



United Nations
Educational, Scientific and
Cultural Organization

2017

UNESCO



Cover

Students at the Escola Primaria Unidade 7 in Maputo, Mozambique where UNESCO pilot-tested this year the VISUS (Visual Inspection for Defining the Safety Upgrading Strategies) methodology, as part of the Organization's training to reinforce national capacities for critical infrastructure assessment. The safety of 192,000 Mozambican students from 100 schools was assessed during the first phase of this project.

The UNESCO-VISUS methodology helps to assess school facilities by using a holistic, multi-hazard approach which considers site conditions, structural performance, local structural criticalities, nonstructural components and functional aspects. It is an effective decision-making tool for planning risk mitigation actions at the local, regional and national scales.

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Published in 2018

by the United Nations Educational, Scientific
and Cultural Organization (UNESCO).

7, place de Fontenoy, 75352 Paris 07 SP, France

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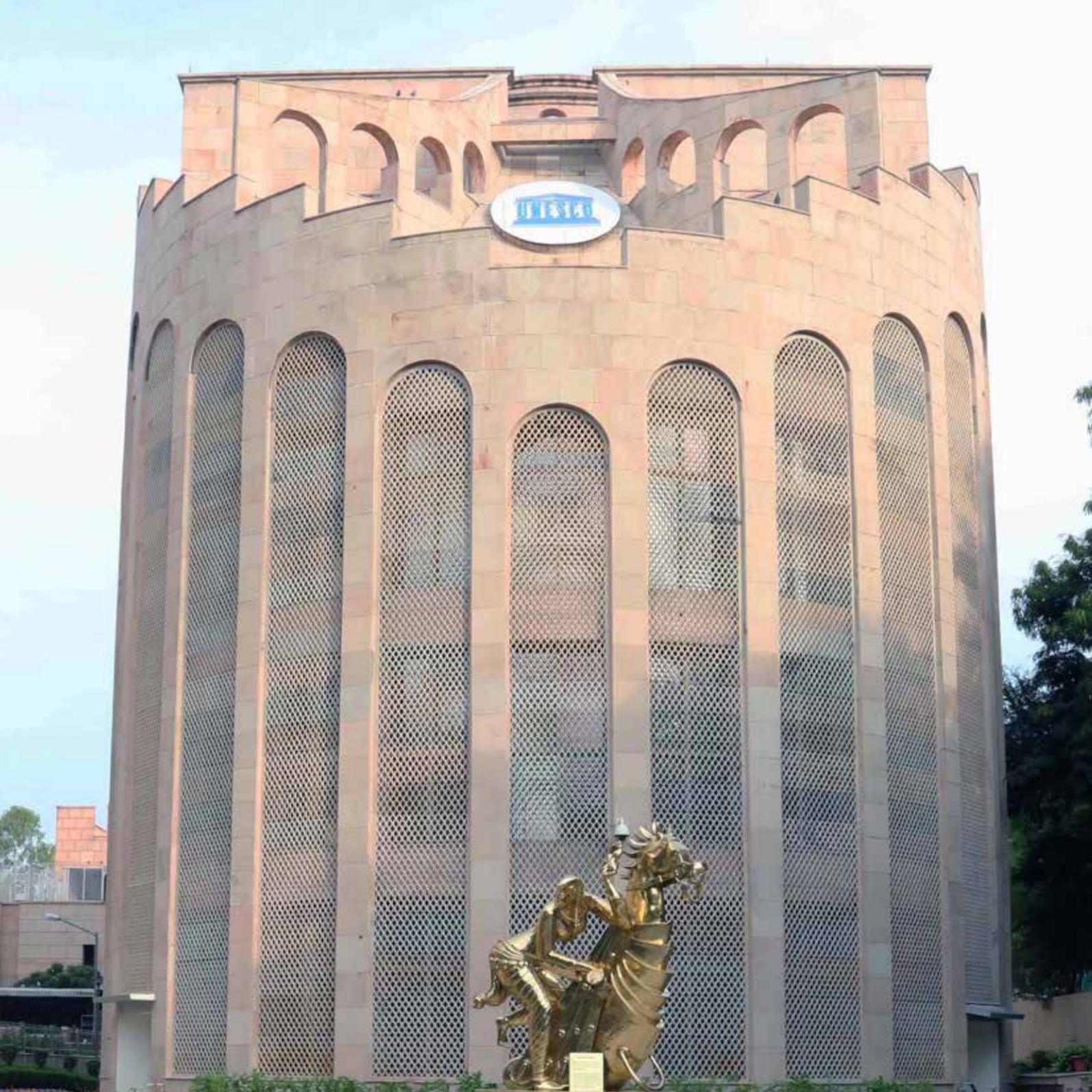
ERI-2018/WS/1/REV.1



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Educational, Scientific and
Cultural Organization

UNESCO

FOR



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The new premises of the UNESCO Office in New Delhi are a stunning medley of creative artistry and functionality. Situated in the heart of the capital's diplomatic area, the building was designed by the acclaimed Indian architect Satish Gujral and constitutes a gift from the Government of India to the Organization. It was inaugurated on 31 August 2017 by the Indian Minister of Human Resource Development Mr Shri Prakash Javadekar and then Director-General of UNESCO Irina Bokova.



