



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



TOGETHER
for a sustainable future



Annual Report 2015

Annual Report 2015



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Vienna, 2016

UNIDO Annual Report 2015

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FOREWORD BY THE DIRECTOR GENERAL



2015 witnessed a period of intense activity for UNIDO. The Organization was confronted with a range of challenges and took on many important responsibilities. This was a year in which our mandate to promote inclusive and sustainable industrial development (ISID) was acknowledged by the international community as crucial to eradicating poverty for all people: women and men, young and old, urban and rural dwellers and people from large, small as well as small island nations alike. We are especially delighted to welcome the Marshall Islands as the newest Member State of UNIDO, and we look forward to our future cooperation.

At the beginning of 2015, I cited three major objectives for UNIDO in fulfilling its mandate:

- At the policy level, I set the objective of mainstreaming ISID in the new post-2015 development agenda, as agreed by the international community.
- At the operational level, my objective was to mainstream ISID in our technical, analytical and normative operations.
- At the management level, the objective was to further improve our systems, structures and processes to become more efficient and effective.

Regarding the policy objective, I was delighted that the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), adopted by the United Nations General Assembly in September, included Goal 9 on building resilient

infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation. Recognition of the global importance of UNIDO and its new mandate and relevance to developed and developing countries alike will play a crucial role in supporting countries on the high-road of development, based on innovation, technological learning, social and economic inclusiveness and environmental sustainability.

To realize its operational objective, the Organization is fine-tuning its programmatic framework, sharpening its technical cooperation approaches and its normative and policy advisory role through building partnerships with governments, other international organizations, financial institutions, the private sector, academia and civil society.

With its financial, managerial, technological and innovative capacities, the private sector represents a particularly important contributor to the achievement of the SDGs. It is therefore of crucial importance for international organizations, and UNIDO in particular, to better understand how we can effectively work together to harness each other's competencies. This is why I am placing great emphasis on engaging with industry and industry associations as we move ahead with our work.

At the Third International Conference on Financing for Development in Addis Ababa last July, we successfully co-organized the third ISID Forum on harnessing partnerships for industrial development. The Forum attracted several high-level delegates, including the Prime Minister of Ethiopia; the Minister of Economy, Finance and Planning of Senegal; the

Secretary-General of the United Nations; the President of the World Bank; the Chairperson of the African Union Commission; and the Executive Secretary of the United Nations Economic Commission for Africa. The Forum provided a highly successful platform for multi-stakeholder dialogue on how to pursue inclusive and sustainable industrialization through adopting strategies, policies and programmes and to leverage multi-stakeholder resources through the innovative Programmes for Country Partnership (PCP).

The PCP was initiated on a pilot basis in Ethiopia and Senegal in November 2014, and is a unique initiative exemplifying the quest for partnership-based, innovative and high-impact solutions to accelerate the implementation of ISID. In this context, the Forum stressed that demand for the expertise of international organizations, in particular specialized agencies such as UNIDO, is expected to increase in the future. Since initiating these new programmes, several countries have expressed interest in joining the programme, in line with their national industrialization strategies. The Organization is pleased to welcome a third Member State, Peru, as a PCP country.

In September, UNIDO co-organized an event on the operationalization of African industrialization. This event demonstrated the importance of structural transformation and pursuing inclusive and sustainable industrialization in Africa and least developed countries (LDCs).

Concerning our management objective, ensuring robust accountability to UNIDO Member States is a major priority for us. Our medium-term programme framework (MTPF) 2016-2019, has been designed in full alignment with the 2030 Agenda and will provide the strategic framework for our programmes over the next four years. We have continued our efforts to mainstream the ethics and accountability function into our operations.

Another important initiative is the organization-wide Transparency Initiative that we launched at the thirty-first session of the Programme and Budget Committee last May. It will significantly increase the transparency of our technical cooperation activities and support services. As part of this undertaking, we have developed a dedicated Open Data Platform, which is now accessible to all stakeholders. This platform includes a variety of programme-related information, presented by country and donor, and complemented by associated documents, reports and key financial information.

We must now build on these important achievements if we are to harness ISID to help eradicate poverty on a global scale by 2030. While this is admittedly a colossal challenge, by joining hands with our many partners it is entirely achievable. I look forward to our journey together on the road ahead.

LI Yong, Director General of UNIDO

UNIDO AT A GLANCE

established in
1966

became a
specialized
agency
in **1985**

170
Member States
(as of 31 December 2015)



● Headquarters in Vienna

● Liaison offices in Brussels, Geneva and New York

Primary
objective

promotion of **inclusive and sustainable industrial development (ISID)** in developing countries and economies in transition

663
staff
members



as of 31 December 2015

43%
female

57%
male

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)



UNIDO's field network consists of **30 regional and country offices**, as well as **17 UNIDO desks**, covering **116 countries**.

UNIDO maintains eight **Investment and Technology Promotion Offices** in seven countries. Together with the United Nations Environment Programme, UNIDO also runs the Global Network for **Resource Efficient and Cleaner Production (RECPnet)** consisting of **74 members operating in 63 countries**.

In 2015, funds available for future implementation amounted to

\$0.476 billion the largest in the recent history of the Organization.

Simultaneously, **technical cooperation delivery rose to \$174.7 million**. **Funding for UNIDO services reached a net amount of \$205 million** (excluding support costs) and is approved for technical cooperation activities in 2015 and beyond.



UNIDO has two policymaking organs:

the **General Conference** meets every two years and

the **Industrial Development Board** 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 and determines its guiding principles and policies, approves the budget and work programme of UNIDO and appoints the Director General. The sixteenth session of the General Conference took place from 30 November to 4 December 2015 in Vienna. Its seventeenth session is scheduled to take place from 27 November to 1 December 2017.

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-third session of the Board took place from 23 to 25 June 2015. The forty-fourth session is scheduled to take place from 22 to 24 November 2016.

1. POLICIES FOR A CHANGING WORLD

We will seek to build strong economic foundations for all our countries ... We will adopt policies which increase productive capacities, productivity and productive employment; financial inclusion; sustainable agriculture, pastoralist and fisheries development; sustainable industrial development; universal access to affordable, reliable, sustainable and modern energy services; sustainable transport systems; and quality and resilient infrastructure.

(General Assembly resolution A/RES/70/1)

Our countries represent great reservoirs of untapped potential. We have the tools and the capacity to overcome barriers, because we are strong and resilient nations. Many of our nations are naturally petroleum rich; others are the largest producing countries of various commodities. Releasing this potential will be one of the core targets of both the Agenda 2030 and the Istanbul Programme of Action for the Least Developed Countries for the Decade 2011-2020.

Ahmed Abtew, Minister of Industry, Ethiopia, Chair of the LDC Ministerial Conference

The progress made by economic powers [Brazil, the Russian Federation, India, China and South Africa] in achieving sustained economic growth and poverty reduction has become a reference point both for developing countries to emulate and for industrialized countries seeking to regain economic dynamism.

LI Yong, Director General of UNIDO, on the occasion of the fifth meeting of BRICS Ministers of Trade

UNIDO AND THE GLOBAL DEVELOPMENT AGENDA

2015 was a landmark year for the United Nations system as Member States elaborated a successor framework to the Millennium Development Goals (MDGs) that had guided international development priorities for the previous decade and a half. In September, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development, a universal agenda that provides a reference point for multilateral development action until 2030 and encompasses all dimensions of sustainable development. The framework includes Goal 9, “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”, recognizing the Organization’s mandate as a universal goal for developing and developed countries alike.

Co-organized by UNIDO at the Sustainable Development Summit in New York in September, a side event discussing the impact of the 2030 Agenda in Africa brought together distinguished African leaders—the Presidents of Benin, Nigeria and Zambia, the Prime Ministers of Ethiopia and Lesotho and the Vice-President of Botswana—government ministers, executive heads of international organizations, senior officials and key development actors. The side event resulted in the signing of a joint communiqué entitled “Africa Must Industrialize!” by the four co-organizers—the African Union Commission (AUC), the Office of the Special Advisor

on Africa, the United Nations Economic Commission for Africa (ECA) and UNIDO. The communiqué encourages all stakeholders to join forces and form a new global partnership for the implementation of the 2030 Agenda, particularly for the most vulnerable countries in Africa. It reaffirms the commitment of the co-organizers to Africa’s industrialization as well as their support for the resolution on a third Industrial Development Decade for Africa.

With a rapidly growing young population, expected to increase by 42 per cent by 2030, ISID was recognized as the key for job creation in Africa. The event further highlighted the need for the benefits of industrialization to be evenly spread, for the role of women in production to be enhanced

to ensure inclusiveness, and for the industrialization process to be extended to Africa’s rural areas, ensuring, in essence, that no one is left behind.

The key challenge ahead is the implementation of the 2030 Agenda. This will involve the integration of SDGs in national regulatory and development strategies and policies as well as the mobilization of the required resources. The 2030 Agenda is significantly different from the MDG framework that it replaces; it will require new and innovative collective actions to leverage the resources from the private sector, civil society, academia, international organizations, development finance institutions and national governments in order to scale up the investment needed to realize its ambitious goals and targets.



Debates on ways to secure the requisite financial flows to meet the challenges of the 2030 Agenda led to the Addis Ababa Action Agenda, adopted at the Third International Conference on Financing for Development (FfD3) and endorsed by the United Nations General Assembly on 27 July 2015. During the Addis Ababa conference, UNIDO co-organized the third ISID Forum together with the Governments of Ethiopia and Senegal and ECA. The Forum attracted eminent speakers and panellists as well as around 400 participants from over 70 countries. The Forum showcased the first concrete applications of the PCP approach in Ethiopia and Senegal, and its success in mobilizing traditional and non-traditional resources for investment in ISID.

The fourth ISID Forum, held on 30 November and 1 December, examined possible ways UNIDO could contribute to advancing industry, infrastructure and innovation nexus in the context of Goal 9.

UNIDO also played an active part in the 2015 Paris Climate Conference (COP 21) in December, which outlined a universal agreement for combating climate change (see chapter 4).

At the Conference, countries reached a universal and globally binding agreement that will require major industrial retrofitting and restructuring to reduce emissions substantially and strengthen societies' ability to deal with the impacts of climate change. The Paris Agreement, which will enter into force in 2020, dovetails with the 2030 Agenda for Sustainable Development, sharing a number of common global environmental priorities including climate change adaptation and mitigation, strengthening resilience, integrating climate change measures into national policies, strategies and planning, accelerating innovation and scaling up financing streams for combating climate change.



The Chief Executives Board for Coordination met in Paris in April.

UNIDO AND THE UNITED NATIONS DEVELOPMENT SYSTEM

The Organization continued to engage deeply with United Nations institutions, including the Chief Executives Board for Coordination (CEB), the High-level Committee on Programmes, the High-level Committee on Management and the United Nations Development Group (UNDG).

It contributed to a number of reports issued by the United Nations Secretary-General, most notably on the quadrennial comprehensive policy review (QCPR), an instrument designed to ensure policy coherence and effectiveness across the United Nations system. During the year, UNIDO participated in inter-agency discussions and ensured that the guiding principles of the QCPR resolution of 2012 are coherently aligned with the Organization's mandate. UNIDO is gradually aligning its strategic

planning cycles with the QCPR cycle and it is expected that its medium-term programme framework and the new QCPR cycle will be fully aligned by 2021.

UNIDO engaged constructively in the Economic and Social Council (ECOSOC) dialogues on operational activities for development. It contributed to ECOSOC integration and high-level segments that address the interplay of the three dimensions of sustainable development and cross-cutting issues, as well as to the United Nations High-level Political Forum, the central United Nations platform for the follow-up and review of the 2030 Agenda for Sustainable Development.

UNIDO also cooperated with the United Nations Department of Economic and Social Affairs and other United Nations partners on the United Nations flagship *Global Sustainable Development Report* on the science-policy interface for sustainable development. In collaboration with United Nations counterpart entities,

UNIDO was the lead author of chapter 5 of the 2015 report concerning economic growth, ISID and sustainable consumption and production.

In October, UNIDO and the United Nations Office at Vienna hosted the annual meeting of the United Nations Strategic Planning Network on “Implementing the 2030 Agenda: Challenges and Opportunities for Strategic Planning,” contributing to major system-wide strategic planning, thinking and cooperation.

UNIDO continued to engage constructively with the Delivering as One (DaO) initiative aimed at ensuring enhanced policy coherence and effectiveness throughout the United Nations system and at the country level. In July, it published an information booklet entitled *UNIDO in the System-wide Coherence and Delivering as One: A multi-pronged approach to achieving common goals* that describes the history of UNIDO involvement in the initiative and showcases some of the most successful DaO projects in which the Organization has been involved.

As a member of the UNDG Advisory Group, UNIDO actively contributed to the United Nations system-wide coherence (UNSWC) approach for a coordinated response to Member States’ needs through the “One United Nations” mechanisms. It also responded effectively to evaluations and assessments carried out by the United Nations Joint Inspection Unit (JIU), the most recent published during the year on the mainstreaming of full and productive employment and decent work by the United Nations system. UNIDO works hand-in-hand with sister organizations of the United Nations family, including the United Nations Development Programme (UNDP), the United Nations Entity for Gender Equality and the

Empowerment of Women (UN Women), the International Labour Organization (ILO), the Food and Agriculture Organization of the United Nations (FAO) and the International Fund for Agricultural Development (IFAD).

The Organization’s DaO implementation has brought about important changes in the way the Organization operates. The initiative involves multiple stakeholders, from in-house to field operations, demanding a strong coordination mechanism with a transparent and technically smooth communication flow between the strategic and operational levels. During the current biennium, it mobilized \$7.2 million for the joint programming of projects at the country level.

GENDER POLICY AND STRATEGY

With the adoption of the 2030 Agenda for Sustainable Development, UNIDO made concerted efforts to increase its capacity to promote and report on gender equality. It reviewed and updated its 2009 gender policy by adopting its first gender strategy for implementing current and future organizational actions and by improving its organizational structure geared towards advancing the goals of gender equality and the empowerment of women.

The updated gender policy and the new gender strategy, both of which were released during 2015, are fully aligned with the Organization’s strategic planning documents as well as with the six pillars of the United Nations system-wide Action Plan on Gender Equality and the Empowerment of Women (UN-SWAP). It is envisaged that the strategy will strengthen gender equality both in

the services UNIDO delivers and within the Organization itself.

As part of the new UNIDO gender architecture to promote gender equality and the empowerment of women, the Director General chairs a senior management gender mainstreaming steering board, while gender focal points in all divisions are expected to devote 20 per cent of their work time to gender functions. An Office for Gender Equality and Empowerment of Women was set up within the Department of Human Resources Management in the Office of the Director General, and the Gender Focal Point Network was expanded.

To increase gender equality within the Organization, the updated policy calls for internal gender mainstreaming evaluations, gender audits and peer reviews. The gender strategy identifies three priorities for 2016–2019: promoting gender parity; promoting a gender-sensitive culture; and strengthening accountability. UNIDO continues to share data on gender balance in order to raise awareness of existing gender gaps among personnel and uses the data to develop targets and take measures to address those gaps.

To further promote gender equality and the empowerment of women through the services UNIDO delivers, the gender strategy sets forth a roadmap and programme management actions in accordance with the policy to enhance the integration of gender in its core programmes and activities and throughout all three thematic priorities. By mainstreaming gender in its core programmes and activities, UNIDO seeks to contribute to structural change at the level of policies, institutions, enterprises and communities. Particular attention is

paid to industrial policies that help address gender imbalances in the manufacturing sector and unequal participation in leadership positions.

All key data produced in programmes and projects, industrial statistics and statistics about the Organization itself will be sex-disaggregated. Gender outcomes will be tracked in consultation with project managers and will include benchmarks and targets. A system is currently being developed to improve monitoring and reporting on the gender-related results of projects and programmes.

In 2015, UNIDO published several guides on gender mainstreaming in projects. Designed to assist staff to apply a gender perspective both in their work and throughout the project cycle, they cover business, investment and technology services for private-sector development, trade capacity-building, agribusiness development, environmental management and Montreal Protocol projects. The guides also serve national and local counterparts, agencies, international and private sector partners as well as individual experts involved with UNIDO trade capacity-building activities.

UNIDO PARTNERSHIP PROGRAMME

The UNIDO partnership approach—the Programmes for Country Partnership, or PCP—mobilizes external partners and additional resources in order to extend the impact of the Organization’s technical cooperation and accelerate ISID in Member States. The approach calls for collective actions and catalyses inputs from local and international development partners to provide the support, knowledge and financial resources needed for ISID. Aside

from its technical cooperation and analytical and policy advisory services, the role of UNIDO is to coordinate partnership activities under the leadership and ownership of the host Government to build a solid foundation for sustainable economic growth.

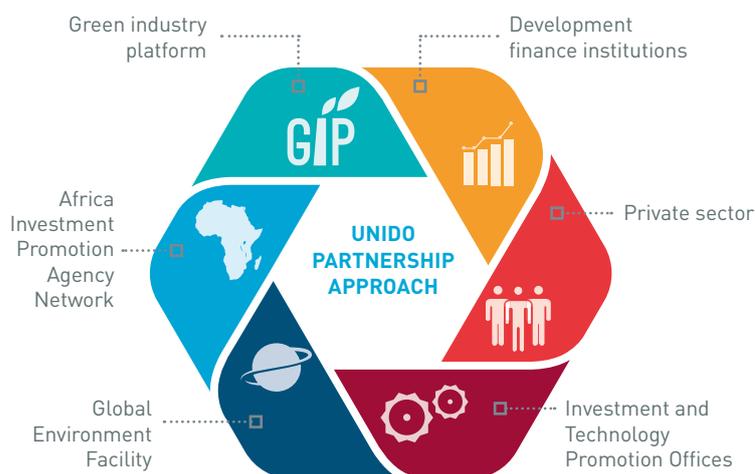
Each PCP is aligned with the beneficiary country’s industrialization priorities and development plans. Early in the year, the host Governments of Ethiopia and Senegal—the first two countries to adopt the new programme—approved the PCP documents. At the General Conference in December, Peru was identified as a third country to participate in PCP.

The PCP for Ethiopia focuses on developing labour-intensive light manufacturing, particularly in agro-food processing, textiles and apparel, and leather and leather products—areas deemed likely to attract private sector investment through their job creation potential, links to the agricultural sector and export capacities. The PCP for Senegal concentrates on industrial policy development, the establishment of agro-poles for agricultural value chains, the development of new industrial parks and the upgrading of existing ones. Both programmes include complementary cross-cutting interventions in line with government-defined priorities.

SIXTEENTH SESSION OF THE GENERAL CONFERENCE

Meeting in November-December in Vienna, the sixteenth session of the General Conference brought together over 800 participants from government, the private sector, academia and the media under the theme “Sustainable industrialization for shared prosperity”.

The Conference was convened at a defining moment in the history of global development cooperation, two months after world leaders agreed on the SDGs and a week before the adoption of the Paris Agreement, the outcome of COP21. Inclusive and sustainable industrial development has been at the heart of the mandate of UNIDO since the Lima Declaration adopted by the General Conference in 2013. In an atmosphere of expectation and confidence in the Organization’s future, the Austrian President welcomed participants, highlighting the “important role of UNIDO in providing decent livelihoods, especially in those countries from which we are now receiving refugees”. He was echoed in the keynote speech delivered by the Nobel laureate in economic sciences, Joseph Stiglitz, who referred to the complexity of





Joseph E. Stiglitz, Nobel laureate, addresses the sixteenth session of the General Conference



Heinz Fischer, President of Austria, and the Director General at the opening of the General Conference

the issues of development, stating that “there is no magic bullet and it cannot be approached with a single tool but needs a comprehensive industrialization tool kit adapted to the circumstances of individual countries.” He believed that the UNIDO inclusive and sustainable industrial development approach was the “expanded framework that was absolutely necessary to get what the world needs today”.

Throughout the Conference, participants agreed that UNIDO had a central role to play in implementing the 2030 Agenda, noting that the thematic priorities of UNIDO fully reflected the three interrelated dimensions of sustainable development: economic, social and environmental. Delegates commended the Organization’s longstanding efforts to tackle the root causes of migration by supporting job creation through its range of services.

The fourth UNIDO ISID Forum, which took place within the General Conference plenary, offered a platform for participants to discuss

multi-stakeholder partnerships. It provided an overview of the achievements to date of PCP (see above). Other key events included a meeting between the Director General and the Vice-President of the European Investment Bank, where both reaffirmed their commitment to promoting ISID, particularly in Africa. Three interactive panel discussions held at the margins of the Conference addressed the role of innovation hubs for sustainable industrialization and shared prosperity, youth and women entrepreneurship, and sustainable industrialization for climate action. As in previous years, the General Conference was preceded by the Least Developed Countries Ministerial Conference (see below).

UNIDO Member States also adopted MTPF 2016-2019, which replaces MTPF for the previous biennium and guides the Organization’s strategic, programmatic and operational actions over the next four years. MTPF 2016-2019 takes into account the Lima Declaration: Towards inclusive and sustainable industrial development as well as

the recommendations relating to the management criteria of the *Strategic Guidance Document*. It is determined by the 2030 Agenda for Sustainable Development and the related SDGs as well as the UNSWC mechanisms, including the United Nations Resident Coordinator system and QCPR.

In line with the renewed mandate given to UNIDO, the Organization’s programmatic focus is structured in three thematic priorities: creating shared prosperity; advancing economic competitiveness; and safeguarding the environment. Each of these programmatic fields will be implemented through four functions: technical cooperation; analytical, research and policy advisory services; normative, standards and quality-related activities; and convening and partnerships for knowledge transfer, networking and industrial cooperation.

Innovative features of the 2016-2019 MTPF include the introduction of a new partnership approach to promoting ISID, based on PCPs, the inclusion of a budgetary framework indicating expected budgetary

DONOR MEETING

The second UNIDO Donor Meeting was organized within the framework of the General Conference theme “Sustainable Industrialization for Shared Prosperity” and attracted over 400 participants including ministers, vice ministers, high-level government officials, Permanent Mission representatives, Chairs of regional groups and donors, representatives of other international organizations and the private sector. The aim was to demonstrate the effectiveness of UNIDO technical assistance interventions and the value for money that donors receive when paired with the Organization’s expertise and services. UNIDO success stories and related funding were the topic of interactive panel discussions where donor representatives, officials from beneficiary countries and end beneficiaries shared experience and knowledge. The results of the feedback questionnaire distributed during the meeting indicated that respondents would welcome a similar event in the future.

requirements for the implementation of MTPF, the Integrated Results and Performance Framework (IRPF) and enhancement of the results-based management approach. Member States also recognized MTPF as an important and flexible tool for implementing the Organization’s mandate and reporting both on the Organization’s performance as well as on progress towards the realization of ISID in its client countries.

UNIDO LIAISON OFFICES

UNIDO liaison offices in Brussels, Geneva and New York continued to raise awareness of and support for UNIDO programmes and activities through close contact in their respective locations with permanent missions, United Nations system organizations, intergovernmental and inter-agency bodies, civil society and the private sector.

New York Office

The New York office, close to the seat of the United Nations Headquarters, continued to play an active part in the development of the post-2015 agenda as a key member of its technical support team. It maintains regular contact with the Friends of ISID group, which continues to champion ISID as a fundamental building block for long-term eradication of poverty and hunger. At the group’s fifth meeting in New York in February, it was emphasized that ISID is not only a concern of developing countries and Africa, but a universal issue. Efforts to mainstream ISID in the United Nations post-2015 development agenda resulted in the adoption of Goal 9 in the 2030 Agenda for Sustainable Development.

Through its presence in New York, UNIDO was able to play a proactive role in the ECOSOC Dialogue on the longer-term positioning of the United Nations Development System (see above). An analysis of the discussions helped the in-house process of strategy formulation designed to make UNIDO fit-for-purpose ahead of the implementation of the 2030 Agenda for Sustainable Development.

Outreach activities undertaken by the New York office included briefings and

participation in various forums. At a high-level expert group meeting held in New York in February that focused on leveraging enhanced management of Africa’s extractive industries to foster ISID, UNIDO presented the role of ISID in structural transformation in Africa and LDCs. UNIDO also provided a similar presentation at the Preparing Leaders Forum in March, which focused on upgrading the skills of African youth.

At the High-level Political Forum on sustainable development, held from 26 June to 8 July in New York, UNIDO co-organized a side event to discuss the prototype Global Sustainable Development Report.

In cooperation with the United Nations Conference on Trade and Development (UNCTAD) and the World Intellectual Property Organization (WIPO), UNIDO further organized an event in May to increase awareness in the international community of the importance of integration and coherence in industrial, trade and innovation policies, tailored towards the overall objectives of national development plans, particularly in the context of the post-2015 development agenda.

UNIDO assumed the role of lead agency in the drafting of the issue brief *Fostering sustainable economic growth and transformation and promoting sustainable consumption* for one of six high-level dialogues during the United Nations Sustainable Development Summit, coordinating the inputs of some 25 United Nations programmes and agencies.

Geneva Office

With over 100 intergovernmental and inter-agency events every year, Geneva is a major forum city for debate on sustainable economic development issues, largely because of the presence

of a significant number of multilateral institutions in the field of economic development. Geneva is at the same time an important venue for debate on the environmental dimension of economic development. In addition to representing UNIDO at numerous meetings organized by United Nations system agencies, one of the functions of the UNIDO office in Geneva is to step up working relations with other international organizations and to encourage new partnerships. During the year, the office worked on new, or renewed, partnerships with the International Trade Centre (ITC), ILO and the International Telecommunication Union (ITU), which sent a high-level delegation to UNIDO Headquarters early in the year. An agreement with ITU—a partner in Goal 9—is being developed while work has started on updating the 25-year old relationship agreement between UNIDO and ILO and aligning it within the new development context.

In common with the other UNIDO offices, an important focus of the office in Geneva during the year was to ensure the effective representation of the Organization’s new mandate and the strategic positioning of the ISID agenda. This was achieved by raising awareness in intergovernmental meetings and public forums of the imperative for ISID. Much of the debate during the year focused on enablers for inclusive and green growth—trade technology and coherent economic development policies—as well as the need for harmonization in advisory services for economic development. The office also organized a number of technical briefings and events, notably a high-level forum on inclusive and sustainable industrialization in Africa, in cooperation with the representative office of the African Union (AU).

A strong UNIDO presence in Geneva is crucial for maintaining close working

relations with 23 Member States, the majority of which are LDCs, with no representation at the seat of UNIDO Headquarters in Vienna. Bilateral and group meetings played an important role as platforms for dialogue, intergovernmental debates, advocacy and monitoring closely the Organization’s service delivery in the respective countries. In addition to formal briefing sessions organized by the office in Geneva, the establishment of a video connection allowed Geneva-based permanent missions to follow briefings taking place in Vienna.

Brussels Office

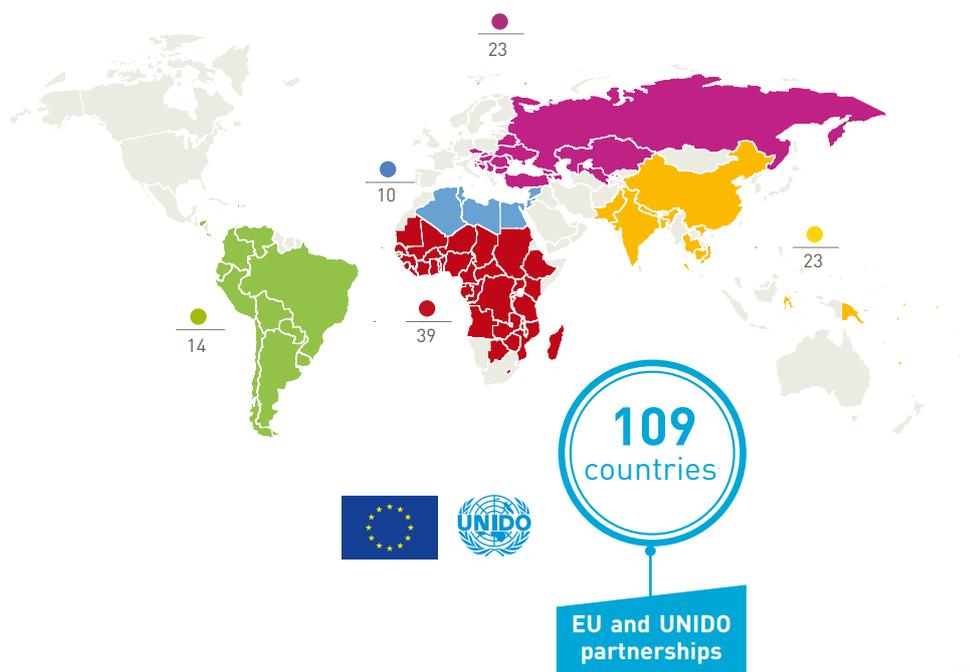
The UNIDO office in Brussels allows the Organization to develop partnerships with European Union (EU) institutions, namely the European Commission, the European Parliament, the Council, the European Economic and Social Committee, as well as the European Investment Bank and the African, Caribbean and Pacific (ACP) Group of States Secretariat, which represents 79 countries of Africa, the Caribbean and the Pacific. It also stays in close contact with the embassies of UNIDO Member States represented in Brussels and with a wide range of

bilateral development agencies and development finance institutions, think tanks, private sector and industry associations, non-governmental organizations and academia that track the policies and activities of the EU.

The policy dialogue during the year concentrated on the Organization’s role in the post-2015 development agenda. Of particular note were UNIDO interventions at numerous



LI Yong, Director General of UNIDO, and Ambroise Fayolle, Vice-President of the European Investment Bank, took part in an event that launched a new report on the cooperation between UNIDO and the EU from 2005 to 2015.



events organized on this issue by the European Commission, the European Parliament and the European Economic and Social Committee. The office contributed to a parliamentary resolution on the role of the private sector in development and briefed EU Member States on ISID at an informal meeting of the EU Council's Working Party on Development Cooperation. In September, it represented UNIDO at an event organized by the Asia-Europe Foundation at the French Senate in Paris.

Throughout the year, the office contributed to a high-level dialogue with the European Commission at major events including a dialogue on industrial policy between the EU and Latin America held in Santiago de Chile in April, the Vienna Energy Forum in June, the third ISID Forum in Addis Ababa in July, the Vienna Food Safety Forum in September and the COP 21 in December. In addition, a joint event on agribusiness in ACP countries took place during the Expo Milano 2015 in May.

The fruitful dialogue and cooperation between the EU and UNIDO was the topic of a report on the past 10 years of cooperation. In his foreword, the First Vice-President of the European Commission, Frans Timmermans, responsible for sustainable development, stated that the 2030 Agenda "provides a clear and ambitious roadmap for the EU and UNIDO to scale-up and accelerate their joint efforts towards building prosperity and sustainability for all". The report, prepared by the Brussels office, was launched at the General Conference in December by the Director General of UNIDO, the Deputy-Director General for International Cooperation and Development of the European Commission and the Vice-President of the European Investment Bank.

