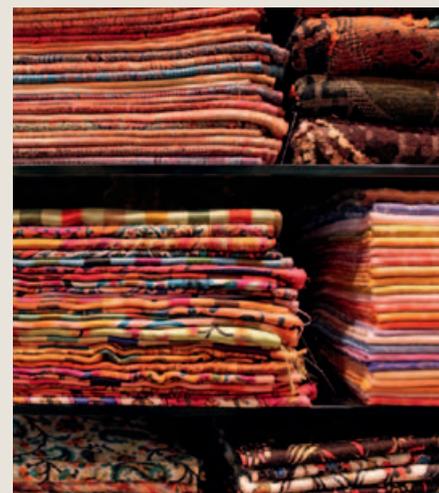
- Fishing cooperatives have been established in all three sites where 34 members have been trained in modern technology, entrepreneurship, hygiene and food safety issues and sustainable resource use.
- Three women's associations have been established and equipped and have received an official recognition from the Government.
- Some 250 women have been trained in entrepreneurial and business management skills.
- The women's associations each operate several successful micro-enterprises (with direct participation of 100 women), allowing the associations to independently finance activities such as literacy classes and health awareness for members and day-care.
- To build local capacities, 25 staff members from counterpart agencies have received capacity-building training and two study tours to gain experience from other countries have been organized.

### IMPACT/OUTLOOK

The project is the central driver for developing the fishery sector in the Red Sea State and its potential to contribute to economic growth, reduce poverty and provide for food security is starting to show. Today, fishing communities previously marginalized by traders, are receiving more income for their harvests. The three landing sites and the fishing cooperatives are serving as models for best practices for fish handling, processing and marketing. To ensure sustainability, all interventions have been made on the basis of economic self-sufficiency.

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## » Transforming the textile industry

**At a glance**

<b>Goal:</b>	A competitive textile industry
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women 7. Environmental sustainability 8. A global partnership for development
<b>Thematic priority:</b>	Poverty reduction through productive activities
<b>Donor:</b>	Government of Spain through the MDG Achievement Fund
<b>Partners:</b>	United Nations Development Programme (UNDP), International Labour Organization (ILO), Istanbul Textile and Apparel Exporters' Associations (iTKiB)
<b>Budget:</b>	\$2,700,000 (\$860,000 from UNIDO)
<b>Status:</b>	Ongoing
<b>Duration:</b>	2009 – 2012

**CONTEXT**

Historically, textile production has played a central role in Turkey's culture and economy. Today, the textile industry is one of the country's most important sectors, in terms of contribution to the gross domestic product (GDP), employment creation and net exports. However, the abolition of the WTO agreement on textile and clothing in 2004 exposed Turkish companies to competition from Asia. In parallel, the international market, including multinational textile retailers and clothing brands, has imposed stricter conditions on suppliers, especially related to labour conditions and the environment. Turkish producers, particularly in less developed regions, lacked information about these changes and their implications on their businesses. Understanding the ramifications of the required structural changes, the Government sought the assistance of the United Nations system to transform the Turkish textile industry.

**STRATEGY**

Funded by the Government of Spain's MDG Achievement Fund, UNIDO developed a three-year capacity-building programme for the Turkish textile sector, in partnership with the United Nations Development Programme (UNDP), the International Labour Organization (ILO) and the Istanbul Textile and Apparel Exporters Association (ITKIB). The programme aims to improve the competitiveness of the textile sector. The focus is on integrating small textile producing firms into domestic and global value chains, thereby providing better job opportunities. The programme also provides support to disadvantaged local groups and women.

**RESULTS**

- Key challenges faced by the various actors in the textile value chain and possible entry points for cluster development activities have been identified
- An analysis of the environmental conduct of 100 SMEs, 10 buyers and 10 business support organizations in the textile industry was undertaken
- 95 experts were trained on the UNIDO cluster development methodology in Kahramanmaraş, Gaziantep, Adiyaman, Malatya and Istanbul
- An expert group meeting of all actors of the textiles value chain was held to discuss CSR practices in the textile industry at all levels
- Information on CSR strategies and supplier requirements was gathered from international buyers, including NIKE, H&M, M&S, Otto, Li & Fung and Gerry Weber. Concrete cooperation activities with buyers have also been identified

**IMPACT/OUTLOOK**

Through the joint programme, the Turkish textile sector will be transformed to become more productive, innovative and responsive to the requirements of consumers in developed and emerging markets. Through this, its competitiveness on regional and international markets will be enhanced, allowing it to bring benefits to the Turkish economy as well as provide jobs for the millions of people residing in the selected target regions.