Preface

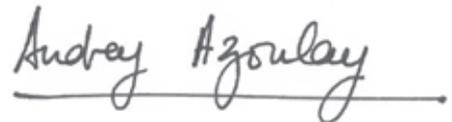
by Audrey Azoulay,
Director-General of UNESCO

The events of 2017 underlined the centrality of UNESCO's mandate and the importance of its action in the world today. In March, UNESCO's work to protect heritage in the midst of conflict, particularly in Iraq, led to the adoption of the first-ever UN Security Council Resolution solely devoted to this issue. This unprecedented, international awareness must now be translated into action. In October, the publication of the *Global Education Monitoring Report 2017/8* set the direction to devise better education policies for all, at this time when an educational emergency is more apparent than ever. Also this year, 32 countries united scientific efforts under UNESCO's coordination, to participate in the largest tsunami exercise ever held up until now.

This Annual Report takes stock of these actions and many others, undertaken during the mandate of the former Director-General, Irina Bokova, to whom I wish to pay tribute. The Report also reflects the professionalism and expertise of the Organization's staff working across the world, and translating the 2030 Agenda for Sustainable Development's Goals into action. The Report features UNESCO's commitment to provide a world of justice, peace and sustainable development.

Guided by the ideals of peace and progress, UNESCO represents a powerful force for transformation in the face of today's challenges. It is also well-placed to share our wide-ranging experience and formulate the innovative ideas that the world currently needs, bearing in mind specific conditions on the ground and the need to respect local history and culture.

In order to meet the challenges of today's world, we must mobilize and work together to build a better future. That is the meaning of the words pronounced at UNESCO by Senegalese poet and former president Léopold Sédar Senghor on his 90th birthday: 'Solidarity and sharing, justice and dignity: words that chime loudly to remind us of our duties.'

A handwritten signature in black ink that reads "Audrey Azoulay". The signature is written in a cursive style and is positioned above a thin horizontal line.

Newly elected Director-General of UNESCO Audrey Azoulay next to The Sun (1958), a ceramic mural by Joan Miró and Josep Llorens i Artigas, at the Organization's Headquarters.

UNESCO's mandate

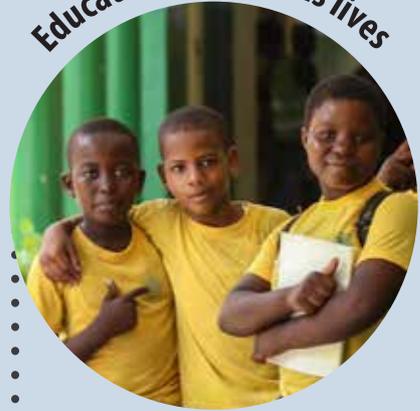
Created in London on 16 November 1945, UNESCO is the United Nations Organization for education, the sciences and culture. Its Constitution, drafted in the aftermath of World War II, opens with the following words, a road map for the Organization: 'Since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed'.

More than 70 years after UNESCO's foundation, this vision of peace remains deeply relevant. It is moreover an essential condition for achieving sustainable development. The world needs to invest in education, the sciences and culture to breed tomorrow's talents, to foster tolerance and the shared value of our common humanity. In an unstable world marked by countless fractures, sustainable peace cannot merely rely on political and economic arrangements between governments. Sustainable peace must be built on the foundation of humanity's intellectual and moral solidarity.

UNESCO fosters dialogue and mutual understanding between peoples through education, the sharing of different cultures, and the free circulation of ideas and knowledge.

UNESCO gathers 195 Member States and 11 Associate Members. Its Headquarters are located in Paris.

Education transforms lives



- Access to quality education is a
- fundamental human right. Education
- provides the means to reach out to
- others, to know one's own rights and
- to become a citizen of the world.
- It is UNESCO's uppermost priority.

Building knowledge societies



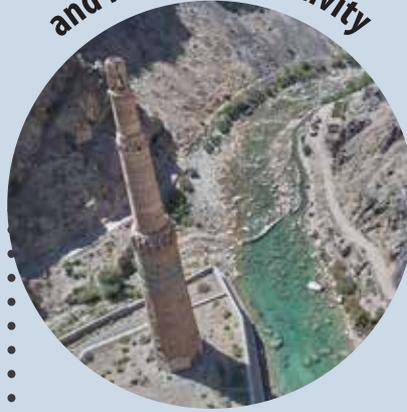
- UNESCO works towards building
- inclusive knowledge societies
- by improving access, preservation
- and sharing of knowledge
- and information.