In the field of technical cooperation, the partnership with the EU helps pursue ISID in more than 100 developing countries. Particular emphasis is on strengthening the role of the private sector, supporting industrial cooperation with European enterprises and centres of excellence and promoting the transition of developing countries towards a green economy. Since 2005, the EU has progressively become a major donor of voluntary contributions to UNIDO. During the year, new agreements were signed to support vocational training and youth employment in Côte d'Ivoire, the sugar industry in Madagascar, the private sector in Mozambique, climate action in South Africa and the identification of polluted sites at the global level. Important activities related to the environment took place in partnership with the United Nations Environment Programme (UNEP), the ILO and the United Nations Institute for Training and Research (UNITAR) in the framework of the Partnership for Action on Green Economy (PAGE), and through the Climate Technology Centre and Network (CTCN), both funded by the EU.

Consultations with the European Investment Bank led to the signature of a Memorandum of Understanding in July in Luxembourg and the development of a work programme adopted at a follow-up meeting in Vienna.

A DIFFERENTIATED FOCUS

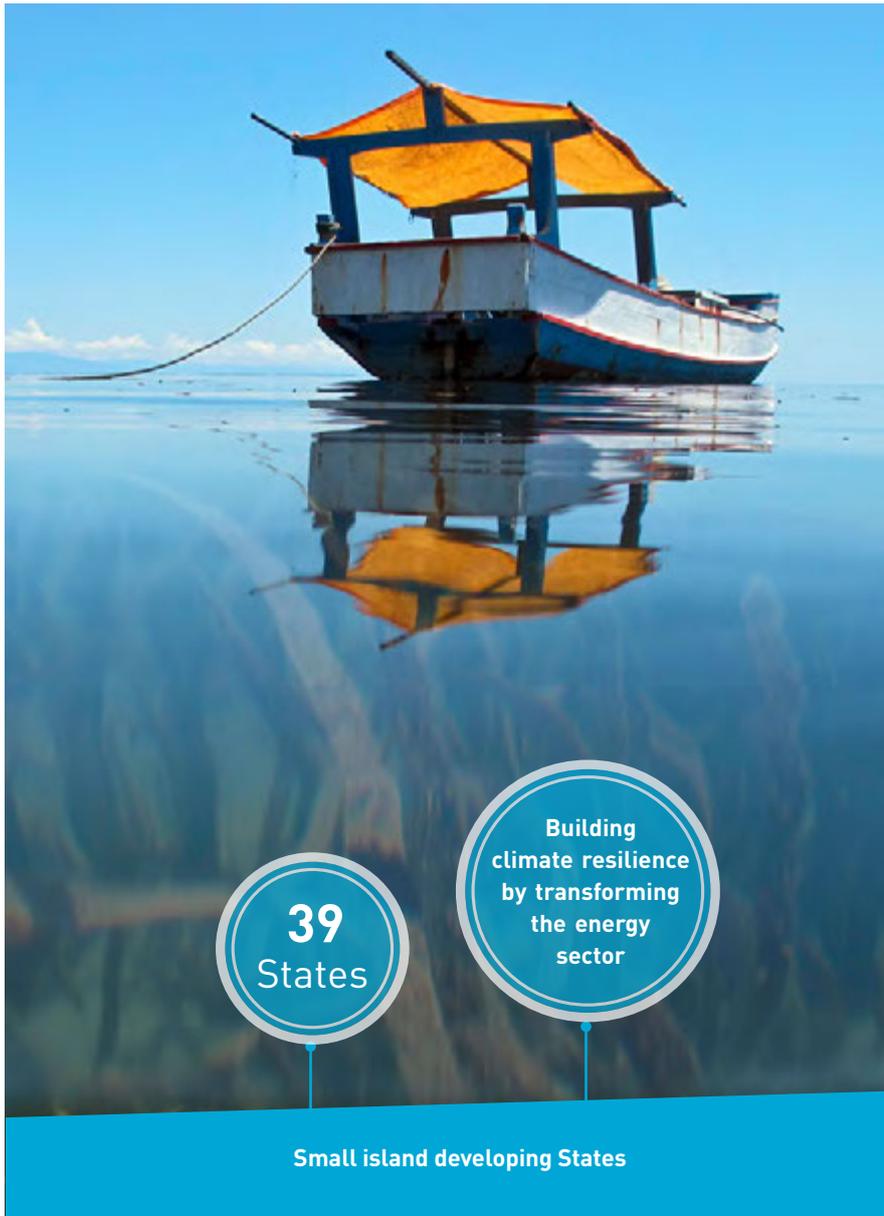
Least developed countries

Least developed countries (LDCs) continue to be a major focus for UNIDO in terms of its normative, policy advisory, convening, programmatic

and technical cooperation functions. The sixth Ministerial Conference of LDCs was held in November in Vienna, immediately preceding the General Conference. With around 300 participants, among them ministers and other senior representatives of governments, United Nations agencies, regional economic communities, counterpart institutions, donors and the private sector, the Conference discussed how ISID could help countries to advance out of the least development category. It provided an opportunity to address barriers impeding LDCs' economic diversification and graduation and ways to overcome them within the context of the 2030 Agenda for Sustainable Development. The Conference further discussed how to mainstream ISID into national development strategies and policies and explored the means to leverage external finance to support LDCs' graduation, building on the recent outcomes of the Third International Conference on Financing for Development. A study tour to centres of innovation in Lower Austria was also organized for the participants as well as a platform for private-public sector dialogue. UNIDO projects and programmes geared specifically to the needs of LDCs are described in detail in chapters 2, 3 and 4 of this report.

Small island developing States

Geographic isolation, susceptibility to natural disasters, small populations and a continued dependence on fossil fuel imports are some of the factors that characterize 39 small island developing States (SIDS) across different continents. Since 1992, SIDS have been recognized by the United Nations as a distinct group of developing countries sharing common challenges. They are the focus of special measures both within and outside the United Nations family.



39
States

Building
climate resilience
by transforming
the energy
sector

Small island developing States

UNIDO plays a key role in a number of United Nations system-wide SIDS initiatives, notably the SIDS Action Platform and the SAMOA Pathway and Means of Implementation. The UNIDO Global Network of Regional Sustainable Energy Centres contributes to the implementation of the SAMOA Pathway and facilitates SIDS-SIDS exchange of knowledge and adapted technology solutions. The Caribbean Centre for Renewable Energy and Energy Efficiency (see chapter 4) opened in October in Bridgetown, with

initial funding provided by the Austrian Government, while the Pacific Centre for Renewable Energy and Energy Efficiency will be inaugurated in 2016 in Nuku'alofa on the occasion of the twenty-fifth Pacific Power Association Conference, to be hosted by Tonga. The Economic Community of West African States' Centre for Renewable Energy and Energy Efficiency, which has been operating since 2010 in Cabo Verde, was nominated as focal point for African SIDS. UNIDO participated in an interview session conducted by

JIU, to provide feedback on a survey to assess the role and work of the Inter-Agency Consultative Group on SIDS and progress made so far in effective implementation of the SAMOA Pathway and the Mauritius Strategy for the further implementation of the Programme of Action for the Sustainable Development of SIDS.

A treaty establishing the first global intergovernmental organization of island nations, the Small Island Developing States Sustainable Energy and Climate Resilience Initiative, entered into force in September. The first 11 contracting parties were Bahamas, Barbados, Belize, Cook Islands, Dominica, Grenada, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Samoa, Seychelles and Tuvalu (see chapter 4). With UNDP as the lead agency, UNIDO is implementing management plans for the phase-out of hydrochlorofluorocarbons in Antigua and Barbuda, Bahamas, Saint Lucia, and Saint Vincent and the Grenadines. The projects include the purchase of equipment for refrigeration servicing and the provision of related training.

UNIDO is currently developing technical cooperation projects that will benefit the Pacific Island countries of Fiji, Samoa, Timor-Leste, Tuvalu and Vanuatu as well as a regional programme involving Fiji, Samoa and Vanuatu that covers the energy, fisheries, agribusiness and bamboo sectors. A mission to Vanuatu in November discussed UNIDO support for the country's reconstruction efforts in the aftermath of Cyclone Pam with value addition through productive activities.

Middle-income countries

Both recipients and contributors of development assistance,

middle-income countries (MICs) are a highly diverse group of countries in terms of geography, demography and socio-economic characteristics, yet face common development challenges. They are home to 5 billion people, or 71 per cent of the world's population, but account for a third of global gross domestic product and 73 per cent of the world's poor. Currently, well over half of the Organization's 170 Member States are MICs. UNIDO is working closely with MICs to address their challenges and to encourage partnerships between MICs and high-income countries.

Fostering ISID in MICs in Europe and Central Asia was the focus of an international conference organized by UNIDO in April in Minsk, in cooperation with the Government of Belarus. Representatives of countries that had progressed from middle- to high-income status described the strategies and policies their countries had followed. Participants called for the convening of similar expert meetings in order to maintain a dialogue on how to promote innovation and entrepreneurship in MICs and, at the same time, exchange information and best practices. A recurrent theme during the discussions was the importance of cooperation between stakeholders and partnerships for sustainable development. Participants called on UNIDO and development finance institutions to work with MICs to overcome the so-called middle-income trap through ISID strategies and instruments.

BRICS

During their seventh summit in Ufa, Russian Federation, in July, the BRICS—the five major emerging economies comprising Brazil, the Russian Federation, India, China and South Africa—reaffirmed the unique



Conference on MICs, Minsk, Belarus, April 2015

mandate of UNIDO to promote and accelerate ISID. The Ufa declaration emphasized that instability in financial and economic systems and price volatility in global commodity markets made industrial and economic diversification through new innovative industries and technologies all the more relevant. The experience and success of BRICS could be shared and exchanged with other developing countries by strongly encouraging South-South cooperation. The Director General was invited to address the fifth meeting of the BRICS trade ministers that preceded the summit, marking a further step in the relationship between UNIDO and BRICS. UNIDO also contributed to the meeting by formulating 6 of the 49 proposals included in the BRICS Roadmap for Trade, Economic and Investment Cooperation until 2020.

A UNIDO workshop held in July in Quito brought together representatives of 32 countries, including BRICS and Latin American and the Caribbean countries, to discuss ways to strengthen international

alliances in the global market, with a special focus on small and medium enterprises (SMEs). Heads of national export facilitation agencies, senior experts from the Eurasian Economic Union, experts from BRICS and representatives of governments and regional organizations in product certification and import regulations addressed the challenges and opportunities for cooperation and strategic alliances. The workshop contributed to building networks and strengthening partnerships in trade and investment between the regions.

UNIDO co-edited a book entitled *Structural Change and Industrial Development in the BRICS* published by Oxford University Press, reported in greater detail in chapter 2.

A briefing on a proposal for a UNIDO-BRICS technology platform was given to participants attending the nineteenth International Economic Forum in St. Petersburg, Russian Federation, in September, with the participation of deputy permanent representatives of BRICS countries.



Meeting of the BRICS Trade Ministers, Moscow, Russian Federation, July 2015

The UNIDO-BRICS technology platform is an online community of innovation players in BRICS willing to share knowledge and transfer technology.



UNIDO FIFTIETH ANNIVERSARY

2016 marks the fiftieth anniversary of UNIDO. The occasion will be an important opportunity to celebrate the Organization's achievements as well as to reflect on future strategic priorities. With this in mind, preparations to mark the event began in 2015.

The main event will be an exhibition at UNIDO Headquarters during the

forty-fourth session of the Industrial Development Board from 21 to 25 November 2016. The exhibition will include a forum for debate and reflection, with speakers and participants from various countries, the private sector, the United Nations system and other prominent international organizations, academia and civil society. It will also showcase

UNIDO programmes and projects and their impact on the ground. Other events leading up to the main celebration will take place at various field locations. Publications and a web platform dedicated to past, present and future activities will be launched and supported by a social media campaign. The theme of the fiftieth anniversary will be "together for a sustainable future".

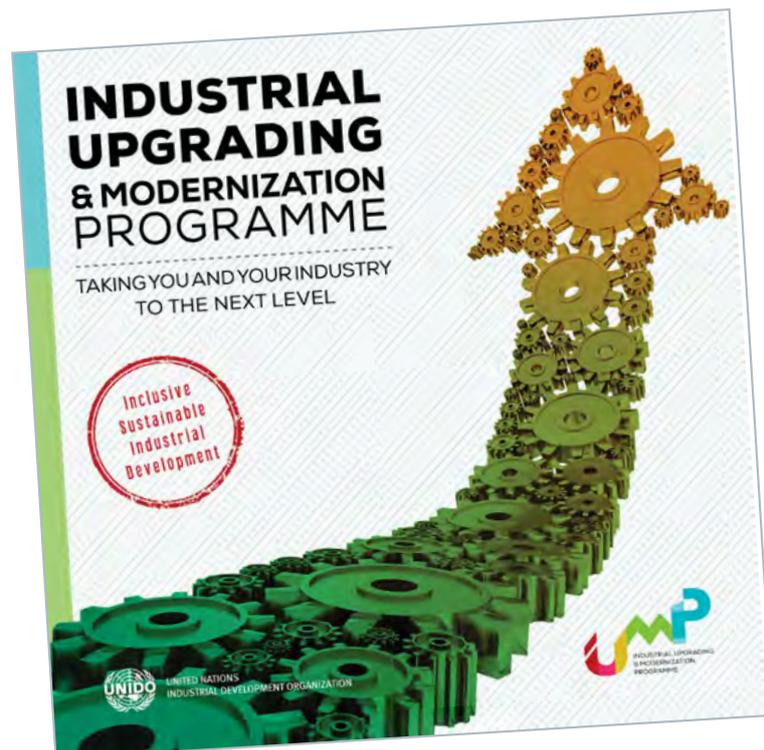
2. ADVANCING ECONOMIC COMPETITIVENESS

It is increasingly being recognized that industrialization, if conducted in an inclusive and sustainable manner, can create jobs, generate income, increase productivity, transform economies and be a major driver of development. Reaping these and other benefits depends, first and foremost, on fostering a dynamic private sector. In particular, countries need to promote competitive small- and medium-sized enterprises, which are the main source of economic activities and the largest employer in many developing countries—and the main engines of empowerment for women and young people.

**Message of United Nations Secretary-General Ban Ki-moon
to the First International Entrepreneurs Investment Forum**

Industry is a seedbed for entrepreneurship, innovation, technological learning and development, economic diversification and the creation of decent jobs. Productivity improvements in industry can ensure pro-poor outcomes and contribute to increased living standards, particularly in developing countries. In addition, building trade capacity to better access domestic and international markets can make an enormous contribution to developing countries' fight against poverty.

While globalization and trade liberalization offer undeniable opportunities in terms of lower prices and a broadening of the range of quality goods and services available, they also expose markets to rapid changes in technologies, consumer preferences and the pressures of competition. In the evolving international landscape and an increasingly interdependent world, countries must be competitive to survive and grow. To compete internationally, enterprises need to be efficient and they also require a supportive economic and business environment. These challenges can be addressed through appropriate industrial policies and programmes on industrial upgrading and modernization, SME and entrepreneurship development, industrial agglomerations, trade capacity-building, and investment and technology promotion.



UPGRADING BUSINESSES AND INDUSTRIAL INFRASTRUCTURE

A recent addition to the UNIDO policy toolkit is the methodology for Growth Identification and Facilitation for Industrial Upgrading and Diversification, introduced to assist Member States in accelerating industrialization in a dynamic global environment. It aims at integrating the principles of new structural economics into existing analytical and operational frameworks, in

conjunction with the Organization's industrial upgrading and diversification programmes. It is based on the premise that government policies on industrial upgrading and diversification must be anchored in industries with a latent comparative advantage. During the initial programme design and pilot implementation stage, UNIDO cooperated with Justin Lin and Peking University's National School of Development.

An ongoing industrial upgrading and modernization project in the United Republic of Tanzania aims at strengthening the capacity of SMEs by instilling business principles and

practices that will give a boost to their industrial performance and competitiveness and encourage growth. Launched in 2011, the \$1.9 million project, part of the UNIDO country programme in the United Republic of Tanzania, completed an industrial diagnosis and upgrading of 19 enterprises in the dairy, edible oil and food processing sectors and trained 50 national experts on industrial upgrading methodologies. This resulted in an increase in local sales of 38 per cent. Companies reported significantly lower losses during processing, resulting in savings of \$1 million in total for beneficiary enterprises. Lessons learned from an edible oil cluster project in Ethiopia were applied in the development of a sunflower oil



INDUSTRIAL UPGRADING AND MODERNIZATION IN THE UNITED REPUBLIC OF TANZANIA



Diagnosis and upgrading of **19** enterprises in the dairy, edible oil and food processing sectors



50 national experts trained



cluster in Dodoma, where UNIDO provided training, equipment and technology. An effective and affordable sunflower semi-refinery prototype was designed and manufactured by local experts in cooperation with a UNIDO expert from Ethiopia, illustrating a successful example of South-South technology transfer using entirely locally available materials.

A project under implementation in Nigeria was designed to improve the alignment of industrial skills development with the skills needed by industries, in particular leather and leather products, garments and textiles, automotive, steel, petrochemicals, and housing construction, which are priority subsectors in the Nigeria Industrial Revolution Plan. The aim of the project is to provide an evidence base on skills demand, gaps and supply in the country and to formulate, in consultation with relevant stakeholders, policy recommendations on an action plan to alleviate the skills gaps.

SCIENCE, INDUSTRY AND TECHNOLOGY PARKS

A side event at the sixteenth session of the General Conference in December highlighted the role of innovation hubs for sustainable industrialization and shared prosperity. The discussion explored how to catalyse technology-oriented innovation and development. The panel comprised experts from science, industry and technology parks, technology-based incubators, academia, the public sector and business. Panellists discussed how to leverage multi-stakeholder partnerships to provide high-quality services supporting entrepreneurship, research and technology transfer and how to bring innovation hubs to self-sufficiency and

sustainability. They also shared examples of best practices from established innovation hubs and explored the role of institutions and individuals in driving the growth of these hubs, such as local government, real estate developers, universities and research institutions, investors, and business incubators.

UNIDO is helping the Government of Kazakhstan to realize its vision of becoming one of the world's 30 most developed countries by 2050. In line with its goal of developing high technology industrial parks, the Government is preparing for EXPO 2017, which will run from June to September 2017. It is the first time that the world exhibition will be held in Kazakhstan and it marks a milestone in the achievement of the country's 2050 strategic goals.

A new project on fostering ISID in the New Silk Road Economic Belt is looking at the creation of industrial parks, zones and cities in Azerbaijan, Tajikistan, Turkmenistan and Uzbekistan. Formulated in partnership with the Asian Development Bank (ADB), it complements an ADB project on industrial park development in Kazakhstan and Kyrgyzstan. The partnership project will lead to deeper regional economic integration through corridor development approaches—transport, logistics and industrial—with a positive effect on income and employment, industrial diversification and competitiveness. In addition to helping reduce poverty and regional disparities, the project is expected to lead to a better understanding of the contribution of science, industry and technology parks, zones and cities to ISID in the New Silk Road Economic Belt.

Under another new initiative, UNIDO is committed to improving the productivity, competitiveness and environmental performance of eco-industrial parks in Argentina,

SHARING KNOWLEDGE IN LATIN AMERICA AND THE CARIBBEAN



The Industrial Knowledge Bank is a tripartite mechanism that enables the exchange of knowledge and expertise in the area of industrial development in countries of Latin America and the Caribbean. The placement of experts, the efficient and low-cost provision of specialized knowledge and the opening up of promising opportunities for cooperation characterize the working mechanism of the knowledge bank. An online platform (www.bankknowledge.org/en) facilitates knowledge transfer and encourages cooperation. In June, a high-level delegation from Latin America and the Caribbean visited a number of technopoles in Lower Austria to learn about the development of regional innovation and economic policy and see how key elements could be introduced for the benefit of SMEs in Latin America and the Caribbean.

Bolivia (Plurinational State of), Chile, Costa Rica, El Salvador, Guatemala, Panama and Paraguay. The first step of the project is to set up a regional platform for the exchange of know-how and expertise on planning, developing and managing industrial parks. The focus is on improving materials, energy and process efficiencies as well as strengthening intraregional cooperation in order to speed up sustainable industrial growth and social development while leaving the smallest possible environmental footprint. The project will also address a number of problems that are specific to the region: low productivity and environmental degradation as a result of obsolete industrial processes and technologies, inefficient resource utilization, the absence of strategies for sustainable production in the target industrial parks and limited awareness of resource-efficient and cleaner production.

With financial support from the Government of China, UNIDO is supporting the set-up of three integrated industrial platforms in Senegal that are expected to create a total of 24,000 jobs, increase the country's export earnings and smooth out regional disparities. The project is part of the Programme for

Country Partnership for Senegal that mobilizes development partners, United Nations agencies, development finance institutions and the private sector—under the leadership and ownership of the Government of Senegal—to advance ISID, within the framework of the Government's new national development strategy (see also chapter 1). Progress to date includes preparations for an integrated industrial platform in Diamniadio about 30 km from Dakar, where the Government is also planning to construct a large-scale, sustainable digital city.

INVESTING IN TECHNOLOGY AND INNOVATION

Insufficient employment opportunities in developing countries force millions of men and women to live in poverty. Among the greatest barriers to job creation are limited access to skills, technology, information and finance.

UNIDO Investment and Technology Promotion Offices (ITPOs) offer a complete service for potential investors in, and suppliers of technology to, developing countries, ranging from

the latest information on investment opportunities to how to do business in unfamiliar environments. The ITPOs steer them through each stage of the investment cycle and broker partnerships between enterprises in developing and industrialized countries, helping to arrange wherever possible study tours, visits to counterpart businesses and participation in international fairs. Requests from Member States to establish new ITPOs bear testimony to their ability to adapt to the changing circumstances and priorities of developing and host countries and to offer demand-driven and quality services.

ITPOs work closely with other technical services within the Organization, providing value-added services to their clients and partners. In addition to core activities, a number of new projects were launched during the year to strengthen the network's outreach and service capacity. The inauguration in April of an ITPO in Nigeria was the first of its kind in Africa. The new office will support Nigeria as well as countries of the Economic Community of West African States (ECOWAS) on their path to ISID by identifying, attracting and mobilizing investments and appropriate technologies, especially for SMEs. Other offices in the ITPO



INVESTING IN IRAQ

A large investment project in Iraq, launched in 2007, is nearing completion. Designed to support the development of the private sector, it encourages investment in private sector companies at different stages of maturity. The \$10 million project draws on successful tried and tested technologies developed by UNIDO such as its Enterprise Development and Investment Promotion, its Subcontracting and Partnership Exchange (SPX) Programme and its Computer Model for Feasibility Analysis and Reporting (COMFAR). Four Enterprise Development Centres established at the start of the project in Baghdad, Basra, Erbil and Thi Qar act as one-stop shops catering to the needs of SMEs in

different areas. Services offered include capacity-building training both in the classroom and through e-learning, investment promotion, business plan development, counselling, access to finance and facilitation of linkages. Over the years, the project has come to reflect a shift in philosophy on the part of UNIDO, from straightforward humanitarian assistance to more participatory, long-horizon, post-conflict programmes. To date, the project has put together 88 investment opportunity profiles and generated an estimated \$65 million in investments, while investment promotion services provided to 130 Iraqi companies resulted in 35 partnership agreements. A total of 91 Iraqi SMEs were created and a



further 184 expanded, securing more than 1,600 jobs. Representatives of 245 Iraqi private sector companies were sent to international fairs and exhibitions, leading to some 2,000 meetings between Iraqi and international companies and the forging of useful partnerships.



network are located in Bahrain, China, Italy, Japan, the Republic of Korea and the Russian Federation.

Following the reopening of the Investment Promotion Unit in Lahore, Pakistan in 2014, UNIDO and the Government of Italy have been working together to increase the number of industrial projects in Pakistan through business-oriented cooperation. During 2015, UNIDO was

able to assess the needs of 10 new companies in terms of technology upgrading and foreign investment. The Investment Promotion Unit worked directly with local SMEs to identify different investment opportunities, including five in the agrifood sector (dairy- and olive-based products).

In collaboration with Pakistan's Small and Medium Enterprises Development Authority, UNIDO ran two workshops

on a credit guarantee scheme for SMEs in Pakistan in Karachi and Islamabad in April and May respectively. These followed the completion in March of a feasibility study on an SME credit guarantee fund in Pakistan that was submitted to the Ministry of Industries and Production. The study is expected to result in a useful tool to assess the needs of Pakistani SMEs and look at possible guarantee schemes generating investments in the SME sector.



In May, the Organization arranged for a delegation from Pakistan to attend Expo Milano 2015 and the IPACK-IMA Trade Fair, one of the world's largest packaging trade fairs, where the focus was on dairy processing, meat processing and food and energy. The Pakistani delegation was also given an opportunity to visit Italian industries and chambers of commerce, leading to contracts for the purchase of machinery in the dairy and biogas sectors.

ITPO Bahrain organized a number of events to stimulate investment and trade between entrepreneurs from the countries of the Maritime and land-based Silk Road during the nineteenth China International Fair for Investment and Trade in Xiamen. The UNIDO delegation consisted of 127 Bahraini entrepreneurs as well as 42 from another 18 countries. In March, ITPO Bahrain joined representatives of UNIDO Headquarters, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Arab International Centre for Entrepreneurship and Investment to run a 10-day training programme at Bahrain's Royal University for Women (see page 31). Based on the EQUIP (enhancing the quality of industrial policies) Toolbox, the programme brought together policymakers from

developing countries to formulate and design context-specific strategies and policies for ISID. The office also helped organize the first forum on entrepreneurship and investment for ISID in January where the Manama Declaration was signed; the declaration stresses the importance of ISID in creating jobs, generating income, increasing productivity and transforming economies. The event attracted more than 1,000 participants from 80 countries and served as a platform for exploring cooperation opportunities as well as joint investment and business partnerships with potential partners from around the world. As a side event, UNIDO and the Bahrain Supreme Council for the Environment held a three-day International Green Economy and Technology Forum that discussed global trends and showcased successful regional and international case studies in this expanding sector.

In February, ITPO Tokyo provided support for an investment seminar for Turkey entitled "Opportunities in the Western Black Sea Region" followed a month later by a seminar on trade and investment opportunities in countries of the Southern African Development Community, in particular Angola, Malawi and Namibia. During the visit of the Director General in May, the office held a UNIDO seminar on sustainable industrialization for shared prosperity. The office further publicized the Organization's activities through UNIDO booths at Japan's Smart Community exhibition in June, which showcased new technologies and solutions for the construction of social infrastructure and at Global Festa Japan 2015, an international cooperation festival held in October. In December, the office organized a fact-finding mission to India to explore partnerships between Japanese companies involved in water management technology and counterparts in India.

Small and medium enterprises from developing countries were able to attend the Expo Milano 2015 international trade fair, courtesy of ITPO Italy. Using an online platform, enterprises could request support from the ITPO to arrange business meetings or study tours to high-tech zones and industrial districts in Italy. The theme of the 2015 Expo, "Feeding the planet, energy for life", was closely related to the work of UNIDO, allowing the office an opportunity to lead a debate on food security and nutrition-related topics, rural development and sustainable management of natural resources. The exhibition welcomed over 20 million visitors and provided a venue for matchmaking for thousands of business owners.

Over 60 chief executive officers of enterprises from Thailand visited the Shanghai Free-Trade Zone to explore new business opportunities, courtesy of ITPO Shanghai, China. The office also organized a UNIDO Day during the third China (Shanghai) International Technology Fair in April, on the theme "Trade in technology for technology innovation and implementation of the One Belt, One Road national strategy".

SUBCONTRACTING AND PARTNERSHIP EXCHANGE

Over the last 25 years, UNIDO has established Subcontracting and Partnership Exchanges (SPXs) to help enterprises meet the challenges of globalization and take advantage of the emerging opportunities that evolve from industrial subcontracting, outsourcing and supply chain opportunities. The network provides an information portal for matchmaking suppliers and buyers across the globe.

2015 saw an expansion of the UNIDO SPX network, with funding committed for new centres in Gabon, Iran (Islamic Republic of) and Oman. The investment promotion programme for Iraq extended its scope of activities to capacity-building within the Iraqi Federation of Industries, where training in the subcontracting partnership exchange programme was conducted in May in Erbil, financed by the Italian Development Cooperation.

During the year, a number of adjustments to the SPX programme were introduced that reflect the high importance the Organization attaches to gender mainstreaming. Future supplier profiling, for example, will take a snapshot of gender distribution at different functional layers of a company's workforce based on which UNIDO will suggest concrete actions to achieve gender balance within the enterprise.

In April, UNIDO took part for the first time in an international trade fair in Hannover, Germany, where it had a dedicated stand in the global business and markets section showcasing the work of its SPX programme. Several of the centres participated as exhibitors, giving them an opportunity to establish links with global value chains. UNIDO took advantage of their presence to discuss current and pipeline projects with SPX centres in Cameroon, China (Xi'an), Iraq, Mozambique and Nigeria. UNIDO also explored with the Qatar Development Bank the possibility of an SPX project in Qatar and considered a revamping of the SPX programme in India with a number of Indian SMEs. A German-Iraqi Partnership Forum, organized by UNIDO during the fair, helped raise awareness of investment opportunities in Iraq through UNIDO Enterprise



Agro-value chain analysis and development

Development Centres as well as the Iraqi Federation of Industries.

In preparation for the launch of the SPX programme in Pakistan at the end of the year, in April and May UNIDO ran a number of seminars to introduce its SPX programme to staff of the Small and Medium Enterprises Development Authority in Lahore (see ITPO section above).

VALUE CHAIN DEVELOPMENT

The globalization of production and trade offers an opportunity for fast technological learning, innovation and development, but also creates a range of externalities and interdependencies. The strategic goal for developing countries should be to develop efficient local value chains and to leverage effectively participation in regional and global value chains for national industrial upgrading and to increase exports.

UNIDO co-organized a two-day workshop in September in Bogor, Indonesia, entitled "Optimizing Indonesia's Participation in Global Value Chains" in cooperation with the Ministry of Foreign Affairs.

The workshop helped reinforce the concept of an effective industrial strategy for economic growth and national development and discussed the dynamics of global value chains and their implications for national industrial strategy and policy. In Turkey, UNIDO gave a presentation on agro-industrial value chain development at the sixth session of the Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation, which took place in Ankara. Among the numerous publications on value chains produced by UNIDO during the year, a working paper entitled *Beyond infant industries and trade liberalization: productive development in value chains and clusters* draws on the Organization's extensive experience with value chains and cluster development and recommends promoting innovation, knowledge and capacity development for ISID.

Another publication, "Global Value Chains and Development: UNIDO's Support towards Inclusive and Sustainable Industrial Development", presents the approaches of UNIDO in research, diagnostic tool development and technical cooperation projects to move towards inclusive and sustainable industrial development through global value chains (see page 28).



Cultural and creative industry clusters in Nabeul, Tunisia



Under a new \$4.4 million project launched in June, UNIDO is supporting the Government of the Democratic Republic of the Congo to create growth poles that will encourage agriculture-based development in the western region of the country. The project focuses on the formation of agricultural value chains in the province of Kongo Central as well as support to the Ministry of Finance in the establishment of three multi-service agro-industrial platforms to serve as centres of technical and commercial development. The centres will facilitate access by farmers and entrepreneurs to the infrastructure, services and technologies needed to increase productivity, upgrade their skills, improve the quality of their products, boost their income and open up new jobs. The project, funded by the Government as part of the World Bank's programme for the development of growth poles in the province of Kongo Central, is expected to benefit up to 50,000 farmers.