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# VIET NAM

## »Green handicrafts



### At a glance:

<b>Goal:</b>	Green production for increased environmental sustainability and income
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 3. Promote gender equality and empower women 7. Environmental sustainability
<b>Thematic priority:</b>	Poverty reduction through productive activities, environment and energy
<b>Donor:</b>	Government of Spain through the MDG Achievement Fund
<b>Partners:</b>	Food and Agriculture Organization of the United Nations (FAO), International Labour Organization (ILO), International Trade Centre (ITC), United Nations Conference on Trade and Development (UNCTAD)
<b>Budget:</b>	\$4,000,000 (\$775,000 for UNIDO)
<b>Status:</b>	Ongoing
<b>Duration:</b>	2010 – 2012

### CONTEXT

The Vietnamese handicrafts and small furniture sectors are internationally recognized as one of the most competitive emerging markets for bulk supply. Most commonly, handicrafts and small furniture are produced at the household level providing jobs for more than one million people across 2,000 villages. However, the growth of the sectors has been accompanied by growing pressure on availability of natural resources and unsustainable harvesting practices in some cases. In addition, the processing of some materials has caused serious water and waste pollution. Many handicraft and small furniture producers lack the know-how on sustainable production and design methods. They also lack the necessary business management skills that would enable them to seize economic opportunities on domestic and international markets. All of this has an adverse effect on the income opportunities of Vietnamese handicraft and small furniture producers, on environmental sustainability as well as on the economic growth of the country.

### STRATEGY

Funded by the Government of Spain's MDG Achievement Fund, UNIDO, in partnership with four other United Nations agencies, initiated a joint programme to increase income and employment opportunities for raw material growers/collectors and handicrafts/small furniture producers. The programme targets around 4,500 poor households in the four northern provinces of Nghe An, Hoa Binh, Thanh Hoa and Phu Tho in Viet Nam. The strategy is to develop better integrated, pro-poor, and environmentally sustainable "green" value chains, enabling poor growers, collectors and producers to improve their products and to link them to more profitable markets.

Within the programme, UNIDO is responsible for providing cleaner production and sustainable design concepts and practices within the bamboo/rattan, silk, seagrass, hand-made paper and lacquerware sectors.

### EXPECTED RESULTS

- Improved understanding of the handicrafts and small furniture value chains in Nghe An, Hoa Binh, Thanh Hoa and Phu Tho
- Sustainable management of natural resources within the handicrafts and small furniture value chains
- Increased income for handicrafts and small furniture raw material growers, collectors and producers in Nghe An, Hoa Binh, Thanh Hoa and Phu Tho
- Improved policies and regulatory frameworks at the provincial and national levels that meet the needs of raw materials and crafts producers, processors and traders in Nghe An, Hoa Binh, Thanh Hoa and Phu Tho

### IMPACT/OUTLOOK

By reducing environmental impacts along the entire life cycle of a craft item, while at the same time enhancing its market value through better functionality, incorporation of traditional designs or better aesthetics, the programme will ultimately ensure Vietnamese products access to today's global interior design market. This will increase the economic standing of poor handicrafts/furniture raw material growers, collectors and producers, promote environmental sustainability and contribute to the economic growth of Viet Nam.