Fostering freedom of expression



- The 'free flow of ideas by word and image' is to UNESCO a driving force for dialogue and mutual understanding. It is also a key lever for innovation, research and intellectual solidarity.

Protecting our heritage and fostering creativity



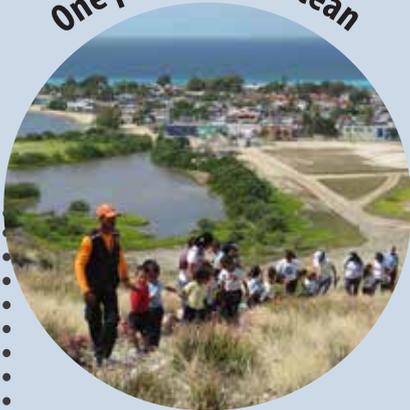
- Recognizing and protecting the value of cultures is at the heart of the fight against ignorance and prejudice, of the efforts to defend human dignity and the dialogue between peoples. No development can be sustainable without a strong culture component.

Learning to live together



- Peace must be learned: this is UNESCO's message. In the 21st century, peace education is not only a matter of international relationships. It must be exerted by societies themselves.

One planet, one ocean



- Today, the planet and its ocean's vital resources are threatened by unsustainable exploitation and climate change. UNESCO improves our knowledge and reinforces our means to preserve the planet as a whole.

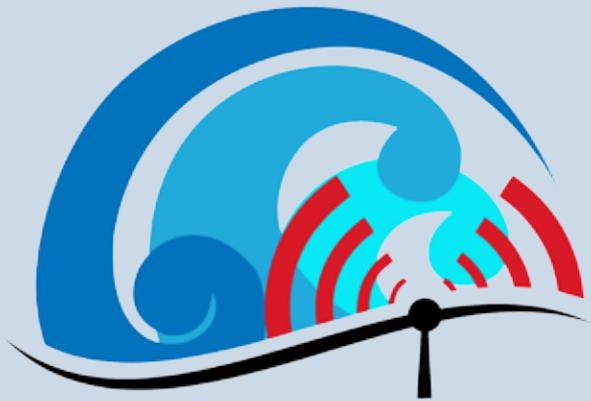
Science for a sustainable future



- Scientific cooperation is essential for the rapprochement between peoples and the construction of peace. UNESCO's programmes gather scientists from all over the world to outline common strategies and challenge pressing issues which transcend borders.

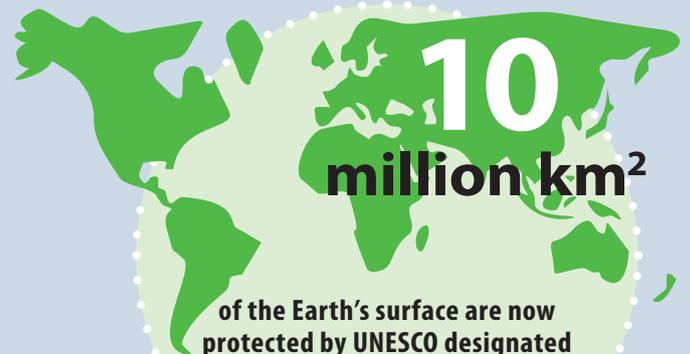


Building peace in the minds of women and men



740,000

participants from 32 countries joined CARIBE WAVE 17, making it the largest international tsunami exercise to date



10 million km²

of the Earth's surface are now protected by UNESCO designated sites such as Biosphere Reserves, Global Geoparks and World Heritage sites



4,000

young women and men have received training through UNESCO's Networks of Mediterranean Youth (NET-MED Youth) Project



21

new sites were inscribed on UNESCO's World Heritage List, which now comprises

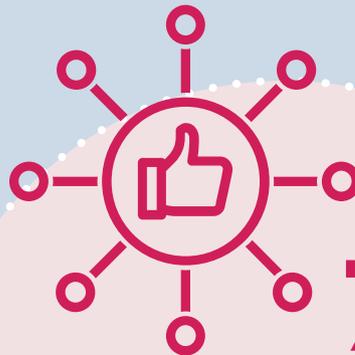
1,073

cultural, natural and mixed World Heritage properties from around the world



765,906

articles mentioning 'UNESCO' were monitored in all media sources (CISION)



7.2 million

followers on our main social media accounts

The year in a snapshot

440,000



learners
benefitted from
UNESCO's Capacity
Development for
Education Programme
(CapED) activities

