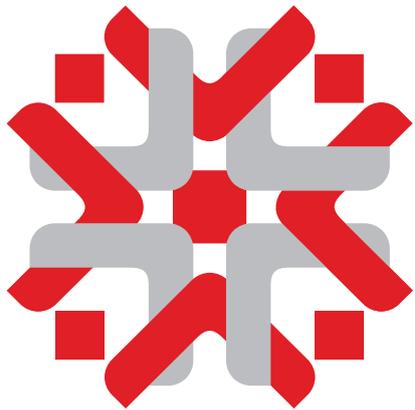




UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



Annual Report 2013





Since becoming a specialized agency, the UNIDO General Conference has been hosted outside its Vienna headquarters only twice: in Bangkok, Thailand (1987) and in Yaoundé, Cameroon (1993). From 2 to 6 December 2013, the fifteenth session of the General Conference took place in Lima, Peru. The Secretariat of UNIDO wishes to express its sincere gratitude to the Government of Peru for the generous hospitality and the excellent arrangements for the Conference.

The cover of this *Annual Report* presents the logo developed by the Government of Peru for the General Conference in Lima. It was designed to reflect the harmonious balance of pre-Columbian fabrics and the influence of guiding stars.

Annual Report

2013



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Vienna, 2014

UNIDO Annual Report 2013

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While this edition of the *Annual Report* is significantly shorter and more concise than its predecessors in compliance with Board decision IDB.41/Dec.12 (n), it meets the Organization’s reporting requirements with regard to General Assembly resolution 67/226 on the quadrennial comprehensive policy review of operational activities for development of the United Nations system and the UNIDO medium-term programme framework 2010-2013, as adjusted in the midterm review approved by the General Conference in decision GC.14/Dec.18.

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FOREWORD



This past year was one of change both for the Organization and for me personally. For UNIDO, it brought recognition of the vital contribution of industry to inclusive and sustainable development as well as a strong endorsement of UNIDO's strategic role in the process, while I had the honour and privilege to be selected by Member States to lead the Organization along a fresh yet familiar path for the next four years. I have no doubt that the valuable work carried out by UNIDO in 2013 and described in this *Annual Report* laid the foundation for its integration as a leading partner in the post-2015 Development Agenda debate. Of course, I share the credit for this with the entire staff of UNIDO and their untiring commitment to the Organization they serve and, most importantly, with my predecessor, Kandeh K. Yumkella, who ably led UNIDO for the first half of the year and under whose leadership it embarked on a radical and valuable process of change that I intend to pursue during my own mandate.

I came to UNIDO with a five-pillar strategy that covered its strategic position in the shifting development landscape, the quality of its services and the need for targeted solutions, the mobilization of funds, a continuation of the process of change and renewal, and the motivation and engagement of staff. These are indeed the foundations on which I hope to build up UNIDO over the coming years and I am pleased to note that the year under review saw us building brick by brick on that foundation. In this connection, I regard the adoption of the Lima Declaration: *Towards inclusive and sustainable industrial development* by the 15th session of the General Conference in December and the inclusion of industrialization as an item of consideration by the Open Working Group established to propose a set of Sustainable Development Goals as particularly important developments in 2013.

We have been helped greatly by a strong support network, starting with our recipient countries—developing countries and those with economies in transition—as well as key supporters from the industrialized world that recognize the imperative of strong, inclusive, sustainable and resilient industrial and economic growth to remove the scourge of poverty from our planet. An entire chapter of this *Annual Report* describes the valuable partnerships UNIDO enjoys with organizations, institutions and different sectors of society. The *Report* also looks at networks, set up or championed by UNIDO, that catalyse development efforts.

The need for brevity in a report of this kind does not allow it to do full justice to each and every success achieved by UNIDO during the year. I would invite readers to look at our website and discover for themselves just what a difference UNIDO is making to improve lives and livelihoods across the continents.

LI Yong, Director General of UNIDO

UNIDO AT A GLANCE

UNIDO was established in 1966 and became a specialized agency of the United Nations in 1985. As at 31 December 2013, the Organization had 172 Member States. • UNIDO employed 693 staff members at Headquarters and other established offices as at 31 December 2013. • The Director General of UNIDO, LI Yong (China), was appointed for a period of four years by the second special session of the General Conference (28 June 2013). • The planned total volume of UNIDO operations for the biennium 2012-2013 amounted to €455.2 million. The portfolio of projects and programmes in hand reached a new record of \$477.7 million. The value of technical cooperation delivery in 2013 amounted to \$180.5 million. • The primary objective of the Organization is the promotion of inclusive and 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. • In addition to its Headquarters in Vienna, UNIDO has offices in Brussels, Geneva and New York. Its field network consists of regional and country offices, UNIDO desks and national focal points composed of 55 offices with 142 national and international staff members. UNIDO maintains Investment and Technology Promotion Offices in six countries. Its 54 National Cleaner Production Centres and National Cleaner Production Programmes are run in cooperation with the United Nations Environment Programme. • UNIDO has two policymaking organs: the General Conference that meets every two years and the Industrial Development Board that meets once a year. The Programme and Budget Committee is a subsidiary organ of the Industrial Development Board and meets once a year. • The General Conference is the supreme policymaking organ of the Organization that determines its guiding principles and policies, approves the budget and work programme of UNIDO and appoints the Director General. The fifteenth session of the General Conference took place from 2 to 6 December 2013 in Lima, Peru. Its sixteenth session is scheduled to take place from 30 November to 4 December 2015. • 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 forty-first session of the Board took place from 24 to 26 June 2013. • The Programme and Budget Committee, consisting of 27 members, assists the Board in the preparation and examination of the work programme, the budget and other financial matters. The twenty-ninth session of the Programme and Budget Committee took place on 22 and 23 May 2013.

UNIDO MEMBER STATES¹

Afghanistan	Djibouti	Libya	Sao Tome and Principe
Albania	Dominica	Luxembourg	Saudi Arabia
Algeria	Dominican Republic	Madagascar	Senegal
Angola	Ecuador	Malawi	Serbia
Argentina	Egypt	Malaysia	Seychelles
Armenia	El Salvador	Maldives	Sierra Leone
Austria	Equatorial Guinea	Mali	Slovakia
Azerbaijan	Eritrea	Malta	Slovenia
Bahamas	Ethiopia	Mauritania	Somalia
Bahrain	Fiji	Mauritius	South Africa
Bangladesh	Finland	Mexico	Spain
Barbados	France	Monaco	Sri Lanka
Belarus	Gabon	Mongolia	Sudan
Belgium	Gambia	Montenegro	Suriname
Belize	Georgia	Morocco	Swaziland
Benin	Germany	Mozambique	Sweden
Bhutan	Ghana	Myanmar	Switzerland
Bolivia (Plurinational State of)	Greece	Namibia	Syrian Arab Republic
Bosnia and Herzegovina	Grenada	Nepal	Tajikistan
Botswana	Guatemala	Netherlands	Thailand
Brazil	Guinea	New Zealand	The former Yugoslav Republic of Macedonia
Bulgaria	Guinea-Bissau	Nicaragua	Timor-Leste
Burkina Faso	Guyana	Niger	Togo
Burundi	Haiti	Nigeria	Tonga
Cabo Verde	Honduras	Norway	Trinidad and Tobago
Cambodia	Hungary	Oman	Tunisia
Cameroon	India	Pakistan	Turkey
Central African Republic	Indonesia	Panama	Turkmenistan
Chad	Iran (Islamic Republic of)	Papua New Guinea	Tuvalu
Chile	Iraq	Paraguay	Uganda
China	Ireland	Peru	Ukraine
Colombia	Israel	Philippines	United Arab Emirates
Comoros	Italy	Poland	United Republic of Tanzania
Congo	Jamaica	Portugal	Uruguay
Costa Rica	Japan	Qatar	Uzbekistan
Côte d'Ivoire	Jordan	Republic of Korea	Vanuatu
Croatia	Kazakhstan	Republic of Moldova	Venezuela (Bolivarian Republic of)
Cuba	Kenya	Romania	Viet Nam
Cyprus	Kuwait	Russian Federation	Yemen
Czech Republic	Kyrgyzstan	Rwanda	Zambia
Democratic People's Republic of Korea	Lao People's Democratic Republic	Saint Kitts and Nevis	Zimbabwe
Democratic Republic of the Congo	Lebanon	Saint Lucia	
Denmark	Lesotho	Saint Vincent and the Grenadines	
	Liberia	Samoa	

¹As at 31 December 2013.



GOVERNANCE AND MANAGEMENT

► This chapter covers the recent session of UNIDO's highest governing body, the future direction of UNIDO as proposed by the General Conference and the Director General, cross-cutting areas of special focus and the administrative processes that guide the day-to-day work of the Organization. In order to devote most of this *Annual Report* to the wealth of technical cooperation and other services provided during the year and their impact on recipient countries, chapter 1 is more succinct than in the past. Additional information on the way UNIDO works can be found at its website (www.unido.org).

The General Conference and Lima Declaration

Since UNIDO became a specialized agency of the United Nations in 1985, the General Conference had taken place outside UNIDO Headquarters only twice, in Bangkok (1987) and Yaoundé (1993). Twenty years later, the convening of the Conference in Lima provided a unique opportunity to renew Member States' commitment to strengthening cooperation among regions, including South-South and triangular cooperation. Co-organized by the Government of Peru, the 15th session of the General Conference brought together high-level government officials from around the world, as well as senior representatives of other United Nations organizations and leaders from the private sector, civil society and academia.

The Conference was opened by President Ollanta Humala Tasso of Peru at a ceremony attended by the United Nations Secretary-General, Ban Ki-moon. At the Conference, Member States adopted by acclamation the Lima Declaration: *Towards inclusive and sustainable industrial development*, which confirms UNIDO's role in the post-2015 Development Agenda. The Conference also passed a number of other important decisions and resolutions that will guide the work of UNIDO in the coming years.

In addition to its legislative work, the General Conference provided a platform for an informed dialogue between government officials, private sector representatives, civil society and academia on the role of inclusive and sustainable industrial development in the achievement of broader social and economic development goals. The Industrial Development Forum—a feature of UNIDO's biennial General Conferences—comprised two panel discussions on partnerships for industrial development and industrial development as a sustainable development goal. This was complemented by six interregional debates that covered green industry and sustainable development, job strategies for inclusive and sustainable development, ways to make industrialization inclusive and sustainable, strengthening associative models for industrial development, economic diversification and industrialization in countries rich in natural resources and the empowerment of women entrepreneurs.

Other important activities undertaken on the margins of the Conference were two side events on industrial cooperation and small and medium enterprises and on trading through value chains, as well as the public launch of the UNIDO Industrial Development Report at the University of Lima.

The General Conference was preceded by the Least Developed Countries Ministerial Conference (see below) and the Latin America and the Caribbean Ministerial Conference (see chapter 2).

The way forward

The Lima Declaration adopted by the General Conference charts the Organization's development priorities for the coming years and places special emphasis on inclusive and sustainable industrial development. It confirms the eradication of poverty as UNIDO's central imperative. In the words of the Director General: "The Lima Declaration is a manifestation of Members States' support for and confidence in UNIDO. It is a roadmap for the future of the Organization and sets a solid basis for further advancing industrial development in the post-2015 and Sustainable Development Goals processes. It highlights UNIDO's critical expertise and experience in the field of inclusive and sustainable industrial development, and in forging new development partnerships." Member States called for UNIDO to promote effective measures towards inclusive and sustainable industrial development. These should encompass: enhancing productive capacities, supporting structural transformation of the economy; encouraging economic growth and the creation of decent jobs; increasing productivity and development; promoting the sustainable use, management and protection of natural resources and the ecosystem services they provide; facilitating the transfer and absorption of technology on mutually agreed terms; and supporting related research and development. The Lima Declaration also welcomed the outcome document of the Informal working group on the future, including programmes and resources, of UNIDO, entitled "Strategic Guidance Document".

Future strategies for poverty reduction need to be economically empowered to generate sufficient income for individuals, households and governments

to pursue their own development priorities and support their path to self-reliance. By promoting inclusive and sustainable industrial development, UNIDO will harness the full potential of industry to address social and environmental challenges in a lasting, equitable and sustainable manner.

Areas of special focus

Gender equality and the empowerment of women in industrial development

The General Conference featured an interregional debate on women entrepreneurs and their role in inclusive and sustainable industrial development. With hundreds of delegates in attendance, the debate on empowering women and fostering entrepreneurship marked a milestone in UNIDO's efforts towards promoting gender equality. It recognized that prerequisites for change included coordination among stakeholders to overcome deep-seated sociocultural barriers; access to better education for girls and women; reform at the policy level to create enabling environments for women entrepreneurs; business growth centres that would provide training, technology and finance; support for growth-oriented enterprises run by women; and the promotion of networks for mentorship and coaching.

Women's leadership on energy justice in productive sectors was the theme of a side event at the Vienna Energy Conference in May that highlighted key issues in the gender-energy-development paradigm and explored best practices and lessons learned to address those issues. A guidance note prepared by UNIDO in cooperation with the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) and entitled *Sustainable Energy for All: the Gender Dimensions* aims to guide policymakers and key stakeholders in developing programmatic and policy activities that enhance the role of women in developing and implementing clean and sustainable energy solutions. Again in cooperation with UN Women, UNIDO sponsored the 2013 SEED Gender Equality Award to support the most promising



The President of Peru [centre] with the United Nations Secretary-General (l.) and the Director General of UNIDO (r.).

In the words of Secretary-General Ban Ki-moon: "This new Lima Declaration of UNIDO is an encouraging milestone. It points the world more firmly in the direction of inclusive and sustainable industrial development. It offers important guidance as the world sets its sights on the year 2015. Reaching our objectives will require significant change and restructuring of the global economy. Industry and the private sector will play a crucial role. Working together, with enlightened action, we can create jobs, improve public well-being and protect the environment ... With this Lima Declaration, you have reiterated the importance of building a life of security, prosperity and dignity for all. Together we can seize the tremendous potential of inclusive and sustainable industrial development. This widely shared vision will strengthen UNIDO's strategic position in the deliberations leading up to the adoption of a new agenda for global development in 2015 and enable the Organization to be firmly integrated in the post-2015 Development Agenda." ■

women-led social or environmental start-up enterprises. Awards were handed out at the SEED Symposium and International Award Ceremony at the end of October in Nairobi. This year's winners included a Colombian enterprise that trains and employs rural women in the production of biodegradable plates, and a Peruvian organization that designs and sells green products. Details on UNIDO projects and programmes targeting women are contained in chapter 3, under "Inclusive development".

Youth employment

Youth employment is one of the most pressing challenges in many countries, especially developing countries. The creation of employment opportunities requires concerted efforts by governments, the international community, the private sector, young people themselves and other stakeholders. UNIDO has been mandated to pursue the development of projects and programmes to reduce poverty among young people through the acquisition of skills and capacity enhancement activities and financial support to creative industries and micro, small- and medium-scale enterprises.



Employment opportunities for young people in Kassala, Sudan.

UNIDO is an active member of the United Nations Inter-Agency Network on Youth Development. At the European Development Days, held in Brussels at the end of November, UNIDO teamed up with SOS-Children's Village International to host a discussion on productive

work for youth. Panelists included high-level representatives of Member States, international organizations, academia and the public sector.

Not surprisingly, a large number of UNIDO projects and programmes focusing on youth are in Africa, where 31 per cent of the population is between the ages of 10 and 25, compared to a global figure of 25 per cent. UNIDO and the Common Market for Eastern and Southern Africa are currently working on a joint regional youth employment strategy that focuses on youth enterprise creation and development. Details of specific activities designed to reduce poverty among youth are given in chapter 3, under "Inclusive development".

Least developed countries

The fifteenth session of the General Conference was preceded by a two-day Least Developed Countries (LDC) Ministerial Conference. Bringing together ministers in charge of industry, relevant United Nations agencies, regional Economic Commissions, emerging countries' institutions, donors and private-sector entities, the ministerial conference promoted the formation of partnerships that will bring sustainable livelihoods and inclusive welfare for citizens of least developed countries. It sought to leverage mechanisms available in the domain of the private sector and the development of small and medium enterprises, productive capacity-building and trade and employment. In cooperation with Brazil, China, India, the Russian Federation, South Africa and other emerging economies, the event also helped implement the UNIDO LDC Operational Strategy 2012-2020, which seeks to promote the critical role of South-South cooperation in LDC development efforts.

The two-day event culminated in a ministerial declaration: *From the Istanbul programme of action to the world we want in 2015 and beyond: implementing the UNIDO LDC operational strategy*. In the declaration, ministers stressed that poverty eradication remained the central imperative for LDCs, but could only be achieved through inclusive, sustainable and resilient economic growth. They pledged their commitment to the structural transformation of their respective economies while underlining that this effort called for the support of a strengthened global partnership for

LDCs. The declaration also highlighted the imperative of gender equality to capitalize on the contribution of women to development as well as the engagement of emerging economies through South-South and triangular cooperation. It reaffirmed that the post-2015 Development Agenda should balance all three dimensions of sustainable development: economic, social and environmental. Of crucial importance was market accessibility, the diversification of industrial production, the removal of supply-side constraints, the availability of resources, technology transfer and productive capacity-building. Finally, the declaration called on all partners to ensure sufficient funds to enable UNIDO to implement its operational strategy towards the achievement of inclusive and sustainable industrial development in LDCs.

Small island developing States

Small island developing States (SIDS) face a range of challenges to their economic viability, from which larger, continental countries are generally spared. Their small size, maritime locations and remoteness make them especially vulnerable to natural disasters and rising sea levels, while constraining their economic growth potential. They are also heavily dependent on fossil fuels and traditional biomass for their energy. During the year, UNIDO registered a growing interest from small island developing States in its technical cooperation activities.

As part of its global network of regional sustainable energy centres, which are supported by the Governments of Austria and Spain, UNIDO was requested by the Sustainable Energy Island Initiative of the Alliance of Small Island States to assist island nations in the Caribbean and Pacific in the creation of renewable energy and energy efficiency centres. Discussions have taken place with stakeholders and a final agreement on the centres is expected in 2014. In a parallel initiative, UNIDO has launched a new programme with financial support from the Government of Austria that will encourage investment in renewable energy technologies. Progress to date includes preparations for renewable energy and energy efficiency demonstration plants in selected Pacific Island States, including Kiribati (tuna processing), Papua New Guinea (tuna processing),



Installation of photovoltaic units in the Pacific Island region.

Samoa (solar hot water for a brewery) and Vanuatu (timber and meat packing).

The year 2014 has been declared by the General Assembly as the International Year of Small Island Developing States. It will be a year when UNIDO takes stock of its partnerships with SIDS, shares best practices and experiences and provides an opportunity for SIDS to explore areas of new and expanded technical cooperation. UNIDO is engaging with partners in SIDS and with the Alliance of Small Island States as part of its global forum role and in line with the vision of inclusive and sustainable industrial development. UNIDO has also participated actively in the preparatory activities for the Third International Conference on Small Island Developing States to be held in September 2014 in Samoa, to which it plans to make a significant substantive contribution.

Middle-income countries

Over 100 UNIDO Member States are considered middle-income countries (MICs). Found on all continents, the

structures of their economies and size of their populations vary considerably. Industrialization is seen as a key to tackling poverty and inequality in these countries, which are home to two-thirds of the world's poor.

The High-Level Conference of Middle-Income Countries held in June in San José came at a critical time, as discussions to shape the post-2015 Development Agenda were gathering pace. Hosted by the Government of Costa Rica and facilitated by UNIDO, the meeting was convened under the theme "Challenges for sustainable development and international cooperation in middle-income countries: the role of networks for prosperity". The conference brought together high-level representatives from over 70 countries. Over the course of three days, participants addressed, inter alia, the role of MICs in the post-2015 Development Agenda, inclusive growth and prosperity, knowledge networks, sustainability and industrial development and financing for development. The meeting concluded with the adoption of the San José Declaration, which highlighted the importance of industrial growth as a basis for sustained development in MICs, strengthening UNIDO's mandate and paving the way for the creation of future cooperation and multi-sector partnerships between UNIDO and business leaders, think tanks, practitioners and high-level academics.

Middle-income countries account for the bulk of import rejections of agro-food products. In the framework of its analytical work on compliance with trade standards, UNIDO conceptualized trade standards compliance footprints with a specific focus on middle-income countries and produced country fact sheets that provide a snapshot on trade performance and export market requirements in the agro-food sector. The fact sheets provide policymakers with a tool to guide priority setting in trade capacity-building and investments in the development of quality and compliance infrastructure. The footprints were launched at the MIC Conference, where UNIDO organized a special event on "Meeting standards—winning markets: consumer safety as a driver for trade and economic growth". Data on MICs feature in the new issue of *Meeting Standards—Winning Markets*, issued in June.

In May, Belarus hosted a conference on cooperation between middle-income countries in the Commonwealth of Independent States (CIS) in Minsk, at which UNIDO

made a presentation on MIC perspectives on sustainable development in countries of the CIS, Eastern Europe and Southern Europe region.

Management

Funding

Continuing the positive trend of recent years, the volume of net funds made available for UNIDO technical cooperation programmes reached \$187.4 million, an increase of more than 18 per cent over 2012. The portfolio of projects and programmes in hand—including future payments due under signed agreements—reached a new record of \$477.7 million. This should enable UNIDO to increase the volume of its services in 2014. Once again, environment and energy attracted the largest allocation of overall funding with \$111.2 million, while poverty reduction through productive activities received \$41.9 million, trade capacity-building \$21.7 million and cross-cutting programmes \$12.6 million.

Funding from governments and institutions

Funding from governmental sources, be it in the context of North-South or South-South cooperation, remained at the high level of recent years with \$98 million. Appendix B shows the distribution of Industrial Development Fund and Trust Fund approvals by region and thematic priority.

The largest contributor in 2013 was Japan, with net approvals (excluding support costs) in project budgets of \$16.7 million, followed by the European Union with \$13.9 million. Additional net contributions above \$1 million were received from Switzerland (\$11.5 million), Egypt (\$7.5 million), Nigeria (\$6.8 million), Sweden (\$4.7 million), Norway (\$4.3 million), Italy (\$3.4 million), Canada (\$2.5 million), China (\$2.2 million), Germany (\$2.2 million), Austria (\$2 million), the Russian Federation (\$1.8 million), France (\$1.5 million), the Republic of Korea (\$1.1 million) and Zambia (\$1.1 million).

Funding from multi-donor trust funds

Indirect government funding of UNIDO technical cooperation through various United Nations multi-donor

trust funds reached \$4.3 million. In addition to the “Delivery as one” funds of \$2.9 million, self-starter multi-donor trust funds amounted to \$1.4 million, including the United Nations Peacebuilding Fund.