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# DEVELOPING COUNTRIES

## » Pharmaceutical industries



### At a glance:

<b>Goal:</b>	Access to medicines in developing and least developed countries
<b>MDG:</b>	6. Combat HIV/AIDS, malaria and other diseases 8. Develop a global partnership for development
<b>Thematic area:</b>	Poverty reduction through productive activities
<b>Donors:</b>	Government of Germany, UNIDO
<b>Partners:</b>	Ministries of Health and/or Industry/Trade, pharmaceutical sector
<b>Budget:</b>	EUR 4,700,000
<b>Status:</b>	ongoing
<b>Duration:</b>	2006 – 2012

### CONTEXT

The burden of disease is disproportionately borne by developing and least developed countries. The high profile pandemic diseases of HIV, tuberculosis (TB) and malaria continue to have devastating effects on public health. It is estimated that Africa bears 25 per cent of the global disease burden and that more than 50 per cent of global deaths in under-fives occur on the continent. Challenges to addressing this tragedy include the limitations of health systems, insufficient human resources and the poor availability of commodities. There are many ongoing initiatives to help address these challenges. In this context, the further development of the local pharmaceutical sector could positively impact on health outcomes in developing and least developed countries and contribute to economic growth.

### STRATEGY

With the financial support of the Government of Germany, UNIDO initiated a project to strengthen local production of essential medicines and to contribute to improved access to affordable medicines. The challenges facing the industry are complex; there are technical aspects of production and regulation as well as associated issues such as sourcing investment, developing policies to support the sector, developing the requisite human resources and promoting technology transfer.

To overcome these challenges, the project aims to facilitate public-private dialogue on the development of a joint strategy in the pharmaceutical manufacturing sector and to assist in the implementation of an holistic package of solutions. The project strengthens capacity-building of relevant institutions such as business membership organizations

and training institutions to contribute to the development of the pharmaceutical sector.

### RESULTS

- In July 2011 the project formed a partnership with the African Union Commission (AUC) to help accelerate the Pharmaceutical Manufacturing Plan for Africa (PMPA), a mechanism that was endorsed by African Heads of State at their Summit in Accra in 2007
- Progress has been made in developing national level strategies in Ghana, Kenya and Viet Nam
- An association for the generic pharmaceutical sector in Southern Africa has been established to advocate the pharmaceutical industry's interests
- Research has been undertaken on economics of production, access to capital for pharma manufacturers in Africa, efficient manufacturing operations for the pharma sector and the philosophy for incentives in pharmaceuticals
- National assessments of the pharmaceutical industry in selected countries have been produced and published

### IMPACT/OUTLOOK

High quality, competitive local production of essential medicines has an important role to play in improving access to drugs. UNIDO sees this as an important niche, at the interface between public health and economic development. To date, countries which have been engaged in the project include Botswana, Cambodia, Cameroon, Ghana, Kenya, Lao People's Democratic Republic, Lesotho, Nigeria, Uganda, United Republic of Tanzania and Zimbabwe.

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# SMALL ISLAND DEVELOPING STATES

## »Connecting to the grid



### At a glance

<b>Goal:</b>	Creating sustainable energy services
<b>MDGs:</b>	1. Eradicate extreme poverty and hunger 7. Ensure environmental sustainability
<b>Thematic priority:</b>	Environment and energy
<b>Donors:</b>	Government of Austria, Government of Italy
<b>Partners:</b>	Secretariat of the Pacific Community (SPC), Pacific Power Association, Organization of American States (OAS), Energy & Security Group (ESG) and Public Service Cooperative Credit Union (PSCCU)
<b>Budget:</b>	EUR 435,000
<b>Status:</b>	Ongoing
<b>Duration:</b>	2007 – 2011

### CONTEXT

On most small island developing states (SIDS) in the Pacific and in the Caribbean, efforts to reduce poverty and achieve economic growth are thwarted by the absence of electricity. A heavy reliance on imported fossil fuels as well as severe shortages of capital for additional capacity make SIDS vulnerable to international oil prices and to uncertain energy supplies. Though the islands have a great potential for producing energy using solar and biomass resources, barriers need to be overcome, such as the lack of financial, technical and human resources.

### STRATEGY

With funding from Austria and Italy, UNIDO, in collaboration with regional and national actors, is implementing renewable energy development projects on Grenada, Samoa and the Solomon Islands. By promoting renewable energy systems and capacity-building of partner institutions, the projects aim to contribute to economic growth and social welfare. The project builds on earlier activities on renewable energy undertaken in the region, as well as on the experience gained by other agencies.