1.3
million

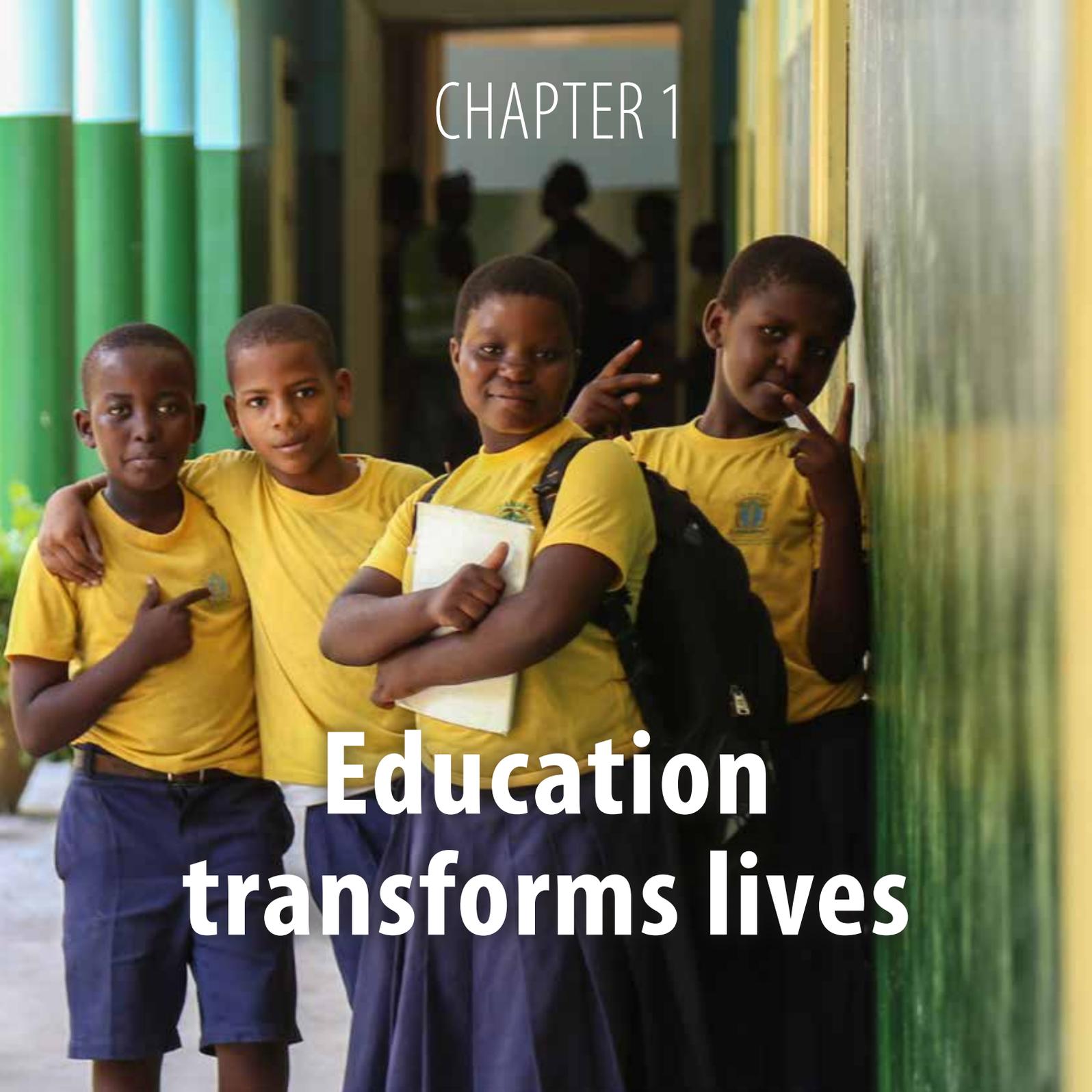
young people in 35 African
countries were introduced
to coding on Africa
Code Week, a joint project by SAP
and UNESCO's YouthMobile
Initiative among other partners



A young boy with a backpack stands in a school hallway. He is wearing a yellow t-shirt and blue shorts. The hallway features several green pillars and a blue trash bin. The background shows some foliage and a building.

According to UNESCO's Global Education Monitoring Report 2017/2018: Accountability in Education, civil society organizations in the United Republic of Tanzania have played an important role in countering corrupt practices by using budget tracking and analysis to monitor government disbursements and expenditure. These organizations have helped improve education delivery by assessing whether resources are allocated and spent in line with budgets and plans for the benefit of teachers and students such as these, from the Zanaki Primary School in Dar es Salaam.