A project launched in January in collaboration with UNDP and FAO is supporting the Government of Armenia in ensuring efficient and sustainable agribusiness development

that contributes to better conditions in rural areas of the country. Funded by the EU and the Austrian Development Agency, the project will establish new, or strengthen existing, producer groups and engage them effectively in value chain development. So far the project has identified producer groups involved with buckwheat, high-value cheese, dried fruits and vegetables for value chain development support. By the end of 2016, 30 new farmer groups in the targeted value chains will have officially registered and submitted business plans. Further training to the staff of the producer groups will cover business issues, budgeting and finance, marketing, food safety and traceability and agricultural and rural development decision-making. Over 1,000 farmers—40 per cent of them women and 30 per cent young people—were instructed on the benefits of group organization and ways to improve primary production. It is estimated that goods produced by the assisted groups will attain at least a 10 per cent premium on prices and a 20 per cent increase in annual turnover. Under the programme, €3.4 million was secured in new financing from the EU and the Austrian Development Agency for the targeted value chains.

SUPPORTING SMALL AND MEDIUM INDUSTRY CLUSTERS

During the course of the year, the Organization witnessed the rising demand for support in cluster and consortia development, both from Member States and the private sector, which led to a range of new projects and the expansion of recipient countries. In Colombia, for example, the Korean International Cooperation Agency is funding a project to develop sustainable automotive supplier capacity.

As part of a project in Myanmar to create a conducive environment for micro, small and medium enterprise (MSME) development, UNIDO trained 959 public officers from different regions of the country in 35 training sessions, while 548 representatives of enterprises, including 12 industrial zone management committees, took part in training and discussions on cluster and MSME development. Particular attention was given to the business development needs of youth and women. More than 300 young entrepreneurs have been mentored, and the financial and economic appraisal of investment projects has been facilitated through training on



Oliver oil cluster

Number of registered producers in the cluster: **17**
Number of people employed in companies: **102**



Metal works cluster

Number of registered producers in the cluster: **5**
Number of people employed in companies: **>50**



Wine cluster

Number of registered producers in the cluster: **34**
Number of people employed in companies: **130**



Freshwater fish cluster

Number of registered producers in the cluster: **5**
Number of people employed in the cluster: **24**



Cluster development in Montenegro

COMFAR III Expert and COMFAR Lite. Funded by the Italian Development Cooperation, the €1.2 million project aims to foster partnerships between local and Italian and European enterprises. Targeted enterprises became demonstrably more competitive through workshops, joint purchasing and common promotional events. Producers of lacquerware benefited from new designs and exhibited their work in Italy at the Museum of Oriental Art, Restructura and Expocasa in Turin and Expo Milano 2015.

Small and medium enterprises provide most of the jobs in the Southern Mediterranean, a region spanning Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, the Syrian Arab Republic and Tunisia as well as the State of Palestine. One sector that is fast-growing yet still has considerable potential for expansion is the cultural and creative industries sector. In an area that requires 5 million new jobs each year to ensure social inclusion, UNIDO is seeking to improve the cultural and creative sector's competitiveness in terms of business,

environmental and social performance, transforming the talents of young women and men—traditional know-how, skills and cultural heritage—into business and job opportunities.

A project, funded by the EU with a contribution from the Italian Development Cooperation, now in its second year, has mapped 144 clusters in the beneficiary countries, highlighting the tremendous potential of the sector in the region. The national steering committees in the seven countries were asked to choose two priority sectors: in Algeria: jewellery (Batna) and copperware (Constantine); in Egypt: habitat design and leather (Cairo); in Jordan: fashion and ceramics (Amman); in Lebanon: jewellery (Beirut) and furniture (Tripoli); in Morocco: home textiles (Casablanca) and interior design (Marrakech); in Tunisia: ceramics (El Djem) and tableware (Nabeul); and in the State of Palestine: furniture (Nablus) and traditional handicrafts (Bethlehem). The project also focused on new product development and business linkages with buyers and consumers. This and a similar project in Myanmar clearly demonstrated that combining complementary areas of expertise—cluster development and support to creative industries—UNIDO can create better impact on the ground in terms of enhancing competitiveness, supplier development, and the socio-economic resilience of vulnerable populations.

In March, an exhibit by a UNIDO project at the forty-first Food Fair in Budva, Montenegro, won the "most innovative fair exhibitor" award. The stand, designed to draw attention to Montenegro's wine, fish and olive oil clusters, was part of an EU-funded project to enhance the competitiveness of local SMEs in Montenegro through cluster development. Implemented by UNIDO in partnership with the Ministry of Economy of Montenegro

and UNDP, the project aims to improve market access of selected clusters in Montenegro. Project activities targeted 34 SMEs in four clusters, directly benefiting 118 fixed-term employees as well as some 270 seasonal workers. Several food producers joined together under the brand name "Delicious Montenegro". The stand drew visitors from retail outlets, tourist agencies and food processing companies. From the supported clusters, 17 producers participated in the fair.

SETTING UP AND SUPPORTING EXPORT CONSORTIA

As part of a recently completed project in Côte d'Ivoire, UNIDO helped set up seven export consortia in the cassava, cashew, cereals, and textile and clothing sectors. It also enabled 30 MSMEs to improve their productivity and competitiveness to the extent that some of them have begun to export to international markets. Twenty-five industrial companies from different industrial sectors benefited from global strategic diagnostics, development of restructuring and upgrading plans as well as assistance in implementing priority actions earmarked in the plans. Training was given to a total of 1,760 participants from 263 manufacturing enterprises as well as consultants and the staff of laboratories, banks and other institutions. The project was responsible for the approval and promulgation of 246 standards in the above-mentioned sectors; UNIDO helped four laboratories install quality management systems, two of which received additional assistance in accreditation. It provided equipment to two laboratories, one for dimensional metrology and one for the analysis and testing of textiles and garment products. Of particular importance was the

formulation of a national restructuring and upgrading programme for the four sectors. An agency and an incentive fund were set up to run the programme while feasibility studies in preparation for three technical centres were being completed.

MEETING THE STANDARDS

A country's economic growth depends to a large extent on its ability to sell its goods on international markets. While many developing countries are already extremely successful, others, in particular LDCs, are struggling to make that crucial breakthrough. To help local enterprises in developing countries enter global value chains, UNIDO helps its client countries meet international standards and the requirements of buyers for certification that the supplied products meet the standards of the respective market.

Among the broad palette of training courses offered by UNIDO during the year in this area, a five-day course in Maputo was designed to build the regional trade capacity of LDCs. Twenty-three participants from Burundi, Chad, Ethiopia, Lesotho, Malawi, Mozambique, Senegal, Sudan, Togo and Uganda were shown how to overcome quality infrastructure-related barriers by experts from UNIDO and other members of the Network on Metrology, Accreditation and Standardization for Developing Countries, including the International Trade Centre, the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), the International Laboratory Accreditation Cooperation, the International Accreditation Forum, the International Organization of Legal Metrology and the International Bureau of Weights and Measures. The event

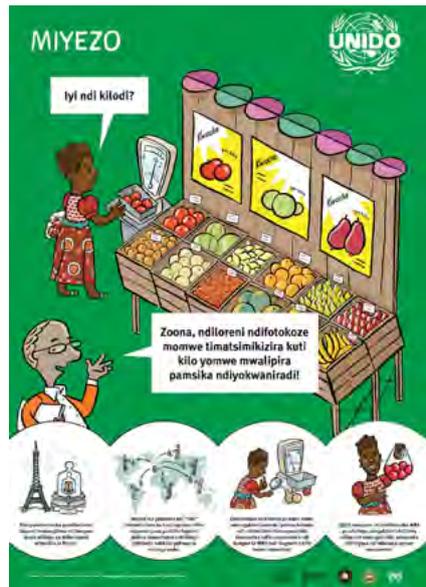
QUALITY FOOD IN MYANMAR

The absence of an effective national quality system in Myanmar hinders the growth of its trade and exports. Weak investment in quality testing facilities has also hampered the development of the value addition and diversification of food products. As part of a €2.6 million project financed by the Norwegian Agency for Development Cooperation (Norad), UNIDO is taking steps that should enable Myanmar's processed food products to access markets across South-East Asia and beyond. Specifically, it is providing training to strengthen the capacities of four existing food testing laboratories to meet the requirements for accreditation to ISO/IEC 17025 for key testing parameters. UNIDO provided the laboratory of the Food and Drug Administration with equipment that will allow it to extend rapidly its range of testing services to exporters. Improvements to the food inspection procedures of the Myanmar Inspection and Testing Services Ltd. should allow that body to receive accreditation to the ISO/IEC 17020 standard for the inspection work carried out in support of the country's imports and exports. In the area of standardization, UNIDO will provide on-the-job training to the Department of Research and Innovation. Progress achieved after two years includes the upgrading of the four laboratories and the launch of the pilot programme to introduce food safety management systems to 15 SMEs. Their goal is to enter global supply chains, especially among retailers in the EU and the United States. The Organization is also training a core group of national consultants in food safety management systems.

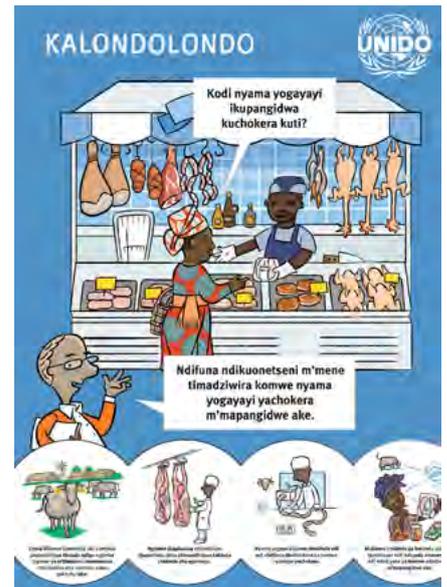
was organized in cooperation with the Enhanced Integrated Framework and funded from a substantive contribution from the Government of Finland to the Organization's trade trust fund.

UNIDO produced a new issue of its *Meeting Standards, Winning Markets—Trade Standards Compliance* report that presents new approaches to the analysis of developing countries' capacity to comply with such standards, the challenges they confront and the implications of their failure to comply.

Beyond its relevance to trade and economic growth, an internationally recognized quality infrastructure system is pivotal for social welfare, health and safety. During the year, Iraq was able to conduct its first independent accreditation assessment of a testing laboratory following the establishment of an internationally and regionally recognized, independent Iraqi accreditation body under a project that began in 2012. Ultimately, the new national body will offer its accreditation services to all national conformity assessment bodies, as well as certification and inspection bodies. The overall aim of the \$12.5 million project, financed by the Swedish International Development Cooperation Agency (Sida), is to help Iraq improve its trade capacities and better integrate into regional and global value chains. The project is being carried out in close cooperation with



Poster in the local Chichewa language illustrating the importance of measurement to Malawian consumers



Poster in the local Chichewa language illustrating the importance of metrological traceability for Malawian trade

the United Nations Conference on Trade and Development and the Swedish Board for Accreditation and Conformity Assessment, as a strategic partner for supporting the establishment and operationalization of a national accreditation body. Eventually, Iraq's upgraded quality system will allow for better consumer protection.

With the establishment of the Arab Accreditation Cooperation under a UNIDO project in 2011, countries in the Arab region set the groundwork for regional quality infrastructure. Moving to the next level, UNIDO launched a new cooperation programme on

quality and food safety infrastructure among Arab States that was announced during the ninety-fifth Ministerial Economic and Social Council of the League of Arab States, held in Cairo in February. The new two-pronged programme that addresses sanitary, phytosanitary and technical barriers to trade, involves cooperation with the League of Arab States, the Arab Industrial Development and Mining Organization and Sida. The first project aims to strengthen regional quality infrastructure and improve the quality and delivery of support services in standardization, conformity assessment and accreditation based on the Arab Quality Infrastructure Strategy, while the second focuses on enhancing regional trade capacity in the food industry and food safety systems.

The need for sustainable fisheries is well understood the world over, particularly among discerning consumers of frozen fish and other seafood products. Producers who meet the standards of sustainable fishing make this visible through the mark of the certifying body on their products.



SMART-Fish programme

The SMART-Fish programme in Indonesia—sustainable market access through responsible trading—aims to support economic growth and increased job creation in the fisheries sector while ensuring the preservation of biodiversity by advocating the sustainable use of fisheries resources. As part of the programme, launched by UNIDO in 2014 with the support of the Swiss State Secretariat for Economic Affairs (SECO), three value chains—pole and line tuna, pangasius and seaweed—are receiving support, taking into account their social and economic impact at the local and national level, in particular on low-income groups and women. The first step was to initiate a public-private dialogue on the sustainable use of maritime resources and safeguarding biodiversity that will continue long after completion of the project. Support to fishermen, farmers and processors

within the three value chains should make their products more competitive by improving traceability, productivity and innovation. UNIDO is working with the Valcapfish Centre, a centre of excellence affiliated with the Fisheries University of Jakarta, on local capacity-building. In consultation with the Australian University of Tasmania, it is strengthening the centre's curricula for the training of future fisheries personnel by integrating aspects of productivity and innovation. The programme is working on a pilot basis with more than 20 partners to improve the performance of the three value chains at the farmer and enterprise level.

Substandard construction materials undeniably contributed to the loss of life following Haiti's devastating earthquake in 2010. This spurred on the

Government to take remedial action and introduce national regulations on quality that had hitherto been missing. Haiti was the only country in the Caribbean Community and Common Market region without a national standards bureau or internationally recognized laboratories for testing building materials, food or any other products. It also lacked a sound metrology facility to check weights and measures against international standards. The adoption of standards such as those promulgated by IEC and ISO is vital for Haiti's ability to compete in international markets and protect its consumers. Against this background, UNIDO is helping Haiti to build a vibrant national quality infrastructure that will enable its enterprises to meet international market requirements and contribute to the country's integration in regional and international trade. The main focus

COLOMBIAN COSMETICS



The greatest challenge for many developing countries hoping to reach export markets is to produce goods that meet international standards and market requirements. Colombia—one of the largest economies in the Latin America and Caribbean region—has a budding cosmetics industry with a strong potential for growth. Endowed with the necessary raw materials to become a world leader in natural ingredient-based cosmetics within the next 15 years, so far it has only achieved a degree of success at the regional level. A weak sanitary and phytosanitary framework, an insufficient capacity for compliance with international standards and the absence of internationally recognized conformity assessment services, among other shortfalls, have contributed to low competitiveness and export rejections. The country has yet to exploit its natural ingredients as a factor of innovation and distinction on international markets.

Funded by Switzerland's State Secretariat for Economic Affairs (SECO) and the Colombian Productive Transformation Programme, a new \$2.7 million project will help Colombia strengthen key quality-related institutions that serve the cosmetics industry, enabling the country to expand the industry and compete on global markets that will in turn open up employment opportunities and advance ISID. So far, UNIDO has completed in-depth assessments of the cosmetic sector's requirements and the country's laboratories as well as a roadmap for the implementation of good laboratory practice promulgated by the Organisation for Economic Co-operation and Development (OECD) which, once in place, will also benefit other economic sectors.

of the EU-funded project is to set up a Haitian Bureau of Standards that will contribute to the reconstruction process, encourage exports and protect consumers from poor-quality products. UNIDO has also been working with the Government to prepare a national quality policy, following work on a national law on standardization during the first phase of the project. Haiti is now a member of ISO and has set up its own national electrotechnical committee.

In common with other LDCs, Malawi needs to achieve sustainable economic growth in order to tackle the challenges of poverty and hunger. In 2012 and 2013 respectively, Malawi embarked on the EU-funded "Development of a robust standardization, quality assurance, accreditation and metrology infrastructure for Malawi" project and the Norad-funded "Market access and trade capacity-building support for agro-industrial products" project.

The former is implemented by UNIDO together with UNDP. The purpose of both projects is to contribute to a more effective and sustainable national quality infrastructure by improving the performance of the Malawi Bureau of Standards. The new quality infrastructure will provide better business services to Malawian enterprises and in the long term help protect the rights of consumers. The projects will also ensure that

SPECIAL FEATURE

UNIDO AND THE PHARMACEUTICAL INDUSTRY

The local production of pharmaceuticals has a double advantage for developing countries. Firstly, it ensures a ready and affordable supply of essential medicines for their own populations, and secondly it opens up employment opportunities for people with a range of skills and expertise. Early on in a ten-year project to strengthen the local production of essential medicines in developing countries, UNIDO helped in the formulation of a business plan for the African Union Commission's Pharmaceutical Manufacturing Plan for Africa that is well on its way to implementation. The overall development objective of the project is to increase capacity for the local

production of safe, efficacious and affordable essential medicines.

In February, UNIDO played a key role in the African Pharmaceuticals Summit in Accra, where it organized a number of workshops and took part in, or moderated, panel discussions on a range of topics to encourage knowledge-sharing, partnership creation and innovative thinking on the local production of pharmaceuticals. The Pharmatech Africa Exhibition was held in parallel with the summit.

Examples of training provided by UNIDO during the year included a grounding in good manufacturing practices of the

World Health Organization (WHO) for 18 inspectors from Kenya's Pharmacy and Poisons Board and 30 representatives of industry from Ghana. In addition, good manufacturing practice baseline assessments were carried out for all 34 pharmaceutical manufacturers in Kenya. UNIDO also supported training and degree programmes for 32 interns of member companies of the Federation of East African Pharmaceutical Manufacturing Associations based on a curriculum that it developed in partnership with Kenya's University of Nairobi and Muhimbili University of Health and Allied Sciences in the United Republic of Tanzania. It also supported advanced industrial pharmacy

the National Smallholder Farmers' Association gains better access to local, regional and foreign markets through strengthened testing and export certification and through improved quality systems implemented in selected value chains. So far, renovation and upgrading of the laboratories has been completed, and testing and metrology equipment installed. A new national quality policy is in place and training courses on certification and accreditation

took place both within and outside the country. UNIDO is responsible for their technical implementation.

A new project was launched at the beginning of the year to put in place a well-functioning and sustainable quality infrastructure framework that enables Central African States to remove technical barriers to trade. With a strong element of South-South cooperation, the project covers Cameroon, the

Central African Republic, Chad, Congo, the Democratic Republic of the Congo, Gabon, and Sao Tome and Principe. The project will provide an enabling economic environment to ease compliance with international trade rules and technical regulations. It should lead to stronger regional economic integration and eventually access to international markets. Preparatory work included the setting up of the project's governance structures, mapping existing quality



training and the University of Purdue (United States) master's course in biotechnology, innovation and regulatory compliance, both delivered at the Kilimanjaro School of Pharmacy in the United Republic of Tanzania. Jointly with the African Vaccine Manufacturing Initiative and WHO, a feasibility study was conducted on the production of vaccines on the continent.

In response to a request from the United Nations Secretary-General in November, UNIDO nominated a representative to an expert advisory group to support the work of a High-Level Panel on Access to Medicines that is co-chaired by the former presidents of Botswana and Switzerland. The overall scope of the high-level panel is

to "review and assess proposals and recommend solutions for remedying the policy incoherence between the justifiable rights of inventors, international human rights law, trade rules and public health in the context of health technologies."

Despite having the largest antiretroviral treatment globally, South Africa remains the country with the highest incidence of HIV/AIDS in the world, with nearly 20 per cent of the population carrying the virus. Five years ago, Italy agreed to fund a UNIDO project that complements a larger bilateral programme between Italy and South Africa to support the South African Department of Health in the implementation of a national

programme of global response to HIV/AIDS. Extended four times before its scheduled completion in mid-2016, the project supported the ongoing transition of the country's Medicines Control Council to the new South African Health Products Regulatory Authority. This was achieved by training 25 expert reviewers to evaluate regulatory submissions, capacity-building of a vaccine manufacturer operating under a public-private partnership, and a multi-stakeholder dialogue towards bridging the skills gap in the pharmaceutical industry. UNIDO entrusted an International Scientific Advisory Committee, set up for that purpose, with an independent end-of-project evaluation that rated all three project components very highly.

infrastructure laboratories and identifying the enterprises to receive support.

Under a similar project in West Africa, UNIDO is helping to establish a framework for the development and operation of quality infrastructure to facilitate intraregional and international trade, protect consumers and the environment, and stimulate sustainable economic development. Launched in 2012, the €12 million EU-funded project is a collaborative effort between UNIDO and ECOWAS. Progress to date includes the definition and harmonization of national quality policies in the 16 countries covered by the programme, the establishment of regional quality infrastructure bodies responsible for accreditation, metrology and standardization, and the adoption of 145 harmonized standards. The project has also provided training on quality to over 350 journalists in 15 countries who are committed to publicizing a culture of quality.

POLICY, RESEARCH AND STATISTICS

Policy advisory services

Solid, evidence-based analysis provides the foundation for sound advice, which in turn translates into appropriate industrial strategies and policies for developing countries and economies in transition. With the right policies, a country can diversify its productive capacity so that industry can help it meet its development goals. Through its analytical and policy advisory services, UNIDO provides Member States with the tools to shape appropriate industrial strategies and policies.

In April, UNIDO and the East African Community Secretariat launched a project that should increase industrial

competitiveness in the region through effective industrial policies and programmes. The project also aims to make information on industrial market opportunities more transparent for the private sector. Specifically, the project will help the public and private sectors to develop an analytical capacity in industrial intelligence while putting in place a regional industrial intelligence capacity. This should result in evidence-based strategies and in turn lead to a more effective implementation of industrial policies and programmes. Financed by the Republic of Korea, the \$1.2 million project involves both national governments and key manufacturing associations in the participating States.

The Pacific-Europe Network for Science, Technology and Innovation is a project funded by the European Commission to encourage cooperation in science, technology and innovation between the South Pacific island nations and the EU. For the past two years, UNIDO has been engaged in a project to strengthen cooperation in the fields of health, demographic change and well-being, food security, sustainable agriculture, marine and maritime research and the bio-economy, and climate action, environment, resource efficiency and raw materials. During the year, UNIDO completed a review of economic literature on innovation activities in the Pacific region and is currently conducting surveys and interviews with stakeholders in Fiji, Papua New Guinea and Samoa as well as New Caledonia.

A project funded by the Republic of Korea was launched during the year to help Myanmar to reduce poverty, create employment and encourage technological innovation by improving the country's industrial policy framework. UNIDO is currently working with the Government on an industrial strategy and policy designed

to raise the competitiveness of priority industries identified by the Government.

Research activities

The bulk of research efforts during the year focused on the preparation of the new edition of the *Industrial Development Report* (see box). Other noteworthy publications involved collaboration with valuable partners. The key elements of UNIDO's work in the field of structural change were presented to the general public as part of the *Routledge Handbook of Industry and Development*, where the Organization contributed a chapter on patterns of structural change and manufacturing development.

Statistics

UNIDO has an international mandate to collect, compile and disseminate global industrial statistics. As a key partner in international statistical activities, UNIDO participated in the Steering Committee of the Ulaanbaatar Group on Statistics for Economies Based on Natural Resources, the annual session of the United Nations Statistical Commission and the concluding meeting of the Inter-agency and Expert Group on MDG Indicators. As a member of the Committee for the Coordination of Statistical Activities, UNIDO attended its regular sessions in New York and Bangkok. It participated in the Inter-agency and Expert Group on SDG Indicators, established by the United Nations Statistical Commission at its forty-sixth session, where UNIDO is one of the lead agencies. UNIDO actively participated in consultations with United Nations agencies on a publication on indicators and a monitoring framework for the SDGs. It presented a set of statistical indicators related to industrialization to the Expert Group Meeting on

the indicator framework for the post-2015 development agenda, held in New York in February.

Other meetings included the sixty-third Plenary Session of the Conference of European Statisticians, the Inter-Agency Task Force on International Trade Statistics, and a meeting of the Economic and Social Commission for Asia and the Pacific Committee on Statistics.

Throughout the year, UNIDO cooperated closely with national statistical offices and the statistics divisions of ministries of industry. Visits to counterpart offices in China, Kyrgyzstan, Oman, Ukraine and Viet Nam covered issues such as advisory services, formulation and monitoring of technical cooperation projects on ongoing industrial statistical programmes and data exchange with UNIDO.

The database maintained by UNIDO is regularly accessed by users around the world involved in research, analysis and decision-making. UNIDO presents quarterly and annual data on the growth, structure and level of global manufacturing and other industrial sectors. During the year, it continued to compile and disseminate global industrial statistics through printed editions of statistical products as well as databases in web and electronic media.

INDUSTRIAL DEVELOPMENT REPORT 2016

The latest issue of the Organization's flagship publication, the Industrial Development Report, deals with the role of technology and innovation in ISID, concluding that technology is able to serve simultaneously all three dimensions of sustainability. Rapid, inclusive and sustainable industrialization can be achieved provided the industrialization process is steered by policymakers, with sound policies and care taken to avoid the mistakes made by others in the past.

From an economic perspective, globalization and the fragmentation of production at the international level have facilitated the diffusion of new technologies through intensified trade in sophisticated manufacturing goods. The diffusion of technology has, however, often failed to translate into concrete growth opportunities. Over the past 50 years, only a handful of countries were able to achieve rapid industrialization and sustain the pace of economic growth. Technological change is recognized as one of the main drivers of long-term growth and is at the core of Goal 9. Innovation needs to be supported by appropriate interventions that strengthen the entire process, from technology invention to its adoption by companies; this was

the case in benchmark countries such as China and the Republic of Korea.

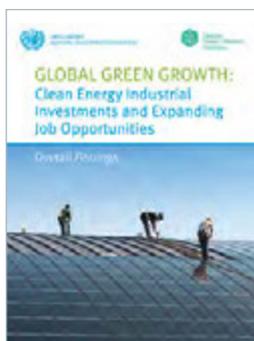
From a social perspective, industrialization contributes to the improvement of indicators such as the human development index and the poverty rate. Even though technology and automation generally improve working conditions, the actual number of jobs may decrease as workers are replaced by machines. A key point highlighted in the report is that technological change is able to mitigate this effect. New technologies generate new markets—the waste and recycling industry is an example—and reduce the prices of consumer goods as well as opening opportunities for investments with higher levels of profitability. Most importantly, the expansion of new technologically-intensive industries absorbs those workers who have lost their jobs to machines.

From an environmental perspective, there is a natural tendency for firms to seek efficiency in the use of resources. Entrepreneurs try to maximize profits by minimizing the use of inputs through process innovations. During the structural change process, the transition from



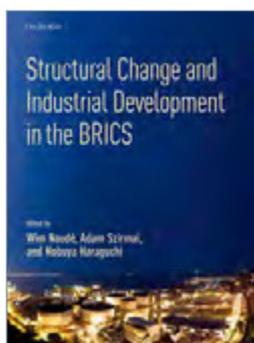
medium-tech industries towards high-tech industries is beneficial from an environmental perspective, as it implies a lower level of pollution.

Despite these positive dynamics, the current trend of technological change does not guarantee a sustainable future. Historically, industrialization has been accompanied by increased pollution and use of resources. Global concerted action is indispensable to reduce greenhouse gases and to stimulate the creation and diffusion of environmentally-friendly technological progress.

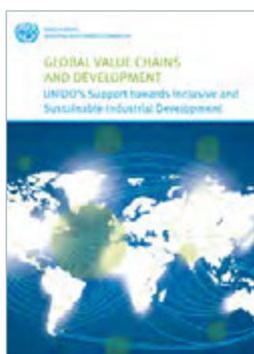


Global Green Growth: Clean Energy Industrial Investments and Expanding Job Opportunities, published in June, looks at the impact on employment of large-scale clean energy plans in Brazil, Germany, Indonesia, Republic of Korea and South Africa and concludes that all countries, at whatever stage of development, can derive significant benefits from investments in clean and renewable energy. It offers conclusive evidence of clear net-gains in employment generation through investment in the clean energy industry rather than in the conventional fossil fuel industry. It also indicates

that countries that sustain annual investments in energy efficiency and clean renewables at a rate of 1.5 per cent of gross domestic product will be able to maintain healthy economic growth rates, while providing sufficient energy resources to sustain growth. Representing a collaborative effort of UNIDO and the Global Green Growth Institute, the report presents in two volumes the overall findings of the study and the respective policy frameworks of each of the five countries.



Structural Change and Industrial Development in the BRICS was published in July by Oxford University Press. It provides a timely analysis of the role of structural change in the economic development of Brazil, the Russian Federation, India, China and South Africa (BRICS) and considers the role of industry, and in particular, manufacturing. Co-edited by UNIDO, the book examines the economic experiences and structural change in BRICS over the past three decades, identifying both differences and commonalities and deriving lessons for other industrializing countries.



Global Value Chains and Development: UNIDO's Support towards Inclusive and Sustainable Industrial Development documents the Organization's extensive experience in the field of global value chains. Given their increasing weight in world production and trade, a systematic review comes at a timely moment and documents UNIDO's far-reaching support for the industrialization of developing countries.

The collection of annual data was made in accordance with the mandate of the United Nations Statistical Commission 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.

To mark World Statistics Day on 20 October, an international seminar on industrial statistics took place at UNIDO Headquarters on the role of industrial statistics in monitoring the progress of nations towards the SDGs. Participants discussed data availability and the methodology for compiling SDG-related indicators, and expressed interest in closer cooperation with UNIDO for coordinated efforts on capacity-building in developing countries.

Preparatory activities were completed on a project to monitor SDG-related activities. The project will involve UNIDO participation in the international negotiation process, rebasing UNIDO data series and conducting awareness activities, including an international seminar on SDG indicators involving a number of national statistical offices and international development partners. UNIDO will publish the rebased data series from 2005 to 2015, starting from 2016.

Statistical tables for recent years were compiled and presented in the publication *International Yearbook of Industrial Statistics*. In addition to the 2015 *Yearbook*, UNIDO published several statistical products, which are listed in appendix K.

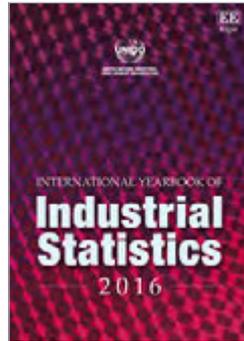
UNIDO quarterly reports on global manufacturing have been widely recognized as an indispensable source of information on the current state of the global economy by manufacturing sector and region. World manufacturing growth remained low throughout the year with falling growth rates in major

emerging industrial economies such as Brazil and China. Some improvements were observed in European countries, while the United States maintained relatively higher manufacturing growth. A methodological paper on seasonal adjustments of quarterly indices describes the experience of producing seasonally adjusted national production indices at an international level when growth figures are received from national sources without seasonal adjustment.

The availability online of data from all UNIDO databases (<https://stat.unido.org/>) led to a significant increase in the number of regular data subscribers and users as well as lower costs and increased revenue from data sales. UNIDO continues to produce databases on CDs to meet the requests of libraries or users in locations with a slow or unreliable Internet connection.

Technical assistance in the field of industrial statistics included a regional project for countries of the Commonwealth of Independent States, funded by a voluntary contribution from the Russian Federation. Under the project, existing data collection programmes were improved in a number of countries in the region to align them with internationally recommended standards. Training workshops were held in St. Petersburg, Russian Federation, and Bishkek. A high-level seminar attended by data producers and data users in policymaking departments of the countries of the regions was held in December in Vienna. A new set of activities was agreed with the State Statistics Committee of Ukraine.