On the Solomon Islands, a community centre in the Malaita Province was equipped with solar panels to provide electricity for lighting, sewing machines, food processing and refrigeration. The centre will also provide training to young women in basic skills, such as sewing and food preservation, and will assist them in setting up their own businesses, thus generating income and improving community welfare.

On Grenada, lending officers were trained and opportunities for receiving long-term credits were established for buyers. A promotional campaign was held to raise awareness on the economic and environmental benefits of switching from electrical water heating to solar water heating systems.

### EXPECTED RESULTS

- Increased use of renewable energy
- Improved access to electricity for local communities
- Increased energy independence
- Various business enterprises supported and employment opportunities increased
- Reduced greenhouse gas emissions formerly caused by the use of fossil fuels

### IMPACT/OUTLOOK

Sustainable energy services are essential for social and economic development. The opportunity that renewable energy offers in increasing social welfare, reducing imports, creating employment and generating new income, is well acknowledged. On Samoa and the Solomon Islands, UNIDO will identify enterprises and processes whose productivity could benefit from the use of renewable energy and energy efficiency practices. Financial support will also be sought for pilot plants in Palau, Tonga and Vanuatu. On Grenada, UNIDO will widen the scope of the solar water heating systems and will seek to enlarge the use of other renewable energy technologies and energy efficiency measures.

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## General information on UNIDO

## **Size and structure of the Organization**

UNIDO was established in 1966 and became a specialized agency of the United Nations in 1985. The Organization currently has 174 Member States. Tuvalu is the newest member having joined UNIDO on 13 September 2011. A list of all Member States is shown on pages 136-137.

UNIDO employs about 700 staff members at headquarters and other established offices. The Director-General of UNIDO, Kandeh K. Yumkella (Sierra Leone), was reappointed by the thirteenth session of the General Conference (7-11 December 2009) for a period of four years. The total volume of UNIDO operations for the biennium 2010-2011 was €361 million. The value of UNIDO's ongoing technical cooperation programmes and projects totalled \$882 million as of 31 December 2011. The value of technical cooperation delivery in 2011 amounted to \$166.7 million, the highest since UNIDO became a specialized agency in 1986. The structure of the Organization is shown on page 135.

## **UNIDO's primary objective**

The primary objective of the Organization is the promotion of sustainable industrial development in developing countries and economies in transition. To this end, UNIDO also promotes cooperation on the global, regional, national and sectoral levels.

## **The policymaking organs**

UNIDO has two policymaking organs: the General Conference and the Industrial Development Board. The Programme and Budget Committee is a subsidiary organ of the Industrial Development Board.

## **General Conference**

The Member States of UNIDO meet once every two years at the General Conference, the supreme policymaking organ of the Organization. The Conference determines the guiding principles and policies, approves the budget and work programme of UNIDO and appoints the Director-General. It also elects representatives to the Industrial Development Board and the Programme and Budget Committee. The fourteenth session of the General Conference took place from 28 November to 2 December 2011.

The fifteenth session of the General Conference is scheduled to take place from 2 to 6 December 2013.