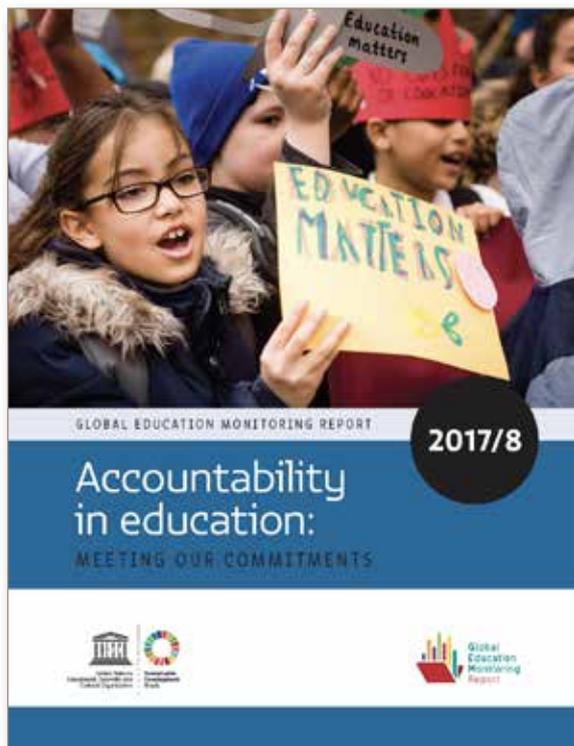
CHAPTER 1

A photograph of four school children standing in a hallway. They are wearing yellow t-shirts and dark blue bottoms. The child in the center is a girl with a backpack, holding a white folder. The other three are boys, some with their arms around each other. They are all looking towards the camera. The background shows a doorway with silhouettes of other people.

**Education
transforms lives**

Education transforms lives

Throughout 2017 UNESCO has kept its focus on meeting the aims of the Sustainable Development Goals – equity, inclusion, quality – by working to improve education systems, highlighting the need to increase accountability through monitoring, and ensuring that schools and other learning environments are safe and secure for all. In all its work, education is promoted as transformative, and Africa and Gender remain overarching priorities.



The second in the new UNESCO Global Education Monitoring Report series, the 2017/2018 edition continues its assessment of progress towards the Sustainable Development Goal on education (SDG 4) and its ten targets.

New data released in 2017 by the UNESCO Institute for Statistics (UIS) signals a learning crisis that could threaten progress towards the SDGs.

■ A wake-up call

Globally, at least 750 million adults and 264 million out-of-school children still lack basic literacy skills with women making up 63 per cent of the total, according to the UNESCO Institute for Statistics (UIS).

And new generations are joining these numbers, with very little progress made on reducing the proportion of children not attending school. Sub-Saharan Africa remains the region with the highest numbers out of school in all age groups, including more than half its young people aged 15 to 17. Just six countries are home to more than one-third of all out-of-school children of primary age: Ethiopia, India, Indonesia, Nigeria, Pakistan and

Sudan. In low-income countries, more than 11 million girls of primary age are out of school, compared with almost 9 million boys, although drop-out rates are lower for girls than for boys.

According to 'Reducing global poverty through universal primary and secondary education', a paper from UNESCO's Global Education Monitoring (GEM) Report team released in June, nearly 60 million people could escape poverty if all adults had just two more years of schooling. If all adults completed secondary education, 420 million could be lifted out of poverty, reducing the total number of poor people by more than half globally and by almost two-thirds in sub-Saharan Africa and South Asia.

Failure to learn, in and out of school

When children are in school they are not necessarily receiving an education that equips them with the skills vital to cope with a rapidly changing world. A UIS paper, 'More than one-half of children and adolescents are not learning worldwide', released in September showed that 617 million children and adolescents worldwide are not achieving minimum proficiency levels in reading and mathematics. Across sub-Saharan Africa, nearly nine out of ten children between the ages of about 6 and 14 will not meet the minimum proficiency levels. The same is true of 81 per cent, or 241 million young people, in Central and Southern Asia. These massive challenges derive not just from the failure to get children into school, but from the subsequent failures to provide them with a high-quality education and to retain them up to higher secondary level. Altogether, they call for greater investment if SDG 4 is to be met, and particularly Target 4.1, which requires primary and secondary education that will lead to 'relevant and effective learning outcomes'.