Global Environment Facility

The relationship with the Global Environmental Facility (GEF) was further solidified and expanded. The Director General visited the GEF Secretariat in Washington D.C. in September for discussions with GEF management. On the technical level, UNIDO has gained approval of the first project concepts on climate change adaptation that will be managed by the Agro-Business Branch, i.e. a UNIDO Branch that traditionally has not been involved in GEF-funded projects. The GEF-5 replenishment cycle will finish by June 2014. UNIDO has already gained a majority of the approvals at the concept stage, confirming that the planning figure provided in last year’s *Annual Report*, with \$279.3 million for the entire GEF-replenishment cycle, is realistic. This would represent an increase of more than 40 per cent over the portfolio achieved during the GEF-4 period. The total value of net funding received from the GEF in 2013 was \$34.8 million, similar to the achievement in 2012.

Montreal Protocol

Funding from the Multilateral Fund for the Implementation of the Montreal Protocol (MLF) amounted to \$46.4 million, an increase of \$ 22.9 million over 2012.

At the request of the MLF Executive Committee to promote alternatives to the use of hydrochlorofluorocarbons that minimize environmental impact, UNIDO developed pilot projects in Gambia and Viet Nam. The innovativeness of the projects lies in their co-financing methodology (combining funds from the MLF, GEF, national Governments, and public and private-sector institutions) and the introduction of novel technologies, which are both ozone- and climate-friendly and more energy-efficient. The project methodology can be replicated in other developing countries at a later stage.

Trust funds

UNIDO has continued to operate and promote a number of programmable trust funds, mainly for the development of new projects and programmes. Contributions to the latter were received from renounced unutilized balances and other sources.

Additional allocations to these trust funds would allow UNIDO to develop high-priority projects in these key areas and at the same time provide for UNIDO cost sharing where required.

Programme approval and monitoring

During the year, 146 projects were submitted to the Programme Approval and Monitoring Committee, of which 128 were approved, 1 was rejected and a decision postponed on 17 pending resubmission. The overall approval rate of 88 per cent was lower than the 91 per cent recorded in 2012, but far higher than the rates of 79 per cent and 75 per cent achieved in 2011 and 2010 respectively. This suggests a consistent increase in the overall quality of UNIDO project and programme proposals, which is also in line with the observations of the Quality Assurance Unit. Of the total number of projects submitted during the year, 35 per cent were intended for implementation in Africa, 22 per cent in Asia and the Pacific, 11 per cent each for the Arab region and Europe and Newly Independent States and 9 per cent for Latin America and the Caribbean. Global and interregional projects accounted for 12 per cent of submitted projects. Disaggregated by thematic areas, environment and energy accounted for 45 per cent of the total number of projects submitted, poverty reduction activities for 37 per cent, trade capacity-building for 10 per cent and cross-cutting projects for 8 per cent.

Evaluation

UNIDO projects and programmes undergo a thorough and impartial evaluation to assess their relevance, efficiency and effectiveness. The conclusions of the UNIDO Evaluation Group form a valuable input into UNIDO’s strategic decision-making process. During 2013, UNIDO conducted or finalized thematic evaluations in its post-crisis interventions, public-private partnerships, the Trade Trust Fund and the UNIDO regional programmes for trade capacity-building in West Africa. Independent UNIDO country evaluation reports were published on UNIDO’s activities in Iraq, Mexico, the Russian Federation and Zambia. The Organization also completed a country evaluation of

its activities in Pakistan. Work continued on a pilot model for the partial decentralization of the management of mandatory terminal project evaluations that foresees increased involvement of project managers in the evaluation process in order to foster an evaluation culture within UNIDO. All mandatory terminal project evaluations were conducted by independent consultants, with UNIDO's Evaluation Group assuming a quality assurance function throughout the process. In October, a regional workshop on evaluation management was organized with representatives from UNIDO counterparts in 15 African countries.

Programme for Change and Organizational Renewal

The Programme for Change and Organizational Renewal is an organization-wide initiative launched in 2010 to make UNIDO more responsive to the needs of recipients and the expectations of donors. The three-year programme has made fundamental adjustments to the Organization's operations through enhanced accountability and transparency, as well as compliance with external standards. The enterprise resource planning (ERP) system implemented by UNIDO is unique in the United Nations system, as it covers all operations and processes of the Organization, both at Headquarters and in the field, in a single integrated solution.

The Programme has had an impact throughout the Organization in achieving greater efficiency and effectiveness. The ERP has streamlined operations, with modules covering portfolio and project management to support technical cooperation activities and human capital management, while a business process reengineering exercise has led to fewer process steps. With the release early in the year of the modules supporting key administrative processes such as finance, procurement, logistics and travel management, the system will, inter alia, enable UNIDO to deliver more with the same human resources through improved teamwork and knowledge management and increased empowerment of Headquarters and field staff. It is expected to enhance the results-based management culture, provide interactive tools and real-time information to internal and external stakeholders on various operations, simplify finance, procurement, travel

management and logistics processes and introduce enterprise risk-management tools.

Ethics

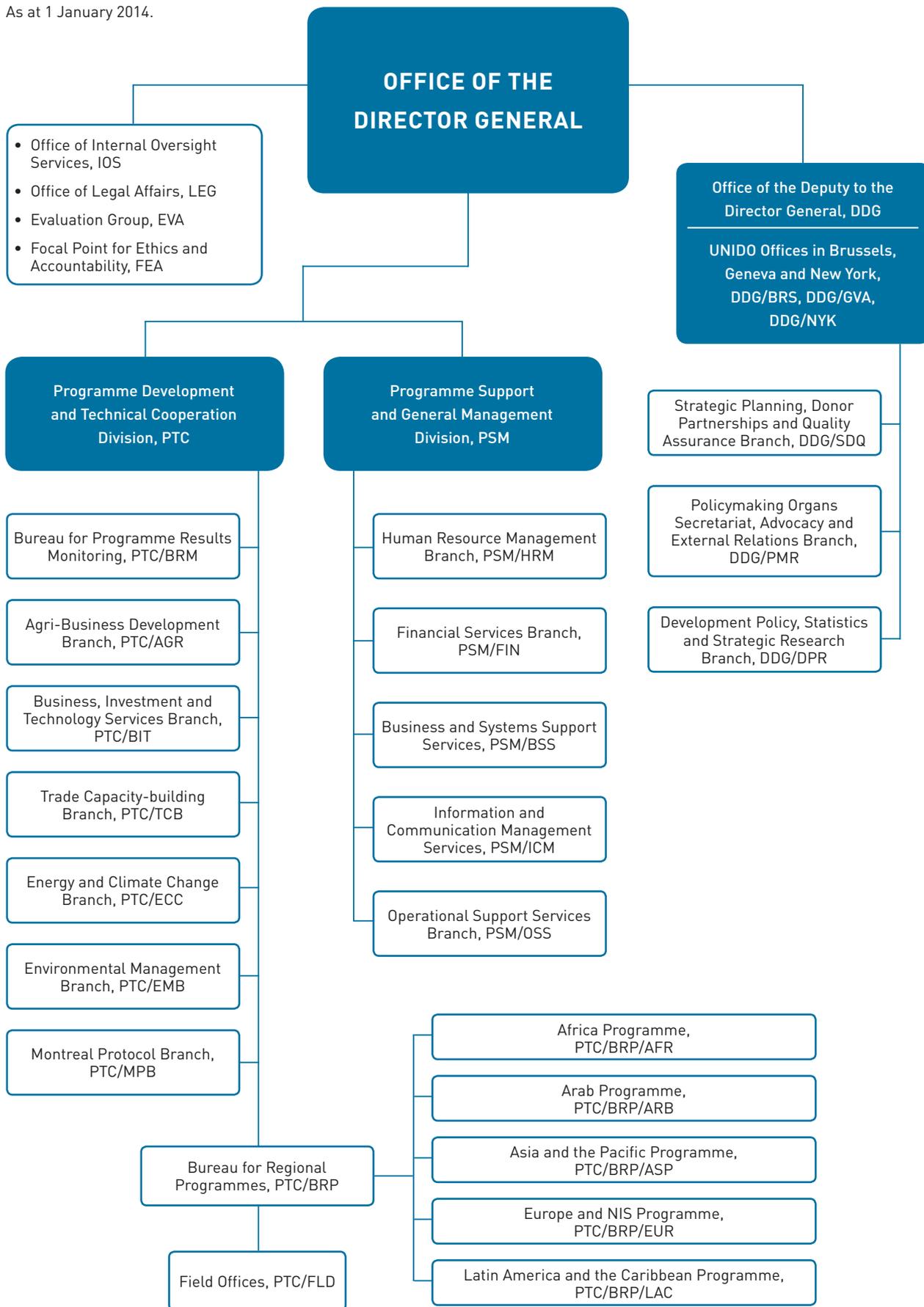
In 2013, an independent focal point for ethics and accountability continued the ongoing task of monitoring and examining financial disclosure and declaration of interests statements submitted by obligated staff members. During the year, 53 financial disclosure and 265 declaration of interest statements were examined. The focal point contributed to the Internal Oversight Services Fraud Prevention Week with a paper on *Cultural aspects of whistle blowing* and provided inputs to the Joint Inspection Unit status of implementations update, the revised procurement manual and the UNIDO reply to a sustainability self-assessment questionnaire submitted by the Swedish International Development Cooperation Agency.

Staffing

UNIDO employed a total of 693 staff members, of which 268 were international recruits as at 31 December 2013. Over the past five years, the percentage of female staff members in the Organization has increased from 28.7 per cent in 2009 to 31.3 per cent in 2013. Further details on the UNIDO workforce are contained in appendix I.

UNIDO continued to implement two policy frameworks using the new enterprise resource planning tools, namely the policy governing the recruitment and administration of personnel under individual service agreements and the new staff performance management system. During the reporting period, a total of 2,434 individual service agreement contracts were issued, of which 774 were for internationally recruited experts and 1,660 for locally recruited experts. The implementation of the first full cycle of the staff performance management system covering the performance of staff in 2012, including the multi-rater feedback, was reviewed by senior management. It was noted that the online tool had resulted in an overall improvement in the compliance rate to over 95 per cent by April. The implementation of the 2013 merit

As at 1 January 2014.



promotion exercise was also carried out in line with the staff performance management system. A total of 422 training courses were offered to staff during the year (see appendix J).

Support services and facilities management

Procurement of services and goods represents a considerable part of UNIDO technical assistance. During 2013, under decentralized procurement, a total of 3,225 contracts and/or purchase orders were issued at an aggregate value of approximately €20.2 million. For centralized procurement, the corresponding figures were approximately 625 contracts and/or purchase orders and €83.0 million. With the roll-out of the ERP supplier relations management module, UNIDO has become the first entity in the United Nations system with a fully embedded and seamlessly integrated e-procurement functionality. This has led to a significant quality improvement, enhancing the efficiency and transparency of all procurement and supply-chain management transactions. The new UNIDO Procurement Manual was launched in July 2013 as part of UNIDO's ongoing change management process and continued efforts to increase transparency and strengthen the Organization's internal control system.

Similarly, the full implementation of the ERP travel module has resulted in an increase in online booking, reaching up to 50 per cent of total travels and generating considerable savings in transaction fees. Over 400 staff members at Headquarters and in field offices have been trained either through classroom training or webinars, thereby facilitating an increase in decentralized travel planning.

During 2013, UNIDO finalized the bidding and awarded the new contract for the Vienna International Centre (VIC) catering services. The exercise entailed a

change of the business model to fully outsourced services, including an agreement that the new contractor would share the costs of refurbishing the catering areas and equipment. This will reduce the administrative burden to the Organization of the operational and financial management of the catering services and enable the renovation of the premises within the limited resources available.

UNIDO provides buildings management services to all organizations housed in the VIC and is responsible for the safe and reliable operation and maintenance of the buildings, machinery, equipment and furnishings. The year under review saw the successful completion of a number of long-term initiatives, such as the ten-year exercise to remove asbestos from the premises, as well as the refurbishment and modernization of conference facilities in Building C. Similarly, the three delegates' refreshment areas in Building C were reopened with new furniture and equipment. The business process reengineering of the Buildings Management Service was finalized and the independent consultant hired to make a diagnostic review and analysis presented his recommendations. Also completed was the implementation of the highly complex new data centre in Building M for the United Nations Office at Vienna.

Under an initiative of the Environment Management Group, the United Nations system-wide coordination body on environment and human settlements, organizations within the system are looking at their environmental profiles and performance with a focus on corporate environmental management through peer review. The peer review of the VIC that began during the year involved visits to the VIC premises and focused on greenhouse gas emissions, waste and water management and staff awareness. The review report will include factual evidence, an independent assessment and non-binding recommendations and give credit for achievements and best practices.



STRENGTHENING PARTNERSHIPS

► In the words of UNIDO's Director General, LI Yong, industrialization is a holistic process that enables countries to rise from a lower to a higher level of development. This task is beyond the capacity of any one body to tackle alone and requires strong partnerships with bilateral and multilateral development agencies, international financial institutions, the private sector, academia, civil society and other stakeholders. While UNIDO has traditionally worked hand in hand with others, the complexity of its current mandate, the diversity of recipient countries and the high expectations of donors give a new imperative to a strengthened partnership approach that will result in comprehensive, coherent and holistic sustainable development solutions.

UNIDO and the United Nations system

As the coordinating body on social, economic and related matters, the United Nations System Chief Executives Board brings together the heads of 29 United Nations organizations. At its first regular session of the year in Madrid in April, UNIDO was represented by its former Director General, Kandeh K. Yumkella, who heard UNIDO praised for its leadership in planning the 2014 World Water Day campaign on "Water and Energy". A second regular session and retreat took place in New York in November, focusing on ways to make the United Nations system more relevant in a post-2015 context. UNIDO was represented by its new Director General, LI Yong, who addressed the issue of partnerships as a precondition for successfully achieving a broad range of "means of implementation", including technology transfer, knowledge exchange, skills development, access to markets, infrastructure and good governance.

A new partnership was announced early in the year to promote green economy as a vehicle for sustainable development and poverty eradication. In response to the outcome document of the United Nations Conference on Sustainable Development, entitled *The Future We Want*, UNIDO joined forces with the United Nations Environment Programme (UNEP), the United Nations Institute for Training and Research and the International Labour Organization (ILO) to create a Partnership for Action on Green Economy, or PAGE (see chapter 5).

In February, the United Nations launched a new facility in Nairobi that aims to speed up the transfer of climate-related technology and expertise to developing countries in order to reduce greenhouse gas emissions and improve resilience to changing weather patterns, drought, soil erosion and other impacts of climate change. The Climate Technology Centre and Network was set up by UNIDO and UNEP together with a consortium of 13 institutions.

November saw the birth of another new sustainability initiative, launched by the World Intellectual Property Organization (WIPO) to contribute to the accelerated adaptation, adoption and deployment of green technology solutions. WIPO GREEN links technology providers

with technology seekers and offers a range of services to catalyse mutually beneficial commercial transactions. UNIDO's role as a partner in the initiative will be to ensure a broad awareness of available options, particularly in the context of the UNIDO-UNEP Green Industry Platform and the Climate Technology Centre and Network.

The UNIDO-UNEP Global Network for Resource Efficient and Cleaner Production (RECP) aims to improve resource efficiency and the environmental performance of businesses and organizations through scaling up and mainstreaming the application of RECP methods, techniques and policies. It contributes to the effective and wide-spread application of RECP by bringing together providers of related services and facilitates South-South collaboration and the transfer of best practices, techniques and policies.

Throughout the year, UNIDO was part of a number of working groups and task forces charged with specific aspects of the post-2015 Development Agenda and contributed to reports and outcome documents within its areas of competence. Together with the United Nations Department of Economic and Social Affairs, the World Bank and the Sustainable Energy for All initiative, UNIDO led the global thematic consultation on energy, one of a series of thematic consultations set up in 2012 to help shape the post-2015 agenda. While consultations were largely online, the process also involved a series of regional meetings. A concluding High-level Dialogue on Energy in the post-2015 Development Agenda took place in Oslo in April.

The Director General was a keynote speaker at the fifth session of the Open Working Group on Sustainable Development Goals held in New York in November, where UNIDO led inter-agency collaboration to produce an issue brief on sustained and inclusive economic growth, infrastructure development and industrialization. The Organization also contributed to the Secretary-General's report *A life of dignity for all: accelerating progress towards the Millennium Development Goals and advancing the United Nations development agenda beyond 2015*. The recommendations of the report assign high importance to inclusive growth, decent employment and social protection.

During the Vienna Energy Forum in May, UNIDO and the United Nations Human Settlements Programme (UN-HABITAT) signed a memorandum of understanding

DELIVERING AS ONE

UNIDO continued to participate actively in the inter-agency processes related to the United Nations system-wide coherence and Delivering as One (DaO) initiative, thereby ensuring that the Organization's mandate and interests were appropriately reflected in the relevant documents and decision processes. For instance, UNIDO monitored the implementation of the Strategic Priorities 2013-2016 of the United Nations Development Group, deriving from resolution 67/226 on the Quadrennial Comprehensive Policy Review, aimed at maximizing the impact of the United Nations development system's operational activities for development. UNIDO also contributed to the preparation of the standard operating procedures to improve implementation of the DaO approach, and to the review of the Management and Accountability System of the United Nations Development and Resident Coordinator System, as well as the business operating system. As a member of the United Nations Inter-Agency Cluster on Trade and Productive Capacity, the Organization is working in cooperation with partner agencies in implementing UN-wide coherence in selected countries.

At the operational level, UNIDO was involved in country-level joint programming, including the formulation of United Nations



Helping build young entrepreneurs in Mozambique.

Development Assistance Frameworks (UNDAFs) in 30 countries, covering the Africa, Arab, Asia and the Pacific, Europe and NIS, and Latin America and the Caribbean regions. In Viet Nam, UNIDO acted as the leading facilitator for the post-2015 consultations on the role of the private sector, while in the European region it was particularly involved in implementing the UNDAFs and DaO initiatives in Albania, Kyrgyzstan, Montenegro and the Republic of Moldova, and it also contributed to the UNDAF evaluation for 2010-2014 in Bosnia and Herzegovina and other countries. In Mozambique, UNIDO played a substantive role in the promotion of the youth employment for equitable and sustainable economic development, as well as the energy components of the

UNDAF. Elsewhere, significant progress was also achieved in the implementation of the UNDAFs in Colombia, Egypt, Jordan, Mexico, Sudan and other countries.

UNIDO also contributed to the preparation of the new UNDAF for the State of Palestine. Under this new programme, UNIDO will support value-chain development of agro-related industries, as well as the development of the stone industry and culture industries and entrepreneurship education for youth and women. The implementation of the new UNDAF will allow the population of the State of Palestine to benefit from greater economic empowerment, improved livelihoods, access to decent work and food security. ■

on the promotion of cleaner urban industries and technologies through joint projects and programmes. UNIDO is currently working with UN-HABITAT on social housing in El Salvador and negotiations are under way to extend the programme to Brazil, Colombia, Cuba and Nicaragua.

UNIDO and the Food and Agriculture Organization of the United Nations (FAO) are helping countries of the Southern Africa Development Community (SADC) to address the growing challenge of forest resource depletion. Representatives of forestry education and training institutions from Malawi, South Africa, Zambia and Zimbabwe attended a three-day meeting in South Africa in November to lay the foundations for a new project on strengthening forestry training centres and wood industries for green employment in the SADC region. Under the new project, UNIDO will be engaged in training and job creation in the forestry and wood industries that are crucial for rural employment and poverty reduction.

Many of the projects and programmes in which UNIDO is involved are multi-agency in nature, where partners are responsible for one or more specific areas. Under its origin consortia programme, for example, UNIDO is working with the International Trade Centre UNCTAD-WTO, FAO and WIPO on a programme to add value to food and handicraft products typical of a particular region or country. Projects that support vulnerable communities affected by crisis—the sustainable livelihoods programme in Khorasan Razavi province in the Islamic Republic of Iran or in Herat province in Afghanistan, for example—often involve cooperation with the Office of the United Nations High Commissioner for Refugees. In Ethiopia, UNIDO is working with the United Nations Development Programme (UNDP) on a national small and medium enterprise (SME) cluster policy. UNIDO continues to collaborate with the United Nations Office on Drugs and Crime on corruption prevention to foster SME development.

Regional focus

UNIDO's field network consists of regional and country offices, UNIDO desks and national focal points composed of 55 offices with 142 national and international staff members. Countries with no in situ UNIDO

representation are covered by the relevant regional programmes at Headquarters, which comprise the Africa programme, the Arab programme, the Asia and Pacific programme, the Europe and Newly Independent States programme and the Latin America and the Caribbean programme.

Africa

UNIDO organized a number of key forums in Africa during the year, notably the 20th African Union Conference of African Ministers of Industry (CAMI-20). Set up by UNIDO in 1971 as a Pan-African response to promote accelerated and sustainable industrial development, this year's session, held in Nairobi in June and organized in cooperation with the Economic Commission for Africa and the African Union, focused on accelerating development in Africa within the post-2015 development framework. The CAMI-20 declaration made particular reference to South-South cooperation, private-sector development, renewable energy, green industries, long-term financing, and quality, standards and metrology. It also looked at the progress of projects and programmes implemented by UNIDO within the framework of the Accelerated Industrial Development of Africa (AIDA). Selected AIDA projects developed in 2012 and finalized during the year included regional enterprise development and investment promotion for private sector-led industrialization and industrial upgrading and modernization for selected regional economic communities.

June saw the convening of the Fifth Tokyo International Conference on African Development (TICAD V), where a number of side events were organized by UNIDO, including one on clean technologies for Africa's sustainable industrial development, held in collaboration with the African Union. One of the main outcomes of TICAD V was the adoption of the Yokohama Declaration 2013, "Hand in Hand with a more dynamic Africa", and the Yokohama Action Plan 2013-2017. In July, experts in the field of economics, industrial development, manufacturing and industry met in Halbtorn, Austria to discuss the outline of a book to be published in 2014 on the new industrial revolution and its implications for Africa. Africa Industrialization Day was marked at United Nations Headquarters in New York, UNIDO Headquarters in

Vienna and field offices on 22 November under the theme of job creation and entrepreneurship development as a means to accelerate industrialization.

During the year, UNIDO developed country programmes in Angola, Burkina Faso, Lesotho, Niger, Sierra Leone, Togo and Uganda, establishing the frame of reference for technical cooperation between the respective Governments and UNIDO. New programmes are currently in preparation for Benin, Burundi, Cabo Verde, Cameroon, Chad, Congo, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Guinea, Madagascar, Mozambique, Rwanda and Senegal.

Arab region

The steady if uneven economic growth of the Arab region in recent years reflects the fact that countries in the region range from rich oil producers to least developed countries. There has been a concomitant increase both in the consumption of resources and the generation of pollution and waste. Greater efficiency in resource consumption and the environmentally sound management of pollution and wastes will not only contribute to the greening of industry, but will present opportunities for investment in new green businesses offering environmental goods and services. Recent unrest and political change in several countries of the region highlight the imperative of an economy that provides sufficient job opportunities for an increasingly educated and skilled new generation.