Implementation of another project started in the Lao People's Democratic Republic to enhance the country's statistical capability by training statisticians, setting up an integrated statistics system



The twenty-first edition of the *International Yearbook of Industrial Statistics* includes data on the level, structure and growth of global manufacturing up to 2014. It provides an assessment of global manufacturing growth trends, especially in the years of economic recession. World manufacturing production in 2014 was trapped in low growth with a marginal change in growth rate compared to the previous year. Most of the global manufacturing growth was contributed by developing and emerging industrial economies, as the manufacturing

growth in industrialized countries remained low. The *Yearbook* also reveals the asymmetric distribution of world manufacturing output. The number of countries with lower manufacturing value added (MVA) per capita was reported to be significantly higher than those with higher MVA per capita.



The international seminar on SDG indicators was attended by representatives from national statistical offices and international development partners.

within the Ministry of Industry and Commerce, introducing a consistent methodological framework for policy-oriented empirical analysis and carrying out an industrial survey.

An ongoing project in Gabon is improving the collection, compilation and analysis of national industrial statistics through the establishment of a business register and a mechanism for its regular updating, capacity-building for the design and implementation of surveys and

capacity-building of the Statistics Directorate. The objective of the project is to evaluate the competitiveness and performance of Gabonese industry on the basis of reliable statistics.

A similar project in Oman is helping to improve the country's statistical infrastructure by installing a permanent system, run by the Ministry of Commerce and Industry, to conduct regular annual industrial surveys, maintain and disseminate data and construct related indicators for

policy-making requirements. The project will develop indicators for monitoring and measuring both the overall performance of the industrial sector as a whole and the performance of its subsectors. UNIDO also extended technical assistance to Nigeria to enhance its industrial statistics capacity, while a new project has been formulated for Kazakhstan.

Training in statistics offered by UNIDO during the year included a workshop in Brussels in May, with the

SPECIAL FEATURE

UNIDO INSTITUTE FOR CAPACITY DEVELOPMENT

The UNIDO Institute for Capacity Development offers learning and research programmes and workshops that enable participants to gain state-of-the-art knowledge, skills, international best practices and experience on topics related to ISID.

The Institute's executive programmes provide senior government officials with an opportunity to acquire knowledge first-hand from UNIDO practitioners and renowned academics in compact courses. Professional programmes provide a foundation for sustainable industrial growth through capacity-building among young researchers, private sector professionals and policymakers to ensure informed and timely policymaking and to strengthen institutions and infrastructures. The Institute offers young professionals and doctoral students advanced, research-based summer courses in thematic areas related to sustainable industrial development. This

year's summer course attracted 374 applications from 95 countries, an increase of 88 per cent over the previous year.

In addition to its educational role, the UNIDO Institute serves as a global forum to support policy dialogue activities and knowledge networks. During the year it joined forces with the United Arab Emirates' Ministry of Economy and the Global Agenda Council on the Future of Manufacturing of the World Economic Forum to organize the first United Nations global summit on manufacturing. The Global Manufacturing and Industrialization Summit, launched in September in the United Arab Emirates, will set an agenda for the debate on ISID by bringing together heads of Government, ministers, chief executive officers from prominent manufacturing companies and other leading industrial stakeholders. It will facilitate the exchange of knowledge and technology,

enhance networking, cooperation and partnerships between manufacturing stakeholders, foster the development of manufacturing capabilities and identify challenges in the manufacturing sector. Comprising five biennial summits over 10 years, it is expected to set the future manufacturing agenda. The first summit of the series will take place in Abu Dhabi in the second half of 2016.

The Institute is a strong advocate of inclusive and sustainable industrial development and its contribution to the achievement of SDGs. Recognizing the disparity between assets and opportunities available to women and men in many developing countries, the Institute seeks gender balance at its workshops and encourages participants to consider the issues before them from a gender perspective. The goal is not simply to enable women from developing regions to gain knowledge in the area of green technologies and sustainable energy patterns, but to include equity

support of the EU Statistical Office, Eurostat. In cooperation with the Arab Institute for Training and Research in Statistics, UNIDO conducted a training programme on the use of the software “R” in industrial data processing in Amman in May for national statistics offices in the Arab region.

Assistance was also extended to a number of LDCs. Under a project in the United Republic of Tanzania, UNIDO provided industrial statisticians with the latest international guidelines

and standards on industrial statistics and put in place a system to conduct annual industrial surveys on industrial statistics. Two industrial intelligence units were set up on the mainland and on the island of Zanzibar to support the Government’s activities. By the time the project is complete in mid-2016, there will be a permanent system in place to conduct regular annual industrial surveys, maintain and disseminate data, and construct related indicators for policymaking requirements. The project is now

being replicated and scaled up to other countries within the East African Community. UNIDO has also been requested to provide similar assistance to other African LDCs, including Burkina Faso, Malawi, Niger and Zambia, as well as Asia and the Pacific LDCs, Bhutan, Myanmar, Nepal, the Solomon Islands and Tuvalu.



between men and women in the debate. The Institute has incorporated gender analyses in its course material.

The Institute’s business model is built on partnership; its modest resources mean that cooperation with academic and research institutions is imperative if it is to carry out its mandate. The Institute enjoys ongoing partnerships with the United Nations University-Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT) for a PhD programme and two candidates from the University of Maastricht have completed research internships with UNIDO as part of their PhD requirements. Other partnership activities during the year included the organization of a training course on

“Green industry: towards inclusive and sustainable development” in collaboration with the University of Bahrain and ITPO Bahrain, and the annual summer course on green industry, in collaboration with the Central European University in Budapest. This year’s course—the fourth of its kind—was held in June-July on the topic “Green industry: pathways towards inclusive and sustainable industrial development”. Selected from over 400 applicants, 125 students participated in a one-month e-learning course. The 25 most successful candidates proceeded to in-residence training at the university campus where they learned about ISID, green industrial policies, resource-efficient and cleaner production, eco-industrial parks, gender and green industry, environmental

cost analysis, waste management, corporate social responsibility and international environmental standards in trade. The results of a satisfaction survey among students were overwhelmingly positive.

A recent partnership with the Deutsche Gesellschaft für Internationale Zusammenarbeit led to a training programme at the Royal University for Women in Bahrain entitled “Enhancing the quality of industrial policies”. The 10-day programme trained 22 public servants and industrial analysts from 21 lower-income countries to formulate industrial strategies for ISID. In the long term, improved industrial strategies should result in sustainable and resilient industrial sectors that generate wealth and decent employment opportunities. At the end of the workshop, participants defined a customized capacity-building package to improve the industrial strategy-setting process in their own countries.

3. CREATING SHARED PROSPERITY

UNIDO's expertise will be particularly relevant in relation to Goal 9 as we seek to promote and accelerate inclusive and sustainable industrial development. But that expertise will also be required in relation to many other aspects of the Goals such as poverty eradication, creating full and productive employment, protecting the environment and achieving gender equality.

Mogens Lykketoft, President of the seventieth session of the United Nations General Assembly, to the UNIDO General Conference at its sixteenth session

I would like to congratulate Director General LI Yong ... He is also very successfully working on changing an output-oriented organization to an outcome-oriented one, thereby underlining that the effects of UNIDO's technical cooperation work are more important than how much money is spent ... Recent developments underline the important role of UNIDO in providing decent livelihoods, especially in those countries from which we now receive so many refugees.

Heinz Fischer, President of Austria, at the sixteenth session of the UNIDO General Conference

While there has been a broad decline in poverty worldwide, both extreme and moderate poverty remain primarily in rural areas, where 75 per cent of the world's poor live. In rural areas, productivity is low, local economic activity is undiversified, unemployment rates are high and jobs are insecure. While there has been a certain reduction in rural poverty as a result of rapid economic growth, it has persisted where policies failed to improve agro-industrial productivity, facilitate the development of rural-urban economic linkages and provide rural populations with access to social services, proper infrastructure and utilities and job opportunities for the rural poor, including women and youth. Throughout the year, UNIDO continued to concentrate its efforts on the development of agro-industries, empowering women and youth in productive activities, and human security in post-crisis situations.



Connecting youth in Forest Guinea: UNIDO made it possible for local communities to learn about information and communications technology and gain access to the world wide web.

75%
of the world's
poor live in
rural areas

AGRIBUSINESS AND RURAL DEVELOPMENT

Agribusiness activities cover the supply of agricultural inputs, the production and transformation of agricultural products and their distribution to final consumers. Agro-industries, as a component of manufacturing, where value is added to raw agricultural materials through processing, preservation, preparation and other handling processes, are

engines of growth in developing countries. They contribute to job and income generation, post-harvest loss reduction, enhanced food safety and quality, improved export performance and overall economic development.

During the year, UNIDO efforts to stimulate agribusiness and rural development in its beneficiary

countries focused largely on industry upgrading, entrepreneurship development programmes and vocational training. Youth, women and vulnerable communities continued to represent target groups in many projects, in particular in the area of entrepreneurial skills development. Details of these can be found in the relevant sections below.

Agrifood industries

Based on a trust fund agreement between UNIDO and the Government of Niger, UNIDO is carrying out a \$12 million project to enhance food security and create income by revitalizing the meat, milk and cowpea value chains. The 3ADI project is encouraging agricultural transformation in the country's most important value chains while addressing the issues of food insecurity and job creation. It draws on locally available skills and resources to increase the quantity, quality and affordability of processed meat and cowpea-based products. The project aims to create a market outlet for upstream livestock production and increase access to profitable international markets. Ongoing activities include the rehabilitation of two slaughterhouses, setting up a production centre for kilishi—a type of beef jerky—as well as two milk collection centres. The cowpea initiative alleviates food insecurity while cowpea exports generate

additional revenue for rural smallholders, and women and youth.

Limited economic growth and variable climate conditions can exacerbate economic vulnerability, particularly in rural areas. An ongoing UNIDO project seeks to accompany the regional Agence de l'Oriental in its mission to develop the eastern region of Morocco. Specifically, it targets the production and commercialization of honey by the local population in order to reduce poverty.

A green trade initiative in Egypt is helping the country to boost the competitiveness of agricultural produce through cooperation with Italy's public and private sectors. Specifically, the UNIDO project aims to enhance both the quality and quantity of fresh produce in line with EU food safety and control standards, promote process and product innovation, improve the efficiency of the collection, transportation and export processes, encourage greater investment in agribusiness and logistics and

increase the volume of its exports. It opens up business opportunities for small-scale farmers and producers, creates employment opportunities for youth, and encourages reduced reliance on chemical fertilizers and pesticides. Three offices were opened in Noubaria, Minya and Luxor. The project is experimenting with new tomato varieties suitable for industrial processing in partnership with an international seed company.

The World Bank's Global Food Safety Partnership (GFSP) is a public-private initiative dedicated to improving the safety of food in middle-income and other developing countries. In June, UNIDO hosted a strategic retreat of GFSP partners to review the current strategy, governance, implementation and decision-making processes and funding options, and devise a strategy for 2016 and beyond. During the 2015 International Food Safety Conference, held in Beijing in June, UNIDO signed a memorandum of understanding with the China Food and Drug Administration to strengthen cooperation. This led



THE AFRICAN AGRIBUSINESS AND AGRO-INDUSTRIES DEVELOPMENT INITIATIVE (3ADI)

The 3ADI initiative aims at enhancing developing countries' competitiveness in agro-industries. It is a joint initiative of UNIDO, FAO and IFAD. Its main goals include providing technical support to Africa's agriculture sector to create highly productive and profitable agricultural value chains that link small and medium agricultural producers to markets; increasing farmers' incomes through value-addition processes; supplying higher-valued and differentiated products to consumers in local, regional and global markets;

retaining a higher proportion of the consumer price within the communities and countries where the primary production takes place; and sustainable resource management. UNIDO is currently implementing 3ADI projects in a number of countries, including Burkina Faso, Comoros, the Democratic Republic of the Congo, Ethiopia, Ghana, Liberia, Madagascar, Niger, Nigeria, Rwanda, Sierra Leone, Sudan and the United Republic of Tanzania. Examples of successfully completed 3ADI projects include the shea butter value chain

project, financed by Luxembourg, that improved the livelihoods of 1,000 women in Mali, or the programme to assist vulnerable communities in western Uganda to better adapt to the effects of climate change through upgrading the banana value chain.

to the joint organization of the Vienna Food Safety Forum held at UNIDO Headquarters in September, attended by 160 participants from some 50 countries representing a wide spectrum of stakeholders engaged in food safety governance and the food industry.

At around 100,000 tons a year, the production of sugar in Madagascar falls short of the estimated 160,000 tons required for local consumption. Earlier this year, UNIDO launched a project to boost productivity and increase the value added of sugar cane projects as a step towards increased food security. Adopting a value chain approach, the project addresses the various bottlenecks along the supply chain of sugar cane, from production to marketing. Under the environmental dimension of the project, it is proposed to use bagasse as a source of energy. The project involves the Malagasy Centre of Cane and Sugar, the private sector and producer associations in a partnership that will ensure the project's sustainability long after its completion. During the first planting

season, UNIDO set up three nurseries and offered training on good production practices to some 400 farmers. Around 300 men and women, including a large percentage of young people, attended sensitization seminars. Three environmentally-friendly pilot processing units to be set up under the project will serve as a model for other regions of the country.

A new project to be launched shortly in Rwanda is designed to contribute to pro-poor national economic growth in a sustainable and climate-resilient dairy value chain and improve the livelihood of rural households, with an emphasis on food security, nutrition and the empowerment of women and youth.

Fishing industries

Fishing is vital to the livelihood and food security of 200 million people, while one out of five people on this planet depends on fish as a primary source of protein. The transition from subsistence and

artisanal to semi-industrial and industrial fisheries has become a central pillar in the sustainable development strategy of many coastal developing countries.

Over the last years, the Government of Sudan's Red Sea State has sought assistance in moving from largely artisanal to sustainably managed industrial fisheries. A new project undertaken by UNIDO and the Norwegian Institute for Marine Research, in cooperation with Sudan's Ministry of Agriculture, Animal Resources and Fisheries, is designed to build institutional capacities for the sustainable management of marine fisheries in the Red Sea State. The three-year project, funded by the Norwegian Embassy in Khartoum, aims to utilize in a sustainable manner the economic potential of these marine fisheries, estimated to be up to €25 million per year. The project team will conduct four monitoring surveys and provide technical assistance for the development of a fisheries statistics system to share



DAIRY HUBS IN BANGLADESH

A dairy hub is a network of small village milk collection centres serving smallholder farmers and a central plant to which milk is transported before delivery to a processing factory. By delivering their milk directly to a dairy hub where they are guaranteed to sell their milk, farmers are assured a secure income. Working with public-private partnerships between Sida, a private dairy company in Bangladesh, PRAN, and the multinational food packaging and processing company Tetra Pak, UNIDO is setting up a dairy academy in Bangladesh. The academy

will be an integral part of dairy sector development and will transfer the appropriate know-how and best practices in efficient milk production from a classroom environment to small dairy farms. Progress to date is encouraging: the hub model has successfully demonstrated that commercial dairy farming can be profitable with proper management. By the time the four-year project is completed in 2018, Bangladesh can expect to see a substantial improvement in the livelihood of around 20,000 smallholder dairy

farmers, many of them women, through increased quality and yield. This will in turn enable Bangladesh to reduce its imports of powdered milk and meet a growing consumer demand for milk that currently far outstrips the available supply.



up-to-date information on the status of coastal fish stocks and landings.

It was the expectation of neighbouring South Sudan in its 2011-2013 development plan that the country would be able to increase the production and market supply of fish from an estimated 40,000 to 100,000 tons by the year 2013, a goal that was thwarted by conflict and austerity measures. A five-year, \$8.6 million project, funded by the Government of Canada, is not only helping South Sudan to increase its supply of fish but is encouraging private sector-led economic growth and sustainable development. Specifically, the project will increase access to fish receiving centres, landing sites and markets for men and women in the selected areas as well as their capacity to harvest and market quality fish and fish products in a sustainable manner. The project is targeting women through a number of steps that will allow them to participate in small-scale businesses and other related income-generating activities.

A new \$1.3 million project, funded by the World Trade Organization's Enhanced Integrated Framework (EIF), aims to make Cambodia's fishery products more competitive. As a first step, UNIDO is selecting processors and exporters with a view to increasing their export potential. Once this has been achieved, UNIDO will apply lessons learned to three coastal provinces: Kampot, Koh Kong and Preah Sihanouk. The increased exports of Cambodia's marine fisheries will open up new markets and provide jobs for up to 6 million people in full-time, part-time or seasonal employment.

Although three quarters of the world's shrimp farms are found in the Asia and the Pacific region, countries of Latin America and the Caribbean—predominantly Brazil, Ecuador and Mexico—account for most



Boosting productivity and competitiveness at the local and regional levels

Reducing the environmental impact of the industry

of the remaining production. While there has been a steady increase in trade since the 1970s, when shrimp farming first began in the region, there is considerable potential for expansion. A new initiative by UNIDO is helping to boost the productivity and competitiveness of shrimp value chains at the local and regional level. It is exploring new strategies for inclusive and sustainable industrial development within the industry, drawing from regional experiences and encouraging the exchange of knowledge and technology among Colombia, Cuba, Dominican Republic, Ecuador, Mexico and Nicaragua. The project aims to improve revenues in all national shrimp value chains and foster the regional integration of shrimp sectors while introducing more resource-efficient and cleaner

production systems that will reduce the environmental impact of the industry. Funded from UNIDO trust funds as well as the OPEC Fund for International Development, the project is scheduled for completion early in 2017.

Leather industries

This year saw the issue of one of the most comprehensive publications ever on cleaner leather technologies for developing countries. Drawing on its wealth of experience over the past decades as well as numerous technical publications on different aspects of the leather industry, *"The Framework for Sustainable Leather Manufacture"* not only revisits traditional themes such as water saving, deliming and chrome management, but offers a

fresh and unbiased assessment of different cleaner methods. In conformity with new trends, both wet and dry finishes are discussed in more detail than previously. Greater attention is likewise given to energy consumption.

One of the Organization's foremost concerns in its leather industry projects has always been the health and safety of workers through the improvement of occupational health and safety practices. During the year, the Organization published a useful guide in Bangla, English and Hindi on how to deal with hydrogen sulphide gas in tanneries and effluent treatment plants. It is accompanied by e-learning material and self-testing for training institutions, companies and effluent treatment plants. Other e-learning courses concerned with the leather value chain became available through the e-learning platform of the UNIDO Institute for Capacity Development.

In April, UNIDO helped plant some 50,000 trees that are to form a green belt around a tannery zone in the Pakistani city of Sialkot. The new zone is part of a plan to bring together 250 tanneries scattered across 10 clusters in an effort to reduce their environmental footprint and implement adaptation measures to cope with flooding and other disasters attributable to climate change. The project is a public-private partnership led by the Sialkot Tannery Association (Guarantee) Limited, a non-profit organization set up for the purpose with the backing of the Pakistani Government. The Organization conducted an assessment of related climate risks and their social impact, and designed a concept for a common effluent treatment plant that would reduce the environmental and water footprints while increasing the resilience of buildings. Construction will begin in 2016 once the design has been finalized.



Master plan of the Sialkot Tannery zone, Pakistan; construction to begin in 2016

Following the successful introduction of an e-learning course for the footwear industry in 2014, UNIDO has added a number of lessons and tests to the programme over the course of the year. For the Mwanza campus of the Dar-es-Salaam Institute of Technology in the United Republic of Tanzania, the e-learning course was a new experience, although other institutions in the country have been using it since its launch. Twinning arrangements are being finalized between the UNIDO Institute for Capacity Development, the Mwanza campus, the International Shoe Competence Centre Germany and Austria's Common Sense e-Learning and Training Consultants. In November, an eight-month blended training course began for SMEs in the footwear industry, involving both face-to-face and e-learning. The International Shoe Competence Centre is involved in the e-training activities, while Common Sense will provide assistance with e-learning tools and methodologies. The UNIDO Institute will host the learning management system portal and the course.



Sialkot tree planting in Pakistan

Another project launched in 2014 has helped build micro and small businesses involved in the leather and leather products sector in Ethiopia, one of the most dynamic growth areas of the country's economy. By bringing together micro and small businesses in 12 networks of enterprises, it has been possible for them to undertake joint activities such as the purchase of raw materials or participation in bids and tenders and to share in micro-financing, group loans and machinery leasing. Currently, 377 enterprises, with an average of 3,800 workers, are receiving assistance. UNIDO has worked with local institutions on capacity-building programmes, covering topics such as cluster development methodology, business development, and design and pattern development. A number of local leather companies received help in implementing enterprise resource planning systems using open-source enterprise resource planning (ERP) where the software is free, there is no licence fee and software developers are local IT experts. Specialized training was offered to staff of the Ethiopian leather and leather products

FORESTRY INDUSTRIES

Forestry industries are continuously changing and becoming more green, requiring particular skill sets and training. Together with FAO, UNIDO is currently piloting a training project in South Africa, with funding from the Government of Finland, to design and test industry-relevant training packages. Once successful, UNIDO aims to replicate the programme in Malawi, Zambia and Zimbabwe. The goal is to improve regional collaboration on forestry and wood industry education and training in the Southern African Development Community region that will lead to the creation of green employment and sustainable forest management and utilization. Training programmes were designed on the use of chainsaws, sawmilling and wood drying to improve the recovery rate of the tree through less wasteful techniques while paying special attention to workers' safety. Biodiversity is ensured through the appointment as project counterpart of the Invasive Alien Species Directorate of Cedara College of Agriculture in KwaZulu-Natal Province. Training certificates will ensure better job opportunities for trainees, who are generally drawn from vulnerable populations.

industry as well as selected students at Addis Ababa University. The project also set up LOMI, a women's association, to promote their products among national and international stakeholders. Project beneficiaries



Trainees in Kwazulu-Natal Province in South Africa acquire new skills in use of chainsaws, saw-milling and wood drying.

were given an opportunity to take part in a number of trade fairs. The project also supports the development of new product lines and their promotion at trade fairs and exhibitions, both national and international. It monitors closely the participation of women in different activities as well as adherence to environmental standards.

The establishment of Modjo Leather City—a modern, environmentally-friendly leather district driven by a group of tanneries connected to a common wastewater treatment plant—will further support the development of the industry. A feasibility study was presented to the European Investment Bank in Luxembourg in April.

Textile industries

Over recent years, consumers in industrialized countries have become increasingly aware of the potential cost in terms of human tragedy and exploitation of the clothes they buy on the Internet or the high street. The collapse of the Rana Plaza factory building in Bangladesh in 2013 and revelations of child labour in the garment industry are turning the

tide in favour of more responsible management of supply chains. In preparation for an EU initiative on supply chains in the garment sector, UNIDO attended stakeholder meetings in Brussels in January and June to share experiences and good practices, and explore possible options.

The EU-Africa Partnership on Cotton was set up in 2004 to help fight poverty in African cotton-producing areas by increasing the competitiveness, added value, job creation and sustainability of Africa's cotton industry. In March, UNIDO took part in a series of workshops organized by FAO and ITC, where it discussed future cooperation in the cotton industry in West Africa. The Organization has also joined a new initiative by the World Bank for the promotion of agricultural mechanization in Africa.

An international workshop that took place in September in Bursa, Turkey, was designed to upgrade the skills and know-how of participants in the area of technical textiles and the non-woven fabric industry. Organized in cooperation with the Government of Turkey, the workshop was attended by participants from Bangladesh,



HOMES AND JOBS IN KYRGYZSTAN

Among the challenges facing Kyrgyzstan, a shortage of housing is one of the more pressing. The country faces a lack of inexpensive construction materials and environmentally-friendly manufacturing technologies and insufficient institutional support for cost-effective green technologies and investment. This challenge can be addressed by providing affordable materials for housing and the reconstruction and repair of drainage and irrigation canal systems, especially in rural areas, while at the same time creating job opportunities.

A study by UNIDO revealed a need for building materials and technologies to meet the requirements of rural and low-income populations. As part of a three-year project that began in 2014, UNIDO identified local raw materials available in abundance as well as technologies using organic and inorganic waste materials that could be adopted by the construction industry. It procured equipment for the production of mud stabilized blocks—the first building material to be adopted under the project—and provided training. Production techniques were identified for a further six eco-friendly building materials and the procurement of related equipment was initiated. A UNIDO Technology Demonstration Centre, supported by two national Kyrgyz institutions, will serve as a knowledge centre for new and alternative cost-effective, eco-friendly building materials and as a training facility for local experts. Financed by the Russian Federation, the \$2 million project will help create low-cost housing and jobs.

5900 BC

Armenia has a rich heritage of textile production dating back over 3,000 years. Today, with fierce competition throughout both the industrialized and developing world, it no longer holds a leading position in global markets, although it is a major supplier of textiles and garments within the Commonwealth of Independent States. Since 2014, UNIDO has been helping in the revival of the textile and garment industry in Armenia and the improvement of the international positioning and competitiveness of Armenia's manufacturing exports. Funded by the Russian Federation, the project aims to improve the market share of textile and garment producers in local markets and leverage market opportunities afforded by the Eurasian Economic Union market. UNIDO is building local technical capacity to support the development and

modernization of SMEs, improve the quality of garments produced by pilot beneficiary enterprises and position Armenian products as high-end design goods. In February, the Atex-Burgo Fashion Centre was set up in partnership with Italy's Istituto di Moda Burgo in Milan to support industrial product design, pattern-making and grading, and provide other services to local operators. UNIDO has assisted participating enterprises through training on product design, quality, production planning, legal matters, standardization, human resources, finance, marketing, networking and project communication. This culminated in the launch of three joint collections of designer clothes under the label "5900 BC", which was presented to buyers, fashion experts and the public at international exhibitions and fairs held in Armenia and the Russian Federation.



STRENGTHENING THE FORMAL ECONOMY

In Viet Nam, work on strengthening the formal economy continued through a project to expand the national business registration system (NBRS) to all commercial entities including foreign invested enterprises in 2015, with the new enterprise and investment laws coming into effect in July. During the course of the year, historic data on over 17,000 foreign invested enterprises from 63 provinces were uploaded into the registration system, enabling public access to legally valid and binding registration information. Policy advice was provided towards the formulation of the new laws and their implementing regulations. Over 600 staff members of the Agency for Business Registration

and 63 provincial registration offices were trained on the requirements of the new enterprise law and related implementing regulations as well as on the use of the upgraded system. The Government ruled that the unique identification number of enterprises in the NBRS should be used in all transactions by public entities in the country. Other activities completed include nationwide awareness-raising activities on the new enterprise and investment laws and implementing regulations, particularly in relation to the registration of commercial entities. Overall, nearly 1.2 million commercial entities in Viet Nam benefited from the project that was funded by SECO.

aspects of industrial development. International Women's Day on 8 March had as its theme "Empowering women, empowering humanity: Picture it!" and focused on women's achievements. The Vienna Energy Forum in June featured a special networking session on the contribution of women to sustainable energy, while a side event at the sixteenth session of the UNIDO General Conference in December debated women's entrepreneurship as a means of tackling unemployment. A networking reception provided participants with a further opportunity to hear first-hand accounts of the significance of women's entrepreneurship as a key driver for inclusive and sustainable industrial development. During the Conference, UNIDO appointed a Norwegian entrepreneur as a goodwill ambassador to support the Organization's efforts in manufacturing and in particular women's entrepreneurship (see chapter 5). UNIDO played a prominent role in a conference on women's economic empowerment in countries of the Middle East and North Africa that took place under the auspices of the Expo Milano 2015 in October as well as a UNIDO-run workshop on women's empowerment in nutrition and food security. The theme of this year's Africa Industrialization Day on 20 November was "SMEs for poverty eradication and job creation for women and youth".



Bosnia and Herzegovina, Kazakhstan, Kenya, Kyrgyzstan, Nigeria, Republic of Moldova, Senegal, Sri Lanka, Sudan, Tunisia, Turkey and Viet Nam.

INTEGRATION OF WOMEN IN INDUSTRY

An effort has been made throughout this report to inform the reader of the different approaches adopted by UNIDO

towards the integration of women in the industrialization process. This section provides a brief overview of initiatives launched primarily with women in mind, but for reasons of space cannot give a comprehensive list of those activities—and this includes virtually all UNIDO projects and programmes—that include a gender perspective.

There were several opportunities during the year for UNIDO to showcase its efforts to integrate women in different

An international conference on women in industrial and financial sectors of the economy took place in Ukraine in May as part of a UNIDO resource-efficient and cleaner production centre project. The conference discussed, inter alia, ways to establish gender-oriented policies as a cross-cutting topic of industrial development and financial stability.

In September, the Director General met the heads of UN Women, ITC, ILO and ITU to discuss ways to strengthen joint efforts towards the economic



A female trainee at a UNIDO-supported workshop in the Selam Vocational College learns to maintain and repair heavy-duty equipment and machinery.

empowerment of women in the context of the 2030 Agenda for Sustainable Development. The principal partner of UNIDO on gender equality and the empowerment of women continues to be UN Women. The Organization participates in UN-SWAP and the Knowledge Gateway for Women's Economic Empowerment, initiatives led by UN Women, as well as inter-agency coordination mechanisms such as the Inter-Agency Network on Women and Gender Equality. It shared its knowledge and experiences on gender equality and women's empowerment through various platforms, including joint technical cooperation programmes with other United Nations organizations and gender theme groups at the country level, the Knowledge Gateway for Women's Economic Empowerment, the Green Industry Platform with its dedicated Women in Green Industry

Chapter and the Global Environment Facility Gender Focal Point Network.

In partnership with the Sustainable Energy and Climate Resilience Initiative, UNIDO is pioneering a flagship initiative to promote gender mainstreaming in the sustainable energy sector of SIDS in the Pacific, Caribbean, Africa and Indian Ocean regions.

Women constitute a disproportionate percentage of vulnerable communities, in particular refugees and displaced persons, and it is not surprising that many of the Organization's efforts to ease the plight of refugees target women. Among these, the vocational training project for Syrian youth and women refugees in Turkey using fixed and mobile training units to build skills in apparel and create social cohesion and harmony in the communities hosting Syrian refugees

in Mafraq, Jordan, have enabled a significant number of unemployed women to find productive work. Women from Côte d'Ivoire seeking refuge in Liberia benefited from entrepreneurship development training to assist them in identifying different types of economic opportunities within their own environment and beyond. Gender mainstreaming is an underlying requirement in the project "Empowerment of the poor and women in flood-prone communities to build resilience to natural disasters through diversified livelihoods" in Djibouti, where training on dry fish processing contributed to improving knowledge and skills of women fish sellers. A fisheries project in South Sudan helped women in fishing communities to develop small-scale businesses. In Guinea, UNIDO is running an economic integration project for women at risk in the recycling of solid waste. These and other activities to support refugees and other vulnerable women are described in greater detail below.