LEAVE NO ONE BEHIND IN CENTRAL AND SOUTHERN ASIA



241
MILLION

8 OUT OF 10
SCHOOL-AGE KIDS CANNOT
READ PROFICIENTLY

80% OF KIDS NOT LEARNING
ARE IN SCHOOL

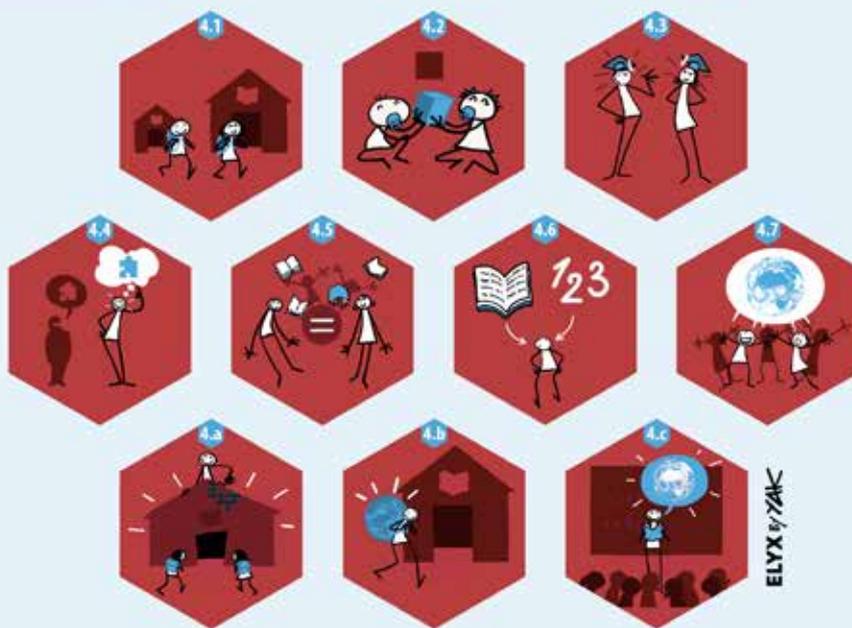


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STATISTICS

@UNESCOSTAT | #DATA4SDGS

Ensure quality education for all

Sustainable Development Goal 4
Ten targets



4.1 Universal primary and secondary education

4.2 Early childhood development and universal pre-primary education

4.3 Equal access to technical/vocational and higher education

4.4 Relevant skills for decent work

4.5 Gender equality and inclusion

4.6 Universal youth and adult literacy

4.7 Education for sustainable development and global citizenship

4.a Effective learning environments

4.b Expand the number of scholarships available to developing countries

4.c Increase the supply of qualified teachers

© UNESCO

Poster designed
by UNESCO this
year to increase
communication
and knowledge
of SDG 4 on
education and its
ten targets.

This paper, released ahead of the UN High Level Political Forum (10–19 July) and focused on poverty eradication in pursuit of the 2030 Agenda for Sustainable Development, demonstrates the importance of recognizing education as a core lever for ending poverty in all its forms, everywhere.

This is the context in which UNESCO and its sister organizations are working to achieve the Sustainable Development Goals (SDGs) and, in particular, SDG 4 on Quality Education. In achieving this goal, huge steps forward will be taken in meeting the targets of all the other SDGs.

■ Financing the future

UNESCO's Global Education Monitoring (GEM) Report team's paper 'Reducing global poverty through universal primary and secondary education' emphasized the economic return on education spending, alongside the difficulties in generating funding. While calling on countries to improve the quality of education, the paper stressed the need to reduce the direct and indirect costs of education for families. These apply at primary, secondary and tertiary levels.

With government budgets under pressure, aid is an essential element in improving access to education in lower-income countries. While development aid in general rose by 24 per cent in 2016, total aid to education amounted to US\$12 billion, 4 per cent lower than in 2010. The drop in aid to basic education – which includes support to pre-primary and primary education as well as adult education and literacy programmes – was even larger at 6 per cent, according to another policy paper from the GEM Report team, 'Aid to education is stagnating and not going to countries most in need', published in June and drawing on data from the OECD Development Assistance Committee.

As well as falling short of the amount needed to achieve SDG 4, aid was not well targeted to the areas most in need of it. Sub-Saharan Africa now receives less than half the amount of aid to basic education it obtained in 2002. While humanitarian aid to education has reached a historic high, increasing by 55 per cent from 2015 to 2016, it still receives only 2.7 per cent of total aid available, not even half the amount requested.

The paper drew attention to three major proposals for donors to reverse this decline: the GPE Replenishment campaign, an International Finance Facility for Education proposed by the International Commission on Financing Global Education Opportunity, and the Education Cannot Wait fund to assist with the delivery of education in emergencies.

On 20 September, UN leaders and heads of state were among those who committed to tackling the global education crisis at 'Financing the Future: Education 2030', a high-level event held at the United Nations, New York,

co-hosted by Norway, France, Malawi and Senegal, for which UNESCO was a partner alongside the Education Commission, Global Partnership for Education, Malala Fund, ONE Campaign and UNICEF. 'Every development success story starts with education. This is why country ownership is at the crux of the 2030 Agenda and the strongest impetus for unlocking progress. From adequate financing to effective learning at all ages, countries hold the reins to making education equitable, inclusive and transformative,' said Irina Bokova, then Director-General of UNESCO.

■ Improving accountability through monitoring

The 2017/8 UNESCO GEM Report, released in October, was entitled *Accountability in Education: Meeting our commitments*. 'Education is a shared responsibility between us all – governments, schools, teachers, parents and private actors,' said Director-General Irina Bokova. 'Accountability for these responsibilities defines the way teachers teach, students learn, and governments act.'

UNESCO's GEM Report paper 'Reducing global poverty through universal primary and secondary education' signals that aid to education is not only falling short of the amount needed to achieve SDG 4, but it is also not well targeted to the areas most in need of it. Infographic commissioned to raise awareness on this issue.