In 2013, UNIDO focused on recovery and post-conflict interventions, initiating several projects addressing social cohesion and human security in Egypt, Jordan, Lebanon, Sudan and Tunisia under the Government of Japan's supplementary funding mechanism. In April, UNIDO participated in the International Donor Conference for Darfur, hosted by the Government of Qatar in Doha, and also assumed the co-leadership role with the World Bank for the Private Sector Development Thematic Group under the Darfur Strategy. During the General Conference in Lima, UNIDO signed a joint declaration with Libya on sustainable industrial development for inclusive growth and employment generation in Libya. In Algeria, UNIDO contributed to the One-UN programme in the field of agro-industry and industrial

competitiveness, while in Lebanon, UNIDO submitted proposals to support the Government's effort to assist displaced Syrians.

In April, UNIDO co-organized the fourth annual Gulf Environment Forum in Riyadh, with its focus on renewable energy, waste management, energy efficiency, water and wastewater, and environmental technologies. Since its inception in 2010, the Gulf Environment Forum has been Saudi Arabia's leading platform for discussing environmental issues in the region and has attracted environmentalists, scientists, economists and policymakers from all over the world.

UNIDO held series of workshops for quality infrastructure institutions in different Arab countries—laboratories, standards bodies, certification bodies, consumer protection agencies and the private sector—where participants had an opportunity to identify professional practices in terms of openness, impartiality, confidentiality and competency. A regional workshop on industrial statistics and classifications for Arab countries held in September in Doha was co-organized by UNIDO and the United Nations Economic and Social Commission for Western Asia, the United Nations Statistics Division, the Arab Industrial Development and Mining Organization and the Gulf Organization for Industrial Consulting.

Asia and the Pacific

A high point of UNIDO activities in the Asia and the Pacific region during the year was the convening of TICAD V in Yokohama, Japan in June, where the Organization played an even greater role than in the past in terms of its participation in the conference and the organization of side events. At the side event on cleaner technology, UNIDO examined development opportunities that are economically, socially and ecologically sustainable. Discussions focused on investments in low-carbon, resource-efficient and cleaner production technology, and SME development and investment promotion for the East African Community.

UNIDO was involved in a number of meetings leading up to the International Year of Small Island Developing States (SIDS) in 2014, including the Pacific Region Preparatory Meeting for the Third International SIDS Conference in July. During the year, UNIDO

embarked on a fisheries project for Fiji, Papua New Guinea, the Solomon Islands and Vanuatu. According to a recent report by the Asian Development Bank, climate change will have a negative effect on the Pacific's key economic sectors, including its fisheries sector.

In 2013, a country programme for India was formulated, approved and signed for the period 2013-2017 in cooperation with the Government. Agreement was also reached on the formulation of a country programme for Myanmar, which will include industrial policy as an important component.

Following in the footsteps of the 2012 high-level round table on Asia 2050, in September UNIDO and the Government of China organized a round table on the role of industrial parks in the development of a Eurasian economic growth belt, as part of the Third China-Eurasia Expo in Urumuqi, China. Discussions centred on green industrial guidelines and ecological design for industrial parks as well as on the contribution of public-private partnerships. Experts presented

models of successful industrial parks in the region, highlighting the value of green growth approaches and regional partnerships. Also in China, UNIDO organized the 2013 Green Industry Conference in Guangzhou in November, in cooperation with the Ministry of Industry and Information Technology, and stepped up its cooperation with Beijing Normal University on green development.

On the occasion of his visit to China in November, the Director General met the President of China and discussed the fruitful relationship between China and UNIDO over the past four decades. President Xi Jinping spoke highly of UNIDO's record of assisting developing countries to realize their industrial development aspirations. He stressed that China had always supported the cause of international development, and pledged his country's willingness to work closely with UNIDO. In particular, President Xi expressed strong support for South-South cooperation to help the development of other developing countries, based on the principle of mutual benefits and win-win results.

"The new vision for UNIDO, with a focus on inclusive and sustainable industrial development, fully concurs with China's priority for future development."

Xi Jinping, President of China.



The President of China (r.) and the Director General of UNIDO (l.).

Europe and the Newly Independent States

In February, UNIDO held a briefing for representatives of Armenia, Austria, Azerbaijan, Belarus, Georgia, the Republic of Moldova, Slovenia and Ukraine, as well as a delegation from the European Union on the Regional Resource Efficient and Cleaner Production (RECP) Demonstration Programme for the European Union's Eastern Partnership region. The project, funded by Austria, Slovenia, the European Union and UNIDO, aims at improving resource efficiency and environmental performance in the prioritized industrial sectors—agro-food, chemicals and construction materials—through the widespread adaptation and adoption of RECP methods, practices and techniques. This four-year technical cooperation project will be implemented with the Organisation for Economic Co-operation and Development (OECD) as lead partner, the Economic Commission for Europe, the United Nations Development Programme and UNIDO, under the EU-funded umbrella project "Greening Economies in the Eastern Neighbourhood".

UNIDO contributed to an inter-agency advocacy paper published by the Economic Commission for Europe entitled *Building more inclusive, sustainable and prosperous societies in Europe and Central Asia: A common United Nations vision for the post-2015 Development Agenda*. The UNIDO brief was on changing production patterns and provided an overview of the region in terms of economic structural change, resource and material efficiency and recommendations for policy measures for sustainable and low-carbon economic growth.

UNIDO developed a number of project proposals for the region in 2013, in cooperation with the European Union (economic diversification, industrial energy efficiency, subcontracting and standards, metrology, testing and quality infrastructure); the Russian Federation (competitiveness in Armenia; food processing in Belarus; building materials in Kyrgyzstan; and the UNIDO Subcontracting and Partnership Exchange Programme for Kyrgyzstan, Tajikistan and Uzbekistan); and the Governments of Austria and Georgia as potential donors for projects in Georgia (creative industries, fruit processing, food and beverage industry, origin consortia development, technical barriers to trade, youth, energy efficiency and clean technology).

In October, UNIDO agreed with the Government of Belarus on a framework for cooperation in support of inclusive and sustainable industrial development. The framework document paves the way for the development of a portfolio of technical cooperation projects and defines thematic areas of cooperation in line with the Government's development priorities. Priority areas include environment and energy, innovation and development, technology transfer, investment promotion, SME development, quality infrastructure and the agro-food and automotive sectors.

Latin America and the Caribbean

The convening of the 15th session of the General Conference in Peru underlined the importance accorded by the Latin America and the Caribbean region to industry within its economic and social development and at the same time focused the world's attention on growing opportunities in the region. Over 30 ministers and vice-ministers of

industry from Latin American and Caribbean countries attended a UNIDO Ministerial Conference in December immediately prior to the General Conference. The Ministerial Conference addressed the importance of industrial production and trade for inclusive and sustainable economic growth in the region, with special reference to the contribution of innovation and technology transfer to sustainable industrial development. It concluded with a ministerial declaration on industrial development in the Latin America and the Caribbean region that recognized, inter alia, the special role of UNIDO in promoting inclusive and sustainable industrial development and called on the Organization to foster a dialogue between stakeholders in the region to achieve this objective. In the words of the Director General: "The region has a huge potential to advance economically in the next decades. Its natural resources, population, labour force and regional market will only strengthen the power of the region regarding its economic, political and cultural integration."

Delegations attending the High-Level Conference of Middle-Income Countries, held in San José in June with UNIDO support, were introduced to the Industrial Knowledge Bank, an innovative tripartite cooperative mechanism to promote the exchange of knowledge and expertise for advancing industrial and productive capacities in Latin America and the Caribbean, and one of UNIDO's foremost contributions to South-South cooperation. The Industrial Knowledge Bank, initiated in 2009, has paved the way for UNIDO to play an active role in matching knowledge donors, knowledge recipients and UNIDO's own competences to support strategic knowledge transfer and ultimately reduce the cost of development. A new initiative designed to improve the efficiency of projects and programmes in the region was launched during the year through the formation of strategic groups of countries that will share experiences and voice a common message.

In October 2013, UNIDO met in Caracas with senior representatives of the Latin America and the Caribbean region at the premises of the Latin America Economic System to discuss preparatory activities for the CELAC (Community of Latin American and Caribbean States) Ministerial Conference planned in 2014. UNIDO and CELAC will be partnering in the promotion of inclusive

and sustainable industrial development in the Latin America and the Caribbean region. UNIDO's main contribution in this partnership will be the strengthening of SME value chains and export consortia programmes in the region.

UNIDO liaison offices

The role of the three UNIDO offices in New York, Geneva and Brussels is to maintain on-the-spot contact with Member States, United Nations offices, the European Union and other development partners; act as the voice of UNIDO at international forums; provide a flow of information to and from Headquarters; prepare visits of the Director General and other UNIDO officials; establish and maintain contacts with civil society, academia and the private sector; and organize events on behalf of UNIDO. The offices also play an advocacy role, ensuring that development partners are kept up to date with UNIDO's activities. Information is channeled through the office of the Deputy to the Director General back to the different branches and units at UNIDO Headquarters and to its field offices, and contributes to the formulation of organizational strategies and approaches, the development of technical cooperation projects and global forum activities, as well as management decisions on specific issues.

New York

A strong presence at the seat of the United Nations Headquarters enables UNIDO to play a valuable role in intergovernmental and inter-agency processes to define the post-2015 Development Agenda and Sustainable Development Goals. The New York Office supported an initiative by Member States to establish a "Friends of Inclusive and Sustainable Industrial Development" group, which is proving to be a powerful advocate in presenting UNIDO's mandate and vision. UNIDO was represented on a number of key teams and working groups, notably the United Nations Task Team on the post-2015 Development Agenda, the Technical Support Team of the Open Working Group on Sustainable Development Goals, the United Nations

Development Group Thematic Consultation on Growth and Employment and the United Nations Development Group Inter-Agency Advisory Panel.

Eleven Permanent Representatives to the United Nations in New York took part in a special event during the UNIDO General Conference (see chapter 1). In an open dialogue, they reflected upon the challenges and opportunities of inclusive and sustainable industrial development in the formulation and negotiation of the post-2015 Development Agenda.

UNIDO inputs highlighting the crucial role of public-private partnerships in sustainable development were reflected in the report of the Secretary-General, *Science, technology and innovation, and the potential of culture, for promoting sustainable development and achieving the Millennium Development Goals* for the 2013 Annual Ministerial Review conducted by the Economic and Social Council of the United Nations. UNIDO also helped direct work on a concept paper on South-South cooperation and triangular cooperation to be discussed in July 2014.

Geneva

Geneva is home to 22 international organizations as well as 24 Permanent Missions to UNIDO, for which its Geneva Office performs a crucial liaison function. During the year, the Office participated in over 120 conferences, events, workshops and seminars organized by the international community and supported approximately 80 missions undertaken by UNIDO staff to attend multilateral meetings and hold discussions with sister agencies. Contacts with civil society, academia and the private sector were maintained through participation in many events, including the International Geneva Luncheon Series, a forum for select senior-level managers, communications and policy practitioners to discuss current challenges in the multilateral system.

Through its Geneva Office, UNIDO provided inputs for a number of inter-agency papers and joint documents, including comments on the *Guidelines for the Third United Nations Conference on Housing and Sustainable Urban Development (HABITAT III)*, to take place in 2016. It also contributed to four environmental side events organized during the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions, held in

May, on green industries, e-waste, chemicals and waste management and national implementation plans. In June, UNIDO had an opportunity to publicize its energy-related activities during the Innovation Fair, organized in Geneva by the United Nations Department of Economic and Social Affairs.

At the Fourth Global Review of Aid for Trade: "Connecting to value chains", held at the World Trade Organization in Geneva, UNIDO co-organized a side event entitled "From standards compliance to shared value: making value chains meet development challenges".

Brussels



Kandeh K. Yumkella, former Director General of UNIDO (l.) and Janez Potočnik, Commissioner for the Environment (r.) sign an EU-UNIDO joint statement on environment and resource efficiency in Brussels in April.

The year under review witnessed a deepening and broadening of the partnership between UNIDO and European Union (EU) institutions. The value of funding agreements signed in 2013 between UNIDO and EU institutions contributed to the record level of funds mobilized (including future payments due under signed agreements) in the reporting period. High-level policy dialogues ensured that UNIDO's role and competencies in agribusiness, SME development, sustainable energy, youth employment, green industry and resource efficiency were reflected in a range of documents and joint statements.

In April, an EU-UNIDO joint statement was signed with Commissioner Potočnik to foster cooperation on green industry, resource efficiency and the environment. Later in the month, the Director General was keynote speaker at an EU workshop in Brussels on "European agribusiness in Africa: opportunities and challenges". The workshop concluded with a joint statement advocating a stronger collaboration between the two organizations in the area of agribusiness and an alignment of the AIDA Initiative and the Comprehensive Africa Agriculture Development Programme.

In June, the Director General participated in a meeting in Brussels of the European Resource Efficiency Platform, of which UNIDO is a member, that approved the "Manifesto for a Resource Efficient Europe", a major policy document to boost resource efficiency.

Cooperation with other international players

During the year under review, 76 non-governmental organizations enjoyed consultative status with UNIDO, including two recent additions to the UNIDO network: the AVSI Foundation and the Center for Global Dialogue and Cooperation.

Partners with whom the Organization cooperated extensively during the year included the World Bank, the African Development Bank, the Asian Development Bank, the Inter-American Development Bank, the African Union, the Secretariat of the Association of Southeast Asian Nations (ASEAN), the International Chamber of Commerce, the International Finance Corporation, the Latin American and Caribbean Economic System and the League of Arab States, to name a few. UNIDO entered into a number of partnerships that should herald the way towards greater efficiency in its delivery of technical assistance. Since most of UNIDO's projects and programmes benefit from effective partnerships, examples of UNIDO's cooperation with other international players can be found throughout this *Annual Report*.

Within its priority theme of poverty reduction, UNIDO was invited by *World Leather*, a leading magazine for the leather industry, to be part of the jury to

select the tannery of the year for 2013. The International Union of Leather Technologists and Chemists called on UNIDO for support in the preparation of technical guidelines for environmental protection aspects for the world leather industry based on experiences in different countries.

UNIDO has been working with the Global Food Safety Initiative (GFSI) and its Global Markets Protocol, established to facilitate sourcing from less developed suppliers and address conformity assessment issues. Two new joint projects were under way in 2013: a sustainable supplier development programme to enable clusters of suppliers in Malaysia to gain access to profitable new markets, and technical support to small food suppliers and national institutions for the implementation of the GFSI Food Safety Protocol in Southern Africa. GFSI was also involved in the first meeting of the Global Food Safety Partnership, organized by UNIDO in October in Vienna. A preparatory meeting brought together 15 experts from organizations and companies, including the World Bank, the International Finance Corporation, GFSI, Coca-Cola Company, Cargill Incorporated and Michigan State University. UNIDO experts presented an overview of lessons learned in implementing the protocol as part of the Organization's capacity-building programme in Egypt, Malaysia and Zambia.

UNIDO's Food Safety Alert Rapid Response Facility serves food production systems in domestic, regional and international markets. Established within the framework of cooperation with the Directorate General for Health and Consumer Protection of the European Commission, the facility was introduced on a pilot basis in Gambia, Ghana, Guinea, Sierra Leone and Togo. Other countries with an expressed need to strengthen sanitary controls for international and regional trade will also benefit from the facility. At a regional level, the facility now provides support to the African Union Commission through its affiliate institution, the Interafrican Bureau for Animal Resources, for the establishment of an Africa-wide rapid food and feed alert mechanism and an African Union food safety management coordination mechanism.

In June, the concept for a pilot trade capacity-building project focusing on standardization, metrology, testing and quality infrastructure was approved for implementation and funding by UNIDO and the Economic Cooperation Organization, an intergovernmental organization involving seven Asian and three Eurasian countries.

Under the umbrella of its trade capacity-building activities, UNIDO cooperated with the Gulf Organization for Industrial Consulting in offering training on competitiveness and reviewed methodology for measuring national and sector competitiveness.

In June, UNIDO took part in a workshop organized by OECD entitled "Making regional value chains happen in the Western Balkans". A proposed memorandum of understanding between UNIDO and OECD will define the contribution of each organization within Europe and Central Asia.

A partnership agreement was signed with IC Publications, an international publishing house focusing on business, politics and economics in Africa, while an agreement is under consideration with the International Center for Promotion of Enterprises in Slovenia to formalize cooperation that began in 1988.

Within its priority theme of energy and environment, UNIDO entered into a partnership with the Government of Austria and the East African Community on the establishment of the East African Centre for Renewable Energy and Energy Efficiency. The next phase of the Centre was secured through a partnership with the Austrian Development Agency and the European Commission's Joint Research Centre. Under its global network of sustainable energy centres, UNIDO is assisting various regional economic communities in the establishment and operation of regional centres to promote inclusive and sustainable industrial development. Current partnerships include the Caribbean Community, the East African Community, the Economic Community of West African States, the Secretariat of the Pacific Community and the Southern African Development Community.

UNIDO is responding to requests from the Alliance of Small Island States for a regional centre covering island countries in Africa, the Caribbean, the Indian Ocean and the Pacific. Early in the year, UNIDO signed a memorandum of cooperation with five international organizations as strategic partners to facilitate the streamlining of project design and implementation in the field of energy, namely the Austrian Energy Agency, the Regional Centre for Renewable Energy and Energy Efficiency of the Economic Community of West African States (ECOWAS), the Energy and Resources Institute, the International Institute for Applied Systems Analysis and the Renewable Energy and Energy Efficiency Partnership.

A workshop that took place in New York in December was one of many events organized by UNIDO during the year under the umbrella of its Green Industry Initiative. Participants looked at, and validated, the findings of a partnership between UNIDO and the Global Green Growth Institute on green growth and employment generation. The final report focuses on five country studies—Brazil, Germany, Indonesia, the Republic of Korea and South Africa—that vary in terms of region and income level. Another useful partnership involved the Economic Research Institute for ASEAN and East Asia and the Institute of Developing Economies of the Japan External Trade Organization. The three organizations developed a methodology for the assessment of industrial subsectors that takes into account not only the economic potential of those subsectors, but also environmental and social dimensions.

Cooperation with industry and the private sector

Clusters and business linkages

Micro, small and medium enterprises (MSMEs) in developing countries are often locked into uncompetitive production patterns and unable to approach dynamic business partners that could bring in new expertise and know-how. UNIDO helps build sustainable linkages between small enterprises, their larger-scale business partners and support institutions that will boost the development of a competitive private sector and contribute to poverty reduction. UNIDO's current focus is on MSME networks, clusters and consortia, responsible enterprise development and the sustainability of supply chains. A second website was launched during the year to support the integration of farms and SMEs into the supply chain (www.farmfork.org).

A new project with an estimated budget of 5 million Swiss francs, funded by the State Secretariat for Economic Affairs (SECO) of the Swiss Government, has been put in place in Tunisia to improve the performance, market access and socio-economic conditions of the harissa, Djebba fig and cactus/prickly pear value chains

(see also chapter 3, under “Inclusive development”). The project supports the country's fruit and vegetables export strategy, launched in 2011, as well as its national agro-food development programme, one of the most important sectors in terms of employment and gross domestic product. A twin project in Morocco involves the argan oil and prickly pear value chains.

Other key projects launched during the year include a Luxembourg-funded project in Senegal and another in Myanmar funded by Italy that are focusing on local economic development, youth employment and MSME networks. A number of recently formulated projects involve creative clusters in Sub-Mediterranean countries funded by the EU; a public-private partnership for a sustainable and inclusive coffee supply chain with Illy Caffè in Ethiopia funded by the Common Fund



With a helping hand from UNIDO, Pakistani mango producers are now in a position to access international retail markets. Would-be exporters who now comply with EU quality standards were put in touch with retailers in France, the Netherlands and the United Kingdom under a €9.5 million EU-funded programme. In June and July, ASDA, a Walmart subsidiary in the United Kingdom, sold around 43,000 boxes of mangoes over a period of six weeks, representing the first link between Pakistani producers and a major global retailer, which should boost employment and wages in rural communities. Similar export contracts have been established with Asian retailers. ■

for Commodities and Italy; local economic development in South Africa funded by SECO; and a project with India's Automotive Components Manufacturers Association to support the Indian automotive industry.

Two papers relating to the social housing value chain in El Salvador were issued during the year: "Supply chain diagnostics and systematization of the UNIDO model in El Salvador" and "Creating productive and sustainable urban communities in El Salvador".

Retail partnerships, public-private partnerships and corporate social responsibility

In July, members of the Global Social Compliance Programme (GSCP) of the Consumer Goods Forum, a cross-industry platform that monitors working conditions and environmental requirements in the global supply chain, met in Vienna to discuss with UNIDO ways of strengthening cooperation. Participants were given updates of current projects, including the partnership between UNIDO's Responsible Entrepreneur Achievement Programme and the GSCP on capacity-building with small suppliers around the world. Also discussed was the programme's work on management systems handbooks for suppliers, the acceptance of its tools and benchmarking process by major organizations, the development of models for environmental stewardship in the supply chain and a review of the future strategy. A pilot will be launched shortly with major retailers such as Switzerland's Migros and the United States' Walmart, Best Buy Co., Inc. and others.

In September, UNIDO signed a cooperation agreement with the German Engineering Association to support agribusiness in developing countries. UNIDO currently partners with a large number of major industrial firms on a range of different projects. These include partnerships with Scania, a global producer of trucks, buses and engines, on skills development in agricultural machinery in Iraq, and with Schneider Electric, on ways to enhance the productivity of rural African micro-industries and businesses through a clean, innovative and standardized micro-power plant.

As part of its Sustainable Supplier Development Programme, UNIDO launched a joint programme in January with Japan's largest retailer, AEON, to increase

safe and sustainable sourcing and business linkages between the company and its suppliers in Malaysia. The focus of the programme will be on food safety requirements, and participants will undergo a series of training and mentoring sessions to implement effective food safety systems in line with a programme developed by the GFSI Global Market Protocol. Within the framework of UNIDO's successful partnership with METRO Group, training courses are being offered to familiarize food supply staff with the internationally recognized requirements of the Protocol. Individual coaching conducted at the suppliers' plants has brought about improvements in hygiene, food safety and quality. The first pilot project involves 20 suppliers in and around Moscow, but will eventually be extended to other regions of the Russian Federation.

A memorandum of understanding was signed between UNIDO and DNV GL, a global ship and offshore classification society, for joint projects to promote water management best practices, in particular in Africa. UNIDO and DNV GL will jointly develop a tool to assist small and medium enterprises in developing countries to evaluate their water footprint in restricted stages of a product life cycle. In December, UNIDO signed an agreement with Royal Philips NV to study the social and economic impact of a new generation of solar-powered LED (light-emitting diode) area lighting being installed in off-grid communities in Cabo Verde. Under the agreement, one thousand solar powered LED community light centres will be installed in Africa by 2015.

Clusters of toy suppliers in China are benefiting from a public-private partnership with the CARE Foundation of the International Council of Toy Industries that includes Hasbro, NBCUniversal and the Walt Disney Company. Under a public-private partnership between the Bangladeshi food company PRAN, Sweden's Tetra Laval, UNIDO and the Swedish International Development Cooperation Agency, support and training provided to managers and dairy farmers in Bangladesh will lead to an increase in milk processing.