A project to catalyse industrial energy efficiency in the former Yugoslav Republic of Macedonia has a strong gender component. The availability of childcare during residential training meant that 35 per cent of the trainees in its energy management system capacity-building programme that began in June are women. Women in the Gambia are closely involved in the promotion of renewable energy systems and have received training and access to loans and grants to set up their own businesses. Under a UNIDO project in Ethiopia, an association of women active in the leather products sector has been officially created under the name of LOMI, which will help promote their products both nationally and internationally (see above). While some activities focused on training women for managerial or entrepreneurial roles, others were designed to improve the lives of women by relieving their

PEARS AGAINST POVERTY

Opuntia ficus-indica, also known as prickly or beles pear, is a domesticated cactus that grows in arid and semi-arid parts of the world and provides a nutritious food source that can be processed into a wide variety of food products and can be used as feed for livestock, especially during the dry season. The plant has the added benefit of being able to thrive in the northern arid and semi-arid regions, and mitigate land degradation. In semi-arid parts of northern Ethiopia it has the potential to combat desertification. In 2013, the Organization of the Petroleum Exporting Countries (OPEC) Fund for International Development (OFID) agreed to contribute towards the costs of a \$2.5 million project that will improve the value chain of the prickly pear by helping rural communities in northern Ethiopia to adopt modern agro-industrial processing techniques at a plant equipped with the latest technology. The project will open up new job opportunities both in the supply and processing of the fruit for those facing poverty and hunger, especially women and young people. The first fresh fruit processing line, including cleaning and sorting units, was inaugurated in November. UNIDO designed a local and international market strategy and identified potential business partners. It established farmers' cooperatives and signed partnership agreements with key local partners. FAO will work with UNIDO on a future scaling up of the project.

daily chores. Water shortage in the town of Chicualacuala, Mozambique, is a burden on women and young girls who are responsible for fetching water. The installation by UNIDO of solar pumping systems means that the hours saved collecting water are now available for women to pursue income-generating activities. Women who benefited from the introduction of clean cooking fuel in Zanzibar, United Republic of Tanzania, appreciated the ease with which they could prepare quick meals and the cleanliness of the stoves and bio-ethanol fuel. The scaling up of this programme will provide business opportunities for women in the local small-scale production, distribution and marketing of ethanol and ethanol stoves.

Women in the Middle East and North Africa account for 51 per cent of university graduates yet only comprise one quarter of the work force. A new regional project approved in January and covering Algeria, Bahrain, Egypt, Jordan, Lebanon, Morocco, Qatar, Tunisia, the United Arab Emirates and the State of Palestine aims to enhance women's economic inclusion and create the conditions for sustainable and inclusive growth by harnessing the great potential of

women entrepreneurs. A conference organized by UNIDO in October in cooperation with the international non-profit organization No Peace without Justice also targeted women in the Middle East and North Africa region. Funded by Italy, the ministerial-level conference took place during the Expo Milano 2015 in October. The conference looked at the findings of two analytical studies: *Assessment of the situation of women entrepreneurs in the MENA region with specific focus on Egypt, Jordan, Lebanon, Morocco, State of Palestine and Tunisia* and a comparison of the six targeted countries with Australia, Italy and Turkey with regard to policy practices in supporting female entrepreneurship development. The former study reflected the results of an ongoing survey so far completed by 446 women entrepreneurs in the six countries, although efforts are currently under way to secure feedback from rural women entrepreneurs. A second conference organized by UNIDO in Milan in October discussed ways to enhance the role of women in the agrifood security industry in Ethiopia.

Under a project in Guinea, five shea butter and two cassava processing centres were upgraded and 70 women were trained in the



Women in the Middle East and North Africa account for:



51% of university graduates



25% of the workforce

45.9%

Female unemployment rate in the Middle East



44.1%

Female unemployment rate in North Africa



use of equipment, boosting both the quantity and quality of products destined for international markets.

YOUTH EMPLOYMENT

According to ILO's *Global Employment Trends for Youth 2015*, at the end of 2014, the global unemployment figure for young people was 73.3 million, with almost 37 per cent of the potential youth labour force worldwide either out of work or not earning enough to avoid poverty. The private sector is the main source of job creation globally. Therefore, many governments see the creation of a strong, diverse private sector as the engine both of economic growth and employment. Yet young people often find it difficult to access capital to start up or expand their businesses, as their age and limited experience are perceived as a high-risk investment. To address this issue, UNIDO has developed an integrated approach that assists governments and supports structures to serve young people who want to improve their livelihoods through the creation of sustainable enterprises.

Youth employment, entrepreneurship development and pro-youth policies were the focus of a number of international forums throughout the year. UNIDO was part of the organizing team at the youth forum of the United Nations Economic and Social Council, held in New York in February. At the first Global Forum on Youth Policy, held in Baku in October, UNIDO moderated a panel on policy achievement and challenges associated with youth employment and entrepreneurship. The forum was hosted by the Government of Azerbaijan and organized by the Council of Europe, UNDP, the United Nations Educational, Scientific and Cultural Organization and the Office



Sustainable handicrafts development in Viet Nam



73.3 million
Global youth unemployment

Source: ILO Global Employment Trends for Youth 2015

of the United Nations Secretary-General's Envoy on Youth. UNIDO helped moderate an online discussion launched by the Secretary-General's Envoy and contributed to the high-level event marking the twentieth anniversary of the World Programme of Action for Youth campaign.

Business development services are often lacking or hard to access for aspiring young entrepreneurs and, where they do exist, they are rarely geared towards the particular needs of youth who have less experience of

networks, markets and investment opportunities than older players. The UNIDO Productive Work for Youth programme assists would-be entrepreneurs by identifying sectors and value chains with a high potential for youth employment. Through its Computer Model for Feasibility Analysis and Reporting software, COMFAR, it assesses the financial feasibility of setting up businesses and teaches them the requisite skills.

A productive work-for-youth project in Armenia is testimony to the fact

that, with the right support, young adults are creditworthy and capable of turning loans into profitable businesses. A revolving fund set up by the Government of Armenia and UNIDO offers low-interest loans and is complemented by intensive coaching, business services and technical assistance to beneficiaries. The success of the UNIDO project of support to youth-led enterprise creation and expansion was recognized by an independent mid-term evaluation in July that commented on the high demand for loans, the project's contribution to systemic change and the strong national commitment to institutionalize the project's approach through replication and scaling up, evidence of its catalytic effect.

Under a similar project in Ethiopia, UNIDO is working with key stakeholders on a national strategy to strengthen the entrepreneurial ecosystem, particularly for youth and women entrepreneurs. At the same time, it is building the capacities of key financial institutions to offer improved financial and non-financial services to SMEs, in particular those run by women or young people. This should result in the creation of resilient and sustainable enterprises in the country. The convening of an investment forum will attract foreign and domestic investments in youth- and women-led enterprises. Financed by the Italian Development Cooperation, the project will be completed at the end of 2017.

Youth employability and entrepreneurship was likewise the topic of a new project that is part of the United Nations Joint Programme on Youth Employment in the United Republic of Tanzania. Financed by Sweden, the project aims to increase the number of available jobs, both on the mainland and the island of Zanzibar, through linkages between businesses and universities.



ENTREPRENEURSHIP CURRICULUM PROGRAMME (ECP) IN CABO VERDE



Cabo Verde has introduced entrepreneurship as a practical subject in 12 secondary schools

on six islands, initially on a trial basis. The programme will be expanded to all schools based on its success. Students show self-confidence, creativity, responsibility and greater abilities to save resources and plan ahead. Some have already started to make their business dreams a reality.



A group of students. *Far right:* Suely Lary Ferreira Gomes is a tenth-grade student who wants to start a beauty salon with the help of her mother.

Second from right: Paulo Jorge is a graduate (twelfth grade). He learned that on the island of Fogo, fish is offered at a lower price. Paulo wants to import fish to the main island and sell it there at a market close to the school area. He completed a market survey and established a partnership with a female fish vendor. The Government provided him with a refrigerator to support his business. Furthermore, his teacher, João Domingos, still acts as his mentor.

Second from left: The student has just started to attend the entrepreneurship courses. After his first lesson, he began to produce candy, which he is selling at school fairs and during breaks. He is paying his school fees with the resulting revenue.



5,940 students enrolled

53% of them female



1,297 students graduated from ECP in 2015



154 teachers trained



27
students

SUCCESSFUL GRADUATES

graduated in July from the Heavy Duty Equipment and Commercial Vehicle Academy just outside Ethiopia's capital. The Academy was set up by the Volvo Group in collaboration with the Swedish International Development Cooperation Agency and UNIDO. It is the first vocational training centre to provide heavy-duty equipment and commercial vehicle maintenance training at an internationally recognized level.

As part of a seven-year project in Côte d'Ivoire, UNIDO is helping the country to achieve greater economic growth and social stability through the rehabilitation of its vocational training system. It is currently providing assistance to 11 vocational training centres and agricultural schools. Since the launch of the EU-funded project in 2012, UNIDO, in cooperation with the Ministry of Employment, Social Affairs and Vocational Training, has trained over 4,000 young people and helped with the capacity-building of government officials and management personnel in pilot vocational centres.

Young people make up around half the population of Guinea—the median age is currently 18.7 years—and for an estimated 70 per cent of them, employment and self-sufficiency

remain a pipe dream. Despite the best efforts of the Government, the unemployment rate for those aged between 15 and 35 continues to rise, leading to frustration, instability and at times violence. The problem is particularly acute in urban areas where it is crucial to find income-generating activities for young people if they are to become responsible members of society. A project completed this year has opened up job opportunities for young people from disadvantaged neighbourhoods, at the same time improving the efficiency of waste recycling. Over the course of the project, some 4,000 youth and women were trained in solid waste management activities such as collection and sorting, sanitation and the integrated management of public spaces. Many of them subsequently

found employment in waste collection centres both in the capital and outside. Over 500 young men and women were able to earn a living through UNIDO support to individual economic initiatives. Through a series of workshops, debates and socio-educational campaigns, the project has also encouraged a culture of non-violence in 20 high risk communities. Lessons learned from the project will be applied to similar pro-women and youth projects in Guinea and in other member countries of ECOWAS.

Under another recently completed project in Guinea, funded by Japan, UNIDO helped 3,300 youths in some of the poorest areas of the country to acquire the entrepreneurial and technical skills needed to become wage-earners. This will in turn enable them to increase rural non-farm income and contribute to regional peace. Community centres in south-eastern Guinea hosted 10 training programmes, where half of the trainees were young women. Five small workshops were renovated and equipped by local artisans to serve as centres for technical training programmes.

As part of a new project launched in March in Zambia and funded by Sida, UNIDO is transferring modern technical know-how for vocational skills training in the field of heavy equipment, such as earthmoving equipment and trucks as well as machinery repair, in order to generate jobs for youth. The Organization is working with Zambia's Northern Technical College to build the capacity of its instructors, improve the current curriculum and provide modern equipment for training. A distinctive feature of the project is the public-private development partnership with the Volvo Group. The mining and transport sectors in Zambia require skilled technicians and operators. The programme aligns technical skills

with industry demand and the Volvo Group provides access to the latest technology to ensure new graduates are prepared for workforce demands.

The Inclusive Development and Entrepreneurship for All (IDEA) programme features strongly in UNIDO country programmes, especially in the ECOWAS and Common Market for Eastern and Southern Africa regions. The IDEA approach addresses youth unemployment through targeted training on skills required by the job market and equips aspiring young entrepreneurs with the tools necessary to run their own businesses.

Key components are financial and technical capacity-building and the forging of partnerships with the private sector, national authorities, civil society and opinion leaders. Stakeholders are involved at all levels, enhancing dialogue and maximizing implementation. The programme is currently running in Mali, funded by the United Nations Peace Building Fund, and in Senegal where it is funded by the Government of Luxembourg. IDEA is planned to start next year in Burkina Faso, Niger, Togo and Zambia.

Although the Arab region is facing a number of development challenges

ranging from waste management to gender inequality, the unemployment rate among youth—among the highest rates globally—is one of the region’s most serious hurdles. In Egypt, for example, UNIDO has designed and adopted a market-driven approach to support youth-led start-ups in waste management. Upon completion of the project at the end of the year, 15 youth-led start-ups in waste management had received technical assistance and capacity-building through intensive training on the technical aspects of business management. Financed by Japan, the project involved collaboration with Egypt’s South Valley University in



HP LIFE IN TUNISIA

The year under review saw the successful completion of a project in Tunisia to provide job opportunities and entrepreneurial skills for young people living in vulnerable parts of the country—Le Kef, Kairouan, Kasserine and Sidi Bouzid—as a step towards

reducing poverty. Under Hewlett Packard’s youth training programme, HP LIFE, 740 young entrepreneurs, half of them women, received individual training in 38 sessions during the year, with 68 continuing on to a four-day business development coaching session. Some 500 college and university students were trained online using the HP LIFE platform; since the start of the programme in 2012, over 7,000 Tunisians have benefited from the online course. Sixteen trainers from four different regions from the public and private sector were certified as HP LIFE trainers. Training on “Greening your Business” offered to 15 companies in the textile, food and leather sectors resulted in

estimated savings of \$3.2 million. The programme also included the formation of eight focal points on the digital entrepreneurship platform, with facilities for the platform in the four governorates. The platform attracted nearly 9,000 users, with 59 experts available to counsel young entrepreneurs. Numerous employment opportunities were opened up through assistance in the start-up of 37 companies as well as help to seven existing companies. Thousands more jobs will be created through the expansion and upgrading of a further 86 enterprises. The programme was funded by the Government of Italy, the United States Agency for International Development and Hewlett Packard.



The **\$3.8 million** project is financed and supported by the United States Agency for International Development (USAID), the Government of Italy, Hewlett Packard (HP) and UNIDO.



During the first phase, the project has resulted in the creation of **1,079 jobs** in Kairouan, Kasserine, Le Kef and Sidi Bouzid.





NEW SKILLS IN IRAQ

Unemployed youth in war-torn Iraq continued to acquire new skills at the Swedish Academy for Training, a vocational training centre set up in Erbil by UNIDO in 2012 in partnership with Scania (a Swedish automotive industry manufacturer and distributor of heavy vehicles), Sida, international education company Education First and the Kurdistan Regional Government’s Ministry of Labour and Social Affairs.

As part of the UNIDO Learning and Knowledge Development Facility, the academy offers courses in basic mechanics, with an emphasis on heavy-duty machinery, computing and English for students from all parts of Iraq. The ongoing conflict in Iraq limits the impact of UNIDO services in relieving economic pressures.

in Africa, Asia and the Pacific, Latin America and the Caribbean, and the Arab region. Training activities targeted trainers, young entrepreneurs, both aspiring and existing, the unemployed and the underemployed, with a focus on marginalized people. The UNIDO-HP global project has supported the training of 50,000 students and the creation of 20,000 jobs. Training facilities and human resources were provided by a number of partner organizations, largely non-profit training institutions that have direct access to local target groups. Following the launch of the HP LIFE e-learning platform, the scope of the partners has increased and now includes private and public sector institutions, universities, academia and non-governmental organizations.

Cambodia fares better than most of its neighbours in terms of youth employment, although a survey conducted by the Youth Committee for Unity and Development, a coalition of Cambodian youth associations, revealed that almost half the 630 people surveyed across the country cited unemployment as their foremost preoccupation. Since 2012, UNIDO has been running a project to create additional employment opportunities for young people while at the same time addressing the issue of e-waste management. During the course of the three-year project, 241 youths were trained in Samsung’s installation and repair services, 156 of whom are either already employed, have become entrepreneurs or are apprenticed to Samsung. Electronics courses at selected vocational training institutes now include a module on Samsung’s state-of-the-art training on installation and repair. Cambodia has developed an e-waste strategy as well as a business plan for a dismantling facility. The participation of a number of women in workshops and skills training represented a breakthrough in what is historically a male-dominated sector.



Qena to close the skills gap of final year students in the faculty of agriculture while the UNIDO Entrepreneurship Curriculum Programme was adapted to the Egyptian context and piloted in 11 technical secondary schools in Qena, targeting 104 teachers and over 2,000 students. A further 57 youths received training as supervisors in a local call centre. Under the same project, 259 young men and women were trained in greenhouse cultivation

of whom 26 qualified as knowledge agents. They in turn trained 99 farmers and established independently 22 new greenhouses units (out of a total of 26), generating both permanent and temporary employment.

Since 2011, Hewlett Packard has provided HP LIFE grants and capacity-building programmes in entrepreneurial and information technology skills at more than 30 certified training centres

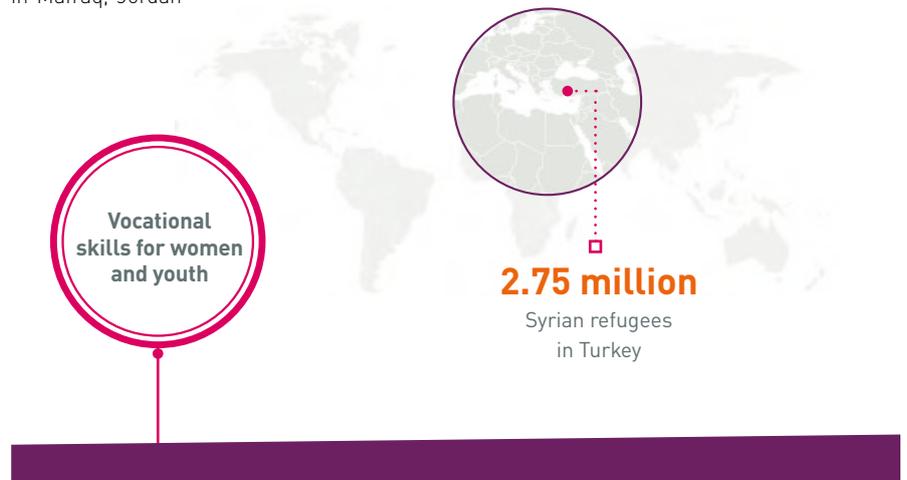
The Learning and Knowledge Development Facility (LKDF), an initiative of UNIDO and Sida, helps young people in developing countries acquire green industrial skills. The aim is to set up efficient, market-oriented, vocational training systems through knowledge sharing and an innovative approach to public-private development partnerships (PPDPs) concerned with skills development. By supporting local industrial training academies in partnership with the private sector, LKDF helps meet labour markets' growing demand for skilled employees, while contributing to inclusive industrial development. The partners of LKDF are running five PPDP projects with in-kind contributions from business partners Festo, Scania and Volvo, with a further 10 projects in the pipeline. In collaboration with global manufacturing companies, the PPDP projects will provide training in industrial skills that will lead to employment, including the operation and maintenance of heavy equipment and machinery as well as logistics and automation. LKDF provides the means to develop and learn from PPDPs. Experience gained from the first two projects in Ethiopia and the Kurdistan Region of Iraq have been useful in similar projects under way in Morocco and Zambia. During the year, UNIDO identified key performance indicators and enabled vocational training centres to track them through an online monitoring tool. Managers were shown how best to run the training centres with a module on business planning.

HUMAN SECURITY AND POST-CRISIS REHABILITATION

UNIDO focuses on human security and post-crisis rehabilitation by raising skills for greater employability and rebuilding productive capacities.



Promoting social cohesion and harmony in the host communities of the Syrian refugees in Mafraq, Jordan



This contributes to the restoration of livelihoods devastated by conflicts and natural disasters through the creation of economic opportunities for the affected populations—refugees, internally displaced persons, returnees, demilitarized groups or simply civilians striving to turn their lives around. Post-crisis assistance includes activities to speed up economic recovery, rehabilitate damaged agricultural or industrial infrastructure, create employment opportunities and stabilize communities.

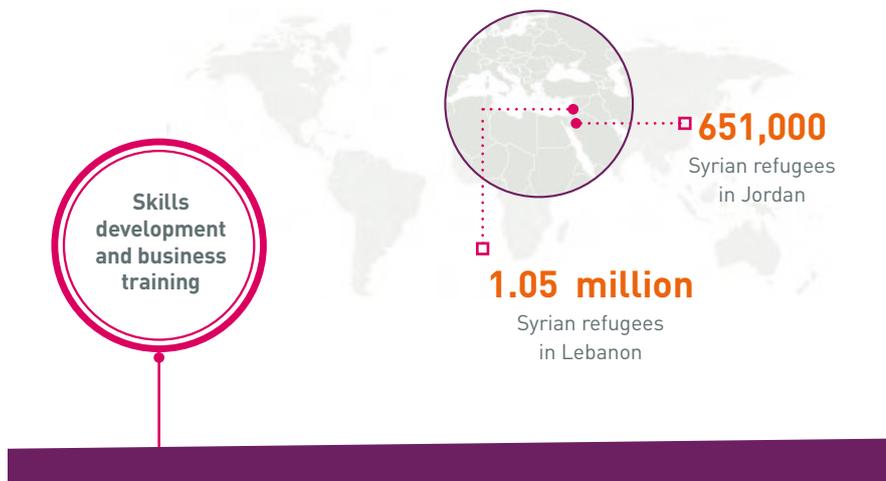
In May, UNIDO co-hosted a panel discussion on the application of the human security approach and its contribution to priority areas of the United Nations system and the wider international community. Panellists included staff of the United Nations and UNIDO closely involved with human security in Tajikistan and Egypt, respectively, as well as a representative of the Department of International Development of the London School of Economics.



Lebanon: Support for host communities affected by the high influx of Syrian refugees

Syrian Arab Republic. In partnership with the Disaster and Emergency Management Presidency of Turkey and the Istanbul Ready-Made Garment and Apparel Exporters' Associations, UNIDO is running a training-of-trainers programme that includes topics such as planning and delivery, instructional skills, classroom management and mentoring. The technical training component of the course will include tailoring, business management and other vocational skills according to market needs and will be complemented by a component on conflict resolution and mediation, aimed at enhancing other broader based community stabilization efforts that might be useful once the refugees return home.

Jordan has around 650,000 Syrian refugees. In some towns—Mafraq, for example, which lies 15 km from the border with the Syrian Arab Republic—refugees account for nearly 90 per cent of the population. A UNIDO project launched in 2014 was designed to provide training to women and youths in the Jordanian host community in entrepreneurship development as well as handicraft skills such as basket weaving, embroidery and recycling handicrafts. A total of 228 local women and youths took part in a skills development and business training programme tailored to their specific needs.



Refugees and migration

The year under review saw an unprecedented number of refugees crossing into neighbouring countries and beyond. While conflict in several countries of the world is causing people to flee their homes, the current crisis in the Syrian Arab Republic tends to overshadow all others. With over 4.6 million Syrian refugees by the end of 2015, the crisis is challenging the international community to come up

with an appropriate response that not only addresses the problems of refugees but also of host communities.

There are over 2 million Syrian refugees in Turkey, a number that is expected to rise steeply in the coming months. A new UNIDO project, funded by the Government of Japan, will provide 1,000 Syrian women and youths with vocational skills that will ease their integration into Turkish society or ensure employment for them if and when they return to the

Since the outbreak of the Syrian crisis, more than 1 million refugees have fled to Lebanon, increasing the population by over 25 per cent. Jobs have been lost as the conflict in the neighbouring Syrian Arab Republic impacts on Lebanon's once thriving tourist industry. One in five Lebanese is now jobless, double the pre-2011 World Bank estimates and thus job creation is a priority. With support from the Governments of Italy and Japan, UNIDO carried out a project to improve host communities' production



A substantial number of people who fled from Côte d'Ivoire have found refuge in the PTP refugee camp in Grand Gedeh County in north-eastern Liberia, over half of them female. In collaboration with the Liberia Refugee Repatriation and Resettlement Commission, UNIDO launched a project, \$1.4 million of which was financed by Japan, designed to help Ivorian refugees and host communities to achieve a greater degree of self-reliance. Not only is the project offering training on entrepreneurial and agricultural skills, but it will also provide trainees with the start-up tools and equipment for crop production and community-based agribusiness. During the year, an entrepreneurship development training-of-trainers course was held for Ivorian refugees and Liberian locals, who were expected to work as peer trainers for other refugees and locals in the PTP camp and host communities. The trainers finally selected will provide basic entrepreneurship development training in 2016 for 400 Ivorian refugees and 100 Liberian locals, who will also receive training in agricultural skills.

institutions and other financial entities for financing options for project-targeted entrepreneurs. Approximately 300 households benefited directly from the project, while both Lebanese authorities and refugee populations gained from capacity-building activities and improved infrastructure. Small and medium enterprises with a high potential for job creation were among the project's greatest beneficiaries.

Refugees are benefiting from UNIDO projects in other parts of the world. *Examining the impact of UNIDO's training on the economic reintegration of repatriated refugees in Liberia* was the title of a working paper issued at the end of the year, co-authored with a senior researcher at the Refugee Studies Centre, University of Oxford. A synthesized version of the working paper will form a chapter of the January 2016 issue of the University's *Forced Migration Review*, issued by the Refugee Studies Centre.

Other vulnerable groups

Under a Japanese-funded project designed to counter violence and extremism through skills training, 250 young people at risk in Kismayo, Somalia, are learning the technical and life skills that will help them secure a brighter future. Similar projects in Djibouti and Liberia will help rebuild communities that have been affected by social instability and natural disasters, as well as providing support to communities hosting refugees.

Under a \$1 million project completed during the year in Southern Somalia, UNIDO was able to provide 140 under-employed tradesmen, owners or staff of micro-enterprises and high-potential youth with technical training and technology transfers in order to take advantage of market growth in dynamic sectors of the economy. Technical



capacity through skills and know-how. It provided support for host communities affected by the high influx of Syrian refugees, adopting a participatory approach to all project activities to ensure the involvement of both the host community and refugees

themselves. Capacity-building and skills development took place in Lebanon's well-established training facilities. The project helped set up or upgrade selected enterprises through training and technology. Linkages were made with relevant private sector

WEATHERING THE STORM



The droughts, flash floods and other natural disasters to which Djibouti is prone have a devastating effect on poorer communities that lack the resources and adaptive mechanisms to cope with crises. Too often, natural disasters deprive them of their livelihood through damage to municipal buildings, homes and equipment, the destruction of infrastructure and the loss of livestock. With reduced employment opportunities and limited access to resources, women are particularly vulnerable. To compound the challenge further, the majority of people living in flood-affected areas in Djibouti are illegal immigrants

fleeing conflict in nearby countries. A Japanese-funded project launched by UNIDO in April aims to help the Government build resilience against natural disasters. Specifically, the project will empower vulnerable communities, especially women in flood-prone communities, by diversifying their livelihood options while at the same time teaching them to cope with unforeseen floods. The project provided training for 70 people in fish preservation, drying processes, packaging and marketing (specifically women) and outboard motor maintenance and fishing tools (for vulnerable men and women) in

partnership with the Yamaha Motor Company. The Japan International Cooperation Agency provided the free services of a consultant to demonstrate fish drying. A further 150 men and women are scheduled to attend awareness-raising workshops. With 372 km of coastline and an abundance of fish, Djibouti's fisheries sector has a strong potential for growth. Promotion of the sector will improve the country's food security and create employment opportunities for vulnerable populations.



assistance initiatives were built around the demands of the high-growth commercial sectors that have been driving Jubaland's economic recovery following its liberation from militants. UNIDO established a mobile training facility and designed technical skills training sessions around the production of public assets, creating a sense of ownership among beneficiaries. This allowed project managers to provide on-the-job training in technical and commercial fields that showed strong synergies with local products, goods and service markets, most specifically in the construction industry. Examples of key assets rehabilitated include a Ministry of Transportation mechanics yard, a public pedestrian pathway to securely access the Kismayo International Airport and speed bumps to improve airport security measures.

A human security project in Upper Egypt, undertaken in cooperation with the United Nations Human Settlements Programme, UN Women, the International Labour Organization and the International Organization for Migration, focuses on the protection of communities from the threat of poverty, unemployment, disease and environmental degradation. Through empowerment, the UNIDO-led project has allowed communities to become self-reliant in addressing vulnerabilities and building their own future. Security forums set up in eight villages opted to focus on economic clusters, such as furniture, waste management, animal husbandry, as well as neighbourhood upgrading and health interventions. Community projects—drainage systems, refurbishing homes and schools, and skills upgrading of local non-governmental organizations, for example—have helped over 30,000 beneficiaries and created jobs for youth of the area. Other key achievements of the project include the construction of greenhouses by groups of entrepreneurs and raising



Above: Nadia and her family, who were supported by the Upper Egypt human security project. *Below:* Zeinab is a skilled handicraft producer supported by the human security project in Upper Egypt.

productivity, thereby tripling income and providing permanent as well as seasonal employment. Thirty date producers established their own packing station and increased the value of their product threefold. Ten young entrepreneurs were trained in palm weevil pest management and are being paid for their services.

Over 80 farmers were able to improve their feeding and milking practices and increase the value of cheese production. Fifty women were trained to build and trade palm crates.

Political instability in Yemen has halted, for the time being, any progress on a project conceived in 2014 to

provide livelihood opportunities for at-risk youth as part of a community integration and reconciliation project.

The aim of a recently launched project in the Islamic Republic of Iran is to support the Ministry of Cooperatives, Labour and Social Welfare to create decent and productive employment for people with disabilities, as well as youth and women. The key to success will be to identify and develop those

sectors that have the capacity to create jobs in a cost-effective manner. In order to understand the dynamics of employment at the national level, UNIDO used an employment diagnostics methodology that includes a broad mapping of the economy and the labour market and an assessment of strengths and weaknesses. Findings in the inception phase of the project showed that, in the short term, informal jobs and micro and small enterprises play a

key role in securing the livelihood of a large number of workers; a long-term strategy towards improved living and working conditions should focus on the development of wage-employment. Following extensive assessments and studies, UNIDO was able to narrow down the list of sectors with a high potential for job creation to six: tourism, handicrafts, garments, footwear and leather products, agribusiness and information technology.

4. SAFEGUARDING THE ENVIRONMENT

Energy is the central nervous system of the world economy. The programme of this year's Vienna Energy Forum reflects the manifold ways in which energy comes into play: as a nexus with other sustainable development goals, as a driver for urban development and as part of mutual linkages with gender equality and the empowerment of women. Austria has a long tradition of know-how and expertise in renewable energy and energy efficiency which it is willing to share.

Michael Linhart, Secretary General of the Austrian Federal
Ministry of Europe, Integration and Foreign Affairs

As women in developing countries are particularly vulnerable to environmental degradation and climate change, UNIDO supports universal access to clean, reliable and affordable energy sources, and promotes the use of energy-efficient and renewable energy technologies.

LI Yong, Director General of UNIDO

2015 was a watershed year for the United Nations system and the planet as a whole. The adoption of the 2030 Agenda for Sustainable Development in September and the Paris Agreement at COP 21 in December will, if effectively implemented, make a profound difference to the future of our societies, our economies and our planet, giving humanity an opportunity to achieve socially inclusive and environmentally sustainable economic growth.

The Paris Agreement is a crucial step towards achieving a safer, sustainable future, limiting the risks associated with climate change yet increasing humankind's ability to adapt to it, while at the same time fostering climate resilience and lowering greenhouse gas emissions. UNIDO will work extensively with its Member States to assist them in achieving the objectives of the Paris Agreement, in addition to cooperating with non-State actors to mainstream environmental best practices in industrial production processes across the world.

UNIDO is confident that the new agreement provides a comprehensive framework within which it can tackle the challenges of climate change. It provides clear directions on necessary actions and puts in place mechanisms to maintain transparency and monitor effectiveness as well as the means to support developing countries in implementation, including financial assistance and technology transfer. The new agreement will



drive innovation and investment in clean energy solutions and technologies to improve resilience and reduce emissions, which are core focus areas for UNIDO.