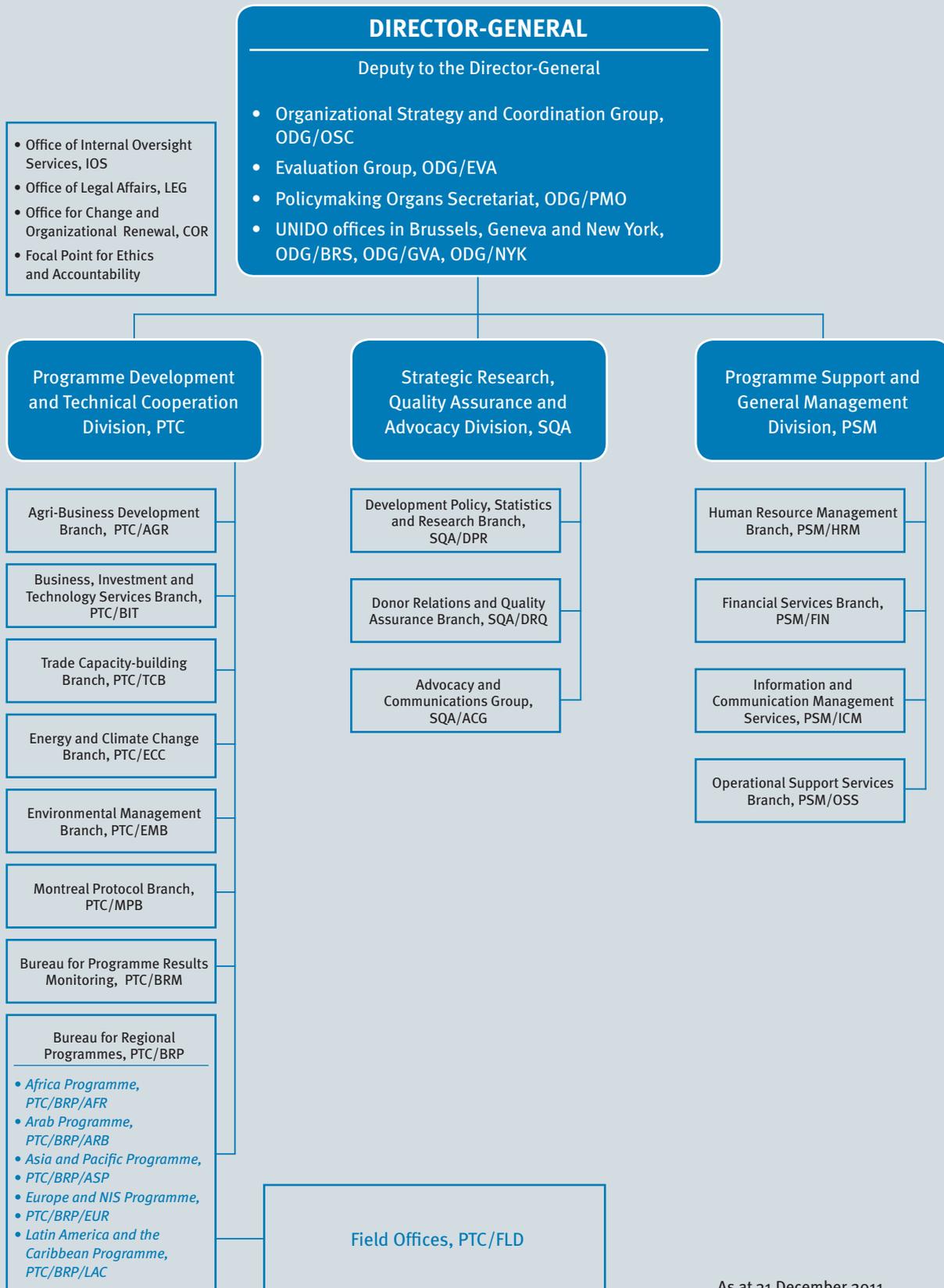
## **Industrial Development Board**

The Board has 53 Members and reviews the implementation of the work programme, the regular and operational budgets, and makes recommendations to the General Conference on policy matters, including the appointment of the Director-General.

The Board meets once a year. The thirty-ninth session of the Board took place from 22 to 24 June 2011.

## **Programme and Budget Committee**

The Programme and Budget Committee, consisting of 27 Members, is a subsidiary organ of the Board. It meets once a year and assists the Board in the preparation and examination of the work programme, the budget and other financial matters. The twenty-seventh session of the Programme and Budget Committee took place from 11 to 13 May 2011.



As at 31 December 2011.

# UNIDO around the world

In 2011 UNIDO maintained a field network of 29 regional and country offices around the world, some of which cover more than one country. In addition, 17 UNIDO Desks were operational in 2011. UNIDO also maintained an office led by a Senior Industrial Adviser in the Democratic Republic of the Congo, presenting a first stepping stone to establishing a country office in the future. Moreover, it continues to operate a centre for regional cooperation in Turkey.