UNIDO is working with Baltika Breweries, the Russian Federation's largest beer company, Carlsberg and the Danish Ministry of the Environment on environmental projects in the Russian Federation related to water conservation, agriculture and climate change. The first public-private partnership of its kind in the

Over the past four decades, UNIDO has played the role of matchmaker between local suppliers and subcontractors on the one side and global buyers of materials, goods or services on the other. Its 25 operational subcontracting and partnership exchanges (SPX) have helped countless enterprises in developing countries take advantage of globalization by benchmarking their performance against international standards and by improving their competitive position through upgrading, finance and international promotion with joint-venture partners. In 2013, UNIDO set up a fourth Enterprise Development Centre in Basra, Iraq, in addition to existing centres in Baghdad, Erbil and Thi-Qar, and began or continued preparations for new SPX centres in Cameroon, China, Congo, Mozambique, Pakistan and Uzbekistan. UNIDO also offered training on supplier benchmarking and supplier profiling in China, Iraq, Kenya, Mozambique, Pakistan, Senegal and South Africa.

In order to give greater visibility to its SPX network, UNIDO is seeking a strategic partnership with the world's largest industrial fair in Hannover, Germany. It continues to cooperate with another international player, the MIDEST International Industrial Fair that is a leading industrial subcontracting exhibition and key platform for international suppliers of industrial subcontracting. A global SPX meeting took place in November in Paris during the MIDEST 2013 meeting. The new SPX Management Information System was further refined and installed and is now an important tool in the day-to-day work of UNIDO's SPX centres. ■



country, it represents a new way of thinking about environmental sustainability. A team of experts began work in September to inspect production sites and adjacent areas in preparation for joint projects.

A recent UNIDO publication entitled *The UNIDO Approach to Sustainable Supplier Development: Promoting CSR for SMEs in a Global Supply Chain Context* describes ways in which UNIDO has successfully engaged SMEs in the corporate social responsibility (CSR) debate and has helped them adapt CSR implementation and reporting requirements to their own particular circumstances and adopt more responsible business practices.

CSR and private standards are indispensable for Turkey's textile industry to join global supply chains. Within the framework of the development and the private-sector window of the Millennium Development Goals Achievement Fund, UNIDO has initiated a constructive dialogue with key market players such as Marks & Spencer, Nike, Inc., Otto Group, H & M AB and Li & Fung Limited to develop a support programme for SME suppliers based on the REAP methodology. A public-private partnership is currently under negotiation between Li & Fung Limited and textile suppliers in Turkey as part of UNIDO cooperation with GSCP.

Cooperation with academia

A large number of UNIDO projects and programmes call on the support of academic institutions to complement its own expertise. Similarly, UNIDO is regularly invited by universities and research institutes to contribute to their initiatives. The following paragraphs highlight a few examples of UNIDO's cooperation with academia during the year under review.

The UNIDO Institute for Capacity Development business model is built on networking with partners to deliver activities, thereby reducing costs, increasing the number of events, contributing to the development of individual skills and fostering the exchange of state-of-the-art knowledge and expertise. An e-learning course organized by UNIDO during the year, in collaboration with the Polytechnic University of Milan, covered solar thermal energy, small-scale hydropower, biomass and geothermal energy.



The summer course “Green Industry: Pathways towards the Industry of the Future” provided 25 young professionals and researchers from the field of green industrial development with the opportunity to learn from UNIDO experts, senior policymakers and internationally renowned scholars how to turn the concept of green industry into practice.

Once again, the UNIDO Institute cooperated with the Central European University in Budapest to host a course in July on “Green Industry: Pathways towards the Industry of the Future”, which offered participants an opportunity to improve industry’s environmental performance and to put the concept of Green Industry into practice.

In May, UNIDO and the Mount Carmel Training Centre in Haifa, Israel, delivered a three-week training programme on the empowerment of women through agribusiness in Africa for the benefit of 30 participants from East Africa. Additionally, public officials, environmentalists and policymakers from 19 developing countries took part in a professional development course on “Green Economy: policy measures and implementation of green growth” at the Weitz Centre for Development Studies in Rehovot, Israel, in August.

In September, the UNIDO Institute cooperated with the University of Bari “Aldo Moro”, to hold an international workshop in Bari, Italy, on the economics of global interactions. The meeting brought together over 50 scholars from Africa, Asia and the Pacific, Europe and North America. It followed the launch of a joint research project between UNIDO and the Aldo Moro University on the role of foreign and diaspora investors in creating industrial linkages for African development. The research project is part of the UNIDO pilot initiative “Challenge Fund for Strategic Thematic Research” and will provide new evidence

on the nature and density of linkages between domestic and foreign firms in a wide sample of African countries.

UNIDO worked hand in hand with the University of California at Berkeley in the United States and the University of Cambridge in the United Kingdom on two of a series of publications on the future of manufacturing. The first, *21st Century Manufacturing*, was written in collaboration with the Berkeley Roundtable on the International Economy and the second, *Emerging Trends In Global Manufacturing Industries*, in collaboration with Cambridge University’s Institute for Manufacturing. Cooperation continued during the year with the United Kingdom’s University of Manchester on the development of a tool for institutional capacity development and cluster policy taxonomy, and UNIDO continued to offer internship and trainee programmes to students at the University’s Institute for Development Policy and Management. A seminar on micro, small and medium enterprises and sustainable and inclusive development was organized by UNIDO in October in cooperation with the Political Economy Research Institute of the University of Massachusetts, United States.

Representatives of Mozambique’s National Industry Directorate and SME Development Agency undertook study tours to Portugal organized by UNIDO in cooperation with the Nova School of Business. Portuguese-speakers were also able to attend a training and study course on SME management and development organized by UNIDO in cooperation with Israel’s Galilee International Management Institute. Israel’s Tel Aviv University and the University of Gothenburg in Sweden joined UNIDO and the International Chamber of Commerce in designing a global survey on barriers to green industry implementation, to be carried out in mid-2014.

Cooperation between UNIDO, the United Nations University-Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT) and the African Technology Policy Studies Network led to a conference in June in Nairobi on green technology and green industry in Africa. Participants discussed the results of their recent research on the drivers that facilitate the diffusion of green technology in Africa. Based on an innovative assessment methodology developed in cooperation with UNU-MERIT, the research focused both on catalysts and barriers in the field of renewable

energy and energy efficiency in Kenya and Nigeria, with particular reference to renewable energy technologies such as solar, biomass, hydro and wind.

Other partnerships during the year involved the Copenhagen Business School, the European Institute for Public Administration in Barcelona, Spain, the Vienna-based Sustainable Europe Research Institute, and the Indian Institute of Technology. UNIDO is also in partnership with Columbia University, United States, and the University of Cabo Verde, as well as the ECOWAS Centre for Renewable Energy and Energy Efficiency on a fellowship in the field of sustainable energy solutions.

South-South and triangular cooperation

UNIDO is currently working on a new strategy, to be finalized in 2014, that will reinforce its role as an advocate of South-South and triangular cooperation, and as a knowledge broker and partnership builder. In the meantime, the year under review witnessed a number of events and initiatives that underscored UNIDO's commitment to the principle of South-South cooperation as a crucial tool for the development of the world's poorer countries as well as those that are at a more advanced stage of industrial development.

April saw the establishment of the UNIDO-China Food Quality, Safety and Testing Training Facility. Under a two-year project that ended in June, the Dali Comprehensive Technical and Inspection Centre in China has been sharing technical knowledge and experience with laboratory technicians from ASEAN countries through training in the testing of milk products. It also provided training on the testing and analysis of food and dairy products as well as international laboratory accreditation to local laboratory technicians from China's less developed western provinces. Over 40 trainees from the public and private sector in 14 African and Asia and the Pacific countries attended training sessions, as well as participants from nine provinces across China. The training was well received by participants and led to tangible improvements in the capacity of laboratories to analyse food and dairy products as well as heightened food safety and trade

capacity in the region. There has been considerable interest in upcoming training programmes.

In May, the UNIDO Centre for South-South Industrial Cooperation in New Delhi moved into its second phase. The main purpose of the Centre is to deepen South-South industrial cooperation between the host country and developing countries through technical cooperation projects and programmes and by acting as a broker between interested parties. South-South cooperation is particularly effective in the area of renewable energy. Ongoing activities include a project on solar micro-utility enterprises for promoting rural energy and productive uses in Bangladesh. Work began in September on a new project to support green industrial development in Ghana, where the Republic of Korea is providing €1.28 million as well as expertise to strengthen the technical and commercial capacity of biogas companies. UNIDO and the Republic of Korea's Pohang University of Science and Technology will work as joint executing agencies.

During the 20th Conference of African Ministers of Industry in June, UNIDO organized a round table event entitled *South-South Industrial Cooperation for African Industrialization in the post-2015 Development Agenda*. The event enhanced awareness of the role that South-South industrial cooperation can play both in achieving Africa's industrialization goals and as part of the emerging post-2015 Development Agenda.

In September, UNIDO and the South-South Global Assets and Technology Exchange held a forum on South-South cooperation as part of the China (Shanghai) International Technology Fair. The success of the event reflected the good partnership that exists between UNIDO and other United Nations institutions in the area of South-South cooperation.

Following its hosting of the 2012 Global South-South Development Expo, UNIDO also played an active role in this year's event, organized in October-November by UNEP in Nairobi. The UNIDO solution forum on clean technologies for green industry showcased sustainable and replicable solutions based on Southern-grown technologies as well as South-South, North-South-South triangular and public-private partnerships.

Other South-South partnerships brokered by UNIDO during the year include a memorandum of understanding between the Darfur Reconstruction and Development Fund and ITAIPU Binacional, one of the world's largest generators of renewable energy and a joint enterprise of

Brazil and Paraguay. The Government of Indonesia hosted a ten-day landing site management training course for staff of Sudan's Red Sea State Marine Fishery Administration and sent fish harvest trainers to Port Sudan to provide training to fishery sector workers. A study tour to Thailand enabled laboratory experts from Bangladesh to learn about control activities in one of the largest exporters of shrimps to the European Union and the United States. UNIDO's experience in Morocco and Tunisia was extended to other African exporting countries through training, study tours and awareness seminars. The Organization has also encouraged an exchange of experiences on best practices in countries of Latin America and the Caribbean using its expertise gained in particular in Ecuador and Peru.

Since the launch in 2008 of a GEF-funded project in China to dispose of obsolete persistent organic pollutants and other wastes, close to 5,000 tons of pesticide wastes have been identified, packaged, transported and disposed of in an environmentally sound manner. To maximize the environmental

benefits of the project, the experience gained is being shared with Egypt and South Africa. Workshops held at the beginning of the year looked at the status of waste management in both countries and allowed participants to share experiences.

Trainers from a vocational training centre in Bouaké, Côte d'Ivoire, sharpened their skills during study tours to the Moroccan vocational training centre (Office de la formation professionnelle et de la promotion du travail) in Casablanca. A project was launched on guidelines for developing green industrial zones along the new silk road in cooperation with partners in China, Japan, Kazakhstan and the Republic of Korea that will promote Eurasian interregional cooperation and inclusive green industrial growth. The Egyptian Traceability Centre for Agro-Industrial Exports is providing distance learning and support to the Philippines to build local capacity and develop food cluster and food traceability projects, while under another UNIDO project in Egypt, both Brazil and Serbia will benefit from technology transfer and trade promotion in the area of medicinal and aromatic plants.

The International Knowledge Bank is a mechanism to promote the exchange of knowledge and expertise for advancing industrial and productive capacities in Latin America and the Caribbean. It fosters and coordinates cooperation both within and beyond the region, creating development opportunities in UNIDO's three thematic priority areas. During the year under review, 22 countries—16 from the region, 5 European and 1 African country—were involved in 10 cooperation activities. The Bank works with 90 partner institutions on three continents and has 14 regional focal points.

Partnership activities undertaken during the year with companies and institutions outside the region included assistance extended in February by CONA, Austria, to the

Ministry of Industry and Production of Paraguay on solar dehydration for fruits, grains and medical herbs; by ZICLA, a company specializing in the transformation of waste into new products in Barcelona, Spain, to the Cleaner Production Centre in Medellín, Colombia in June; and by Futuribles International, a Paris-based non-profit organization network on future studies to the National Institute of Industrial Technology, Argentina, on training in technological progress, development and technical innovation.

Within the region, the Environmental Control Agency of Colombia cooperated with INEN, Ecuador's standardization institute, on waste management; the National Agricultural Technology Institute of Argentina helped CITEvid, a centre

for technological innovation in the wine sector attached to the Ministry of Production of Peru, on ways to improve productivity; the Chilean leather and footwear federation FEDECCAL F.G. transferred best production practices in the tannery industry to CALTU, Ecuador and provided training in sales strategies and technological innovation; CONA, El Salvador assisted POECUADOR Ecuador in solar drying in the agro-industrial sector; Colombia provided expertise to the Ministry of Industry of Ecuador in the design of ovens for the sugar industry; while Mexican experts from Siliker Mexico offered training to the National Institute of Industrial Technology of Argentina on the improved handling of food products. ■



SOLUTIONS FOR SHARED PROSPERITY

► Poverty is a complex phenomenon with dimensions that go far beyond low income levels. Finding the right response to each country's individual needs calls for a concerted effort across the spectrum of development cooperation. Some of the essential tools needed to fight poverty fall fairly and squarely within the mandate of UNIDO: sound policy and good governance, investment promotion, technological know-how and training. This chapter of the *Annual Report* describes UNIDO's efforts to help governments introduce the policies that will encourage industrial development; to secure a flow of investments to developing countries; to instill an entrepreneurial spirit or teach other skills to enable people to achieve their productive potential; and to introduce the technologies that will permit industries in the developing world to move forward.

Technology and development

Investing in development

During the year, UNIDO completed a diagnostic study of the performance of the investment promotion agencies in countries participating in the Africa Investment Promotion Agency Network (AfrIPANet), a programme developed in 2001 in collaboration with the African Union. The programme relies on UNIDO surveys to formulate a strategy for investment promotion agencies to attract more foreign direct investment. A first round of training modules included stakeholder consensus-building and the mobilization of private sector institutions as partners; analytical methods; the improvement of regulatory and policy frameworks; investor targeting; investment facilitation; sector analysis using survey and benchmark data; and investment opportunities and partnerships with local enterprises.

UNIDO's Computer Model for Feasibility Analysis and Reporting (COMFAR) is a useful tool for public and private stakeholders seeking pre-investment advice. During the year, UNIDO organized 30 workshops on the financial analysis of investment project scenarios and public-private partnership projects, and introduced certification schemes for trainers. COMFAR is a key element of a three-year project, launched in June, on capacity-building in project formulation and evaluation in Angola under a partnership between UNIDO and the multinational oil company, Chevron.

Through its Investment and Technology Promotion Office in Bahrain, UNIDO helped restructure the Ministry of Investment of Sudan, creating an Enterprise Development and Investment Promotion Centre to stimulate domestic investment for leveraging foreign direct investment. The centre has produced around 1,000 entrepreneurs and trained 250 experts on enterprise development and investment promotion. It has also developed an entrepreneurship school curriculum in cooperation with the Ministry of Education.

An ongoing investment promotion technical cooperation programme in Uganda is assisting the Uganda Investment Authority to attract greater flows of investment, in particular from member countries of the Cooperation Council for the Arab States of the Gulf. One component of the project involved the capacity-building

of staff of the Uganda Investment Authority. The training given covered the same subjects as the Sudan programme, with the addition of a delegate programme with ITPO Bahrain and preparation for an investment forum with the Cooperation Council for the Arab States of the Gulf. Under the investment promotion component of a similar programme in Congo, work was recently completed on a road map for the establishment of a new investment promotion agency.

UNIDO's Investment Monitoring Platform is an interactive online investment software that enables users to monitor investment trends, opportunities and impact. The Investment Monitoring Platform in Africa contains data from more than 7,000 companies in 19 countries and provides a unique opportunity for research and policy advice in an empirically sound manner. In July, UNIDO and the Federal Ministry of Industry, Trade and Investment in Nigeria, in collaboration with other stakeholders, launched the platform in Nigeria.

Investing in technology

The large disparities in income and social development between developed and developing countries mirror the differences in their industrial development and access to new technology. Investment in technology contributes to continuous productivity growth, innovation and the potential for inclusive and sustainable industrial development.

Since it became a specialized agency in 1985, UNIDO's network of Investment and Technology Promotion Offices (ITPOs) has contributed to reducing development imbalances by brokering investment and technology agreements between industrialized and developing countries and countries with economies in transition. Located in a number of Asian and European countries, the specialized network of UNIDO ITPOs opens up opportunities for investors and technology suppliers to identify potential partners and offers unique services to both entrepreneurs and business institutions. The ITPOs work together with chambers of commerce, entrepreneurs, government ministries, civil society and academia in their respective host countries. Heads of ITPOs attend a yearly meeting at UNIDO Headquarters to shape a common action plan for the coming years.

In June, ITPO Tokyo launched a new advisory programme in cooperation with the Ministry of Economy, Trade and Industry of Japan to help the business communities in Algeria, Ethiopia and Mozambique to attract green and responsible investment and technology from Japan in support of sustainable industrial development and economic growth. The programme capitalizes on the know-how and expertise of ITPO Tokyo and strengthens its outreach and service capacity for the three countries. ITPO Tokyo was actively involved in the organization of TICAD V in July and held a seminar on investment and technology promotion in Africa in cooperation with the Japan External Trade Organization.

ITPO Bahrain co-organized a workshop on creating an enabling environment for entrepreneurship and economic development through innovation and e-government as part of a two-day United Nations Public Service Forum in June. The forum followed the commemoration in Manama of United Nations Public Service Day, which celebrates the value of public service to the community, highlights its contribution to the development process, recognizes the work of public servants and encourages young people to pursue careers in the public sector. A green lifestyle was the theme of the UNIDO pavilion at the annual Bahrain International Garden Show, held in March under the patronage of the King of Bahrain and co-organized by ITPO Bahrain in cooperation with the National Initiative for Agricultural Development. The event proposed a more sustainable environment and economic development through policy dialogue and promoted the application of innovative technologies and investment in the greening of industry.

In collaboration with the Italian Ministry of Foreign Affairs, ITPO Italy organized the third meeting of the steering committee for the project "Enhancing investments to Iraq through industrial zone development". The meeting was held at the Italian Ministry of Foreign Affairs and was attended by high-level Iraqi institutional counterparts, representatives from Basra, Kurdistan and Najaf, the Embassy of Iraq in Italy, UNIDO experts involved in the project and the Iraq Task Force of the Italian Development Cooperation, the donor organization for the project. For the past ten years, UNIDO and the Italian Development Cooperation have worked together to strengthen the technical and

managerial skills of Ethiopia's tanneries and to develop SMEs and support the Leather Industry Development Institute in the country. In May, ITPO Italy helped organize an Ethiopia-Italy business forum led by the Minister of Industry of Ethiopia that outlined the economic and business opportunities in the leather sector as well as other sectors.

ITPO Republic of Korea spearheaded a partnership between UNIDO and the country's Trade-Investment Promotion Agency that was signed in Vienna in March. The agreement paves the way for future cooperation and collaboration on joint programmes and projects and other activities in line with UNIDO's thematic priorities, in particular in areas such as export and investment promotion and trade facilitation and logistics.

During the first Shanghai International Technology Fair in May, ITPO China (Shanghai) helped organize a UNIDO Day and supported various workshops. The UNIDO Day featured technology as the key to sustainable industrial development.

The UNIDO Centre for International Industrial Cooperation in Moscow completed a project to modernize Russian food suppliers in cooperation with METRO Group. The project suppliers were able to increase significantly the level of compliance with international standards of quality and safety of food products, with 71 per cent of suppliers passing the final assessment.

One of nine UNIDO international technology centres, the International Center for the Advancement of Manufacturing Technology (ICAMT) was established in cooperation with the Government of India in 1999 to encourage manufacturing technologies and innovations and monitor technological trends. During the year, UNIDO ICAMT continued to implement three programmes in India on technology in the machine tools and foundry industries, as well as the upgrading of companies in the plastics manufacturing industry. UNIDO provided training on intellectual property rights and conducted audits in 13 units in the machine tools sector and six in the plastic sector. A workshop on intellectual property rights for the foundry industry and academia was held in Belgaum, India, at the end of December. A similar training course for scientists from the Central Manufacturing Technology Institute took place at the ICAMT in Bangalore, India in July.

In May, UNIDO ICAMT launched a new compendium of green manufacturing technologies in the machine tools, plastics and foundry sectors featuring case studies and entitled *Green Shoots—Manufacturing turning a new leaf*.

While the main thrust of UNIDO's technology portfolio remained the transfer and upgrading of technology, growing attention was paid to innovation and emerging technologies such as bio- and nanotechnology. This was reflected in the establishment last year of the International Centre for Nanotechnology in Tehran. The Centre's active participation in a number of key conferences on water, wastewater and nanotechnology, including the Conference on Emerging Ethical Issues in Science and Technology organized by the United Nations Educational, Scientific and Cultural Organization in Bratislava in May, have helped align its activities with the priorities of national and international stakeholders.

Agribusiness

UNIDO's agribusiness and rural entrepreneurship development programme promotes sustainable and inclusive business opportunities for the rural poor through agribusiness and entrepreneurship development. It seeks to add value to agricultural commodities at various points along the value chain, linking input providers, farmers, traders, processors, providers of logistic services, distributors and retailers.

As part of the African Agribusiness and Agro-industries Development Initiative (3ADI) adopted three years ago in Nigeria, UNIDO has been working with the Food and Agriculture Organization of the United Nations (FAO) in supporting the East African Community in its agri-enterprises and agro-industries development programme covering Burundi, Kenya, Rwanda, Uganda and the United Republic of Tanzania. FAO and UNIDO have jointly supported value-chain development activities in Burkina Faso, Comoros, the Democratic Republic of the Congo, Ghana, Liberia, Madagascar, Nigeria, Rwanda, Sierra Leone, Sudan and the United Republic of Tanzania, where a five-day workshop on agribusiness investment promotion took place in October. The UNIDO-FAO workshop was planned in the context of the 3ADI and Africa Investment Promotion Agency Network



Milk-processing plant in the United Republic of Tanzania.

(AfrIPANet) programmes, both of which place strong emphasis on investment promotion in the agribusiness sector.

Ongoing assistance to Lebanon's packaging industry yielded positive results during the year. Libanpak, set up in 2008 with the support of UNIDO, helped improve packaging and labeling in 80 Lebanese companies to comply with international standards, thereby boosting sales and exports. A competition run by Libanpak presents awards for the best student packaging designs, opening doors to future employment in the packaging industry. The Lebanon Student StarPack Contest is an important landmark in the academic year for university students both in Lebanon and surrounding countries. In June, UNIDO organized a packaging technology workshop in Rwanda following the signing of a memorandum of understanding between UNIDO and Ipack-Ima, Italy's leading organizer of exhibitions for the processing and packaging technology industry. A similar workshop was held in Amman to introduce a new project that will pave the way for a packaging centre in Jordan. UNIDO, the East African Community and Ipack-Ima will stage a major processing and packaging exhibition in Nairobi in September 2014.