As the engine of economic growth, industry has helped to generate prosperity and has increased living standards for many segments of society and in numerous nations around world. At the same time, industry has historically been responsible for the depletion of natural resources and the pollution of air, water and soil. UNIDO furthers

sustainable industrial development by improving the environmental performance of existing industries and fostering the development of new industries delivering environmental goods and services.

UNIDO helps industry grow along a sustainable path by encouraging industrial development that is both resource-efficient and protective of the natural environment and human health. In this way, countries will be able to improve their competitiveness and access markets, while at the same time reducing their environmental footprint.



SUSTAINABLE CITIES

The current trend towards accelerated urbanization makes it imperative to develop cities that are both sustainable and smart. This is particularly true in developing countries and emerging economies where urban growth is high and systems and infrastructure are insufficient. Estimates show that over half of humankind currently lives in cities, a figure expected to rise to 60 per cent by 2030. This situation presents an opportunity for UNIDO to help countries to address urban and industrial development challenges through its experience in fostering sustainable cities. The global development agenda advocates, in Goal 11, the need to make cities and human settlements inclusive, safe, resilient and sustainable, while the Organization's mandate of realizing inclusive and sustainable development is an integral component of Goal 9: to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. In November, UNIDO published a useful brochure entitled "Sustainable Cities: Hubs of Innovation, Jobs, Industrialization and Climate Action", describing how

UNIDO helps make cities cleaner and better places to live in.

Renewable and efficient sources of energy power the circular economy. This is nowhere more evident than in large urban centres, which depend on reliable and sustainable energy sources to run basic services and industrial production sites. Malaysia has seen significant economic development in recent years, with an estimated 74 per cent of the population residing in urban areas. While this brings challenges in terms of urban planning and development, it also holds the promise of improved living standards, with an undeniable link between urbanization and higher income levels. UNIDO is hoping to integrate climate considerations in urban planning and management in Melaka City through the adoption of national policies, incentive schemes and capacity-building activities. The recently launched project will encourage the use of electric vehicles by demonstrating solar-powered charging facilities, smart-grids and information technology applications, among others, and will show how energy efficiency and the use of renewable energy can be applied

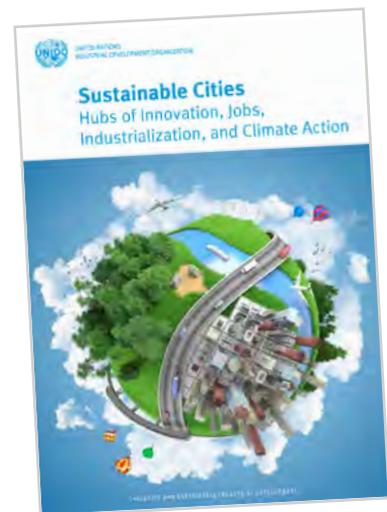
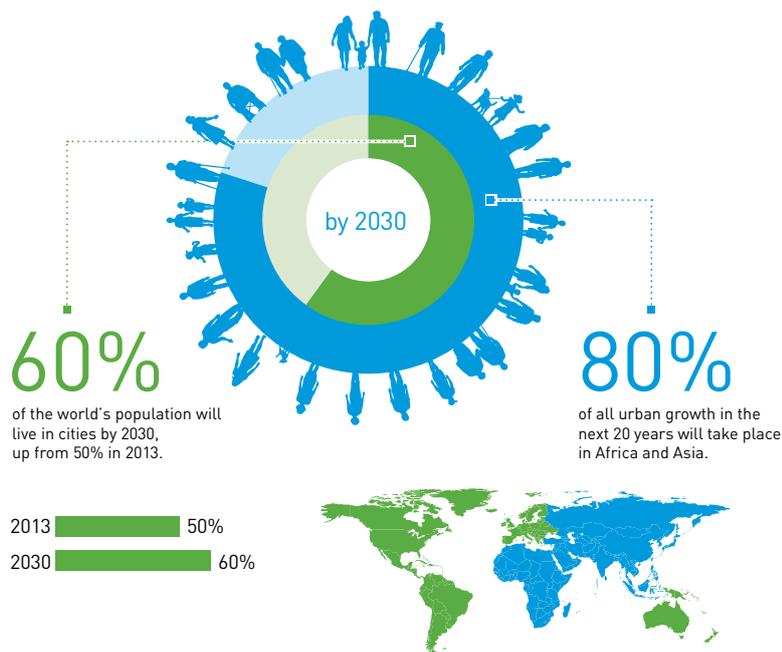
to administrative and commercial buildings. A range of awareness-raising events will inform government officials, suppliers and end users of the benefits and opportunities associated with sustainable cities at both the local level in Melaka and at the national level.

Energy-efficient, low-carbon transport is also the topic of a new project that will help Malaysia reach its target of 10 per cent of all vehicles being powered by electricity by 2020. The project should not only result in the reduction of GHG emissions, but have a significant long-term impact both in terms of income and job creation in Malaysia, as well as environmental benefits such as a reduction in air and noise pollution, particularly in large cities.

South Africa is also slated to introduce energy-efficient, low-carbon transport electric vehicles and non-motorized transport as part of the country's green transport and green cities initiatives. A project launched during the year will help promote the use of electric vehicles and non-motorized transport through policy, institutional capacity-building, coordination and



Melaka City, Malaysia



awareness-raising. Demonstrations at the municipal level and in game reserves should help create a strong market demand for electric vehicles and bicycles and help reduce greenhouse gas emissions.

A similar project, recently launched in China, is introducing low-carbon technologies for the entire supply chain of powertrain vehicles in order

to achieve major energy savings and emission reductions in the automotive industry. The advanced “new energy” powertrain vehicle technologies that include electric battery and plug-in hybrid technologies have the advantages of high energy efficiency and zero tailpipe emissions. While the use of energy vehicles reduces the demand for imported liquid fuels, it does not lessen the impact

on the environment if electricity is mainly sourced from coal-fired power generation. Financed by the China International Centre for Economic and Technical Exchanges and undertaken in cooperation with the Society of Automotive Engineers of China, the project will initially pilot innovative technologies for new energy vehicles and renewable energy in Shanghai and Yancheng.

SMALL HYDROPOWER IN NIGERIA



One of the most beautiful regions in Nigeria is at the same time one of the country's least developed. The picturesque Mambilla Plateau in the north-eastern state of Taraba bordering Cameroon suffered from poverty and unemployment as a result of land disputes and civil unrest, forcing thousands to leave the country. When most were able to return to the region some 10 years ago, UNIDO, together with the Office of the United Nations High Commissioner for Refugees (UNHCR), FAO and others took steps to prevent a recurrence of ethnic conflicts and create an enabling environment for communities. One of the principal industries in the area is Mambilla Beverages Nigeria Limited in Kakara, with 6,000 small-holding contract farmers. The crippling costs of running diesel generators and wood fuelled boilers for drying tea ruled out any possibility of expansion and employment opportunities were limited. Two years ago, with the support of the Government of Taraba State and funding from UNHCR, UNIDO and the International Centre on Small Hydropower installed a small hydropower plant with an operating capacity of 400 kW that supplies clean electricity both to the factory and local communities. Inaugurated in August, the plant has not only helped the tea factory to diversify its production and see a profit for the first time in nearly two decades, but it has reduced greenhouse gas emissions through the switch from diesel and wood fuels to renewable hydropower.

SUSTAINABLE ENERGY

Since the time of the first Industrial Revolution, societies have relied on increasing supplies of energy to meet their needs for economic development and expansion. Addressing today's global challenges requires a profound rethinking of the way we produce and consume energy. Evidence shows that energy systems need to be affordable, reliable and environmentally sound to support a sustainable future. An energy transformation of this kind requires committed and bold action.

Industry today accounts for over one third of global energy consumption and greenhouse gas emissions and will continue to drive global energy demand over the coming decades, particularly in developing and emerging economies. At the same time, structural change through industrialization will remain the main driver of poverty reduction and wealth creation in the post-2015 world, making inclusive and sustainable economic growth and development an even greater imperative.

Renewable energy for productive uses

As an integral part of its mandate to support the industry-related SDGs, in particular Goal 9 and Goal 7, UNIDO focuses on promoting clean, renewable energy for productive uses and industrial applications in developing countries. To enhance productive activities and increase the competitiveness of SMEs in rural on/off-grid areas, the UNIDO renewable energy strategy promotes mini-grids based on viable and proven technologies such as small hydropower, biomass, solar energy and wind.

Mini-grids and other clean rural energy solutions

The market for renewable energy systems in the Gambia is presently small but it is growing fast. A UNIDO project to develop a market environment that will stimulate investments in renewable energy-based mini-grids for productive uses in rural areas of the country has achieved excellent results,

according to an independent mid-term evaluation carried out in February by the Global Environment Facility (GEF). The project's training component included a training-of-trainers course as well as specialized training for 30 renewable energy experts. Another course was offered for enterprise managers and engineers by international and national experts in collaboration with the National Water and Electricity Company Training Centre, while 52 women were trained on renewable energy at the Mbolo Women Association Project as part of the gender mainstreaming component. The project exceeded expectations in terms of electricity generated and other targets.

Although it boasts rich natural resources, Chad suffers extreme poverty. Energy consumption is low and as much as 90 per cent of the country's total energy consumption comes from traditional sources such as fuelwood. The reliance on fossil fuels for electricity generation results in relatively high greenhouse gas (GHG) emissions. Chad has significant renewable energy resources that offer a clean alternative to



Ultra-low heat micro hydropower installation in Mwea, Kenya

fossil fuel dependent electricity generation, with lower operation and maintenance costs, reduced GHG emissions and less reliance on and exposure to volatility in international oil markets. Renewable energy is particularly suitable for remote rural areas without existing grids where it can provide the lowest cost energy supply option for income generation and socioeconomic activities.

During the year, UNIDO continued to make good progress on a GEF-funded project to replace traditional inefficient cooking stoves in Chad with 1,500 energy-efficient models that consume 50 to 80 per cent less firewood. The aim is to reduce CO₂ emissions by 12,162 tons a year while

reducing concentrations of smoke and greenhouse gas emissions. The new cookstoves have been introduced in two traditional agrifood processing industries, sorghum-based beer brewing (bili bili, kochat and argui) and meat grilling (tchélé). The former is traditionally the job of women, while the latter is considered men's work. A recently completed project to promote energy efficiency technologies in the beer brewing sector of Burkina Faso improved the health, increased income and freed up time for over 1,000 women brewers. The replacement of traditional cooking stoves by energy-efficient models has spared women exposure to toxic smoke and had a direct impact on the environment. A National Federation of Beer Brewers

is strengthening social cohesion, cooperation, empowerment and the bargaining power of beneficiaries, while a community micro-credit scheme will assure the project's sustainability and respond to the beneficiaries' lack of access to credit.

Small hydropower

Following the successful launch of its flagship publication *World Small Hydropower Development Report 2013*, UNIDO set up a network of national focal points with partners from industry in preparation for the next issue of the report; the network will also serve as a resource in the design and preparation of small hydropower projects including GEF proposals. The second edition of the report will provide practitioners, decision makers and investors with the tools to accelerate small hydropower development, including updated data, in-depth policy and investment analysis, and detailed case studies. Another invaluable resource is its knowledge platform (www.smallhydropower.org) in cooperation with the International Centre on Small Hydropower in Hangzhou (ICSHP), China (see *Annual Report 2014*).

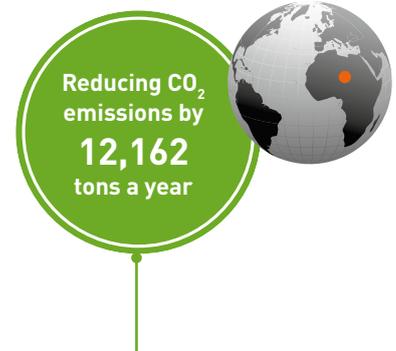
Under a cooperative initiative with ICSHP, three small hydropower specialists will be seconded to UNIDO for a period of six months. Plans for joint activities include assistance in the areas of resource assessment, a feasibility study and investment plans for co-financing in



12% of Chad's forest was lost between 2008 and 2010



85% of Chad's population derives their energy supply from ligneous sources





International workshop on biogas, "Contributing to the knowledge and development of solutions", visit to Lanas Trinidad, Uruguay



Vienna Energy Forum 2015 field visit to the forest biomass combined heat and power (CHP) plant at Simmering, Vienna
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five countries—Ethiopia, Kyrgyzstan, Myanmar, Nigeria and Peru—which have demonstrated a high level of national ownership, small hydropower resources, willingness on the part of local experts to receive training, support among local communities and potential for productive uses in and around the small hydropower system. In partnership with ICSHP and other Chinese organizations, UNIDO offered training in Zambia as part of a project to step up the introduction of small hydropower mini-grids as a renewable source of energy for productive uses, particularly in rural areas. UNIDO will conduct a feasibility study of potential small hydropower plants based on the positive outcome of a similar project in Shiwa Ng'andu in the north of the country.

March saw the launch of a GEF-funded project implemented by UNIDO, the Economic Community of West African States and the Ministry of Energy and Industry of Guinea-Bissau to promote investment in small- to medium-scale renewable energy technologies in the country's electricity sector. The launch took place during a four-day workshop in Bissau on renewable energy mini-grids. Because of Guinea-Bissau's dependence on expensive diesel generation, the cost of generating electricity and consumer tariffs are among the highest in West Africa and only a fraction of the population has regular access to electricity. An unreliable and expensive power supply means that the productivity and competitiveness of the mainly agro-based industry remains low. These challenges will be addressed by a second project to develop a hydropower plant with an estimated capacity of 20 MW at Salthino, financed by the Sustainable Energy Fund for Africa, a multi-donor facility funded by the Governments of Denmark, the United Kingdom and the United States and hosted by the African Development Bank. The project will relieve Guinea-Bissau's dependence

on expensive diesel generation and help the country's electricity sector towards more sustainable patterns.

During the year, UNIDO launched a new five-year project to help China reduce the environmental impact of its own small hydropower plants while boosting competitiveness. The aim is to reduce greenhouse gas emissions and dependence on fossil fuels by upgrading, greening and improving the management of existing small hydropower stations.

Biogas

Biogas is a mixture of gases produced by the breakdown of organic waste material in the absence of oxygen. By using widely available agricultural or municipal waste—plant material, sewage, manure, green or food waste—it is a low-carbon alternative to fossil fuels that also addresses the problem of waste management. It has a worldwide potential for productive uses and industrial applications as well as mobility applications. In the recent past, the use of industrial scale biogas has significantly expanded and is now contributing to heat and power supply in a variety of industries.

Waste to energy is the focus of the ongoing biogas project in Uruguay that aims to transform the different kinds of waste generated by agriculture and agro-industry production chains into energy and other by-products. Introduced at a workshop on biogas for productive uses and industrial and mobility applications that took place at UNIDO Headquarters in June, the GEF-funded project will help strengthen the policy framework for low-emission technologies, encourage waste-to-energy valorization alternatives and low-emission waste treatment technologies as well as strengthening capacities in sustainable waste-management and

low-emission treatment technologies in prioritized sectors. The Vienna workshop, organized in the run-up to the Vienna Energy Forum 2015, led to an international biogas workshop in Montevideo in October, while similar workshops are planned for other countries, including Argentina and Brazil. A project launched by UNIDO in late 2014 aims to reduce greenhouse gas emissions in Chile by supporting the introduction of biogas energy technologies in select agro-industries, in particular the dairy industry in the Los Lagos and Los Rios regions. A newly approved project on biogas applications for the Brazilian agro-industry will help reduce greenhouse gas emissions and dependence on fossil fuels through the promotion of biogas-based mobility and other energy solutions for productive uses and by strengthening the national biogas technology supply chain. In a recently completed project on Senegal's meat industry and slaughterhouses (see section on eco-industrial parks and industrial symbiosis below), a substantial part of the slaughterhouse's power consumption is covered by a combined heat and power unit running on biogas.

In October, UNIDO co-organized a side event on biogas applications in South Africa during the South Africa International Renewable Energy Conference held in Cape Town; a second side event co-organized by UNIDO discussed regional sustainable energy centres.

Solar energy

Rural electrification through photovoltaic technology is proving to be a success in developing countries. As part of its work in support of ISID, UNIDO promotes energy access for productive uses, and is involved in solar photovoltaic activities in countries such as Cabo Verde, Côte d'Ivoire, Egypt, Guinea-Bissau, India,



Maldives, Nigeria, Sudan, Uganda, the United Republic of Tanzania and Zambia.

Solar energy has been successfully harnessed to provide drinking water and irrigation in five villages in the Chicualacuala district of Mozambique, a country particularly vulnerable to climate change (see chapter 3). The solar pumping systems, designed and installed by UNIDO as part of the United Nations Joint Programme on Environment Mainstreaming and Adaptation to Climate Change in Mozambique, have dispensed with the need for villagers, in particular women and girls, to spend hours of their productive work time fetching water.

UNIDO is a key player in a new inter-agency programme in Sudan to promote clean energy access in the Darfur region through the provision of solar photovoltaic systems in 70 schools, health clinics, women's centres and other community facilities. The project will directly benefit 70,000 returnee households with indirect

benefits for thousands more in outlying villages. The Organization's role in the project, which is led by the United Nations Development Programme, will be to put in place and run vocational training programmes to build capacity on the installation, operation and maintenance of solar energy systems.

The International Centre for Promotion and Transfer of Solar Energy was established in Lanzhou, China, under a UNIDO project completed in 2009. The solar technologies and products developed at the centre have gained international recognition with a growing focus on international cooperation and technology and knowledge transfer. In order to cement the centre's position as a leading global authority on the development and transfer of solar technology, a second phase of the project is being implemented by the Government of China and UNIDO. The second phase will include an evaluation of the centre as well as a road map for South-South cooperation in the field of solar technology.



Centre promoting local solar energy solutions in Chad



Solar water heating system in tanneries in Bangladesh

A new \$6.5 million project launched in March will help Egypt on the path to ISID by making the country's economy greener and meeting the industrial sector's growing energy demand. The UNIDO project will focus on developing local capacities to manufacture solar energy products and components that are in compliance with international quality norms. It is expected to attract considerable investment from the private sector, allowing Egypt to play a leading role in the solar industry in the Middle East and North Africa. Under a project in Bangladesh, UNIDO is assisting solar micro-utility enterprises to strengthen their technical and institutional capacities in order to provide energy in rural areas. Conceived as a South-South cooperation initiative and funded through the UNIDO Centre for South-South Industrial Cooperation, the project involves technical and knowledge transfer between India and Bangladesh. A "Solar Lighting for All" project under development for Côte d'Ivoire and Ghana represents a partnership with the Vienna-based Organization

for International Economic Relations and the Energy Globe Foundation, with funding from the OPEC Fund for International Development.

Industrial energy efficiency

UNIDO is committed to helping industries use energy more efficiently by making available the best operating practices and technologies to speed up economic growth, improve competitiveness and create jobs, while addressing the crucial challenge of climate change. The Organization attaches particular importance to the energy efficiency requirements of SMEs, which represent the backbone of socio-economic development, especially in developing and fast-growing economies. The UNIDO industrial energy efficiency programme focuses on policy and standards, building capacity, raising awareness and demonstrating new technologies. It also encourages the implementation of energy management systems based

on the International Organization for Standardization's (ISO) energy management standard (ISO 50001) and energy system optimization. Other projects focus on efficiency improvements of energy-intensive industrial equipment, energy-efficient and low-carbon transport vehicles and related infrastructure.

Colombia is receiving help from UNIDO to boost its energy performance by introducing energy management systems and technical improvements, including the optimization of motor, steam and pump systems. Under a new GEF project launched at the end of the year, Colombia will be able to save energy and make its industries more profitable and competitive. The project will involve building the capacity of national institutions to adopt energy efficiency measures, putting together a cadre of energy management experts from the public and private sectors, strengthening capacities in audit and system optimization and putting in place a financing

scheme for the implementation of energy efficiency measures.

Although it is diversifying rapidly, South Africa's economy is still largely structured around energy-intensive, large-scale operations such as manufacturing, mining and primary minerals beneficiary industries. UNIDO is supporting the Government's efforts to overcome the energy shortages and rising prices that constrain the country's growth in gross domestic profit through the development of industrial energy efficiency policy frameworks, the introduction and promotion of energy management systems, capacity-building and expert development, and awareness creation.

India is the fourth-largest economy in the world in terms of purchasing power parity. The economy is diverse in nature, encompassing modern and traditional agriculture, a wide range of industries and an ensemble of services. The country's micro, small and medium enterprises (MSMEs) contribute around 45 per cent of manufacturing output, 40 per cent of exports and employ more than 69 million people. A project to develop and promote a market environment for the introduction of energy efficiencies and enhanced use of renewable energy technologies in process applications in 12 selected energy-intensive MSME clusters in India is making good progress. Two proposals have been submitted for assistance in the modification of existing technologies. UNIDO has set up demonstration projects on energy information and analytics and is working on a further three on renewable energy and energy efficiency. Sample energy audits have been carried out in 10 clusters in order to develop the best operating practices. Under a separate project, UNIDO is working together with the Government of India on a project that will help MSMEs to adopt more

sustainable operating practices. The idea is to promote energy efficiency, create and sustain a revolving fund to ensure the replication of energy efficiency measures and address any barriers. The project will involve capacity-building among 10 energy-intensive clusters, demonstrations of energy consumption reduction at the cluster level and the establishment of sustainable and effective financial mechanisms.

A GEF project, completed during the year, helped reinforce the concept of energy efficiency in Viet Nam through energy management and system optimization. The ISO energy management standard was adopted by 62 factories that developed energy plans and completed operational improvement projects, with assistance provided by trained national experts. Of these, 15 factories received ISO 50001 certification. UNIDO undertook 150 system assessments, 139 of which led to system optimization. The Organization was able to raise public awareness of the imperative of energy management through a dynamic communications strategy throughout the five-year project, resulting in four television programmes on ISO 50001, 15 case studies and two video clips. Through extensive training by UNIDO, Viet Nam now has a cadre of certified experts on different aspects of energy management and

system optimization and the country can look forward to a more energy-efficient future. Strong interest in the project led to a new initiative in Viet Nam focusing specifically on industrial boilers. The project aims to reduce energy consumption and GHG emissions through a switch to energy-efficient boilers and the adoption of best operating practices in industry, for which UNIDO will help create an enabling environment within the country's industrial subsectors. What has been lacking up to now is a targeted approach to developing a Vietnamese market for energy-efficient boilers, resulting in lost opportunities for savings. The project will facilitate the development of both the end use and supply sides of the energy efficiency industrial boiler market; it will achieve this by improving policy and regulations on a boiler standardization system to enforce the use of energy-efficient boilers as well as capacity-building for local boiler manufacturers, boiler operators, end users, energy consultants, energy service providers and others.

In January, UNIDO and the Dubai Supreme Council of Energy signed a memorandum of understanding on joint activities to promote sustainable energy policies, technologies and solutions in the United Arab Emirates as well as other countries of the Arab



region. The agreement focused on the South-South sharing of knowledge and technology that would lead to ISID.

Climate policy and networks

The new Climate Policy and Networks Division focuses on low-carbon technologies and cross-cutting issues, global networks and platforms and gender-responsive climate policy. It responds to increasing demand for innovative partnerships and multi-level and integrated solutions to address the energy, climate and development challenges simultaneously. The Division positions UNIDO strategically in the global energy and climate change forums, and coordinates global and regional programmes on low-carbon technologies and networks.

Low-carbon technologies and cross-cutting issues

Low-carbon low-emission clean energy technologies (LCETs) have emerged as potential solutions to address simultaneously the challenges of climate change, energy poverty and unsustainable industrialization in



Ultra-low head micro hydropower installation in Mwea, Kenya

developing countries. They comprise a range of advanced innovative technologies that not only significantly reduce greenhouse gas emissions but also promote renewable energy and resource and energy efficiency. The LCET programme provides a comprehensive technology transfer mechanism based on three building blocks: an assessment of

techno-socioeconomic needs and identification of appropriate LCETs, demonstration projects, and public-private partnerships for scaling up the demonstrated technologies and new business models. This three-pronged approach helps create small businesses and sustainable jobs, especially in rural areas that are not connected to national grids.

JAPANESE TECHNOLOGY FOR AFRICA

The Government of Japan is helping to promote LCETs in Ethiopia and Kenya to allow better access to energy for productive uses and improve productivity in industry by strengthening local capacity. The \$8.2 million programme focuses on innovative Japanese LCETs such as micro-hydropower, solar energy and waste-to-energy technologies in Africa. One technology involves the introduction of ultra-low head micro, or damless, hydropower technology. In contrast to conventional hydropower systems,

the ultra-low head micro-hydropower systems can generate electricity when installed in agricultural irrigation as well as for drinking and waste water canals. It is an environmentally-friendly solution that requires neither extensive engineering work nor costly maintenance, making it suitable for electricity generation in off-grid areas. So far, two 10 kW systems have been successfully installed and commissioned in Fentale, Ethiopia, and Mwea, Kenya. Capacity-building workshops took place in Kenya for

local communities as well as in Japan for 19 experts and policymakers from Ethiopia and Kenya. The project is also assisting in the formulation of policies to monitor the provision of rural energy services. Now in its second year, the project will reinforce a market-based policy approach for the deployment of LCET and scale-up investments. It will also establish linkages to Japan's Joint Crediting Mechanism.

UNIDO was among the first United Nations agencies to launch a project that investigates holistically interdependence and synergies between energy, water, food and ecosystems. March saw the launch of Nexus Solutions for Sustainability, a project to identify integrated solutions to energy, water, food and ecosystem security. The joint UNIDO-GEF-International Institute for Applied Systems Analysis (IIASA) project aims to address gaps in achieving agreements and goals on financing for development and climate change. It will examine how the SDGs can be addressed jointly to maximize benefits and to what extent problems in one area may affect others. The project should lead to coordinated and sustainable resource allocation and planning decisions through a greater understanding of the trade-offs and potential synergies of decisions as well as the creation of a regional knowledge and capacity network. The three organizations will work together to provide a system analysis framework as a policy tool to assist countries in making informed decisions.

South-South cooperation is particularly relevant when it comes to dealing with the negative impact of climate change. Other countries will have probably faced similar challenges, making South-South technology transfer a less expensive yet highly effective solution. When Bhutan asked UNIDO's Climate Technology Centre and Network (CTCN) for help in dealing with its congested and inefficient road and fossil fuel-based transport systems, the Centre facilitated sharing of relevant transport policies and systems by Thailand.

Global networks and platforms

CTCN is the operational arm of the United Nations Framework Convention on Climate Change



Top left: South-South technology transfer via CTCN. Top right: Demonstration of energy technologies in Indonesia Above: CTCN working with the Government of Colombia to help measure impacts of national adaptation projects



Technology Mechanism. It was set up in Copenhagen in 2013. Hosted jointly by UNIDO and UNEP, it helps developing countries to adopt climate technologies that will assist them in achieving energy-efficient, low-carbon and climate-resilient development. It provides technology solutions, capacity-building and advice on policy, and legal and regulatory frameworks tailored to the needs of individual countries. CTCN has received over 100 requests from developing countries for technology assistance ranging from agriculture to waste management. Solutions are provided by a network of climate technology stakeholders from academia, finance, non-governmental organizations,

the public and private sectors, and research as well as over 140 national focal points selected by their countries. Membership gives network partners an opportunity to showcase relevant technologies, policies and practices and to facilitate their deployment in developing countries by gaining pre-qualified access to competitive bidding for the delivery of CTCN technical assistance and/or capacity-building services. CTCN regional forums are a useful channel for South-South cooperation and help strengthen the regional network of national designated entities and their relationship with other technology stakeholders. A Regional Forum for National Designated Entities will be held in



The Vienna Energy Forum 2015 opened a dialogue on sustainable energy for inclusive development and productive capacities.

early 2016 in Tonga in collaboration with the Secretariat of the Pacific Regional Environment Programme.

The Global Network of Regional Sustainable Energy Centres—a post-2015 South-South and triangular partnership—continued to grow during the year. There are currently eight centres that enjoy the support of their respective Governments: the Caribbean Centre for Renewable Energy and Energy Efficiency, the Centre for Renewable Energy and Energy Efficiency of ECOWAS, the East African Centre for Renewable Energy and Energy Efficiency, the Himalayan Centre for Renewable Energy and Energy Efficiency, the Mesoamerican Centre for Renewable Energy and Energy Efficiency, the Pacific Centre for Renewable Energy and Energy Efficiency, the Regional Centre for Renewable Energy and Energy Efficiency of Arab States, and the Southern African Centre for Renewable Energy and Energy Efficiency. UNIDO provides technical support during the establishment and operation of the centres, while the centres themselves provide valuable support to projects implemented

by UNIDO and other international organizations. The centres promote South-South cooperation, facilitate the implementation of the Sustainable Energy for All (SE4ALL) initiative and complement national activities in the areas of policy and capacity development, knowledge management and awareness-raising, as well as investment and business promotion.

In September, UNIDO joined the ECOWAS Centre for Renewable Energy and Energy Efficiency, the African Development Bank and others to organize the ECOWAS Sustainable Energy Policy and Investment High-Level Forum in Abidjan, Côte d'Ivoire. The inauguration ceremony of the Caribbean Centre for Renewable Energy and Energy Efficiency took place in Barbados the following month in the presence of ministers of energy and other key stakeholders. Also in October, a side event on the newly established Southern African Centre for Renewable Energy and Energy Efficiency was organized at the South African International Renewable Energy Conference, where UNIDO presented a report on renewable energy and energy efficiency markets in southern Africa.

During the year, UNIDO activities in support of the centres concentrated on strengthening the capacities of regional organizations, assisting in the formulation of regional renewable energy and energy efficiency policies, raising awareness of sustainable energy issues, improving access to relevant data, training of trainers, establishing applied research networks and facilitating investment. The \$10 million project is being financed by the European Commission, GEF, the Austrian Development Agency, the Spanish Agency for International Development Cooperation and other partners. A further \$40 million has been earmarked through co-financing arrangements.

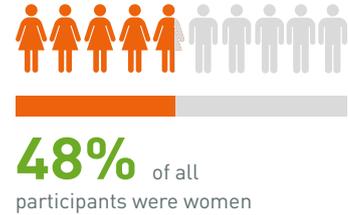
September saw the official establishment of the SIDS Sustainable Energy and Climate Resilience Initiative (SIDS DOCK) at a ceremony in New York. SIDS DOCK is an initiative among member countries of the Alliance of Small Island States to provide SIDS with a collective institutional mechanism to help them transform their national energy sectors into a catalyst for sustainable economic development and generate financial resources to address adaptation to climate change. It is called SIDS DOCK because it is designed as a "DOCKing station", to connect the energy sector in SIDS with the global market for finance and sustainable energy technologies as well as carbon markets in the EU and the United States in order to trade carbon emissions. The SIDS DOCK Declaration highlighted the important role played by UNIDO in the establishment process. The new body will implement its activities through a network of regional sustainable energy centres, set up by UNIDO with financial support from the Government of Austria.