## MEMBER STATES OF UNIDO

Afghanistan	Bosnia and Herzegovina	Côte d'Ivoire	Fiji	Iran (Islamic Republic of)
Albania	Botswana	Croatia	Finland	Iraq
Algeria	Brazil	Cuba	France	Ireland
Angola	Bulgaria	Cyprus	Gabon	Israel
Argentina	Burkina Faso	Czech Republic	Gambia	Italy
Armenia	Burundi	Democratic People's Republic of Korea	Georgia	Jamaica
Austria	Cambodia	Democratic Republic of the Congo	Germany	Japan
Azerbaijan	Cameroon	Denmark	Ghana	Jordan
Bahamas	Cape Verde	Djibouti	Greece	Kazakhstan
Bahrain	Central African Republic	Dominica	Grenada	Kenya
Bangladesh	Chad	Dominican Republic	Guatemala	Kuwait
Barbados	Chile	Ecuador	Guinea	Kyrgyzstan
Belarus	China	Egypt	Guinea-Bissau	Lao People's Democratic Republic
Belgium	Colombia	El Salvador	Guyana	Lebanon
Belize	Comoros	Equatorial Guinea	Haiti	Lesotho
Benin	Congo	Eritrea	Honduras	Liberia
Bhutan	Costa Rica	Ethiopia	Hungary	Libya
Bolivia (Plurinational State of)			India	
			Indonesia	

A network of Investment and Technology Promotion Offices (ITPOs) around the world promote investment and technology flows to developing countries and countries with economies in transition. There are also a number of International Technology Centres at various stages of development that work closely with the ITPOs.

In addition to the above, there are 47 National Cleaner Production Centres (NCPCs) and National Cleaner Production Programmes (NCPPs), established by UNIDO and UNEP, and more are being set up.

UNIDO maintains offices in Brussels (European Union), Geneva (United Nations) and New York (United Nations).

Lithuania	Netherlands	Russian Federation	Sri Lanka	Tuvalu
Luxembourg	New Zealand	Rwanda	Sudan	Uganda
Madagascar	Nicaragua	Saint Kitts and Nevis	Suriname	Ukraine
Malawi	Niger	Saint Lucia	Swaziland	United Arab Emirates
Malaysia	Nigeria	Saint Vincent and the Grenadines	Sweden	United Kingdom of Great Britain and Northern Ireland
Maldives	Norway	Samoa	Switzerland	United Republic of Tanzania
Mali	Oman	Sao Tome and Principe	Syrian Arab Republic	Uruguay
Malta	Pakistan	Saudi Arabia	Tajikistan	Uzbekistan
Mauritania	Panama	Senegal	Thailand	Vanuatu
Mauritius	Papua New Guinea	Serbia	The former Yugoslav Republic of Macedonia	Venezuela (Bolivarian Republic of)
Mexico	Paraguay	Seychelles	Timor-Leste	Viet Nam
Monaco	Peru	Sierra Leone	Togo	Yemen
Mongolia	Philippines	Slovakia	Tonga	Zambia
Montenegro	Poland	Slovenia	Trinidad and Tobago	Zimbabwe
Morocco	Portugal	Somalia	Tunisia	
Mozambique	Qatar	South Africa	Turkey	
Myanmar	Republic of Korea	Spain	Turkmenistan	
Namibia	Republic of Moldova			
Nepal	Romania			