Following the successful completion of a project in Timor-Leste to develop the bamboo sector, UNIDO handed over to the Government the newly equipped Skills Development Centre for Bamboo. The Bamboo Centre has been developed as an industrial unit for the production of bamboo laminates and products,

and as a centre for the demonstration of viable industrial technologies for bamboo processing that offers training and skill development for apprentices from all over the country.

UNIDO is formulating master plans for six staple crop processing zones in Nigeria. They include value-chain analysis, a spatial land use plan, an infrastructure plan, a sustainable institutional structure, a legal and management framework and a phased implementation plan for stakeholders, investors and project partners. The project is self-funded and supports the country's new agricultural transformation agenda. The World Bank and the African Development Bank will be investing in these staple crop processing zones.

More than 100 global agriculture machinery manufacturers, government officials and other industry leaders participated in the Agrievolution Alliance Summit in New Delhi in December to consider the issue of global food security and the farm machinery industry. UNIDO put forward a case for greater farm mechanization as a way to reduce poverty, increase income and life expectancy and put human capital to better use.

The year under review saw the successful completion of a project in Sudan to develop the capacities of rural fishing communities in the Red Sea State (see chapter 2). Results achieved include the establishment of fishing cooperatives, increased revenue for cooperative members and the construction of three new fish landing sites and associated businesses. The project also set up five small business associations involving 533 women that similarly led to higher incomes and eased their integration into local economies. An estimated 1,570 people benefited directly from the project that was supported by the Government of Canada, while there were a further 6,280 indirect beneficiaries. Canada was the host of the 2013 World Seafood Congress, which opened in St. John's, Newfoundland in September under the theme "Creative Solutions for Global Challenges". The Congress was organized by the International Association of Fish Inspectors with the support of UNIDO and FAO, as well as a number of commercial sponsors.

With high national unemployment, Djibouti has had to absorb some 21,000 refugees from neighbouring countries. Recent studies undertaken by UNIDO on the fishery and salt sectors—areas where refugees tend



Ethiopia's population of 90 million cattle, sheep and goats is one of the world's largest and its highland sheepskins and Bati genuine goatskins enjoy international recognition. At the request of the Government, UNIDO elaborated a blueprint for a programme to upgrade the leather and leather products industry that was launched in 2009 with support from the Government of Italy. As a result of the project, the total value of Ethiopia's exports of leather and leather products has almost doubled in the past six years. There has been a shift from raw material exports towards exports of finished leather, shoes and leather goods. Foreign shoe manufacturers such as ARA of Germany, GEOX of Italy and China's Hua Jian Industrial Holdings Co., Ltd., that recently pledged to invest \$2 billion and create 100,000 jobs over the next ten years, have started subcontracting operations in Ethiopia. The accreditation of laboratory facilities by the South African National Accreditation System, the introduction of an enterprise resource planning system, the application of UNIDO's SME cluster development approach and the creation of a new brand, "Taytu—Made in Ethiopia", are some of the features of the programme that will enable Ethiopia to sell its shoes and leather products in top markets around the world. The project has generated over 5,000 jobs, improving the livelihoods of local communities. ■

to seek employment—resulted in a proposed project to strengthen the capacities of refugees and other vulnerable groups by providing them with skills, technologies and associated training in the fishery and salt sectors. At least 750 unemployed people and other vulnerable groups in neighbouring Somalia were able to sharpen their technical and vocational skills through locally relevant and market-oriented training programmes and the introduction of improved technologies and manufacturing practices.

In the Plurinational State of Bolivia, UNIDO has led the agro-industrial component of a three-year multi-agency programme on nutrition and food security financed by Spain's MDG Achievement Fund. Small community-based food processing plants were established and farmers trained on enterprise management and good manufacturing practices that enable them to comply with food safety and nutritional value norms. Simply but professionally designed and launched, these plants boost income from crops and deliver safe and nutritious supplies to municipal school nutrition programmes.

Through UNIDO, communities of poor cocoa farmers in the Autonomous Region of the North Atlantic of Nicaragua have acquired the skills needed to plant new cocoa plantations, applying a system of agroforestry management. The project will now move on to set up community-operated pre-processing units for quality-controlled fermentation and drying of cocoa and will help processing groups to comply with quality standards while receiving technical support and finance from anchor buyers. The project focuses on building the technical and administrative capacities of selected farmers to set up and run community-owned pre-processing units.

Rural development

While a staggering 75 per cent of the world's poor live in rural areas, policies and resources continue to be biased in favour of urban development. Harnessing the productivity and entrepreneurial potential of rural communities is indispensable in the effort to achieve resilient economic growth and raise people above the poverty line. This is the challenge set out in a brochure, *Promoting Livelihood Security by Adding Value to*



Teaching entrepreneurial skills to villagers in Salima, Malawi.

Local Resources, issued in April. UNIDO's approach to rural development addresses pro-poor value chains, entrepreneurship, vocational and technical training, creative industries and human security through an improvement in livelihoods and the creation of job opportunities. It also gives special emphasis to projects designed primarily for women, young people or displaced persons.

Insights to rural enterprise development was the topic of an expert group meeting held in Vienna in October, which focused on new ways to encourage innovation in rural areas of developing countries. Organized jointly by UNIDO, the Centre for Development Research of the University of Natural Resources and Life Sciences in Vienna and the international humanitarian agency GOAL, the meeting also identified drivers of rural innovation processes that would assist in understanding local development dynamics and made recommendations for the improved design of rural development projects.

A UNIDO project that drew to a close at the end of the year has changed the lives of 25 marginalized rural communities in central Malawi. From virtually no income at all at the start of the project, they now earn some \$500 a month, part of which can be channeled

back into the community to support entrepreneurship, protect against disasters and provide social benefits. Many villagers suffer from infectious diseases and were dependent on relief aid or begging. Training in vocational skills, the introduction of labour-saving technologies for increased productivity, improvements in nutrition and diet and measures to minimize the effects of climate change are some of the ways that have edged rural households in the district of Salima towards greater self-sufficiency.

With the support of the Government of Canada, UNIDO has gone a long way towards improving food security and nutrition in eastern Sudan. The aim of the integrated food security project was to increase revenue through enhanced agricultural and livestock productivity as well as through employment opportunities and community participation in social and economic development and conflict mitigation. An estimated 5,000 village households in the State of Kassala will benefit directly from the project, although many more will profit indirectly through related activities. UNIDO has trained over 100 farmers on improved agricultural practices and supported them with quality seeds, tools and associated inputs. A pipeline programme on developing the soybean value chain will create jobs among youth, in particular in the rural farming areas through soybean value-addition activities. Soybean oil has tremendous potential in the edible oil sector and for biofuel as a green alternative to fossil oil.

SME development and export consortia

A policy for the development of small and medium enterprises (SMEs) in the United Republic of Tanzania was put in place in 2002-2003 with the help of UNIDO. A review ten years later revealed that while the basic tenets of the policy were still valid, specific policy actions were in need of an upgrade. The observations contained in the UNIDO review were confirmed at a stakeholders' workshop led by the Permanent Secretary of the Ministry of Industry and Trade. In a follow-up action, UNIDO is helping to reform the registration processes and procedures. In the spirit of South-South cooperation, the country will be able to draw on experience gained during a similar exercise in

Viet Nam, where registered information on over 809,000 enterprises, including some 165,000 annual financial statements of shareholding companies, are publicly accessible through the national business registration system portal. Enterprises in Viet Nam have so far saved an estimated \$12 million as a result of simplified registration procedures.

A major €10 million EU-funded programme launched in September, of which UNIDO is implementing the €2.2 million technical assistance component, aims to boost competitiveness in Cameroon by transferring know-how to national institutions and improving the productivity and quality of the country's SMEs. The Programme for the Improvement of the Cameroonian Economy Competitiveness covers industrial upgrading, the establishment of a subcontracting and partnership exchange, and strengthening quality infrastructure and business intelligence for industrial competitiveness. It follows an EU-funded pilot programme for industrial upgrading, standardization and quality that was completed in 2012.

A similar project is under way in the Syrian Arab Republic on textile and garment industry value chains, where UNIDO is helping to enhance the quality and quantity of products for local and international markets, in particular markets in the European Economic Area, in order to create higher profitability and increase job opportunities. It also assessed the regulatory framework for industrial development and conducted a survey of business development services based on which it made a variety of recommendations to strengthen the business environment. Training in industrial upgrading was provided for 55 national consultants and eight recent graduates. UNIDO is currently finalizing an IT tool for diagnosing, assessing and benchmarking the performance of SMEs, which will subsequently be validated through a field test.

UNIDO continued during the year to facilitate access by SMEs in the Arab region to national, regional and global value chains. In partnership with relevant institutions in the region, UNIDO helped to build capacities to reduce the rejection of products, particularly in agro-industrial sectors where food safety and sustainability concerns are paramount. In North Africa, UNIDO focused on the opportunities available to local industries for increased trade with the countries of the European Economic Area.

Building competitiveness

Competitiveness and innovation are the keys to economic growth and development. UNIDO's Industrial Upgrading and Modernization Programme contributes to economic growth and facilitates the regional integration of developing countries and economies in transition by increasing the capacities of local industries for the generation of value-added, economic diversification, export growth and employment creation. Encouraged by the results of a pilot programme in Cameroon, the EU allocated €10 million to expand programme activities. Under an agreement signed in August, UNIDO is implementing the technical assistance component of the programme, which aims to improve the competitiveness of local private-sector producers and promote a new corporate culture among local businesses.

The Competitive Industrial Performance Report 2012/2013, entitled *The Industrial Competitiveness of Nations: Looking back, forging ahead*, was launched in September in Moscow. The publication benchmarks the ability of countries to produce and export manufactured goods competitively, indicates whether structural change towards high value-added and technology-intensive industrial sectors has taken place and shows the impact of a country's industrial production on the world market.

In common with other small island States, Cabo Verde had insufficient employment opportunities for its youth, lacked a competitive industrial base and was strongly dependent on remittances and foreign aid. Reforms introduced by the Government to improve the country's business environment have enabled it to rise from 149th position in 2009 to 119th in 2012 in the World Bank's *Doing Business* report, which provides objective measures of business regulations for local firms in 189 economies. As part of the One UN programme for Cabo Verde, UNIDO has helped the country to create the capacities to implement reforms based on a dialogue with the private sector and civil society. A study of the constraints facing businesses led to the formulation of an action plan as part of the government programme on competitiveness. Measures to improve government services to the private sector are already in progress. UNIDO is also improving the quality of advisory and training capacities to meet the needs of MSMEs.

To prepare youth for their future careers in an entrepreneurial society, the country is introducing an entrepreneurship curriculum in secondary education under a project approved in November.

Another project designed to enhance private-sector competitiveness is the EU-funded "Competing with Quality" project in Mozambique, that has both a quality and an SME development component. On the quality side, the establishment of the new metrology laboratory in Zimpeto, inaugurated in September, was an important step towards the creation of a robust quality system. The SME component included training in SME and policy development in Israel, Portugal and the United Republic of Tanzania. UNIDO also developed concept papers on ways to strengthen enterprise advisory centres and set up an SME business incubator.

Over the past three years, UNIDO has helped increase the competitiveness of the non-traditional export sector in Côte d'Ivoire. Under the second phase of an EU-funded multi-agency project, UNIDO was given responsibility for enhancing the competitiveness of exporting enterprises. Within the three value chains identified—manioc, textiles and cashew nuts—UNIDO has created export consortia and is helping upgrade national standards to meet export market standards as well as supporting the accreditation of laboratories. Now in its final phase, the project is concentrating on the adoption of standards and a study on product certification and laboratory accreditation.

Productive capacity-building

Acquiring skills

UNIDO is assisting people, in particular young people, to acquire technical and entrepreneurial skills as a foundation for growth and poverty reduction while fostering a more conducive environment for entrepreneurial initiatives. Two surveys assessing the impact of entrepreneurship education in Angola and Mozambique were conducted during the year in collaboration with two universities in Portugal: the University of Beira Interior in Covilhã and the Catholic University of Portugal in Porto. The results will be

presented at a world conference on entrepreneurship and sustainability to be organized by the Institute for Small Business and Entrepreneurship in Dublin in 2014.

An international workshop on cleaner technology in the leather processing industry took place in Bursa, Turkey in May-June. In addition to acquiring theoretical knowledge of cleaner production methods, participants visited leather factories and treatment plants and attended laboratory sessions. The know-how and skills gained during the workshop are being shared with other staff at the tanneries where they are employed.



The third edition of the *UNIDO Trade Capacity-Building Resource Guide* covers 31 multilateral and regional agencies, including five regional development banks, and provides additional material on six inter-agency cooperation mechanisms. With a sharp focus on emerging dynamic trends, in particular the costs of trading, a value-chain perspective and South-South and triangular cooperation, the 2013 edition increases its relevance in the area of trade-related technical assistance. The compilation of major bilateral and multilateral technical assistance services is expected to increase significantly both the coverage and potential use of the *Guide*. A new feature is an interactive web tool with search functions (www.tcbresourceguide.org). ■

A conference to look at the risks and challenges facing least developed countries in pursuit of green industrial skills for sustainable development took place in Leipzig, Germany, in July. Organized jointly by UNIDO, the German Federal Ministry of Economic Cooperation and Development and WorldSkills International, the conference aimed to increase the employment potential of young people living in deprived areas. The conference was followed by the WorldSkills competition 2013, where hundreds of young people from around the world demonstrated the skills of their respective trades in public and tested themselves against international standards.

A new approach adopted by UNIDO is its Innovation, Development and Entrepreneurship for All methodological framework, or IDEA. Tailor-made to respond to the specific needs of least developed and middle-income countries, IDEA addresses the challenges of youth unemployment and improving conditions for youth in informal employment. Further information on skills development for young people can be found in the section on Youth later in the chapter.

Ensuring quality

UNIDO has produced a second edition of its *Meeting Standards, Winning Markets—Trade Standards Compliance Report*, which looks at the challenges trade standards and international market requirements in the agro-food sector represent for developing countries. The report analyses why the exports of developing countries are frequently rejected at border entry points to major international markets and the financial implications of such rejections, not only by European Union countries and the United States, but also by Australia and Japan. It gives the results of a quality infrastructure survey and a corporate buyers' compliance confidence survey and provides policy guidance and decision-making support to a variety of stakeholders in order to facilitate "smart" trade and compliance capacity-building, while helping exporting developing countries to detect and prevent non-compliance that would negatively affect their exports.

The Organization's efforts to examine compliance with trade standards on a regional basis led to the publication, in collaboration with the Institute of

Developing Economies of the Japanese External Trade Organization, of the *Regional Trade Standards Compliance Report—East Asia 2013*. The report presents an in-depth analysis of import rejections of East Asian agro-food products in major markets, as well as detailed case studies on compliance challenges in agro-food value chains in China and Viet Nam. It was launched in Tokyo in September.

UNIDO is one of 10 inter-agency partners that form the Network on Metrology, Accreditation and Standardization for Developing Countries, the goal of which is to facilitate market access for developing countries through key areas of quality infrastructure. During the year, UNIDO developed a guidance document, *Best Practices in Quality Infrastructure Development*, outlining the contribution of quality infrastructure to economic growth, trade and poverty reduction. UNIDO and the International Trade Centre UNCTAD/WTO will co-host the network's secretariat for the 2014-2015 term.

Under the auspices of its Institute for Capacity Development, UNIDO delivered a regional trade capacity-building training programme for policymakers from Central Asia. The course gave participants a better understanding of economic integration processes, such as the removal of trade barriers or the streamlining of procedures and regulations, and equipped them to explore strategies to improve trade rules, policies and procedures within their respective countries. With financial support from the Ministry of Economy of Poland, the programme consisted of a five-week distance learning course in March and April followed by an eight-day residential course in May on Lake Issyk-Kul in Kyrgyzstan. The programme, held in Russian, targeted participants from government, industry and trade. Some 100 candidates took part in the online course and the 26 most successful contenders were subsequently invited to Issyk-Kul.

In June, UNIDO and the European Union signed a €12 million agreement to boost the competitiveness of Nigerian industry in the non-oil sector. The inception phase of the project began in September. The programme will help develop a national quality policy and upgrade existing quality infrastructure for accreditation, metrology and conformity assessment, the latter with direct private-sector involvement. In the context of the West Africa Quality Programme, experts

from 15 West African countries convened in October in Togo to validate a quality infrastructure scheme prepared with the support of UNIDO. In the south of the continent, a new large-scale project is under development for Swaziland to align the institutional structure of the Swaziland Standards Authority with international norms.

As part of an ongoing project to support the Arab Industrial Development and Mining Organization, UNIDO ran a series of regional workshops to raise awareness of the principles of good governance practices in the development of national quality infrastructure. The first workshop, held in June in Cairo, brought together over 70 representatives of national accreditation, standardization, metrology, quality infrastructure and research bodies. It was followed by similar workshops in Rabat in September and in Dubai in October. The success of the workshops led to the elaboration of guidelines on good governance practices to promote standardization, conformity assessment, quality, metrology and related activities, as well as inspection, auditing, testing, consultancy and training. Available in Arabic, English and French, the guidelines define ethical professional conduct in quality infrastructure, and set out internationally recognized guidelines on ways to avoid unacceptable practices and, where necessary, to correct them.

Under a \$1 million EU-funded capacity-building programme for the Ministry of Trade and Industry, UNIDO was asked to help set up the Haitian Bureau of Standards and Metrology. Intensive training has already taken place and standardization committees on priority products have been established. After the inception phase, the project is expected to be implemented for two years. Confidence in UNIDO led to the financing by the United Nations Stabilization Mission in Haiti of a new metrology laboratory. Supported by new donors, including the German metrology institute Physikalisch-Technische Bundesanstalt and the Government of Brazil, the laboratory is providing services to control agencies (legal metrology) and to economic operators (industrial metrology) in order to ensure fairness in commercial transactions and ensure the health and safety of the population. UNIDO is targeting female professionals engaged in standards, metrology, conformity assessment and quality in the capacity-building component of the project and

has stipulated that at least half of the trainees should be female.

In 2011, the African Union Commission and UNIDO agreed to a partnership for the accelerated implementation of the Pharmaceutical Manufacturing Plan for Africa. Two years later, UNIDO was formally tasked by the Commission to coordinate a consortium of core partners for the early implementation of the business plan. The consortium spent a week in Ghana in October looking at the public health situation and how industry can produce drugs that meet international safety standards.

Consumer safety

Food-related diseases affect millions of people the world over. According to the World Bank, 70 per cent of deaths among children under the age of five in less developed countries are linked to biologically contaminated food. While food safety is crucial for global health, it also affects the ability of developing countries to export food products. UNIDO plays an active role in the Global Food Safety Partnership and hosted the first Technical Working Group meetings in October (see chapter 2). The Organization has also put in place a food safety alert rapid response facility that serves domestic, regional and international markets. The facility has been set up on a pilot basis in Gambia, Ghana, Guinea, Sierra Leone and Togo as part of UNIDO cooperation with the Directorate General for Health and Consumer Protection of the European Commission. UNIDO is also extending support to other countries to strengthen sanitary controls for international and regional trade as well as to a number of regional organizations. The pilot phase is supported by contributions from Finland and Norway.

Inclusive development

The Lima Declaration gave renewed emphasis to the need for special measures to support those who have been left furthest behind in the fight against poverty. This section describes some of UNIDO's projects and programmes that specifically target vulnerable groups



Funded by the Italian Development Cooperation, UNIDO has helped Peru establish a partnership for the promotion of origin consortia for sustainable rural development.

of society within developing and least developed countries in order to achieve both sustainable and inclusive development.

Integration of women in industrial development

The integration of women in industrial development not only features as a priority in most UNIDO projects and programmes, but a number of initiatives are geared exclusively or predominantly to women as beneficiaries. The paragraphs below contain a few examples, by region, of UNIDO's efforts to target women, although examples can be found throughout the *Annual Report*.

UNIDO projects are designed not only to integrate women more fully into the industrial development process of their respective countries, but also to ensure that working conditions meet health and safety standards and are free of gender discrimination. This was an important component of a trade capacity-building project in Burundi financed by the Enhanced Integrated Framework and the Norwegian Agency for Development Cooperation designed to strengthen the country's trade capacity by enhancing compliance with international standards and regulations. UNIDO conducted a gender analysis and distribution across



South Sudanese youth acquire the know-how and experience to enable them to achieve sustainable livelihoods either through self-employment or by working in the private sector.

the selected value chains—coffee and fruits and vegetables—to ensure that a minimum number of women participated in training and in the training of trainers modules in particular. The Burundi project will promulgate voluntary standards, including the International Labour Organization principle of equal pay for equal work and compliance with national regulations protecting pregnant women and new mothers.

As part of its project “Integration and progress through protection and empowerment of displaced groups in South Sudan”, funded by the Government of Japan, UNIDO held three design workshops at which mostly female participants were taught to use sewing machines and were encouraged to work with recycled material—plastic bags, old textiles and paper, for example—to produce original works reflecting the country’s cultural identity. Armed with their new creative skills in textile design as well as a sewing machine and materials as part of their starter kits, participants now have the skills to launch their own businesses. Under another project in South Sudan, UNIDO has set up a mobile training unit to increase the participation of women in skill development training programmes in the counties of Nasir, Ulang and Panyikang. In Nasir, for example, less than four per cent of women are involved in income-generating activities; the majority

are illiterate and as many as 75 per cent are single mothers with no educational opportunities. In the Democratic Republic of the Congo, UNIDO provided training to 400 rural women farmers on good hygiene practices, good manufacturing practices and entrepreneurship management. In Senegal, a project to support cultural and traditional industries in the regions of Toubacouta and Delta du Saloum has provided financial and technical assistance to over 30 women’s associations involved in fish processing in both regions.

The Fandema Women’s Skills Training Centre in Tujereng Village, Gambia is a local community development project designed to improve the living standards of women through entrepreneurship training. Self-managed and self-sustained, Fandema was not connected to the national grid and had to rely on a generator for its limited power supply. Under a UNIDO-GEF project to promote renewable energy-based mini-grids for productive uses in rural areas of Gambia, Fandema not only boasts its own stand-alone solar and wind energy system, but is creating awareness among women in Gambia of the imperative of renewable energy in the face of climate change and is also providing elementary training on renewable energy equipment.

A new project to support Nigeria in improving quality infrastructure in the non-oil productive sectors of the economy will contribute to gender-responsible management and empower Nigerian women through the enhancement of their productive capacities. UNIDO is carrying out a gender analysis to assess how the project can contribute to women’s economic empowerment and to document any potential adverse effects of the project on women.

In many developing countries, women are traditionally employed in the agriculture sector. In its support to horticultural value chains in Upper Egypt, UNIDO has set up sorting and packaging units that provide jobs for low-skilled women from rural areas. Projects that support agricultural value chains in Morocco (argan oil and prickly pear in Ait Bâamrane) and Tunisia (harissa, Djebba figs and prickly pear) have encouraged the emergence of rural women entrepreneurs (see also chapter 2).