A joint initiative of UNIDO, the Austrian Government, the Austrian Development Agency, SE4ALL and IIASA, the Vienna

GENDER MAINSTREAMING IN ENERGY AND ENVIRONMENT PROJECTS

In January, UNIDO issued its *Guide on Gender Mainstreaming Environmental Management Projects* as a complement to last year's *Guide on Gender Mainstreaming Energy and Climate Change Projects*. Both publications are intended to help UNIDO staff involved in environmental management interventions to apply a gender perspective to their work and, more specifically, to mainstream gender throughout the project cycle. The guides can also be useful for national and local counterparts, agencies, international and private sector partners and individual experts who work closely with UNIDO on environmental management.

UNIDO is involved in a range of gender mainstreaming activities and recently joined working groups of the Gender Equality for Climate Change Opportunities project, a joint initiative of the International Union for the Conservation of Nature and the United States Agency for International Development. Women and children tend to suffer more than men from exposure to persistent organic pollutants (POPs). For this reason, many UNIDO projects designed to reduce or eliminate POPs draw attention to the specific dangers facing women. Gender activities are embedded in all programming and projects of the Organization's Stockholm Convention programme. During the year, 9,975 women—48 per cent of all participants—received training and skills development as a part of the programme.



Energy Forum explores current development challenges from the perspective of sustainable energy. This year's forum opened a dialogue on sustainable energy for inclusive development and productive capacities. Meeting in Vienna in June in the run-up to the United Nations Sustainable Development Summit in September and COP 21 in December, the three-day conference brought together over 1,600 policymakers and representatives of civil society, the private sector and academia to share best practices, identify opportunities and challenges, forge networks and intensify cooperation and business partnerships in the context of sustainable energy for all. Participants included for the first time high-level delegations from the European Commission, the Ministry of Economy, Trade and Industry of Japan and the United States Department of Energy. The Vienna Energy Forum 2015 recognized sustainable

energy as a golden thread that connects the post-2015 development agenda with climate action.

Gender-responsive climate policy

Women are particularly vulnerable to the negative impacts of climate change, pollution and resource scarcity yet at the same time they are often at the forefront of measures to safeguard the environment. With this in mind, UNIDO efforts to champion gender-responsive climate policies in client countries focus on women's access to sustainable sources of energy as well as labour-saving technologies, the role of women as key agents of environmental protection, and women's engagement and leadership in green industry. UNIDO is also seeking to ensure that the distinct needs and priorities of women and men are reflected in

international and national agreements, regulations and capacity-building.

Women's knowledge and experience of the use of appropriate energy technologies are not being taken into account and, as a result, their potential as agents of change in driving innovative climate change responses remains untapped. A webinar was organized in May by UNIDO in cooperation with UN Women, the Climate Technology Centre, ENERGIA and EmpowerWomen.org. Moderated by UNIDO, the webinar brought together experts and entrepreneurs in the field of sustainable energy to reflect on the role of energy technologies in empowering women. Panellists agreed that women often lack access to technologies and finance, as well as information and training about appropriate technologies and their use. In order to foster women's empowerment in the sector, panellists recommended acceptance

of the need to recognize and accept different working styles—for instance, women’s preference for cooperative models of working—and to focus on simple innovations that are affordable, durable, easy to use and maintain, eco-friendly, money-saving and life-changing. Some of the 170 participants in the webinar, who came from over 90 countries, contributed to discussions with questions and comments that underlined the importance of ensuring women’s involvement in decision-making and the integration of gender dimensions in policy dialogues.

ENVIRONMENTAL SUSTAINABILITY

UNIDO continues to promote sustainable industrial development by upgrading the capacity of industry to use resources more efficiently and to develop, use and maintain environmentally-sustainable technologies. The Organization’s service delivery in the areas of energy and environment was restructured early in the year and an expanded environment branch formed in order to further enhance UNIDO technical cooperation within its ISID mandate.

The services delivered under the UNIDO environment programme are geared towards enabling countries to enter into a circular economy, in which industries ideally produce neither pollution nor waste, and resources are either reused or safely reabsorbed by the environment. UNIDO aligns its service delivery with a growing global focus on promoting circular economies. The SDGs, the European Commission’s Circular Economy Strategy and the 2015 G7 Summit Leader’s Declaration were all signal policy frameworks adopted in 2015 that focused on the circular economy. Longer-standing national policies, such as China’s



Launch of “Nexus Solutions for Sustainability”—a partnership between GEF, IIASA and UNIDO (see page 65).

GLOBAL ENVIRONMENT FACILITY

A major donor to the Organization’s environment activities is the Global Environment Facility (GEF), established in 1991. UNIDO continues to perform well in GEF’s sixth replenishment cycle (GEF-6), which started in July 2014 and will last until June 2018. The Organization has been able to gain approvals on sizeable GEF funding envelopes from the GEF-5 replenishment cycle of around \$270 million in GEF grants, an increase of some 40 per cent over GEF-4. Based on these figures, it is estimated that UNIDO might be able to access up to \$320 million during GEF-6. In 2015, the GEF portfolio contributed with 30 per cent to overall UNIDO service delivery. It is expected that this figure will stabilize above 20 per cent in the coming years as a result of a sustained GEF-funding scenario.

In the first three GEF-6 work programmes (October 2014, May and October 2015), UNIDO gained concept approvals with a total grant value of \$99.81 million in its specific focal areas of comparative expertise: \$22.8 million for chemicals and waste (including POPs, e-waste and mercury); \$13.2 million for international waters and \$40 million for climate change (industrial energy efficiency and renewable energy for productive use). Additionally, UNIDO has also been able to gain substantial approvals of \$23.1 million in two new GEF programmes: “Sustainable Cities” and “Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa”.



SPECIAL FEATURE

UNIDO AND HEINEKEN

Population growth, changing lifestyles and climate change all place increasing pressure on the environment, particularly the nexus issues of water, energy and food production. By 2030, the world is expected to require 40 per cent more water and 50 per cent more energy. Since both these resources are indispensable for households as well as for many industries, they must become more efficient in their energy and water usage. With a growing demand for food across the globe, responsible agricultural sourcing has never been more important. One sector that touches all three of these resource topics is the brewing industry. A memorandum of understanding signed in February between UNIDO and the Dutch brewing company HEINEKEN aims to encourage public-private partnerships for the responsible planning and management of water resources in 11 water-stressed priority catchment areas in Algeria, Egypt, Ethiopia, Indonesia, Mexico and Nigeria.

UNIDO will work together with HEINEKEN and other stakeholders to identify the root causes of water stress and develop collaborative programmes to reduce it. The initiatives will complement HEINEKEN's commitment to reducing average water consumption to 3.3 hl/hl in breweries located in these regions. This project also benefits from the support of Israel,



Stakeholder workshop on water stewardship, Nigeria

a country with extensive experience and expertise in water conservation, technology and innovative practices.

The three-year water stewardship project is already showing results. Stakeholder engagement workshops that brought together representatives of government, civil society and industries were successfully held in September in Jimma, Ethiopia, and in November in Lagos, Nigeria. Measures identified by stakeholders to reduce water stress in Dabena, Ethiopia, are the reforestation of degraded upstream catchment areas, the promotion of sustainable land use and agroforestry practices and the establishment of community-based water retention facilities. Beyond water stewardship, UNIDO is working with

HEINEKEN to undertake feasibility studies in Sierra Leone to examine potential renewable energy that would enable HEINEKEN's Freetown-based brewery to become an independent power producer, supplying excess back into the local community. UNIDO and HEINEKEN are exploring the option of establishing an energy management system and conducting energy systems optimization within their Sedibeng Brewery, located near Johannesburg, South Africa. These two industrial energy efficiency methodologies have a proven track record of being able to improve industrial energy performance quickly and significantly. The ensuing reduction in energy demand, particularly electrical energy, is especially welcome given the current power constraints within South Africa.



Water stewardship



Renewable energy



Sustainable and inclusive supplier development

National Circular Economy Promotion Law and Japan's Kobe 3R Action Plan, also demonstrate strong country ownership and interest in the concept.

In order to respond to these calls issued by Member States, UNIDO conducts technical cooperation activities that strongly support the circular economy model by providing multiple value creation mechanisms that are decoupled from the depletion of finite resources and the degradation of the environment. These activities increase the resource efficiency of

manufacturing processes, facilitate the development, adoption and maintenance of environmentally-friendly products, extend the useful lifespan of products and enable the sustainable management of industrial waste. In addition, industrial inputs such as energy and water are also targeted.

Promoting industrial resource efficiency

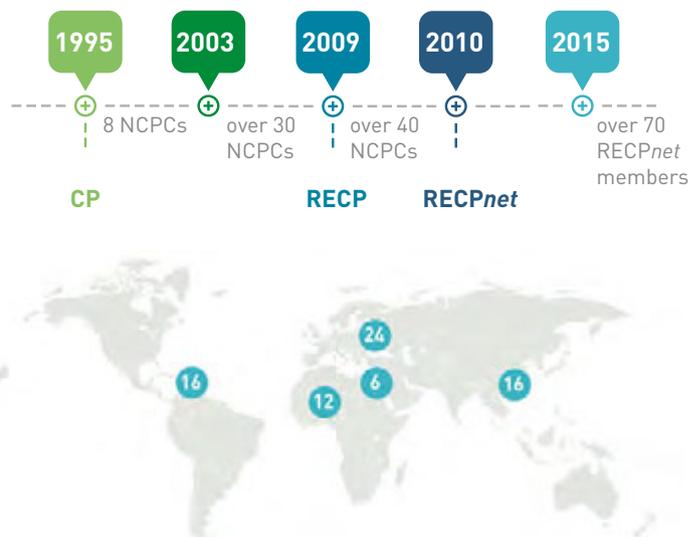
The year under review marked 20 years of successful implementation

of the global Resource Efficient and Cleaner Production (RECP) programme, run by UNIDO and UNEP. The programme focuses on accelerating the application of preventive environmental strategies to processes, products and services in order to use natural resources more efficiently and reduce risks to humans and the environment.

The RECP programme is delivered at the national and regional levels through the Global Network for Resource Efficient and Cleaner Production (RECPnet), which brings together over 70 providers of RECP services around the world. RECPnet consists of 74 members, with 12 members in Africa, 6 in Arab States, 16 in Asia and the Pacific, 24 in Europe and Central Asia and 16 in Latin America and the Caribbean. New national RECP programmes were launched during the year in Bosnia and Herzegovina and Ecuador.

The RECP programme's 20-year landmark was celebrated at the joint UNIDO-UNEP Global Network Conference on RECP that took place in October in Switzerland (see below). A UNIDO-UNEP publication, *National Cleaner Production Centres—20 years of achievement: towards decoupling resource use and environmental impact from manufacturing growth* provides a comprehensive overview of the evolution of the RECP concept and its relevance in a changing international development agenda.

The Global Network Conference on RECP took place in October in Davos, Switzerland, in conjunction with the World Resource Forum 2015. Organized jointly by UNIDO and UNEP, the conference gathered RECPnet members from over 60 countries, as well as government officials, international RECP practitioners, cleaner production



RESOURCE-EFFICIENT AND CLEANER PRODUCTION

As an example of the country-level application of RECP, a recently completed project in Tunisia led to a measurable and lasting improvement in the competitiveness and environmental performance of the country's small and medium enterprises. The five-year project was funded by the Governments of Switzerland and Tunisia. Five economic sectors—hotel, food processing, textiles and clothing, leather and footwear, and surface treatment of metal parts—applied a RECP methodology that has demonstrably improved their productive use of materials, energy and water and reduced their generation of waste, effluents and emissions. The introduction of an improved energy accountability system and the use of an ozonizer to kill bacteria and filter contaminants led to a 70 per cent reduction in water consumption in the hotel sector while the textile industry was able to achieve a 50 per cent reduction in water consumption with new washing machines. In total, 80 companies in Tunisia are now applying RECP and more than 350 people, including 60 unemployed young people, have benefited directly from RECP training. The benefits until 2030 for the audited companies and Tunisian society at large are calculated at €70 million.

experts and representatives of development financial institutions. The conference culminated in the adoption of the Davos Declaration on Promotion of RECP in Developing and Transition Countries. The declaration calls for the promotion, mainstreaming and scaling up of RECP in support of the 2030 Agenda for Sustainable Development.

Eco-industrial parks and industrial symbiosis

Eco-industrial parks are emblematic of the Organization's approach to promoting a circular economy, in this case, as applied within the context of sustainable cities (see pp. 56 and 57). In Viet Nam, the creation of industrial zones has benefited the country's economic development, but it has also taken its toll on the environment. Converting existing industrial zones into eco-industrial parks is the aim of a UNIDO project launched last year with \$5 million of funding from GEF and the Government of Switzerland. The project is expected to help reduce GHG emissions by 182,000 tons and water consumption by 6 million m³ per year, ensuring that the quality of wastewater reaches international standards. This

will be achieved through increased transfer, deployment and diffusion of clean and low-carbon technologies. RECP audits are currently analysing the implementation potential of such clean and low-carbon technology as well as identifying training needs within companies. The project additionally targets the strengthening of park management capacities for the monitoring and managing of the park's overall performance. Awareness-raising events have informed key stakeholders of the benefits for the local population, private companies and the environment as a result of their participation in the project.

The Société de gestion des abattoirs du Sénégal is a major player in Senegal's meat sector and its slaughterhouses produce a daily supply of some 20,000 tons of meat, most of which is consumed in Dakar. On average, the site consumes 250 m³ of water and more than 2,200 kW of electricity per day. In common with other industries along the seafront, much of the 220 tons of raw waste generated daily is discharged directly into the sea at Hann Bay, once a thriving fishing community and seaside paradise before the water became toxic. Under a recently completed project, UNIDO

was able to transform the main slaughterhouse from a top polluter into a clean energy producer. In an example of the possibilities inherent in a circular economy model, animal waste is processed into biofuel that in turn provides the electricity used to power refrigerators and heat water. There were corresponding reductions in waste water, solid waste and air emissions and new jobs were created in waste handling. The best practices from this project will be applied to other slaughterhouses and wastewater producing industries in Senegal and the ECOWAS region.

A quarter of Senegal's population, estimated at 15 million at the end of the year, are city-dwellers; yet effective urban planning has failed to keep pace with the country's rapid urbanization. A new UNIDO project focuses on activities related to storm water management and climate change adaptation, while also encouraging long-term urban growth strategies that address sustainability and resilience. Under a second component of the project, UNIDO will help put in place a green industry strategy in greater Dakar industrial parks that will stimulate sustainable industry by greening existing and creating new industries based on resource efficiency and the use of renewable energy technologies, in addition to promoting integrated waste management. The project will support the integration of energy efficiency measures that do not require large initial investments. Abidjan, Côte d'Ivoire's largest city and former capital, is in a similar situation. A rapidly growing population has led to crippling traffic congestion and air pollution. Together with the African Development Bank, UNIDO is implementing a GEF-funded project to address pollution and improve the traffic situation through the introduction of intelligent transport system elements and infrastructure in priority areas.



In 2014
there were
295
industrial zones
in Viet Nam



The project is expected to help **reduce GHG emissions by 182,000 tons**



and **water consumption by 6 million m³** per year, ensuring that the quality of wastewater reaches international standards.



CAPACITY-BUILDING FOR DEVELOPING PROGRAMMES FOR THE MITIGATION OF GLOBAL ENVIRONMENTAL PROBLEMS

Over 100 experts from Armenia, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation and Ukraine received training during the year on the development of programmes to tackle global environmental challenges. Representing government, academia and non-governmental organizations, participants were also shown how to leverage funding from bilateral and multilateral donors, particularly GEF. Funded by the Russian Federation, the project included four regional and four country workshops with the participation of national and international experts from the beneficiary countries. The project generated 10 national proposals for submission to GEF and other multilateral and bilateral donors, as well as three regional concept proposals on e-waste, clean-tech and mercury removal. The training of local trainers and their participation in project development and assessment aimed to enhance local technical skills to benefit from the available multilateral environmental funding and to contribute to the respective countries' efforts to mitigate environmental challenges and comply with obligations set out in ratified international environmental agreements. Capacity-building of local experts also created opportunities for networking among professionals, learning from successful countries and for pooling national human and financial resources to conceptualize, design and launch regional projects to address negative regional environmental spillovers.

Recycling industries

An environmental problem with which cities also have to deal is electronic waste, or e-waste. This waste stream is rapidly growing in developing countries as more and more of the world joins the global information society and is subject to the rapid turnover rate of electronic equipment. In developing and transition economies, electronic appliances are rarely disposed of in an adequate manner and there is little regulation in place, creating hazards for local populations, as well as for the environment. While the environmental services industry has developed into a multi-billion dollar industry worldwide, it is largely absent in developing countries.

E-waste in Ethiopia is generated by both new and second-hand equipment and it is generally stored in households or disposed of as mixed waste in open dumps; the estimated amount of non-functional electric and electronic equipment within the 10 largest cities of Ethiopia is estimated at some 4,300 tons. A GEF co-financed project has led to the development of a national e-waste management strategy and a collection system for used electronics. UNIDO helped devise and put in place a sustainable business model for handling e-waste, creating new jobs for skilled and unskilled workers. An existing computer refurbishing facility on the outskirts of Addis Ababa was upgraded and equipped with modern recycling machinery. Training programmes targeted both formal and informal recyclers and collectors. The benefits of the project were publicized both inside the country and in neighbouring countries. An ongoing project that is creating job opportunities for unemployed young people in Cambodia in the management of e-waste is described in chapter 3.

Innovative management of chemicals

Chemicals have become an indispensable part of our lives in the form of products, pharmaceuticals, and manufacturing and agricultural inputs. If used or discarded unwisely, they have a devastating impact both on human life and the environment. It is often the poorest members of society who are most exposed to the hazardous effects of inadequate chemicals management.

Through multiple global forums held throughout the year, UNIDO presented its comprehensive approach to the sound and innovative management of chemicals in industry. A core element of this approach is chemical leasing, a circular business model pioneered by UNIDO in developing and transition economies. It aims to maximize the utility derived from expensive and hazardous substances in industry, while minimizing cost and environmental impact. Chemical leasing has been utilized for 10 years by UNIDO in industries all around the world to address the urgent need to reduce the impact of chemical production and consumption on the environment, water and human health.

To help ensure the sustained, sound management of chemicals by industry, UNIDO developed a step-by-step methodology and a toolkit on innovative approaches to the sound management of chemicals and chemical waste. The toolkit will help small and medium enterprises in developing countries and emerging economies to apply state-of-the-art solutions for replacing hazardous chemicals, reducing chemical consumption and waste, and taking proper risk reduction measures for accident prevention while also improving business performance. As part of the global RECP programme funding, the Government of Switzerland provided



LEAD PAINT

According to WHO estimates, 143,000 deaths per year result from lead poisoning, with lead paint a major contributor. Exposure to lead also contributes to 600,000 new cases of intellectual impairment among children every year. A year ago, UNIDO joined the Lead Paint Alliance, a joint UNEP-WHO initiative to minimize occupational exposures to lead paint and prevent absorption by children. A new GEF-funded project aims to minimize the impacts of lead in paint on human health and the environment in the Andean Free Trade Region, while taking steps to phase it out altogether. UNIDO will be working in cooperation with the United States Environmental Protection Agency—an active member of the Lead Paint Alliance—that will be co-funding the project. Support for the project will also be extended by the International Paint and Printing Ink Council. The four countries involved in the programme—the Plurinational State of Bolivia, Colombia, Ecuador and Peru—produce a total of some 460,000 tons of paint a year, of which roughly three quarters is for architectural and one quarter for industrial use. By introducing legal limits on the use of lead in paint, the yearly reduction in lead paint for the four countries is estimated at 7,100 tons (Plurinational State of Bolivia), 84,000 tons (Colombia), 23,200 tons (Ecuador) and 52,900 tons (Peru). The project will also help raise awareness at the national and regional levels of the hazards of lead paint.

€2.5 million to identify innovative approaches for the sound management of chemicals and chemical waste. This new approach is being implemented in Colombia, Egypt, El Salvador, Morocco, Guatemala and Peru. Now in its third year of application, the methodology has been tested in pilot projects involving 23 enterprises. It has helped identify various innovative solutions

in areas such as the production of polymers, paint formulation and the industrial use of solvents.

Water resource management

Finite natural resources, such as water, form a vital input to manufacturing industries. The Organisation

for Economic Co-operation and Development (OECD) *Environmental Outlook to 2050* (OECD, 2012, Paris) predicts that global water demand for manufacturing will increase by 400 per cent from 2000 to 2050 without new policies, far surpassing any other sector. Most of this increase will be in emerging economies and developing countries, with implications for water supply, allocation and quality. It is therefore imperative that conservation and sustainable management of water form an integral part of any future industrial development. By applying circular economy principles, UNIDO helps ensure that water is used in an efficient and sustainable manner by industry, and is reused to the greatest extent possible in industrial processes.

The year under review marks the end of the United Nations Decade for Water, which was launched in 2005. Efforts to raise the profile of water on the global agenda, including contributions by UNIDO to publications and conferences organized by UN-Water, were crowned with success when in September the General Assembly agreed on a stand-alone water conservation goal as one of its SDGs.

Following a successful project on the assessment and management of the Gulf of Mexico Large Marine Ecosystem, GEF also entrusted UNIDO as lead agency with the task of developing a project dealing with the reduction of pollution loads from industry and the restoration of sustainable fisheries. UNIDO is working with FAO, enabling partner countries to benefit from the comparative advantages of both agencies.

The EU-funded SwitchMed programme aims to change the way goods and services are produced and consumed in the southern Mediterranean region. It supports industry, emerging green entrepreneurs, civil society

and policymakers through policy development, demonstration activities and networking. Implemented by UNIDO and UNEP, the SwitchMed programme involves Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Tunisia and the State of Palestine. In preparation for demonstration activities in industry, UNIDO undertook scoping missions to assess local capacities and priorities in sustainable production and identified 21 service providers from the public, semi-public and private sectors as well as academia. All partners received training on the UNIDO transfer of environmentally sound technologies methodology and are currently in the process of identifying industries that will receive technical assistance. The first of what will be an annual gathering of stakeholders in the SwitchMed programme—SwitchMed CONNECT 2015—took place in Barcelona, Spain, in November. The aim of the conference was to build synergies, exchange knowledge and scale up social and eco-innovations that promote sustainable consumption and production.

Upgrading industry through the Montreal Protocol

UNIDO efforts to help countries comply with multilateral environmental agreements, such as the Montreal Protocol on Substances that Deplete the Ozone Layer, are strongly supportive of the circular economy. By upgrading industrial processes and products to meet standards mandated by multilateral environmental agreements, UNIDO helps develop products that are more environmentally sustainable, while extending their lifespans through servicing. This results in efficiency gains and emissions reduction, while creating jobs and securing the long-term use of sustainable technologies and products.



Refrigerator production company in Hubei province, China. CFC12 is replaced by a natural refrigerant, hydrocarbon (HC), commercially named R600a (isobutane) and R290 (propane). As these gases are flammable, a dedicated training programme for operators to ensure the safe and effective use of the new refrigerants was carried out by UNIDO.

Since 1992, UNIDO has been transforming industry to phase out more than one-third of ozone-depleting substances (ODS) in the developing world. It has completed over 1,340 Montreal Protocol projects through the Multilateral Fund for the Implementation of the Montreal Protocol, the GEF and through bilateral contributions. Currently, UNIDO is implementing hydrochlorofluorocarbons (HCFC) phase-out management plans in 70 countries. Interventions target the foam, refrigeration, air conditioning, aerosol, solvent and healthcare sectors, as well as fire protection and agro-industry. In all areas, the introduction of new ozone-friendly technology and equipment is

coupled with training on technology use, safety, maintenance and repair.

UNIDO activities to promote HCFC phase-out also encourage South-South cooperation. Study tours to India and China by, respectively, the Ozone Units of the Democratic People's Republic of Korea and Pakistan, provided an opportunity to gain technical information and first-hand experience on alternative technologies, as well as on enforcement measures and methodologies for HCFC phase-out. The Chinese Government and industries have provided valuable technology transfer services for UNIDO activities, focusing on HCFC phase-out in countries such as Algeria and Brazil.



UNIDO's activities under the Montreal Protocol between 1990 and 2015 have contributed to the phase-out of **71,000 tons of ozone-depleting substances (ODS) per year**

Industry conversions Overall effect
Reduction of **338** million tons CO₂ eq.

which corresponds to the combined GHG (greenhouse gas) emissions reduction target of France, Germany and the UK for 2020. Out of this amount, 190 million tCO₂-eq. have been reduced through conversion of production lines in different industrial sectors.



Left: Refrigerator compressor production company in Hubei province, China. These compressors are based on hydrocarbon refrigerants, R600 or R290. Besides protecting the ozone layer and having nearly zero global warming potential, they offer better energy efficiency results than previous CFC12 compressors or other alternatives such as R134a and R404a. *Right:* A demonstration Montreal Protocol project in South Africa on the technical and economic advantages of vacuum-assisted foam injection in the insulation of discontinuous sandwich panels.

Sustainable transformation of processes and products

Through a large number of projects involving national and international partners, UNIDO is assisting industry around the world with the phase-out of HCFCs. In addition to eliminating ODS, these projects seek technology options that minimize climate impact through the adoption of substances with low global warming potential. They furthermore enable industry to switch, on a large scale, to more environmentally-friendly and resource-efficient products, while providing the service sector with the skills to maintain them.

Through multiple projects around the world, UNIDO is training service technicians in maintaining air conditioner units using environmentally-friendly technologies. This training will not only support the technicians in maintaining their livelihood in an evolving technical environment, but will also substantially upgrade their marketable skills. The technicians will be able to extend the lifetime of refrigeration and air-conditioning equipment considerably,

while also reducing the equipment's overall energy consumption.

In China, a project on an HCFC phase-out management plan in the room air-conditioning sector is finalizing the conversion of assembly lines, with annual output in excess of 5 million air-conditioning units, using the natural refrigerant R-290 (propane). In response to the interest expressed by a number of countries in Africa, and the Latin America and Caribbean region in the new climate-friendly technology, UNIDO has provided R-290 air-conditioning units to several countries for training purposes.

A number of technology demonstration projects are being prepared and will be submitted for approval in early 2016. Among them is a demonstration project which deals with the phase-out of HCFC-22 used in the refrigeration assembly sector. The global project will focus on refrigerating systems in the retail sector and look into aspects such as technology viability, incremental operating costs and energy and climate benefits in order to develop an integrated store concept introducing alternative technology with low global

warming potential (in particular CO₂) and optimizing energy consumption.

Under another project, UNIDO is proposing a proactive approach to refrigerant containment, leakage reduction and the introduction of climate-friendly alternatives through demonstration projects in Africa, Western Asia, and Latin America and the Caribbean. In cooperation with UNEP, UNIDO received funding for two feasibility studies on district cooling (Egypt) and related not-in-kind technologies (Kuwait).

As a result of ongoing discussions on an amendment to the Montreal Protocol to include a phase-down schedule for HFCs, the Multilateral Fund opened a funding window for country surveys on ODS alternatives. In the course of the year, UNIDO received funding to conduct surveys in 26 countries.

Alternatives to hazardous substances

2015 marked the year in which the ODS methyl bromide was to be



Right: A local operator from Rade Koncar Kontaktori Relei d.o.o. knowledgeable in the project-acquired decontamination process of the Stockholm Convention-regulated POPs, polychlorinated biphenyls (PCBs) *Left:* Commissioning activities of the new boiler installed at a pilot facility in the Lao People's Democratic Republic

phased out entirely from industries in developing countries. Working alongside Kenya's National Cereal and Produce Board, UNIDO enabled the country to meet this requirement. Through the provision of expert advice, equipment, training and awareness-raising, the use of methyl bromide was replaced by environmentally-friendly alternatives. By the time the project was completed, the Government had introduced regulatory measures to control the imports and use of methyl bromide, to monitor consumption, and to ensure compliance with the requirements of the Montreal Protocol.

Managing pollutants through the Stockholm Convention

Assistance to countries in meeting the requirements of the Stockholm Convention on Persistent Organic Pollutants (POPs) enables a circular economy by developing new industries without POPs releases and establishing recycling and waste

management industries in a manner that minimizes the generation and release of POPs throughout industry.

UNIDO works with industry to optimize production processes to avoid POPs emissions, set up new facilities and production lines utilizing POPs alternatives, as well as constructing and operating facilities for the safe management of material containing POPs. UNIDO support for e-waste management and the development of recycling industries also constitutes part of this work and is funded under the POPs programme.

National implementation

UNIDO has assisted 74 countries in developing, reviewing and updating their national implementation plans under the Stockholm Convention on POPs and is currently implementing 82 projects in over 55 countries, with a total value of \$161.21 million in GEF grants.

UNIDO support to countries in their implementation of the Stockholm Convention on POPs has resulted in the elimination of 1,775 tons of POPs and 45,388 µg of highly toxic unintentional POPs (dioxin and furan) releases while safeguarding a total of 1,593 tons of POPs. Capacity-building components in projects have resulted in a total of approximately 16,000 training participants, of which about 5,000 were women. UNIDO projects facilitated the creation of 20 new businesses and leveraged considerable incremental investments. Through its projects, UNIDO also assisted countries in approving or enacting over 25 environmental laws and policies and promoted best practices that were adopted by 60 companies.

Best environmental practices and technologies

Particular emphasis has been put on the promotion of best available

techniques (BATs) and best environmental practices (BEPs) in priority industry sectors. In addition, action on the production of POPs alternatives and the development of new industries avoiding POPs releases and recycling has been actively supported by the UNIDO programme.

Cambodia, Indonesia, the Lao People's Democratic Republic, Mongolia, the Philippines and Thailand are now fully conversant with the concepts of BAT and BEP in fossil fuel-fired utilities and industrial boilers. Under a project to help them meet their commitments under the Stockholm Convention on Persistent Organic Pollutants, UNIDO provided guidelines on BAT/BEP for the sector that took into account the specific features of industry in the country, common practices in the region and related socioeconomic considerations. UNIDO BAT/BEP interventions have been proven to effectively reduce dioxins in the pilot demonstration facilities. UNIDO also ran two awareness-raising workshops in each country, as well as courses on BAT/BEP, POPs and process optimization in industrial boilers, training a total of 797 experts (of which 254 were women). BAT/BEP concepts were incorporated in the curricula of the partner universities' in all participating countries. Under a regional POPs project in the Caribbean, UNIDO is providing assistance to Antigua and Barbuda, Barbados, Belize, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

A project in Africa is helping a number of least developed countries to carry out their national implementation plans under the Convention. The goal is to create an enabling environment through the introduction of BAT/BEP to industrial processes, the improved management of different

kinds of municipal waste and assistance in phasing out POPs in agriculture. The five-year project, which began in 2011, made good progress during the year. Burundi held a workshop for 45 participants from institutions including private companies. A workshop in Uganda was attended by 35 men and women from government institutions and the private sector. Targeted awareness-raising campaigns in BAT/BEP were conducted during the second half of the year at the national level, as was a study tour for staff of the Kombolcha Textile Share Company in Ethiopia to learn how to phase out hazardous dyes and eliminate other environmentally-risky practices. Fifteen companies in Swaziland and the United Republic of Tanzania acquired waste licences for continuing sustainable practices.