#CountOnME

#WhosAccountable


Global
Education
Monitoring
Report

[Bit.ly/GEM2017](https://bit.ly/GEM2017)

Stories from the field

Thailand

Chit Ko's story: Education without borders, a life without limits

Chit Ko migrated with his family from Myanmar to Thailand as a small child. When he was 11 his poverty-stricken parents decided that schooling was over and it was time for him to work. Instead Chit Ko, now 13, stayed in school and is not only top of his class, but finished at the top of Kayin State in the Myanmar Non-Formal Primary Education (NFPE) examination.

That change is owed to Seik Khamar Chan, headmaster of Sauch Kha Hong

Sar Learning Centre, who encouraged villagers in the Mae Sot community to keep their children in school. 'If Chit Ko continues to work like this, his life will be tough like yours,' Seik Khamar Chan told them. 'I will help cover all of his school expenses and I can guarantee that he will be good. Please trust me.'

Since that day, Chit Ko has spent much of his time reading books on a tablet filled with Myanmar and Thai learning resources, and his performance in class has soared. 'I have all of my textbooks and I can read many other books that I like from the tablet,' says Chit Ko. This small miracle resulted from a collaborative effort between the headmaster, UNESCO and its partners in promoting the use of ICT

to overcome barriers to learners. 'I'm very proud of my son,' says his father, looking at a photo of Chit Ko receiving an award for his high NPFE exam score.

Since 2014, the UNESCO Office in Bangkok has been implementing the 'Mobile Literacy for Out-of-School Children in Thailand' initiative with the support of Microsoft, True Corporation, CP Group, Help without Frontiers Foundation and the Thai Ministry of Education to provide quality education for marginalized children along the Thai-Myanmar border through mobile learning and ICT devices.

To date, over 5,500 children, including Chit Ko, have enhanced their basic literacy and numeracy skills by more than 50 per cent thanks to this project.



© Help without Frontiers/Sukkhon Panthong

Thirteen-year-old Chit Ko (left), now top of his class, has benefited from UNESCO's project to implement mobile literacy for out-of-school and marginalized children along the Thai-Myanmar border.

It must be designed with care and with the principles of equity, inclusion and quality in mind.'

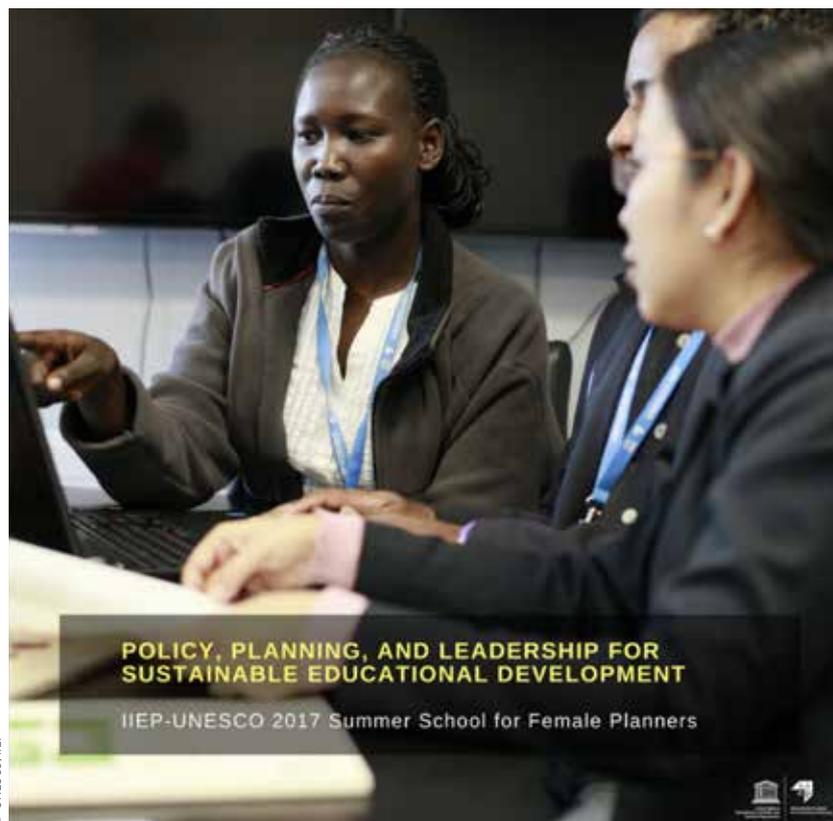
The report highlighted the responsibility of governments to provide universal quality education and stressed that accountability is indispensable in achieving this goal. Only one in six governments publish annual education monitoring reports. Strong independent bodies such as ombudsmen, parliaments and audit institutions are also needed to hold governments to account over education.