A UNIDO project in Lebanon on Community Empowerment and Livelihoods Enhancement has helped ensure economic recovery in different regions,

generating employment and reducing poverty. Over 500 women were able to increase their contribution both to their own households and to the national economy by strengthening their agricultural and business skills. New equipment supplied to cooperatives will help producers of essential oils, olive oil, jam and other products and create jobs for women. The project has so far upgraded 52 small and medium agro-enterprises, with approximately 1,200 households benefiting from UNIDO support.

A gender-mainstreaming project in Pakistan, completed at the end of the year, has helped over 500 women from poor rural and semi-urban communities to set up or improve small businesses. In addition to business management know-how, they received training in production techniques, product design and innovation in marble and mosaic work, jewelry, home furnishing textiles and fashion. The project has also assisted local universities and private support institutions in building up their technical and enterprise development capabilities. UNIDO set up business growth centres that provided women with credit through Pakistan's First Women's Bank.

Bangladesh is currently the world's second largest garment exporter after China. The country's textile and ready-made garment industry provides employment to five million people, of which 70 per cent are women. The tragic collapse of a factory building outside Dhaka in April, when 1,120 workers lost their lives, focused world attention on the often hazardous working conditions prevailing in the sector. Under its Better Work in Textiles and Garments—the third component of the Better Work and Standards Programme, launched in 2010 with financial support from the European Union and the Norwegian Agency for Development Cooperation—UNIDO is helping the industry to take advantage of global markets. Since the start of the project, revenue from the sector has increased from \$15 billion to a current level of \$21.5 billion. At the same time, UNIDO, together with the German Society for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit), is striving to improve productivity and working conditions and expand the textile and garment sector of Bangladesh to create better employment opportunities. Progress during the year included assistance to 21 companies to improve quality and productivity; the development of 11 quick-impact training

modules; six seminars; the formulation of a cluster development plan by the London College of Fashion in consultation with stakeholders; the support of three research and training institutes for the apparel and textile sector and the extension of a private-public partnership agreement between the Ministry of Textiles and Jute and the Bangladesh Textile Mills Association.

Under its project "Nutrition and Household Food Security in Afghanistan", financed from the Millennium Development Goals Achievement Fund, UNIDO has provided training to women in agro-processing and established processing centres in the provinces of Badakhshan, Bamiyan, Daikundi, Kabul and Nangarhar that are being managed by women's cooperatives.

In line with its policy on gender equality, UNIDO conducted a gender survey in Ukraine to ensure that gender issues are appropriately considered during the development and implementation of a project to promote the adaptation and adoption of resource-efficient and cleaner production through the establishment and operation of a Cleaner Production Centre. The survey report recommends ways to overcome gender inequalities in the project. Gender mainstreaming will be further considered in the development of the Cleaner Production Centre's strategies and future.

Craftswomen in Panama and Peru received support from UNIDO under two projects financed by the Millennium Development Goals Achievement Fund and completed during the year. UNIDO assistance in Peru focused on the handicrafts sector and on building creative industry clusters in four selected regions where some 85 per cent of artisans are women. In Panama, the three-year project supported the development of sustainable micro-enterprises in rural areas, mainly in the sectors of agro-processing and tourism. Target beneficiaries were people living below the poverty line, particularly indigenous communities in the provinces of Coclé, Herrera, Veraguas and Chiriqui.

Following the meeting of the Inter-Agency Network on Women and Gender Equality, held in New York in March, UNIDO invited the Network to participate in the Vienna Energy Forum in May, especially in a dedicated side event on gender and energy. This event brought together a panel of practitioners, experts and advocates who continued the debate on women's

leadership and economic empowerment in energy. It led to a general consensus that to make a sustained impact on poverty reduction, energy strategies, policies and practices must empower women by both promoting their leadership and addressing the obstacles to their full and active participation. A UNIDO operational manual will offer guidance on how energy projects can systematically address existing or potential gender inequalities.

Youth empowerment

Over the past seven years, UNIDO's commitment to ensuring that young people in Mozambique have the skills necessary to start their own businesses has yielded outstanding results. Under a youth project financed by the Government of Norway, entrepreneurship was added to the curriculum of 331 schools for grades 9 to 12. By the time the project was completed at the end of the year, 1,654 teachers had been trained and nearly 500,000 students were enrolled in the course. The Ministry of Education and Culture has integrated the programme into the national education strategy, ensuring that UNIDO's legacy will make a lasting difference to the lives of young people in Mozambique.



The Abuja Entrepreneurship and Career Fair was organized by UNIDO in cooperation with the Nigerian Federal Ministry of Industry, Trade and Investment.

Under a similar project recently completed in Angola in partnership with the Governments of Portugal and the Republic of Korea and the energy company

Chevron, entrepreneurship was introduced as a subject to 10,000 pupils in 45 pilot schools in nine provinces. UNIDO trained 150 teachers, 40 pedagogical directors, 15 focal points, 8 inspectors and 18 education officials to teach entrepreneurship and prepared syllabuses and teaching aids for the approval of the Scientific Council for pilot testing. So far, 2,000 youths have graduated with entrepreneurial skills and, based on the success of the pilot programme, the Government will introduce the curriculum nationwide to reach a potential 500,000 pupils.

In Cabo Verde, a new entrepreneurship curriculum programme was launched at the secondary school level, funded by the Government of Portugal and UNIDO. In Rwanda, the subject has been a compulsory part of the secondary school curriculum since 2010, following the successful completion of UNIDO's entrepreneurship education project (see chapter 2). In Côte d'Ivoire, 700 students graduated during the year from a vocational training centre that was restored and equipped under a UNIDO project to provide skills in mechanics, metalwork, plumbing and masonry. A further 1,546 students are currently enrolled in courses.

In October, UNIDO and the Ministry of Education and Culture of Mozambique organized a two-day conference entitled "Entrepreneurship for youth: investing in future generations" that brought delegations from Angola, Cabo Verde, Côte d'Ivoire, Rwanda and Uganda to Maputo to share their experiences and best practices in the field of youth entrepreneurship. A similar event took place in Abuja in June. The first of its kind in Nigeria, the Entrepreneurship and Career Fair was organized by UNIDO in cooperation with the Federal Ministry of Industry, Trade and Investment. The event was attended by 1,228 young people; a further 1,091 attended a similar job fair in Lagos. Awards were given in a business plan competition to the best three of 189 plans submitted.

Twenty-four aspiring entrepreneurs participating in UNIDO's Multi-stakeholder Programme for Productive and Decent Work for Youth in the countries of the Manu River Union—Côte d'Ivoire, Guinea, Liberia and Sierra Leone—had an opportunity to spend three months at the Vellore Institute of Technology in India, where they were able to develop viable and bankable business plans, establish links with Indian entrepreneurs in related sectors and acquire knowledge and

technology tailored to the specific needs of their respective countries.

Under a UNIDO GEF-funded project in Gambia, young entrepreneurs were offered training on renewable energy technologies, especially the use of solar and wind energy for business activities ranging from water pumping to soap making. A biomass gasification project in Benin has provided training to young farmers. As part of a project to improve industrial energy efficiency in South Africa, UNIDO is training a number of young engineers participating in the South African National Cleaner Production Centre internship programme on energy management systems and energy systems optimization issues.

The population of Arab States has nearly tripled since 1970 from 128 million to 362.5 million, of which over 60 per cent are under the age of 25. For many, employment remains a dream. Recent political unrest in the region has further exacerbated the issue.

The empowerment of young entrepreneurs and the creation of employment opportunities for women are a priority for UNIDO's Investment Promotion Programme for Iraq. Enterprise Development Centres located in Baghdad, Thi Qar, Basra and Erbil are providing young people with the skills to start their own businesses or find suitable employment in existing enterprises. A new UNIDO initiative in Tunisia is hoping to create at least 1,600 jobs for youth in the vulnerable regions of El Kef, Kairouan, Kasserine and Sidi Bouzid through entrepreneurship and enterprise development. This \$2.9 million project, financed by the Government of Italy, the United States Agency for International Development and Hewlett-Packard (HP), will enhance the capacities of regional and local business support institutions, training centres, universities and vocational training institutes relating to enterprise creation and development. Over 1,000 aspiring entrepreneurs will attend enterprise promotion seminars and 800 young entrepreneurs will undergo enterprise creation training. In addition, 8,400 young entrepreneurs will receive the information technology tools needed to increase their business efficiency and growth through HP's Learning Initiative for Entrepreneurs (HP LIFE) training, either face-to-face or through the HP LIFE online training platform. A further 146 HP LIFE entrepreneurs as well as 40 start-up entrepreneurs will receive direct



Group work at the HP LIFE e-learning training of trainers in Kairouan, Tunisia.

business counselling from UNIDO-certified coaches. Much of the groundwork for the project has been completed and so far 16 trainers have been certified on HP LIFE, 255 entrepreneurs and 159 students trained on HP LIFE face-to-face and more than 3,000 Tunisians have accessed the HP LIFE e-learning course.

Countries of Europe and the Newly Independent States are not immune to the challenge of youth unemployment facing many less developed countries. A project launched in March with financial support from the Government of Austria is helping to create much-needed jobs in Armenia, a country where in 2012 unemployment among young people between the ages of 15 and 24 was 48.2 per cent for women and 32.2 per cent for men. In line with government priorities and the recommendations of the MDG Acceleration Framework, the project will provide support to 300 young men and women in creating or developing a business through entrepreneurship training and counselling. The newly-fledged entrepreneurs can apply to a revolving fund set up by the project to provide start-up funding to youth-led businesses. The fund is expected to run for at least 15 years to ensure funding for future entrepreneurs. During the first three months of the project, 29 of 86 applicants were selected for training, while 10 young entrepreneurs received a loan to start or expand an existing business. UNIDO also

undertook a regional sector analysis to facilitate market research.

Support to post-crisis countries

Reintegrating refugees is a challenge facing many countries. A number of UNIDO projects have enabled returnees to develop the skills necessary to find employment and support their families or to start their own businesses and achieve self-reliance. In addition to offering entrepreneurship and vocational skills training, UNIDO builds the capacities of partner institutions to conduct entrepreneurship training. In Liberia, for example, 900 returning refugees received entrepreneurial and vocational skills training, of whom over half have already started their own businesses or found employment. UNIDO helped to introduce competency-based curricula into the technical/vocational education and training system within the country and institutionalize assistance to refugees with the Liberian Refugee Repatriation and Resettlement Commission. The intervention was financed by the Government of Japan.

For the past two years, UNIDO has been assisting the Government of the Democratic Republic of the Congo in its efforts to build up its agro-food sector to create the jobs and income that will improve livelihoods and help maintain peace. At the CIVAK training centre in Kimpese in the Bas-Congo province, over 1,500 beneficiaries, mostly women and youth, have learned better ways to process cassava and fruits, improve their production practices, better manage

their businesses and market their products. A new fruit processing unit with a capacity of 150 kg per hour of fruit jam is now up and running and the CIVAK centre was expanded with financial support from the Government of Japan. As a result of the new infrastructure and improved skills in food processing, food hygiene, entrepreneurship and marketing, beneficiaries attracted over 1,000 farmers interested in supplying products to the centre's processing unit. Around 800 people in surrounding villages gained access to electricity through the construction of a new electrical cabin that will ensure energy sufficiency at the centre beyond the duration of the project. In all, over 4,000 individuals are benefiting directly or indirectly from the variety of services provided by the centre.

Building on existing vocational training programmes, a UNIDO project in South Sudan supports efforts by the Government to develop its human capital base and help the integration of internally displaced persons and ex-combatants. Following a needs assessment of the labour market, UNIDO organized training programmes for 75 would-be entrepreneurs, as well as training in 11 subjects for a further 624 beneficiaries. Participants received toolkits and UNIDO-organized study tours to Egypt, Germany and Israel for 12 trainee entrepreneurs. UNIDO also assessed business plans for new micro-industries and selected the best for further support, such as cell phone repair and mobile catering. Advanced training was held in hospitality, construction and welding to increase graduates' employability, as well as three workshops on product design leading to the construction of a product design centre.



AN ENVIRONMENTALLY SUSTAINABLE FRAMEWORK

► UNIDO is recognized by the international community as a leading player in the global debate on energy and the environment. Its Director General from 2004 until the middle of 2013, Kandeh K. Yumkella, was Chair of UN-Energy and Special Representative for the United Nations Secretary-General's Sustainable Energy for All initiative. In June he left UNIDO to take up his appointment as special representative of the Secretary-General in charge of the newly established United Nations Office for Sustainable Energy in Vienna.

There is no denying that industry leaves a significant environmental footprint, but with a mandate to promote socially inclusive and environmentally sustainable industrial development and proven experience and expertise in this area, UNIDO is well placed to improve the environmental performance of global manufacturing. Industrial growth and sustainability are by no means mutually exclusive and with the right technologies they can—and must—work hand in hand to secure a brighter future for generations to come.

Green industry

In cooperation with the Ministry of Industry and Information Technology of China, UNIDO organized the 2013 Green Industry Conference in Guangzhou, China in November, that focused on creating a circular economy through resource efficiency and effective environmental management and policy. The conference looked at ways to apply green industry concepts to manufacturing processes and provided a platform for some 700 participants to exchange experiences and learn about new initiatives and projects relevant to the implementation of green industry measures at the country level. During his visit to China, Director General LI Yong signed a memorandum of understanding with the Minister of Industry and Information Technology to promote green industry and cleaner production in China, including industrial water and energy efficiency and programmes to reduce the use of lead.



The 2013 Green Industry Conference in Guangzhou, China.

UNIDO had an opportunity to present its Green Industry Initiative during the United Nations Global Compact Leaders' Summit, held in New York in September. This was one of a series of global events organized with various partner governments and organizations that took place in Brussels, Lima, London, Nairobi, New York and Seoul between September and December to help achieve a wider uptake of the green industry approach and demonstrate the viability of green industry as a means to achieve sustainable industrial and economic development.

In cooperation with the United Nations Environment Programme (UNEP), the Organisation for Economic Co-operation and Development (OECD), the American and Caribbean Economic System and the Latin American Development Bank, UNIDO is running a project in Latin America and the Caribbean to establish a set of indicators to monitor green growth. The indicators, based on the OECD Green Growth measurement framework, draw on UNEP's experience with environmental indicators. Seven countries of the region are currently involved—Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Paraguay and Peru—although other countries that have expressed an interest in the programme are expected to join in the future.

Resource efficient and cleaner production

Since its launch in 1994, UNIDO's cleaner production programme has expanded to more than 50 countries. In 2010, UNIDO and UNEP formed a network to promote the adaptation and adoption of resource-efficient and cleaner production (RECP) in developing and transitional economies (see chapter 2).

An international workshop on sustainable production in the leather processing industry was organized by UNIDO in Bursa, Turkey in May-June in cooperation with the Government of Turkey. Participants from developing countries gained a better understanding of sustainable technologies and production in the industry and exchanged experiences on cleaner technologies. The 3rd Global Network Conference on RECP took place in September in Montreux, Switzerland under the theme "Putting decoupling into action: moving to scale". The conference was convened on behalf of the Global Network of Resource Efficient and Cleaner Production (RECPnet) by UNEP and UNIDO, with the support of the State Secretariat for Economic Affairs of Switzerland. Eco-efficiency and innovation were discussed at an international summit in Lima in April, organized by Peru's Ministry of Production in collaboration with UNIDO.

Under its regional RECP network, project partners in Albania, Croatia, Moldova, Montenegro, Serbia and the former Yugoslav Republic of Macedonia provided mutual support in the development and implementation of



RECENT GREEN INDUSTRY PUBLICATIONS

Green growth—from labour to resource productivity: best practice examples, initiatives and policy options was published in April with the support of the French Development Agency (Agence Française de Développement) and the Sustainable Europe Research Institute. It explores issues of resource efficiency and productivity and helps identify approaches to economic growth and development that are less dependent on resource usage than current models. *Greening food and beverage value chains: the case of the meat processing industry* is a review of best practice greening opportunities for Asian beef supply chains, which is expected to serve as a point of orientation for practitioners in their adoption of green industry policies and practices. *Greening value chains for sustainable handicrafts production in Viet Nam* is a comprehensive report, published in June, that describes UNIDO's work under the Millennium Development Goals Achievement Fund joint programme, funded by Spain. It presents holistic solutions for the handicrafts sector, from the cultivation and collection of raw materials to production and marketing and to the identification of "triple-bottom-line" development opportunities. *Towards the development of a tool for diagnosing the environmental sustainability of agro value chains* presents the findings of a research project on the holistic improvement of the environmental footprint of agro value chains and provides an evaluation of 28 approaches, methods and tools that are assessed against agreed principles. ■

thematic projects, starting with low-carbon production and sustainable tourism. Sound chemicals management, including chemical leasing, will begin in 2014. Activities include awareness-raising, training of national consultants, assessments at the company level and dissemination of results. The National Cleaner Production Centre (NCPC) with the most experience in each topic leads the group and is responsible for coordinating thematic activities within the region, strengthening the exchange of information, cooperation and learning between NCPCs and assisting them in project-related matters.

UNIDO has pioneered chemical leasing in developing and transition economies since 2004. A large-scale chemical leasing project currently involves centres in Brazil, Colombia, Croatia, Mexico, Nicaragua, the Russian Federation, Serbia, Sri Lanka and Uganda. The centres regularly exchange information and experience through online conferences, expert meetings and the distribution of technical and information material, where there is a common language. UNIDO encourages joint problem-solving, especially among centres within a region. An expert from the centre in Serbia, for example, provided technical assistance to Croatia and Ukraine, while a Colombian expert assisted the centre in Nicaragua. Additional tools to facilitate the exchange of experience and know-how include the establishment of a new thematic subgroup on chemical leasing in agriculture and a hotline involving experts from different countries.

Almost 1,500 households in rural Viet Nam benefited from an inter-agency project that drew to a close in June. Under a programme funded by the Government of Spain's Millennium Development Goals Achievement Fund or MDG-F, 27 communities in the northern provinces of Hòa Bình, Nghệ An, Phú Thọ and Thanh Hóa were introduced to green practices and techniques in the production of crafts—bamboo and rattan, hand-made paper, silk, seagrass and lacquerware—and shown how to strengthen linkages with international markets. The joint programme raised the incomes of participating households by 80 per cent in comparison to a non-participating control group, reduced the environmental impacts of crafts production and improved working conditions. UNIDO assessed cleaner production in 48 small and medium enterprises (SMEs), trained 65 trainers in cleaner production and delivered

grass-roots cleaner production training in 19 communities. Nine producer groups received advanced skill training, benefiting 261 households. The project also introduced improvements to tools and equipment as well as sustainable product development advice and guidance.

E-waste is a fast growing problem that can nevertheless offer valuable employment opportunities. A new three-year project in Cambodia aims to provide employment and business opportunities for youth and generally improve e-waste management skills, knowledge and practices. During its inception phase, the project trained 30 local trainers and 110 unemployed youths from five pilot provinces. It has built capacities in installation and repair skills for five priority products, namely mobile phones, air conditioners, televisions, refrigerators and washing machines. UNIDO is currently developing an integrated approach for entrepreneurship development targeted at youth to support job creation and business opportunities as

well as capacity-building strategies for effective e-waste management. Funded mainly by the Republic of Korea through the East Asia Climate Partnership Programme, with additional funding from Samsung Electronics, the project will run until August 2015.

UNIDO is currently developing a project to build human skills in the productive use of natural resources and waste treatment to create jobs for marginalized populations in Croatia, Hungary, Romania, Serbia, Slovakia, the former Yugoslav Republic of Macedonia, Turkey and Ukraine. A pilot project was launched in Hungary in cooperation with the Türr István Training and Research Institute, a Government-funded agency that is involved with ethnic communities and disadvantaged groups, including the Roma. The project will also focus on resource efficiency and renewable energy sources, the treatment of different types of waste and the creation of jobs and business opportunities in the electronics industry. In September, a first meeting was held between UNIDO and the Türr István Training and Research Institute at the proposed project site.

In October, UNIDO organized its annual international seminar on the eco-town concept for decision makers and technical managers responsible for the environmental management of industrial zones and estates in developing countries. The seminar focuses on the Japanese model of a zero-emission eco-town, from which lessons can be learned on waste recycling and waste management. Three years of successful cooperation with the eco-city Kitakyushu led to a renewal of a memorandum of understanding between UNIDO and Kitakyushu in May for future cooperation in the fields of environmental technology and waste recycling services. Other partnerships in the area of waste treatment and management involved, for example, the International Atomic Energy Agency, on the innovative use of electron-beam technology for waste treatment and cement companies on industrial and hazardous waste in the cement production process.

Industrial energy efficiency

UNIDO's industrial energy efficiency programme is structured around four core thematic areas: energy management systems and standards; energy system optimization; low-carbon and industrial process

TOWARDS A SUSTAINABLE ECONOMIC PARADIGM: FROM LABOUR TO RESOURCE PRODUCTIVITY

"Resource scarcity calls for a change in model. Green growth will be based on energy efficiency, but also on the new revolution of a circular economy."

—Delphine Batho, former Minister of Ecology, Sustainable Development and Energy of France.

Gathered in Paris in May, world leaders and key actors in the global environment debate met to discuss the theme "Towards a sustainable economic paradigm: From labour to resource productivity". At the centre of the new growth model was the imperative to decouple economic growth from an increase in raw material use, i.e. doing more with less, a key requirement to achieve the shift to a green economy. The international forum was organized by UNIDO and the French Development Agency (Agence Française de Développement) with the support of UNEP. ■

technologies and best practices; and benchmarking. Since the introduction of energy management systems and energy efficiency measures, many countries have recorded energy savings. Attaining higher standards in industrial energy efficiency and renewable energy can, however, represent a challenge for developing countries without the requisite know-how and conformity assessment services.

UNIDO helped introduce ISO 50001 to some 20 countries during the year. The project portfolio reached \$88 million of GEF financing, which in turn has helped leverage over \$600 million in co-financing from financial institutions, business and industry and recipient governments. The first 17 enterprises to adopt energy management systems in Ecuador showed preliminary savings at the level of 17.2 GWh a year. The ISO 50001 energy management system standard was adopted as the national technical standard and UNIDO trained 50 government officials in energy management systems and 150 managers and 146 staff were introduced to the basic principles. A further 20 technicians received extensive training in how to implement the standard. Training is under way on the optimization of steam and motor systems and energy assessments have been conducted for 25 enterprises.