Reducing mercury use through the Minamata Convention

The Minamata Convention on Mercury is the first global agreement specifically designed to address contamination from a heavy metal. The Convention addresses issues related to the use and release of mercury, including trade, industrial uses, and major sources of atmospheric emissions and releases of mercury into the environment, as well as long-term storage and disposal of mercury and mercury compounds. UNIDO was actively involved in negotiations leading up to the ratification of the Convention and continues its close involvement as an implementing agency.

UNIDO is the lead organization in the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) for the implementation of enabling activities under the Minamata Convention. This includes

conducting Minamata initial assessments and developing national action plans in the artisanal and small-scale gold mining sector.

National implementation

A Minamata initial assessment in Chad, to be conducted over the next two years, will complement the country's efforts to reduce the exposure of humans and the environment to mercury. Other countries that ratified the Convention during the year were Jordan, Kuwait and Samoa. UNIDO also made progress in conducting enabling activities during the year in Colombia and Comoros. The first subregional workshop to support countries in the Pacific region with the ratification and implementation of the Minamata Convention was held in Apia in January and was opened by the Prime Minister of Samoa.

Other enabling activities approved during the course of the year by GEF involved Gabon and Mozambique (national action plan on mercury in the artisanal and small-scale gold mining sector), Cabo Verde, Nepal and Sao Tome and Principe (Minamata initial assessment), Tunisia (improved mercury management) as well as regional projects covering Guinea, Mali and Senegal and separately, Benin, Burkina Faso, Niger and Togo (Minamata Convention initial assessment in francophone Africa). Inception workshops also took place in Armenia, where participants received training on inventory development, as well as in China, Nigeria and Viet Nam. An inter-agency agreement is in preparation with the United Nations Institute for Training and Research for training in Yemen.

Artisanal and small-scale gold mining

A regional project in Burkina Faso, Mali and Senegal to improve the health and



Left: In Côte d'Ivoire, a project to reduce the risks of mercury contamination from artisanal and small-scale gold mining will be completed by the third quarter of 2016. *Right:* Small-scale gold mining in Mozambique

environmental impact of artisanal and small-scale gold mining by reducing mercury emissions and promoting sound chemical management will be completed in September 2016. In Côte d'Ivoire, a project to reduce the risks of mercury contamination from artisanal and small-scale gold mining will be completed by the third quarter of 2016, while a similar project in Mali is drawing to a close. UNIDO is also promoting integrated measures for minimizing

mercury releases from artisanal gold mining in Ecuador and Peru.

Industrial processes

Projects designed to protect human health as well as the environment by reducing mercury emissions and promoting the sound management of chemicals continue in Mongolia and the Philippines. In China, a

GEF-funded project was completed in 2015 aimed at reducing mercury emission and promoting sound chemical management in zinc smelting operations. In the Latin America and Caribbean region, UNIDO is implementing a mercury waste project in Argentina. New project proposals were developed during the year for Nigeria, Sri Lanka and Turkey and have been endorsed by the respective Governments.

Photo right: Mr. Mohamed Abdalla Mohamed SALIM, a national expert from Sudan who trains counterpart staff (Marine Fishery Administration) in the operation and maintenance of marine vessels used in surveys of renewable marine resources.



5. MANAGING UNIDO SERVICES

We are impressed by the transformative and results-oriented work taking place [in UNIDO] and the ongoing efforts to achieve more with fewer resources.

Bente Angell-Hansen, Ambassador and Permanent Representative of Norway to UNIDO, at the sixteenth session of the UNIDO General Conference

We welcome the Transparency Initiative at UNIDO and the launch of the Open Data Platform during this session of the General Conference. Argentina has been part of the group that helped prepare this tool, which will be useful not only for governments to precisely know the implementation status of each project but also to civil society to obtain updated information on the important work carried out by this Organization.

Rafael Mariano Grossi, Ambassador and Permanent Representative of Argentina to UNIDO, at the sixteenth session of the UNIDO General Conference

I am also very pleased to hear about UNIDO's involvement to increase its transparency and access to information through the Open Data Platform including the ongoing programmes and projects all over the world.

Fernando Frutuoso de Melo, Director-General, Directorate General for International Cooperation and Development, European Commission

This chapter contains a brief description of UNIDO support services, without which none of the work described in the previous four chapters would be possible. Notwithstanding, for reasons of cost and in order to allow as much space in this report as possible for a presentation of UNIDO substantive activities, managerial activities are described somewhat more succinctly than in the past.



FUNDING

In 2015, technical cooperation delivery rose to \$174.7 million. This increase bears witness to the effectiveness of UNIDO's efforts to achieve additional efficiency gains against a background of decreasing contributions to its regular budget.

Funding for UNIDO services increased for the fourth consecutive year to reach a net amount of \$205 million (figures exclude support costs unless stated otherwise) approved for technical cooperation activities in 2015 and beyond. This represents the second largest amount in the Organization's history and a 7.2 per cent increase over the already high level of voluntary contributions allocated in 2014.

In geographical terms, voluntary contributions were allocated primarily

Voluntary contributions for UNIDO services increased for the fourth consecutive year.

to projects and programmes in Africa with \$66.9 million net, followed by Asia and the Pacific with \$49.6 million, Arab States with \$28.3 million, global and interregional activities with \$27.1 million, Europe and Central Asia with \$19 million and Latin America and the Caribbean with \$14.2 million.

Thematically, the trend of recent years was generally maintained, with contributions earmarked by donors for environment and energy-related projects amounting to \$121.5 million net, followed by \$56.3 million for activities in the field of poverty reduction through productive activities, \$20.6 million for projects in the area of trade capacity-building and \$6.4 million for cross-cutting areas of UNIDO interventions.

The major contributors for environment and energy remained GEF, leading to a net increase in project budgets with an all-time record amount of \$75.2 million, and the Multilateral Fund for the Implementation of the Montreal Protocol (MLF) with \$31.9 million.

Funding from governments and institutions remained almost at the high level of 2014 and reached \$92.4 million, with 13 donors contributing more than \$1 million each. The largest contributor was once again the European Union with a \$31.2 million net increase in project budgets, which supported primarily larger-scale technical cooperation projects in sub-Saharan African countries and in the Mediterranean region.

Additional main contributors with net approvals exceeding \$1 million were Switzerland with \$11.8 million and Japan with \$6.9 million, followed by China with \$4.9 million, Norway and Sweden each with \$3.4 million, Italy with \$3.2, the Russian Federation with \$2.7 million, Nigeria with \$2.5 million, the Republic of Korea with \$2.3 million, Canada with \$2.2 million, Egypt with \$1.6 million and Germany with \$1.1 million. (Appendix B details the thematic and geographical distribution of approvals from governments and the European Union by region and thematic priority.)

Funds available for future implementation amounted to \$475.8 million. The level of future payments under signed agreements, with the addition of available donor funds, reached \$173.8 million, which represents a decrease of 5 per cent on 2014. Although this should allow UNIDO to maintain an almost similar level of service delivery in 2016, it also calls on UNIDO stakeholders to further strengthen their support of UNIDO core capacities in order to meet the increased expectations and demands of its constituencies in the context of the 2030 Agenda for Sustainable Development.

Global Environment Facility

The partnership between UNIDO and GEF has been significantly strengthened over the past years. As a result, GEF-funded projects contributed in 2015 to almost 30 per cent of the Organization's overall technical cooperation delivery. For further details, see chapter 4.

The projects implemented in this context link the Organization's mandate for ISID with specific GEF focal areas, including climate change mitigation, chemicals and waste and international waters. Since 2014,

UNIDO has also been engaged in the development of projects related to climate change adaptation. Two initial projects were developed in this regard in 2015 for Pakistan and Uganda, both of which are anticipated to start their implementation in early 2016.

As a result of consultations between the Director General and the GEF Chief Executive Officer in the year under review, an agreement was reached for cooperation on GEF-6 flagship interventions, namely sustainable cities and food security integrated approach programmes.

The GEF Council meeting in May confirmed the Organization's full compliance with currently applicable GEF fiduciary standards, GEF environmental and social safeguard and gender policies. This compliance supports UNIDO efforts to gain fast-track accreditation with the Green Climate Fund as a potential major partner and which is expected to lead to the collaborative development of large-scale programmes related to climate change mitigation and adaptation.

Montreal Protocol

The net increase of project budgets from MLF reached \$31.9 million, an increase of more than 10 per cent compared to 2014. Following the request of the MLF Executive Committee and in agreement with the countries concerned, UNIDO continued developing project proposals with an emphasis on the introduction of new technologies that are both ozone- and climate-friendly as well as more energy-efficient. Demonstration projects are under implementation to test appropriate technologies using natural refrigerants with the objective of replicating and upscaling similar interventions in the future (see also chapter 4).

Funding from multi-partner trust funds

Compared to 2014, funding from multi-partner trust funds towards the Organization's technical cooperation services increased slightly to \$3.4 million. This increase is mainly due to higher contributions from the United Nations Peacebuilding Fund to the amount of \$1.4 million, whereas Delivering as One programmes and multi-partner trust funds remained at a similar level to 2014, with net approvals to the amount of \$1.9 million, which underlines the limited significance of the latter two funding sources in the UNIDO portfolio.

UNIDO-managed trust funds

The Director General reinvigorated the promotion of soft-earmarked voluntary contributions with the establishment of the Partnership Trust Fund, which is expected to contribute to the development, coordination and launching of PCPs as well as the organization of global forum activities dedicated to the promotion of partnership initiatives primarily targeting governments, the private sector and development finance institutions towards the action-oriented promotion of ISID. Contributions have already been received from China, with \$4 million including support costs in 2015, the Russian Federation with €246,709, and Italy with €151,994. Contributions were also received from the Government of Mexico for the Fund for Latin America and the Caribbean.

Additional contributions to UNIDO trust funds continue to be highly encouraged so as to equip the Organization with the required flexible resources to swiftly and effectively address requests from its Member States.

PROGRAMME APPROVAL AND MONITORING

During the year, 118 programmes and projects were submitted to the Executive Board, of which 116 were approved and a decision postponed on one pending resubmission. The overall approval rate of 98 per cent was higher than the 95 per cent, 88 per cent and 91 per cent recorded in 2014, 2013 and 2012 respectively, and far higher than the rates of 79 per cent and 75 per cent achieved in 2011 and 2010. Due to the rigorous cross-organization compliance checklist introduced to ensure the high quality of projects, the rates of approval were significantly higher than in previous years. Of the total number of projects submitted during the year, 33 per cent were intended for implementation in Africa, 19 per cent for Asia and the Pacific, 8 per cent for Europe and Central Asia, 14 per cent for Arab States and 8 per cent for Latin America and the Caribbean. Global and interregional programmes and projects accounted for 18 per cent of the submission. Disaggregated by thematic areas, environment and energy accounted for 38 per cent of the total number of projects submitted, poverty reduction activities for 33 per cent, trade capacity-building for 10 per cent and cross-cutting programmes and projects for 19 per cent.

Austrian Development Cooperation, organized a high-level panel in April to discuss the use of evaluation in evidence-based policymaking under the title "Accountability and learning—the need for results and impact".

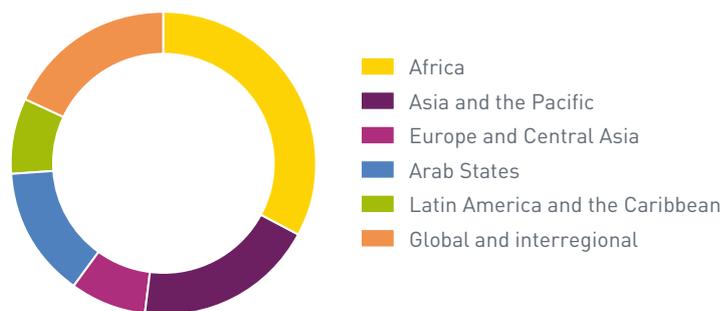
As a member of the United Nations Evaluation Group, UNIDO took part in its annual general meeting as well as its Evaluation Practices Exchange seminar held in New York in March, which dealt with issues such as the integration of gender equality and human rights in evaluation, mixed methods for impact evaluation, designing and managing thematic evaluations and national evaluation capacity development.

During the year, UNIDO conducted country evaluations in Indonesia, Thailand and Tunisia and led thematic evaluations on UNIDO activities in the area of enterprise development and job creation, including women and

youth, as well as on Montreal Protocol projects with an emphasis on countries in Latin America and the Caribbean and in the Europe and Central Asia regions. It conducted independent terminal evaluations of GEF-funded projects and provided support and quality assurance to the evaluation of stand-alone projects and programmes as well as for independent mid-term reviews of GEF projects. A four-day workshop for Latin America and the Caribbean countries was organized in Colombia as part of UNIDO efforts to strengthen evaluation capacities within counterpart ministries.

Following the adoption of the SDGs, the UNIDO independent evaluation function is expected to provide strategic thematic evaluations, as well as evaluations of projects and programmes on the implementation of Goal 9 and industry-related SDGs, by highlighting what works

Share of programmes and projects submitted to the Executive Board in 2015, by region



EVALUATION

In December 2014, the General Assembly passed a landmark resolution on capacity-building for the evaluation of development activities at the country level and declared 2015 as the International Year of Evaluation. To mark the occasion, UNIDO, together with the other Vienna-based organizations and the

Share of programmes and projects submitted to the Executive Board in 2015, by thematic area



and what does not work, and by aggregating the results and implementation experiences from the UNIDO portfolio to facilitate continual organizational learning, accountability and excellence.

STAFFING

UNIDO was closely involved in two issues at the common system level during the year, namely the comprehensive review by the International Civil Service Commission of the compensation package of staff in the Professional and higher categories, and a raise in the mandatory age of separation for active staff to 65. UNIDO was selected to participate in the implementation of a human resources network pilot project on common/shared services and standards in the recruitment and selection of locally recruited staff in countries piloting Delivery as One. It also took part in a common system review of the existing minimum operational residential safety standards as well as security standards related to official travel by air.

At the organizational level, UNIDO reviewed the results of the first phase of the review of its human resource management framework and put in place a number of new measures designed to enhance staff career development and growth, and facilitate succession-planning within the Organization. The second phase of the review took place in mid-year with the participation of staff nominated both by the administration and the Staff Council. Issues looked at included policies and systems, including the post classification system, competency framework, a staff performance management system aimed, inter alia, at the

designation of feedback sources, the rotation policy, the preservation of institutional and technical knowledge, and merit award/promotion schemes.

A new initiative during the year was a staff survey on programme support services. A total of 420 responses were received from Headquarters as well as from field offices and UNIDO offices in Brussels, Geneva and New York, representing around half of the staff. As a result, proposals for improvements were identified and are being implemented in the following areas: ensuring a unified and coherent approach; improving response and resolution times; increasing client orientation, training and communication; and increased consistency in the interpretation of rules and regulations. UNIDO also introduced on a pilot basis electronic official status files. New initiatives developed for implementation in 2016 also include a new induction and staff orientation approach as well as a revised staff development programme.

Other issues under discussion during the year included the UNIDO travel policy and a harassment and discrimination policy, while staffing limitations meant that a review of the formal internal justice system was only partially completed. A recruitment freeze in force during the year hampered the proposed implementation of the talent outreach measures to attract qualified human capital. As far as external expertise is concerned, the Organization took steps to expand its own talent pool by using the services of an outside recruitment company.

Staff security

The year under review saw an increase in areas of conflict as well

as global terrorism, representing unprecedented security challenges for UNIDO activities and operations, which often take place in high-risk environments. The Ebola virus outbreak in West Africa resulted in extraordinary security measures for travel and events in the region over an extended period. Nevertheless, UNIDO managed to ensure the security and safety of its staff and experts, either assigned or on mission, to countries facing a variety of crises and emergency situations. New security policies concerning official travel, in particular air travel, were introduced, as were guidelines on safety and security crisis management at the Vienna International Centre. Staff received training on Ebola risks and prevention as well as general security training. This enabled UNIDO to maintain technical cooperation projects and programmes in countries where serious security situations prevail. At the system-wide level, UNIDO was actively involved in the elaboration and implementation of new security policies promulgated by the United Nations Security Management System.

BUSINESS AND SUPPORT SERVICES

The UNIDO integrated ERP system is managed by a dedicated business and systems support unit. During the year, improvements to the ERP system to increase operational efficiency and effectiveness included a major upgrade of the entire ERP system to the latest version to allow further simplification for users, improved system accessibility and the implementation of new features and functionalities. In a move to reduce the total cost of ownership and increase service quality and coverage,

UNIDO outsourced certain ERP services at the beginning of the year. Process and system improvements facilitated portfolio and project management, procurement, financial and human resource management, travel and knowledge management and collaboration. UNIDO was an early adopter of the new United Nations Joint Staff Pension Fund financial interface, which enables automated reporting and transmission of data.

May saw the launch of an organization-wide initiative to increase the transparency of UNIDO activities. The initiative includes new platforms for reporting and monitoring for all stakeholders, in particular Member States, donors, ISID partners and the public at large. The extranet for Member States includes a number of new features, such as a UNIDO Overview Dashboard, covering the main areas of UNIDO activities. The new Open Data Platform, available at <https://open.unido.org>, displays an interactive world map with detailed information on ongoing programmes and projects, including delivery figures, project outcomes and outputs, timelines, and project managers and gender-equality information, clustered by region and country. This information is complemented by project documents and other related material as well as statistical information on the country and donor. During 2016, the information available will be further expanded and UNIDO intends to join the internationally recognized International Aid Transparency Initiative.

The ISID operation platform is a dynamic portal for promoting the Organization's mandate and has a special focus on the enhanced partnership approach. It will help leverage and coordinate resources for implementing ISID, promote specific

investment opportunities and facilitate matchmaking between different stakeholders. A new private sector partnership with SAP® facilitates close cooperation and consultation on matters of mutual interest.

The head of the Business and Support Services Unit was appointed as the Vice-President of the newly formed United Nations-wide special interest group ERP-SIG, which includes international organizations operating various ERP systems, enabling UNIDO to lead United Nations-wide interactions with SAP® on strategic and operational topics.

LEGAL SERVICES

Strengthened coordination in legal matters and inter-agency support within the United Nations system was the purpose of a two-day meeting hosted by UNIDO in May in Vienna. Bringing together the legal advisers of over 20 specialized agencies and related organizations under the leadership of the Under-Secretary-General for Legal Affairs and the Legal Counsel of the United Nations, the meeting covered topics such as privileges and immunities, agreements with donors and the protection of intellectual property by international organizations. The UNIDO Office of Legal Affairs ensures that all its activities and programmes are in accordance with the external and internal aspects of the Organization's legal framework. It ensures the proper conduct of the affairs of the Organization by promoting the rule of law both within the Organization and in its relations with governments, organizations, enterprises and individuals, and by safeguarding and defending the legal positions, rights and interests of the Organization.



The aim of the two-day meeting of legal advisers hosted by UNIDO was to foster cooperation on legal matters within the United Nations system.

ADVOCACY AND OUTREACH

The Organization's advocacy and communications activities focused on supporting and promoting the post-2015 development agenda discussions in the lead-up to the United Nations Sustainable Development Summit, and later on, promoting the adopted 2030 Agenda and the 17 Sustainable Development Goals. A range of global events and global forum activities in the course of the year enabled the dissemination of key messages and the wide promotion of UNIDO activities, including its Programme for Country Partnership approach.

Under the Organization's Goodwill Ambassador programme, a number of public figures, business leaders and industrialists from various regions of the world have been appointed to improve the visibility, profile and global reach of UNIDO, both with governments and the private sector. The Organization benefited from outreach activities by HAI Helen of China, the Chief Executive Officer of the Made in Africa Initiative and adviser to the Governments of Ethiopia, Rwanda,

and Senegal on investment promotion and industrialization. Janne Vangen Solheim, Chief Executive Officer of the Norwegian garment manufacturing company Janusfabrikken AS, was appointed as UNIDO Goodwill Ambassador for Manufacturing; Marc van Montagu, from Belgium's Vlaams Instituut voor Biotechnologie, serves as Goodwill Ambassador for Agribusiness; and Marcos Pontes, a Brazilian astronaut, advocates for sustainable industry in his home country.

To generate interest in global industrial development issues among the public, three issues of *Making It* magazine were published and numerous visiting groups of graduate students from around the world attended lectures and presentations on the Organization's mandate and activities.

UNIDO substantially expanded its social media presence: its Twitter account reached 48,000 followers and Facebook pages received over 10,000 visitors weekly. Videos produced and posted on YouTube were viewed over 250,000 times. Interactions on LinkedIn contributed to the development of a 25,000-strong network of professionals, and a flickr online photo archive now has over 3,000 photos reflecting UNIDO global forum activities and work in the field. In addition, the UNIDO public website, a major public information tool that attracts up to a million visitors every year, was streamlined and modernized.

SUPPORT SERVICES

Buildings Management

With a team of 111 specialists and qualified support staff in civil, electrical, climatization and electronics engineering, UNIDO is responsible for the safe running and maintenance of the entire Vienna International Centre building complex on behalf of the Vienna-based organizations (VBOs) that share the premises. The biennial Buildings Management Services (BMS) cost-shared budget is approximately €42 million and the annual budget for the project implementation of major repairs and replacements €3.5 million. An additional biennial budget of some €10 million is implemented for special projects for the different VBOs.

During the year, BMS introduced a more efficient ticketing system for the 25,000 work orders it fulfils annually. Measures taken to achieve a major reduction in communications costs and improve Internet access included the installation of an independent switchboard operation and billing system for UNIDO, a new global IP-based communication system, wireless Internet improvements in buildings A and B, a new data centre for the International Atomic Energy Agency (IAEA) and the installation of 90 new WLAN access points in buildings D and E. A number of areas of the complex were refurbished including

the kitchenettes in buildings A and B and sanitary areas in parts of buildings F and G. A new elevator monitoring and control system was installed and a number of elevators modernized. Major repairs and replacement of equipment were carried out in the areas of heating and cooling, drainage and water pumps and pipes and fire doors.

Other cost-saving measures

During the year, UNIDO strove to implement cost-saving measures throughout its Headquarters operations, whether in travel, communication costs or in the introduction of measures for greater efficiency and effectiveness at the work place. A new travel policy was revised and implemented in March bringing the daily subsistence rates for all staff members of the Organization travelling outside their duty station to the same level. A centralized approach to the online booking of tickets yielded savings in transaction fees. More than 10 field offices received IP telephony installations that allowed them to contact Headquarters free of charge; lower rates were secured for video conferencing. Guidelines were issued on ways to save on official mobile phone roaming costs, while all VBOs agreed on a joint contract for the purchase of office supplies. Discussions on the reduction of overhead communication costs will also lead to a substantial saving over the coming years.

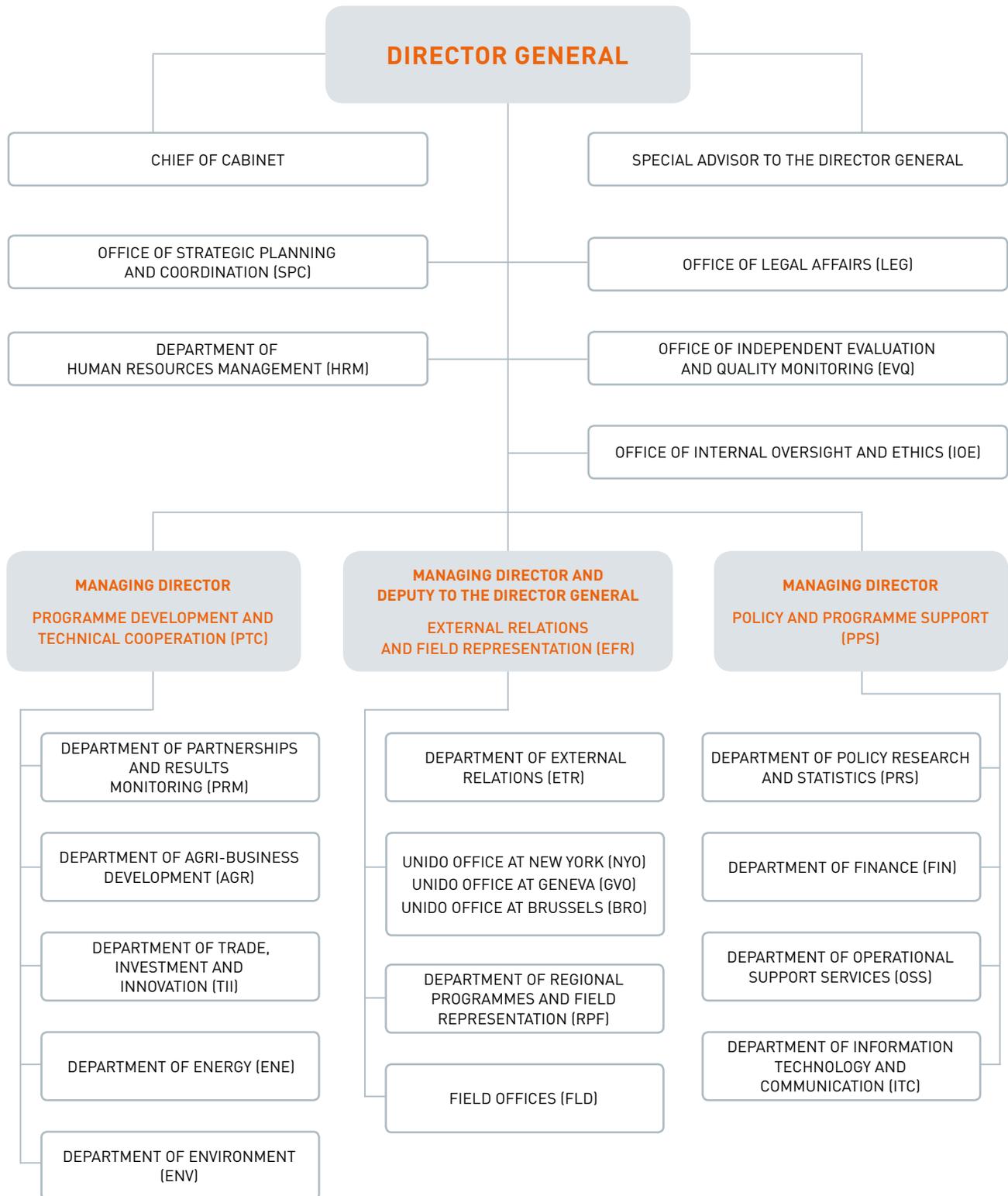


UNIDO MEMBER STATES¹

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

¹ As at 31 December 2015.

UNIDO ORGANIZATIONAL STRUCTURE



*The process of restructuring began in September 2015 and was finished in January 2016.

ABBREVIATIONS

3ADI	African Agribusiness and Agro-industries Development Initiative	ITU	International Telecommunication Union
ACP	African, Caribbean and Pacific	JIU	United Nations Joint Inspection Unit
ADB	Asian Development Bank	LCET	Low-carbon low-emission clean energy technology transfer
AIDS	Acquired immune deficiency syndrome	LDC	Least developed country
AU	African Union	LKDF	Learning and Knowledge Development Facility
AUC	African Union Commission	MDG	Millennium Development Goal
BAT	Best available technique	MIC	Middle-income country
BEP	Best environmental practice	MLF	Multilateral Fund for the Implementation of the Montreal Protocol
BMS	Buildings Management Services	MSME	Micro, small and medium enterprise
BRICS	Brazil, Russian Federation, India, China and South Africa	MTPF	Medium-term programme framework
CEB	Chief Executives Board for Coordination	MVA	Manufacturing value added
CO₂	Carbon dioxide	Norad	Norwegian Agency for Development Cooperation
COP 21	Twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, also known as the 2015 Paris Climate Conference	ODS	Ozone-depleting substance
COMFAR	Computer Model for Feasibility Analysis and Reporting	OECD	Organisation for Economic Co-operation and Development
CTCN	Climate Technology Centre and Network	OFID	OPEC Fund for International Development
DoA	Delivering as One	OPEC	Organization of the Petroleum Exporting Countries
ECA	United Nations Economic Commission for Africa	PAGE	Partnership for Action on Green Economy
ECOSOC	United Nations Economic and Social Council	PCP	Programme for Country Partnership
ECOWAS	Economic Community of West African States	POP	Persistent organic pollutant
EquIP	Enhancing the quality of industrial policies	PPDP	Public-private development partnership
ERP	Enterprise resource planning	QCPR	Quadrennial comprehensive policy review
EU	European Union	RECP	Resource efficient and cleaner production
FAO	Food and Agriculture Organization of the United Nations	RECPnet	Global Network for Resource Efficient and Cleaner Production
FfD3	Third International Conference on Financing for Development	SDG	Sustainable Development Goal
GSDR	Global Sustainable Development Report	SE4ALL	Sustainable Energy for All
GEF	Global Environment Facility	SECO	State Secretariat for Economic Affairs (of Switzerland)
GFSP	Global Food Safety Partnership	Sida	Swedish International Development Cooperation Agency
GHG	Greenhouse gas	SIDS	Small island developing States
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit	SIDS DOCK	Small Island Developing States Sustainable Energy and Climate Resilience Initiative
GVC	Global value chain	SME	Small and medium enterprise
HCFC	Hydrochlorofluorocarbon	SPX	Subcontracting and Partnership Exchange
HIV	Human immunodeficiency virus	UNCTAD	United Nations Conference on Trade and Development
HLPF	United Nations High-level Political Forum	UNDG	United Nations Development Group
ICSHP	International Centre on Small Hydropower	UNDP	United Nations Development Programme
IDB	Industrial Development Board	UNEP	United Nations Environment Programme
IDEA	Inclusive Development and Entrepreneurship for All	UNHCR	Office of the United Nations High Commissioner for Refugees
IEC	International Electrotechnical Commission	UNITAR	United Nations Institute for Training and Research
IFAD	International Fund for Agricultural Development	UN-SWAP	United Nations system-wide Action Plan on Gender Equality and the Empowerment of Women
IIASA	International Institute for Applied Systems Analysis	UNSWC	United Nations system-wide coherence
ILO	International Labour Organization	UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
ISID	Inclusive and sustainable industrial development	VBO	Vienna-based organization
ISO	International Organization for Standardization	WHO	World Health Organization
ITC	International Trade Centre	WIPO	World Intellectual Property Organization
ITPO	Investment and Technology Promotion Office		



Marking the transition to a new era in the global fight against poverty, 2015 was a critical year for the international community. With the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), the United Nations General Assembly adopted a universal vision of creating equitable, prosperous and environmentally sustainable societies.

UNIDO is well positioned within this new integrated approach to fulfil its mandate of inclusive and sustainable industrial development. In the years ahead, UNIDO will further consolidate its role as the reference organization supporting national efforts towards inclusive and sustainable industrialization—recognized as instrumental for the achievement of the SDGs.

The Annual Report 2015 showcases UNIDO's achievements in delivering a diverse portfolio of services to its Member States. The report is structured according to the Organization's three guiding pillars: creating shared prosperity, advancing economic competitiveness and safeguarding the environment, as well as its cross-cutting activities on industrial statistics, research and policy guidance, standard setting and the promotion of knowledge exchange platforms and multi-stakeholder partnerships.



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INDUSTRIAL DEVELOPMENT ORGANIZATION

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