# Abbreviations

3ADI	African Agribusiness and Agro-industries Development Initiative	FAO	Food and Agriculture Organization of the United Nations
ACP	African, Caribbean, and Pacific Group of States	Federexport	Italian Federation of Export Consortia
AEA	Austrian Energy Agency	GCLME	Guinea Current Large Marine Ecosystem
AECID	Spanish Agency for International Development Cooperation	GEF	Global Environment Facility
AFRIMETS	Intra-Africa Metrology System	GFSI	Global Food Safety Initiative
AfriPANet	African Investment Promotion Agency Network	GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
AIDA	Action Plan for the Accelerated Industrial Development of Africa	GRULAC	Group of Latin American and Caribbean States
AMC	Programme Approval and Monitoring Committee	GSCP	Global Social Compliance Programme
ARCEIT	Arab Regional Centre for Entrepreneurship and Investment Training	HCFC	hydrochlorofluorocarbon
ASEAN	Association of Southeast Asian Nations	HCLM	High-Level Committee on Management
AU	African Union	HLCP	High-Level Committee on Programmes
AUC	African Union Commission	HP	Hewlett Packard
BAT	best available technique	HPMP	HCFC phase-out management plan
BEP	best environmental practice	ICHET	International Centre for Hydrogen Energy Technologies
CAMI	Conference of African Ministers of Industry	ICS	International Centre for Science and High Technology
CEB	United Nations System Chief Executives Board for Coordination	IDB	Industrial Development Board
CFC	chlorofluorocarbon	IEA	International Energy Agency
CIS	Commonwealth of Independent States	IFAD	International Fund for Agricultural Development
CMP7	7th session of the Conference of the Parties serving as the Meeting of the Parties	IIASA	International Institute for Applied Systems Analysis
COP	Conference of the Parties to the United Nations Framework Convention on Climate Change	ILO	International Labour Organization
CSD	United Nations Commission on Sustainable Development	IMP	Investment Monitoring Platform
CSR	corporate social responsibility	ISIC	International Standard Industrial Classification of All Economic Activities
CSS	carbon capture and storage	ISO	International Organization for Standardization
DaO	Delivering as One	ITC	International Training Centre
EAC	East African Community	ITPO	Investment and Technology Promotion Office
ECLAC	United Nations Economic Commission for Latin America and the Caribbean	JAC	Joint Advisory Committee
ECN	Energy research Centre of the Netherlands	KRISS	Korea Research Institute of Standards and Science
ECOSOC	Economic and Social Council	LAC	Latin America and the Caribbean
ECOWAS	Economic Community of West African States	LDC	least developed country
ECREEE	ECOWAS Regional Centre for Renewable Energy and Energy Efficiency	LDC-IV	Fourth United Nations on the Least Developed Countries
EDIP	Enterprise Development and Investment Promotion	LIFE	Learning Initiative for Entrepreneurs
EGM	expert group meeting	MDG	Millennium Development Goal
EIF	Enhanced Integrated Framework	MDG-F	Millennium Development Goals Fund
ERP	enterprise resource planning	MEA	multilateral environmental agreement
ESCWA	Economic and Social Commission for Western Asia	MRU	Manu River Union
EU	European Union	MVA	manufacturing value added
EurAsEC	Eurasian Economic Community	NCPC	National Cleaner Production Centre
		NIP	national implementation plan
		NIS	Newly Independent States
		Norad	Norwegian Agency for Development Cooperation
		NSO	National Statistical Office
		ODS	ozone-depleting substance

OECD	Organisation for Economic Co-operation and Development	TETF	Renewable Energy Trust Fund
PCB	polychlorinated biphenyl	TSCR	Trade Standards Compliance Report
PCOR	Programme for Change and Organizational Renewal	TSCR	Trade Standards Compliance Report
POPs	persistent organic pollutants	UN	United Nations
PPM	portfolio and project management	UNCED	United Nations Conference on Environment and Development
QCPR	quadrennial comprehensive policy review	UNCTAD	United Nations Conference on Trade and Development
REAP	Responsible Entrepreneurs Achievement Programme	UNDAF	United Nations Development Assistance Framework
RECP	resource efficient and cleaner production	UNDG	United Nations Development Group
RECPnet	Global Network for Resource Efficient and Cleaner Production	UNDP	United Nations Development Programme
RETF	Renewable Energy Trust Fund	UNEP	United Nations Environment Programme
SADC	Southern African Development Community	UNFCCC	United Nations Framework Convention on Climate Change
SME	small and medium enterprise	UNINETTUNO	Italian International Telematic University
SPX	Subcontracting and partnership exchange programme	UNSMS	United Nations Security Management System
STAP	Scientific and Technical Advisory Panel of the Global Environment Facility	uPOP	unintentionally-produced persistent organic pollutant
TCB	trade capacity-building	VBO	Vienna-based organization
TCPR	triennial comprehensive policy review of operational activities for development	VIC	Vienna International Centre
TEST	transfer of environmentally sound technology	WHO	World Health Organization
		YEN	youth employment network







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