Under the UNIDO energy management system and system optimization programme, projects were launched in Egypt and the Islamic Republic of Iran bringing to 11 the total number of ongoing projects in this field. By the end of the year, the programme involved over 5,000 decision makers; UNIDO had provided in-depth training on implementation and system optimization to more than 700 energy efficiency consultants, trained some 4,500 employees and assisted over 100 companies in the implementation of energy management systems in line with ISO 50001 and state-of-the-art system optimization practices and know-how. Some of the companies involved have already taken steps to gain third-party certification to ISO 50001. In South Africa, 31 graduates completed a UNIDO-accredited training and certification programme for ISO 50001 in July and are now qualified to lead an audit team to certify a company as ISO 50001-compliant. The certification programme was a component of a larger project to improve energy efficiency in South Africa and represented the entry step for UNIDO's work on ISO 50001 conformity



A boiler operator in Ecuador explains to trainees the changes in operational practices that resulted in a 25 per cent energy saving.

assessment, an area that is attracting growing demand for technical cooperation.

UNIDO partner enterprises in South Africa such as ArcelorMittal Steel, BMW, South African Breweries and Toyota, to name a few, reported annual energy savings in excess of 150 GWh, while projects in Malaysia and Viet Nam also showed remarkable results. Under the energy management system component of the project in Malaysia, 218 participants from 42 factories were trained by international experts and nine host factories have already put systems in place. Training workshops on the optimization of pump, fan, steam and compressed air systems were attended by a further 633 participants. The positive response to the project encouraged Malaysia to allocate two-thirds of its GEF5 climate change focal area allocation to UNIDO, resulting in a climate change portfolio of \$11 million. In Viet Nam, ten enterprises have adopted energy management plans, of which two were the first enterprises to be awarded ISO 50001 standard certificates under a UNIDO project.

New areas in the UNIDO portfolio of energy efficiency projects included energy performance standards for industrial equipment, the integration of energy efficiency and renewable energy technologies in industry, the promotion and support of clean technologies innovation and the transfer of manufacturing capacity for low-carbon technologies. Five projects relating to these new thematic areas are under development, while a further project is awaiting approval by GEF.

Low-carbon technologies are becoming increasingly crucial for micro and small-scale enterprises. A new project in Chad has been designed to promote the use of clean energy technologies for traditional food processing sectors such as sorghum-based beer brewing and meat processing in an effort to reduce Chad's greenhouse gas emissions. At the same time, households and communities will benefit from lower fuel costs and reduced health risks. The project aims to stimulate market demand for improved cooking stoves in the micro-scale food industry.

Over the past four decades, energy consumption in the Islamic Republic of Iran has risen sharply as a result of increased usage of electric energy both in the domestic and industrial sectors. To avoid depleting its oil exporting capacity, the country expanded the production of natural gas and industries were required to switch from oil to gas to generate electricity. The abundance of cheap energy meant that energy efficiency was not a high priority for large factories and the Government struggled to instill an energy culture within its industrial sector. Under a project launched in 2012, UNIDO proposed entering into voluntary energy agreements with industries, providing a framework for national energy management standards, assisting in capacity-building through training on energy management systems and most importantly, identifying options for technology improvement of the country's energy-intensive industrial sectors. The project will lead to savings in indigenous fossil fuel reserves of 500 million m³ of gas and 5 million m³ of oil by 2016, and 7,000 billion m³ of gas and 70 million m³ of oil by 2025, while reducing costs by more than \$5 million per annum.

Water management

The *United Nations World Water Development Report 5*, launched in March 2014, focuses on water and energy. UNIDO was designated the lead agency for the preparation of the report and contributed a chapter on the nexus between water, energy and industry.

Mercury

Minamata disease, named after the city in Japan where it was first identified, is a life-threatening neurological illness resulting from severe mercury

poisoning. A new multilateral environmental agreement—the Minamata Convention, which addresses human activities that contribute to wide-spread mercury pollution—was adopted by 147 countries early in 2013 and opened for signature in October at the Conference of Plenipotentiaries in Kumamoto, Japan. UNIDO, as co-lead for the Artisanal and Small-Scale Gold Mining area of the Global Mercury Partnership, played an active part in the lead-up to the drafting and ratification of the Convention. UNIDO is currently running nine mercury projects, including two new projects funded by the Global Environment Facility (GEF): one in Mongolia promoting sound chemical management and the other a preparatory project in Argentina to facilitate the implementation of the Minamata Convention in that country. These projects demonstrate the Organization's comparative advantage outside the artisanal and small-scale gold mining sector by moving into areas such as the management of mercury in waste and industrial products and processes. Progress continued during the second year of a project funded by GEF and the French Global Environment Facility (Fonds Français pour l'Environnement Mondial) to reduce mercury pollution from artisanal and small-scale gold mining in Burkina Faso, Mali and Senegal. UNIDO is helping to develop a national action plan, as required by the Minamata Convention, to transfer cleaner and more efficient gold production methodologies and open access to an ethical fair-trade gold market in an attempt to empower local mining communities.

A project was put in place recently to combat mercury poisoning in Ecuador and Peru. The goal is to protect both human health and the environment by implementing measures aimed at minimizing mercury releases from artisanal gold mining affecting the Puyango basin in Ecuador and the Tumbes River basin in Peru.

Transfer of environmentally sound technology

The UNIDO transfer of environmentally sound technology (TEST) methodology comprises elements of resource efficiency and cleaner production, environmental management systems and accounting, as well as corporate social responsibility. The application of TEST leads to the adoption of best practices, new skills

and an improved management culture. The first TEST pilot programme was launched in 2000 in the Danube River Basin and has since been replicated in industrial hotspots worldwide, preventing the discharge of industrial effluents into international waters and thereby protecting water resources for future generations.

The year under review saw the completion of TEST projects in Cambodia, Egypt, Morocco, the Russian Federation and Tunisia. Their success laid the groundwork for a number of new projects that are currently in the final stages of preparation. The TEST methodology has also been implemented as part of a regional international water project aiming at reducing the impact of tourism activities on coastal waters.

In September, UNIDO hosted the 40th session of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) in Vienna. Jointly sponsored by nine United Nations organizations and specialized agencies with responsibilities relating to the marine environment, GESAMP conducts marine environmental assessments, undertakes studies and identifies emerging issues related to the state of the marine environment. GESAMP consists of 16 experts from a wide range of disciplines, who act in an individual capacity. UNIDO hosted a side event on the impact of the discharge of mine tailings and coastal run-off in the marine environment and also sponsored two working groups.

September also saw the formal opening of a water treatment plant that provides drinking water to rural communities in Kilifi County, Kenya. The UNIDO Chipande Water Project, funded by the Government of Slovenia, comprises a stand-alone mobile unit for water filtration using reverse osmosis. Since it can be powered by solar and wind energy, it is not dependent on access to the grid. In communities where the task of fetching water—sometimes over long distances—falls on women and girls, its proximity to a primary school will allow girls to devote more hours to their studies. The project has also brought an economic advantage to the community through the bottling and sale of water. It serves as a useful best practice pilot, demonstrating how a community water project can be sustainably managed.

The success of three ongoing UNIDO surveys in Sudan's Red Sea State encouraged the principal donor, Norway, to provide funding for an additional survey,

which will expand the knowledge base for the sustainable use of renewable marine resources.

In response to recent requests from Bosnia and Herzegovina and Montenegro, UNIDO is preparing projects to combat water pollution using the TEST methodology, to be funded by the Government of Slovenia. The first project is designed to enhance the quality of the water in an artificial lake in the municipality of Lukavac in Bosnia and Herzegovina through the application of sustainable eco-remediation measures. Under the second project, the use of TEST for the treatment of biological sludge from a municipal wastewater treatment plant in Mojkovac, Montenegro will help preserve the water quality of the river Tara and, by extension, avoid pollution of Durmitor National Park, a world heritage site of the United Nations Educational, Scientific and Cultural Organization and an area with a high potential for tourism. The third project, again in Montenegro, targets a region that has a similar potential for tourism. Using its TEST methodology, UNIDO will design a comprehensive plan for the ecological rehabilitation of the Port Milena Channel, assuring the region's environmental sustainability. Both projects will encourage the socio-economic development of two regions of Montenegro.

From an ecological standpoint, tourism can have fundamentally beneficial implications for a country, but also has the potential to create severe complications. In 2008, UNIDO embarked on a GEF-funded project in collaboration with the World Tourism Organization (UNWTO) to reduce the negative effects of tourism on coastal waters in Cameroon, Gambia, Ghana, Kenya, Mozambique, Nigeria, Senegal, Seychelles and the United Republic of Tanzania. The three areas addressed by the project are environmental management of tourism facilities through TEST, with UNIDO as lead agency; development of eco-tourism initiatives led by UNWTO; and sustainable reef management, carried out by a regional group on behalf of UNIDO. With eight demonstration sites, the project has involved local communities and private-sector operators, resulting in initiatives such as the collection, processing and selling of polyethylene terephthalate or PET bottles in Kenya to the benefit of the local population.

The Mekong River is not only an important trading route between China and South-East Asia, but also enjoys exceptional biodiversity, on which the

livelihoods of some 55 million people living in its lower basin depend. In common with other major waterways, its water quality has been negatively affected by industrial activities. Under a project launched in 2011 to improve water quality through the introduction of TEST, UNIDO identified 11 local industries and SMEs that were considered pollution hotspots and found solutions to improve both their economic and environmental performance. It provided training to companies on management tools, including environmental management accounting and systems and corporate social responsibility. The success of the project led to a similar initiative in the Lao People's Democratic Republic, while the principles and tools of UNIDO's TEST methodology were incorporated in the strategy for the years 2013-2015 of Cambodia's Ministry of Industry, Mines and Energy.

Energy access for productive uses

UNIDO works closely with a range of partner organizations and stakeholders to deliver integrated energy solutions that provide broad benefits to the economy and society. During the year, UNIDO strengthened its energy partnerships with GEF, bilateral donors such as the Governments of Austria, Japan, the Republic of Korea and Spain, as well as a number of private companies.

Work on the GEF-UNIDO Global Clean Technology Programme for SMEs began under a \$15 million project expected to run for three years. The programme involves the creation of platforms to promote clean technology innovations and boost the competitiveness of SMEs, help build national capacity for clean technologies and develop a supportive local entrepreneurial ecosystem. It uses a cross-sectoral, competition-based approach to identify the most promising entrepreneurs across a country. The project was launched in India in May and in Armenia and Malaysia in October, and is under development in Brazil, China, Nigeria, Pakistan, the Russian Federation, South Africa, Thailand and Turkey.

August saw the launch of a joint initiative between UNIDO and the Ministry of Economy, Trade and



The Third Vienna Energy Forum exhibition.

The Third Vienna Energy Forum, in May, brought together around 1,200 participants from 100 countries, including ministers, high-level dignitaries and energy practitioners from the private sector and civil society. Organized jointly by UNIDO, the Austrian Federal Ministry for European and International Affairs and the International Institute for Applied Systems Analysis, the principal message of the Forum, summarized in six key recommendations, positioned energy clearly in the post-2015 Development Agenda and underlined the significance of financing and partnership in ensuring a sustainable energy future. Discussions were led by over 110 experts. In addition to five ministerial-level plenary sessions, several parallel sessions addressed issues such as energy access, financing the energy future and the development of an energy-related sustainable development goal. The Forum also included special events relating to the Secretary-General's Sustainable Energy For All initiative, as well as a series of side events, including an extensive exhibition. Several memorandums of understanding were signed during the Forum. ■

Industry of Japan to promote the rapid deployment and dissemination of new low-carbon low-emission clean energy technologies, products, services and systems with special focus on Africa. The first phase of the programme, with an initial budget of \$5.5 million, involves Kenya and Ethiopia.

The specific mandate of UNIDO and its long history of activities in the field of energy and the environment ensure that the Organization plays a key role in the United Nations Secretary-General's Sustainable Energy for All initiative. Parallel activities within UNIDO that complement the Sustainable Energy for All initiative include the UNIDO Green Industry Initiative and Platform, the Global Clean-Tech Programme for SMEs and its public-private partnership on motor-systems efficiency indicators in cooperation with the Global Green Growth Institute. RECPnet offers technical support and information on new processes, energy and materials efficiency. The year under review saw the development of the first global tracking report that provides a comprehensive snapshot of the energy status of countries. UNIDO was one of 15 organizations involved in preparing this key tool.

A two-day seminar jointly organized by UNIDO and the Government of Côte d'Ivoire, in cooperation with the International Gas Union, the Economic Community of West African States (ECOWAS) Commission, the ECOWAS Centre for Renewable Energy and Energy Efficiency and the oil company Petroci, was held early in November in Abidjan, Côte d'Ivoire. The seminar focused on ways to build up energy systems where natural and renewable gas are important elements for social and economic development. Over 75 participants took part in the training, which was aimed at securing support for access to modern, affordable and reliable energy services across the ECOWAS region.

Finding solutions to the sustainable energy challenge was the topic of an eight-day training course held in Slovenia in November for policymakers from different corners of the world. Organized under the auspices of the UNIDO Institute in cooperation with the Ljubljana-based International Centre for Promotion of Enterprises, the course familiarized participants with current and expected trends in sustainable energy solutions and encouraged them to reflect on practical, innovative and cost-effective ways to address sustainability issues within the energy industry. Lectures

were complemented by guided visits to green enterprises and research centres.

At the end of December, UNIDO signed a memorandum of understanding with the NL Agency of the Ministry of Economic Affairs of the Netherlands by which the two organizations will step up cooperation in the area of climate change mitigation activities and inclusive and sustainable industrial development. Specifically, they agreed to share knowledge and expertise relating to industrial energy efficiency, renewable energy technologies, environmental management, sustainable industrial development and green economy.

During the year, 11 GEF-funded renewable energy projects entered the full implementation phase, while a further 15 projects are under development. By the end of the year, the total renewable energy portfolio stood at \$100 million and covered over 30 countries. A particular focus was on mini-grids, innovative business models and renewable energy for industrial applications. A strategy was put in place to facilitate the development and promotion of small hydropower technology among energy producers and users.

UNIDO is currently involved in a number of programmes to scale up renewable energy markets. One of these targets small island developing States in the Pacific island region, where it is helping to trigger investments in renewable energy technologies in order to improve energy security, reduce greenhouse gas emissions, increase energy independence and boost competitiveness through low-carbon industrial development. A similar project in Ukraine is helping SMEs to switch to renewable energy and apply energy efficiency measures. The expected reduction in the consumption of fossil fuels will not only benefit the environment, but should enable enterprises with a high energy consumption to be more competitive. Some ten demonstration projects, of which two are operational, will use different sources of energy and apply different modern technologies. An automated biodiesel production unit was commissioned in September, while heat exchangers were installed and an energy management system put in place in an industrial bakery. A solar thermal system providing low-temperature heat to an industrial milk-processing plant and a steam turbine in a paper factory are ready for installation, while a gasification project in a wood



Installation of heat exchangers at one of the leading industrial bakeries in Ukraine.

processing factory and a biogas system in a pig farm are in preparation. The project has also supported the Government of Ukraine in the development of a national renewable energy action plan and is preparing extensive training for managers and technicians in the agro-food sector to begin later in 2014. UNIDO is also designing a postgraduate master's course on energy efficiency and renewable energy in the agro-food sector.

A new project was launched at the beginning of the year to increase access to clean energy for productive uses in Cambodia, with a particular focus on off-grid areas and agro-based SMEs in Batambong and Pursat provinces, especially those involved with rice milling. The project should enable the local manufacture of efficient and environmentally sound biomass gasifiers that use rice husk fuel. The project is in line with the Government's vision to provide electricity to all Cambodian villages in rural off-grid areas by using locally available renewable resources for electricity generation by 2020 and to connect 70 per cent of rural households to grid quality service by 2030.

Following the signing of a memorandum of understanding during the Vienna Energy Forum in May, UNIDO and the Government of Austria agreed to support the

ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) in Cabo Verde and to set up three more centres in East and Southern Africa and in the Caribbean region. ECREEE was established in 2010 with technical and financial support from UNIDO and the Governments of Austria and Spain to create favourable conditions for renewable energy and energy efficiency markets in the 15 ECOWAS member countries. The new project will strengthen ECREEE's capacity to deal with a rapidly expanding project portfolio and an increasing demand for its services.

Currently UNIDO is helping ECREEE to design policies enabling countries to meet ECOWAS targets for renewable energy and with hydropower development training for experts from the region and other parts of sub-Saharan Africa. Training was supported by the Austrian Development Agency and the Austrian Energy Agency and combined theoretical lessons, hydro site visits, as well as meetings with plant operators and owners, consultants, hydropower generation associations, manufacturers and financiers. A new ECREEE online portal was designed with support from UNIDO to provide decision makers, project developers, investors and other stakeholders with tailored information and planning strategies. It will boost knowledge management, networking and advocacy and strengthen renewable energy and energy efficiency capacities.

Of the various sustainable energy options open to developing countries, small hydropower is the optimum choice, when available, for rural or isolated areas, since it can be easily operated and maintained by local communities and adapted to run under different geographical conditions. As part of a project that began in April, the *World Small Hydro Development Report 2013*, published by UNIDO in cooperation with the China-based International Centre on Small Hydropower, includes contributions from over 60 different authors and organizations. Offering 20 regional overviews and 149 country-level reports, it represents a unique compilation of global small hydropower data and is a valuable policy and investment guide. The *Report* was launched at the end of October in Brazil at a conference on local solutions to climate change and sustainable development organized by UNIDO, in cooperation with the Brazilian National Reference Centre on Small Hydropower and the International Centre on Small Hydropower. An interactive website presenting key data on small

hydropower complements the knowledge platform on renewable energy.

At the Vienna Energy Forum in May, a new international centre for renewable energy was announced by the Director General and the Director of Brazil's Itaipu Binacional, one of the world's largest generators of renewable clean energy. The new centre will be located at the Itaipu Technological Park, in Foz do Iguaçu, Brazil, as a joint venture between UNIDO, Itaipu and a number of partners, including private-sector associations.

A new project in Uruguay supports national strategies to transform the different kinds of waste generated in the agriculture and agro-industry production chains into various types of energy and other by-products. It is expected to deliver tangible socio-economic benefits within the targeted sectors. The project will start by strengthening the policy framework for sustainable production schemes and low-emission technologies and by enhancing the design of waste-to-energy valorization alternatives and low-emission waste treatment technologies. A similar project is under development in Chile, focusing on the utilization of biogas in the agricultural sector.

October saw the convening of the biennial International Conference on Oil Palm and the Environment in Selangor, Malaysia. Organized jointly by UNIDO and the Malaysian Palm Oil Board, the conference looked at the challenges of balancing the economic, social and environmental development of the oil palm business. It provided an opportunity for UNIDO to present a new research study, *Global Assessments and Guidelines for Sustainable Liquid Biofuel Production in Developing Countries*, and the Biofuels Screening Toolkit. The research study, carried out by UNIDO in collaboration with UNEP, the Food and Agriculture Organization of the United Nations and funded by GEF, aimed to establish clear guidelines to help developing countries mitigate the negative environmental and socioeconomic impacts of future biofuel projects and to develop a tool to assist GEF with project funding decisions. Case studies were completed in Argentina, Mozambique and Ukraine on the impacts of the scale-up of biofuel production. The findings and recommendations of the research project were discussed at a conference, organized by UNIDO in March in Vienna. The Biofuels Screening Toolkit, a major outcome of the



Ribbon-cutting ceremony at Razan-Sai, Kyrgyzstan.

A landlocked mountainous country, Kyrgyzstan is sometimes known as the Switzerland of Central Asia. Two-thirds of the population live in rural areas and nomadic traditions continue among herding communities. In an effort to provide access to medical services in some of the country's most remote areas, the Ministry of Health has set up a network of rural first-aid centres, but unreliable access to electricity has hampered the efficiency of their services. In 2009, UNIDO joined the United Nations Development Programme (UNDP), the World Health Organization, the United Nations Volunteers and other partners in a project to provide a reliable energy supply to first-aid stations as part of the One UN Programme for Kyrgyzstan. UNIDO was given responsibility for the solar photovoltaic component of the project. Electrification has recently been completed at 14 centres. UNIDO implemented 12 solar photovoltaic-based projects, each with an installed capacity of 3kW. The initiative will soon be replicated in other parts of the country. ■

research study, helps to ensure the sustainability of biofuel production in the light of potential negative effects both on the environment and on food security. It was positively assessed by participants at the UNIDO Biofuels Conference, convened in Vienna in early May, and features 11 sustainability indicators that can be used to identify project conditions where there are no significant risks, potential risks that could be mitigated by specific project designs and high risks that cannot be mitigated.

Implementation of multilateral environmental agreements

Montreal Protocol

The achievement of the four implementing agencies of the Multilateral Fund of the Montreal Protocol—UNDP, UNEP, the World Bank and UNIDO—is evaluated annually by the Multilateral Fund Secretariat based on weighted performance indicators. Out of eleven evaluations between 2001 and 2011, UNIDO was ranked as the top implementing agency nine times and second twice. The last evaluation (2012) gave UNIDO the highest possible score of 100 points and stated that the Organization achieved eight out of eight targets. During the year, all countries receiving UNIDO support achieved the milestone of a consumption freeze of hydrochlorofluorocarbons (HCFCs) at the baseline level, as stipulated in the phase-out deadlines of the Montreal Protocol.

June saw the first forum organized jointly by UNIDO and ATMOsphere Technology Co., Ltd., an information technology company based in Cambodia. The UNIDO ATMOsphere Technology Summit 2013 “Natural Solutions for Developing Countries” provided end-users and manufacturers in the refrigeration, air-conditioning and foam sectors with practical solutions to challenges encountered during the introduction of natural substances as refrigerants.

A number of projects were completed during the year, including a project to phase out HCFC-22 and HCFC-141b in the manufacture of air-conditioning equipment at one of Jordan’s foremost manufacturers

of high-quality commercial and industrial heating, ventilation and air-conditioning equipment. A total of 60 air-conditioning designs at Petra Engineering Industries were tested and redesigned. Modifications to the foaming line and assembly line included the replacement of HCFC-141b by a hydrocarbon with zero ozone depletion potential and an alternative to HCFC-22 as a refrigerant. In the Bolivarian Republic of Venezuela, the first tranche of a project to reduce HCFC consumption in the refrigeration and air-conditioning sector was completed in December, as was the inception phase of a project to support 22 countries of sub-Saharan Africa to adopt a regional as well as a country approach to the implementation of the Montreal Protocol.

An expert group meeting, organized jointly by UNEP and UNIDO at UNIDO Headquarters in November, enabled national ozone officers from Africa and international experts to discuss with UNIDO technical and policy aspects of the phase-out of HCFCs. The region’s national ozone officers also attended the UNIDO ATMOsphere Technology Summit, mentioned above, as well as other workshops and regional meetings. UNIDO held training of trainers sessions during the year in Congo (in French) and the United Republic of Tanzania (in English).

The phase-out of HCFCs is proving challenging for countries in West Asia, since current alternatives commonly used in the refrigeration sector have high global-warming potential (GWP). At its 69th Meeting in April, the Executive Committee of the Multilateral Fund approved a project to promote low-GWP refrigerants for the air-conditioning sector in countries with high ambient temperatures, to be implemented by UNIDO and UNEP. The results of the project will be utilized in the development of investment activities for the second phase of the HCFC phase-out management plans. In Africa’s least developed countries, UNIDO is involved in increasing the capacity of the refrigeration servicing sector, including the establishment of reclaim centres and networks, through the provision of servicing equipment and toolkits for technicians as well as training. UNIDO is currently implementing HCFC phase-out management plans in Benin, Burkina Faso, Burundi, the Central African Republic, Chad, Congo, Equatorial Guinea, Gambia, Guinea-Bissau, Madagascar, Malawi, Niger, Rwanda, Senegal, Sierra Leone, Sudan, Togo and Zambia.

An ongoing project in Nigeria is developing a model for managing unwanted ozone-depleting substances (ODSs) in developing countries; it will also demonstrate how ODS disposal can promote other environmental and climate change issues, such as energy efficiency and carbon market co-financing. Five companies that produce rigid foam in Pakistan are being helped to convert or upgrade manufacturing and servicing technologies to make them non-ozone depleting, climate-friendly and energy-saving. The implementation of the second tranche of the project that began in 2011 is under way in collaboration with UNEP and the National Ozone Unit, as the national coordination institution under the Ministry of Climate Change.

A few years ago, the Government of Ecuador launched an ambitious programme to replace old and inefficient domestic refrigerators with locally-produced environmentally-friendly models. As part of its Montreal Protocol activities in Ecuador, UNIDO is supporting the Government in the recovery and destruction of CFC-12 from the old refrigerators. A total of 330,000 units are being replaced and dismantled with an expected recovery of more than 16 tons of refrigerant, equivalent of approximately 173,000 tons of CO₂. The project included the training of trainers and technicians and pilot demonstration plants.

Saint Vincent and the Grenadines is working towards the total phase-out of HCFCs by 2025. The country will apply policy instruments, such as a green tax and incentive schemes, to support the efforts for HCFC phase-out. UNIDO will assist it to reduce the demand for HCFCs through refrigerant recovery, reuse and retrofit, and by training technicians and providing tools to facilitate good servicing practice.

UNIDO adopted an innovative approach to the phase-out of 600 tons of ozone-depleting HCFCs in the Russian Federation. The \$58 million project, funded by GEF and beneficiary companies, addresses concurrently two key environmental issues: the phase-out of ozone-depleting substances and the improvement of energy efficiency in the refrigeration and air-conditioning sector, both of which will lead to a reduction in greenhouse gas emissions. Progress to date includes procurement of equipment, including rapid-response analysers to combat ODS smuggling, training, preparation of a climate change mitigation policy, a practical guide on the management and depletion of ODSs, a

background report, *Analysis of production and consumption of HFCs in the Russian Federation*, research studies and a competition on "Protect the Ozone Layer and Earth Climate". Public relations activities included the celebration of Ozone Day in September in Moscow, a dedicated website (www.ozoneprogram.ru) and a range of publications.

As part of the HCFC Phase-out Management Plan in Turkmenistan, UNIDO conducted a training workshop in March for technicians in the refrigeration and air-conditioning sector that was also attended by local and foreign companies with knowledge and expertise in the field. UNIDO is also providing training for customs and law enforcement officers to monitor and control imports of HCFCs and HCFC-dependent equipment, providing them with training materials and refrigerant identification toolkits to help prevent illegal trade.

Methyl bromide is used widely in the control of pests and diseases in the international trade of agricultural commodities. While it is listed as an ODS in the Montreal Protocol, its production and consumption is permitted for quarantine and pre-shipment purposes. Parties to the Montreal Protocol are negotiating the inclusion of quarantine and pre-shipment treatments as controlled uses, including related financial support to Article-5 countries. If agreed, this is likely to generate a considerable number of requests for UNIDO assistance from Member States.

Current efforts by UNIDO to phase out methyl bromide include a project involving Libya's horticulture sector, specifically the cultivation of tomatoes, cucumbers, peppers and other vegetables.

As of 2013, UNIDO is one of the implementing agencies of the Climate and Clean Air Coalition. During the year, UNIDO submitted a proposal focusing on the elimination of hydrofluorocarbons (HFCs), an issue fostered by the Coalition and very much under the international spotlight.

Stockholm Convention

During the year, UNIDO's activities under the Stockholm Convention on Persistent Organic Pollutants included the successful deployment of non-combustion technology to a plant in Mongolia to decontaminate transformer oils and safely dispose of polychlorinated biphenyl

(PCB). Non-combustion equipment is also being introduced in Nepal and PCB-reduction projects have recently been approved for Congo and Indonesia. The successful completion of the PCB project in the former Republic of Macedonia saw the country exceed its project target of treating 150 tons of PCB-containing equipment. In the Philippines, a UNIDO-commissioned non-combustion persistent organic pollutants (POPs) treatment facility reached a milestone in March with the treatment of 22 tons of PCB waste through non-combustion technology. A reduction in the emission of unintentional POPs in Senegal is the aim of a newly approved project that will demonstrate best available techniques (BATs) and best environmental practices (BEPs).

UNIDO has developed or is developing over 55 projects to assist countries in the review and update of their national implementation plans for the Stockholm Convention. A workshop held in Vienna in September gave countries an opportunity to report on the inventory work conducted and provided a platform for the exchange of ideas. UNIDO hosted two side events during the ordinary and extraordinary meetings of the Conference of the Parties to the Stockholm, Basel and Rotterdam Conventions that took place in April and May on e-waste sustainable recycling industries and the management and disposal of wastes with POPs.

UNIDO has initiated the first project on new POPs that were added to the Stockholm Convention list in 2009. It involves capacity-building in the former Yugoslav Republic of Macedonia to remove technical and economic barriers to initiating clean-up activities for alpha-hexachlorocyclohexane, beta-hexachlorocyclohexane and lindane contaminated sites at OHIS, a government-owned organic chemicals producer. The

location of the contaminated site in a populous area makes the clean-up a high priority for the Government. A workshop on new POPs held in September in Vienna enabled countries to review and update their national implementation plans and report on inventory work conducted.

The incineration of municipal solid waste and e-waste is responsible for the release of unintentionally produced POPs. UNIDO is currently addressing this issue in a newly approved project to introduce BATs and BEPs at selected demonstration sites in West and Central Africa. Another newly approved project for the Caribbean will present a sustainable management mechanism for POPs and other chemicals in Antigua and Barbuda, Bahamas, Barbados, Belize, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.

Medical waste is a global challenge that can jeopardize the health of both those who come into contact with hazardous materials discarded by health-care facilities and those living in surrounding areas. In China, UNIDO is making good progress on a project to manage medical waste in a sustainable and environmentally-friendly manner. After checking the emission of major pollutants from incineration and pyrolysis demonstration facilities, the project has introduced non-incineration technologies that avoid the generation of dioxins and applied BATs to control the emission of volatile organic compounds and odours from non-incineration treatment processes. All demonstration projects are up and running, with monitoring results expected in the near future. Successful experience will be shared with other municipalities of the country.



RESEARCH AND ANALYSIS

► The groundwork for all UNIDO projects and programmes is rooted in solid research and analysis. With strong research and statistical capabilities, UNIDO is in a unique position to analyse structural change and identify the patterns that countries follow as they grow richer, in terms of the structure of the economy. This in turn provides the background for policy recommendations that are offered both to Member States seeking support from UNIDO and to the global debate.

Global, regional and thematic research and analysis

As in the past, UNIDO's flagship publication, the *Industrial Development Report* reveals how and why continuous upgrading of manufacturing industries offers opportunities for growth, productive employment and the efficient use of resources. The 2013 issue, entitled *Sustaining Employment Growth: The Role of Manufacturing and Structural Change*, was published at the end of the year and launched in New York in March 2014. Drawing on both UNIDO's own extensive research on structural change as well as on inputs from leading authorities in the field, it will be an invaluable tool for policymakers seeking effective policies for industrial structural change to reduce poverty, generate employment and increase sustainability. This year's *Report* emphasizes the impact of manufacturing on employment generation, with one in six jobs globally originating, directly or indirectly, from manufacturing activity.

UNIDO was a key contributor to two other prestigious publications. *Pathways to Industrialization in the Twenty-First Century: New Challenges and Emerging Paradigms*, prepared in collaboration with the United Nations University, was published by Oxford University Press in February. The book contributes to disseminating within the academic community the key elements of research work undertaken by UNIDO over the last few years. Of similar relevance is *The Industrial Policy Revolution II: Africa in the 21st Century*, published by Palgrave Macmillan in December, which contains a chapter by UNIDO that analyses how the interactions

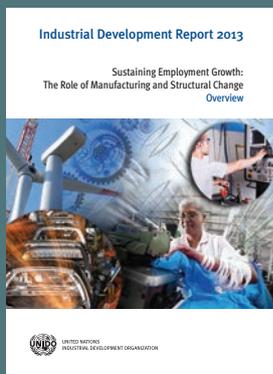
of output, employment and labour productivity generate unique development patterns among manufacturing industries. The book is edited by Nobel prize winner Joseph Stiglitz and former Chief Economist of the World Bank, Justin Lin.

The outputs of UNIDO's Challenge Fund for Strategic Thematic Research—an internal mechanism that facilitates interdivisional cooperation on research—came to fruition during the year with the preparation and journal publication of a number of working papers. Two papers on the investigation of the characteristics and determinants of linkages between local suppliers/buyers and foreign investors in Africa and on productive investment carried out by the African diaspora were published in *World Development*, a top-ranked international peer-reviewed journal. Both papers were presented at various forums, including the Centre for the Study of African Economies at Oxford University in the United Kingdom, the United Nations University in Helsinki and Maastricht University, Netherlands. Other UNIDO working papers in this series included *Factors influencing the international trade of carbon offsets from the destruction of ozone-depleting substances* and *Youth productive employment through entrepreneurship development in the Arab region: state-of-the-art of interventions in Egypt and Tunisia*.

Policy advisory services

In the course of the year, UNIDO merged its various policy advisory services into a coherent programme, providing Member States with the analytical and strategy-setting capacities that are at the core of evidence-based industrial policies. In common with other aspects of its work, UNIDO expanded its network of partners in the area of policy advice, details of which are given in chapter 2. In an effort to engage other development agencies in the issue of industrial policies, UNIDO sponsored the publication of a working paper entitled *Strategic Industrial Policy and Business Environment Reforms: Are they Compatible?*, which was published by the Donor Committee for Enterprise Development in June.

Industrial policies are notoriously hard to evaluate since their objectives are long-term and they are rarely



UNIDO's flagship publication, the *Industrial Development Report 2013*.

expressed in a quantifiable manner. In the course of the year, UNIDO adopted an innovative methodology for assessing the outcomes and impact of one of South Africa's prime incentive schemes for the modernization of the manufacturing sector, in cooperation with the Department of Trade and Industry. UNIDO will contribute to a midterm evaluation of the scheme in 2014. A working paper on the industrial policy process in Ghana was also published during the year.

During the year, UNIDO and the German Federal Ministry of Economic Cooperation and Development worked together to produce an online toolbox for industrial diagnostics that will be finalized in the course of 2014. The toolbox will help developing countries access a broad range of diagnostic tools to set their own strategies for poverty reduction. International best practice examples suggest that a successful industrial policy cycle must start from a thorough industrial diagnosis that sets the ground for the design of an evidence-based industrial strategy. Related activities included an international practitioners' workshop on structural and industrial policy in developing countries held in Berlin, a joint regional workshop and training on industrial statistics and their application to industrial policy for the East African Community member countries in Dar es Salaam, United Republic of Tanzania, and a joint practitioners' workshop on benchmarking the implementation of Namibia's industrial strategy to international best practice in Windhoek.

Under the Partnership for Action on Green Economy (PAGE), UNIDO is working with the United Nations Environment Programme, the United Nations Institute for Training and Research and the International Labour Organization on the formulation of inclusive green economy policies (see also chapter 2). Over the next seven years, PAGE will support 30 countries in building national green economy strategies that will in turn generate new jobs and skills, promote clean technologies and reduce environmental risks and poverty. The partnership will build enabling conditions in participating countries by shifting investment and policies towards the creation of a new generation of assets such as clean technologies, resource-efficient infrastructure, well-functioning ecosystems, green skilled labour and good governance. Activities so far include the formulation of a project document, negotiation with donors, fundraising, and kick-off activities in Mongolia and Peru.

UNIDO's **Networks for Prosperity initiative**, launched in 2011 in collaboration with the Leuven Centre for Global Governance Studies, Belgium, and funded by the Spanish MDG Fund, facilitates the access of developing countries to global knowledge and technology sources in accordance with their development needs and policy requirements. The role of networks for prosperity was the topic of a panel discussion at the June conference of middle-income countries. An updated third edition of *Networks for Prosperity: connecting development knowledge beyond 2015* was released in November. ■

Negotiations were under way at the end of the year with the Development Centre of the Organisation for Economic Co-operation and Development (OECD) for a partnership on instruments for industrial policy. The partnership will look at the specific requirements of low- and middle-income countries and foster an exchange of know-how among practitioners.

UNIDO was part of an international consortium that successfully submitted a bid under the research funding programme of the European Union (EU) for a project in the South Pacific region. This was the first time that UNIDO had accessed funding through the EU Framework Programme for Research and Technological Development and the extensive procedures that had to be followed will serve to facilitate future submissions. UNIDO's role in the project is to review and design policy instruments—fiscal, investment, trade, training, research and development, intellectual property protection, standards and public procurement—to boost industrial innovation in the region.

At the beginning of the year, Heads of State and Government of the Southern African Development Community (SADC) approved the Regional Indicative Strategic Development Plan, prepared at the end of 2012 with UNIDO support. This led to a request to UNIDO for a similar assignment by the Secretariat of the Southern African Customs Union, which aims to finalize its regional industrial policy by the end of next year.

Statistical services

UNIDO continues to provide global industrial statistics both in print and electronically, compiled in compliance with the United Nations Statistical Commission and in cooperation with OECD. Country data received from national statistical offices were validated and supplemented with UNIDO estimates and improved in terms of their international comparability. Foremost among UNIDO's range of statistical products and publications is its *International Yearbook of Industrial Statistics*.

The *International Yearbook of Industrial Statistics 2013*, released in February 2014, presents data on the level, structure and growth of global manufacturing for recent years up to 2012, a period characterized by some dynamism in North America and East Asia, but by a sustained recession in Europe. Other analytical and methodological reports issued by UNIDO during the course of the year include a statistical profile of industrial development of least developed countries, structure and growth patterns of agro-industrial sectors and efficiency of energy use in manufacturing industry, methods of measuring the output of industries with longer production cycles, and the use of advanced statistical methods in analysing energy efficiency. A report based on the compilation of production indices in the United Republic of Tanzania was published at the end of the year.

The International Year of Statistics 2013—a worldwide recognition of the contributions of statistical science—was marked by UNIDO, inter alia, by a presentation in August in Hong Kong, China, at the 59th World Statistics Congress and the launch of the *2013 International Yearbook of Industrial Statistics* in Doha.

UNIDO has introduced a number of methodological changes to the compilation of quarterly production statistics related to the adjustment of index numbers and the introduction of a new country grouping based on the stage of industrialization. An electronic newsletter, *Statistics Brief*, highlights the major findings of the *Yearbook*. UNIDO also released the first stand-alone competitive industrial performance report, *The Industrial Competitiveness of Nations: Looking back, forging ahead*. Formerly included in the *Industrial Development Report*, the new publication marks the

tenth anniversary of the first release of UNIDO's competitive industrial performance index. Launched in Moscow in September, the report discusses the concept of competitiveness and industrial performance and presents statistical data for the composite and eight-base indicators. A working paper, *Country grouping in UNIDO statistics*, issued in August, enables a comparative analysis of the growth and structure of industrial activities. Another working paper, entitled *Comparisons of economic linkages between China and Africa: applying the WIOD database*, with reference to the World Input-Output Database, was published at the end of the year.

UNIDO continued its efforts to introduce the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4). The number of countries with data by ISIC Rev.4 reached 45 in 2013 and is expected to grow in 2014. Regional workshops and direct contacts with national statistical offices have contributed to the implementation of international industrial statistical standards.

UNIDO maintains close cooperation with national statistical offices and statistical divisions of ministries of industry. Missions to Cameroon, Congo, Myanmar, Oman, Qatar and the Russian Federation at the invitation of the respective statistical offices covered issues such as advisory services and the formulation and monitoring of technical cooperation projects on ongoing industrial statistical programmes. UNIDO joined the Austrian Statistical Society, the International Association for Mathematical Geology and others to conduct the 5th International Workshop on Compositional Data Analysis organized in Vorau, Austria, in June. The Organization was invited by Statistics Austria to take part in a Statistics Day conference in October on the theme "Business statistics in change", as well as to a meeting of the newly created African Union Commission Institute for Statistics to discuss the strategic plan for 2014-2018, which defines the direction for the development of statistics in Africa.

A workshop held in Dar es Salaam, United Republic of Tanzania, in May on the application of industrial statistics in industrial policy was one of a number of regional training programmes organized by UNIDO to familiarize national institutions with recent statistical methods. Organized in cooperation with the East African Community, the German Society for International

Cooperation (GIZ) and the National Bureau of Statistics of the United Republic of Tanzania, the workshop was attended by representatives from statistical offices as well as ministries of industry and other policymaking bodies. In cooperation with the National Bureau of Statistics of China and the United Nations Statistics Division, UNIDO co-organized an international workshop on industrial statistics in Beijing in July that was attended by the statistical offices of 12 countries from South and South-East Asia as well as Sudan. The workshop discussed major problems of implementation of international recommendations for industrial statistics in the region.

A similar workshop was conducted in Doha at the end of September in cooperation with the Economic and Social Commission for Western Asia and the Gulf Organization for Industrial Consulting to assist national statistics offices in the region in implementing recent industrial classification standards. From now on, Bahrain, Kuwait, Qatar and the United Arab Emirates are included in the group of industrialized economies in all statistical publications and form a new industrialized region: West Asia.

Other statistics-related meetings attended by UNIDO during the year included the 44th session of the United Nations Statistical Commission, held in New York in February-March, the 24th meeting of Inter-Agency and Expert Group Meeting on Millennium Development Goals Indicators held in Geneva in October, and the annual meeting of the OECD Committee on Statistics, held in Geneva in July. An OECD statistician subsequently visited UNIDO to learn about its experiences in database management. As a member of the Ulaanbaatar City Group on Statistics for Economies Based on Natural Resources, UNIDO attended the second meeting of its Steering Committee in Moscow in September and provided a list of indicators recommended for United Nations guidelines to be submitted by the Group.

The readiness of countries to self-fund technical cooperation projects in the field of industrial statistics is testimony to their confidence in UNIDO's statistical expertise. Funding was approved during the year for new projects in Gabon and Oman, as well as a regional project for member countries of the Commonwealth of Independent States, where representatives of national statistics offices from the region took part in a two-day high-level inception seminar in December.



The executive training programme at Hernstein Castle.

The project is designed to improve the institutional capacity of the national statistical offices of countries within the Commonwealth of Independent States to produce timely and internationally comparable statistics relevant to industrial development policy. An ongoing project in the United Republic of Tanzania entered the next phase and the preparatory assistance phase of a project has been approved for Nepal. UNIDO formulated new projects for Bhutan, Cambodia, the Lao People's Democratic Republic and Myanmar, while the concept for a regional project covering those countries and Nepal was presented to the European Commission.

Capacity development

The future of manufacturing was the topic of discussion at an executive training programme held in June at Hernstein Castle, just outside Vienna, under the auspices of the UNIDO Institute for Capacity Development, with support from the Austrian Government. High-level policymakers and senior government officials from 26 middle-income countries learned about future trends in manufacturing and the latest developments in the sector. The executive programme was designed to help policymakers to shape and implement industrial policies and respond to global trends in order to enhance the competitiveness of their manufacturing industries. It included workshops led by experts in manufacturing

and industrial policy management from academia, the private and public sectors, as well as UNIDO and its partner institutions.

Participants learned about the potential of new technologies used in manufacturing, including additive manufacturing, cloud computing, mechatronics and customizable materials. Presentations were given

on solutions for sustainable, green manufacturing and innovations in environmental technologies, as well as on the business strategies used to respond to the challenges of the new industrial revolution. The programme also included sessions on global trade and investment patterns and potential policy implications and responses to these trends.

ABBREVIATIONS

3ADI	African Agribusiness and Agro-industries Development Initiative	IDEA	Innovation, Development and Entrepreneurship for All
AfriPANet	Africa Investment Promotion Agency Network	ILO	International Labour Organization
AIDA	Accelerated Industrial Development of Africa	ITPO	Investment and Technology Promotion Office
ASEAN	Association of Southeast Asian Nations	LDC	Least developed country
BAT	Best available technique	MIC	Middle-income country
BEP	Best environmental practice	MLF	Multilateral Fund for the Implementation of the Montreal Protocol
CAMI	Conference of African Ministers of Industry	MSME	Micro, small and medium enterprise
CELAC	Community of Latin American and Caribbean States	NCPC	National Cleaner Production Centre
CIS	Commonwealth of Independent States	ODS	Ozone-depleting substance
COMFAR	Computer Model for Feasibility Analysis and Reporting	OECD	Organisation for Economic Co-operation and Development
CSR	Corporate social responsibility	PAGE	Partnership for Action on Green Economy
DaO	Delivering as One	PCB	Polychlorinated biphenyl
ECOWAS	Economic Community of West African States	POP	Persistent organic pollutant
ECREEE	ECOWAS Centre for Renewable Energy and Energy Efficiency	RECP	Resource efficient and cleaner production
ERP	Enterprise resource planning	RECPnet	Global Network of Resource Efficient and Cleaner Production
EU	European Union	SADC	Southern Africa Development Community
FAO	Food and Agriculture Organization of the United Nations	SECO	State Secretariat for Economic Affairs of the Government of Switzerland
GEF	Global Environment Facility	Sida	Swedish International Development Cooperation Agency
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection	SIDS	Small island developing States
GFSI	Global Food Safety Initiative	SME	Small and medium enterprise
GSCP	Global Social Compliance Programme	SPX	Subcontracting and partnership exchange
GWP	Global warming potential	TEST	Transfer of environmentally sound technology
HCFC	Hydrochlorofluorocarbon	TICAD V	The Fifth Tokyo International Conference on African Development
HP	Hewlett-Packard	UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
ICAMT	International Center for the Advancement of Manufacturing Technology		

UNDAF	United Nations Development Assistance Framework	UNU-MERIT	United Nations University-Maastricht Economic and Social Research Institute on Innovation and Technology
UNDP	United Nations Development Programme	UNWTO	World Tourism Organization
UNEP	United Nations Environment Programme	VIC	Vienna International Centre
UN-HABITAT	United Nations Human Settlements Programme	WIPO	World Intellectual Property Organization



“Together we can seize the tremendous potential of inclusive and sustainable industrial development. This widely shared vision will strengthen UNIDO’s strategic positioning in the deliberations leading up to the adoption of a new agenda for global development in 2015 and enable the Organization to be firmly integrated in the post-2015 Development Agenda.”

United Nations Secretary-General Mr. Ban Ki-moon at the fifteenth session of the General Conference in Lima, Peru.



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