Lack of accountability opens the door to corruption and means that standards in both public and private education fail to be enforced. The report also emphasized the importance of accountability in addressing gaps and inequalities, and pointed to the accountability vacuum on aid, with donors not delivering on their aid commitments for those in need.

Teachers are often made accountable for system failings that they are not realistically in a position to remedy, and the report proposed that accountability mechanisms for schools and teachers should be supportive and avoid punitive mechanisms, especially those based on narrow performance measures. It also emphasized the need for democratic participation, to respect media freedom to scrutinize education, and to set up independent institutions to handle complaints.

■ Gender disparities in access, particularly at higher levels

The number of university-level students worldwide doubled to 207 million between 2000 and 2014, but governments and families are struggling to keep pace with the rise in demand, and there are still huge



© UNESCO/IIEP

In August, UNESCO's International Institute for Educational Planning (IIEP) convened 32 women from 23 countries to its Headquarters in Paris for a special summer school course to strengthen the planning capacities of these future female leaders in view of monitoring progress towards the SDGs.

disparities in access and funding. 'Six ways to ensure higher education leaves no one behind', a policy paper published in April by the GEM Report team and IIEP, analysed the global trends and set out a series of measures to make higher education more equitable and affordable.

Disparities are found within as well as between countries, and reflect differences including gender, race, location and affluence. In South Africa, around one-sixth of black and coloured people attended higher education in 2013, compared with over half of white people.

Working on new indicators on learning and standards for learning assessments at IBE-UNESCO

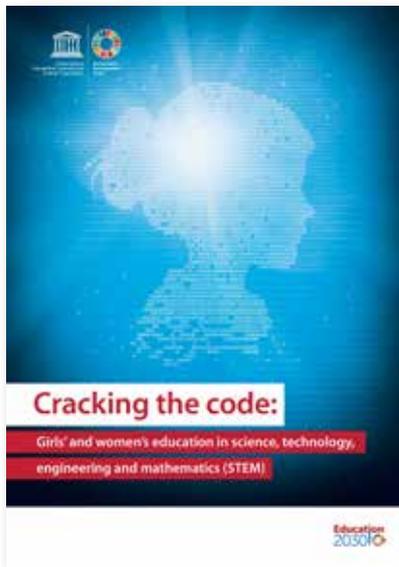
The International Bureau of Education (IBE)-UNESCO is at the forefront of vital work to agree new indicators on learning and standards for learning assessments, as part of the Global Alliance to Monitor Learning (GAML) which was set up in 2016 by UIS. GAML brings together technical experts from around the world to develop new indicators on the learning needed to achieve different targets under SDG 4. They are also asked to set the standards for good practices on learning assessments.

The alliance has more than 250 members, representing a wide range of stakeholders from Member States, academia, international organizations, NGOs, civil society and the private sector. It is developing the standards and methodologies needed to measure learning globally, while helping countries to produce and use the information to achieve SDG 4.

Fewer than 1 per cent of indigenous young people in Mexico attend higher education. In China, young people from rural areas are seven times less likely to attend university than students from urban areas. Women made up only 30 per cent of undergraduate-level students in low-income countries in 2014.

The paper drew on a range of examples to show how different countries are expanding and diversifying higher education offerings to achieve greater equity. Its six recommended areas for policy action target helping those who need it most through using regulatory frameworks to guarantee equity and affordability; monitoring activity to ensure equal opportunities; varied admissions criteria; coordination of different forms of student aid, such as loans and grants; and ensuring no graduate spends more than 15 per cent of their annual income to repay their student loan.

The new UNESCO publication Cracking the Code aims at deciphering the factors that both hinder and facilitate girls' and women's participation, achievement and continuation in STEM education.



(From left) Malaysia's Director-General of Education Tan Sri Dr Khair Bin Mohamad Yusof, Director-General of UNESCO Irina Bokova and Thailand's Vice Minister of Education Dr Sophon Napathorn opened the three-day UNESCO International Symposium and Policy Forum 'Cracking the code: girls' education in STEM' held in Bangkok, Thailand in August.

The educational gender gap is particularly wide in science, technology, engineering and mathematics (STEM). Females represent only 35 per cent of all students enrolled globally in STEM-related fields of study in higher education, leading to an under-representation of women in the professions that depend on these skills. This was the issue behind a three-day UNESCO International Symposium and Policy Forum, 'Cracking the code: girls' education in STEM' held in Bangkok, Thailand in August, which saw the launch of a UNESCO report, *Cracking the Code: Girls' and women's education in STEM*.

The report explored the roots of this gap in social attitudes and the educational impediments girls face at every step of

their education. Its proposals respond to the many challenges and include changes to teacher training, learning contents, materials and equipment, assessment methods and tools, as well as the overall learning environment and socialization process in school. More than 300 participants in the symposium included positive female role models in STEM such as keynote speaker Aditi Prasad, COO of Robotix Learning Solutions.

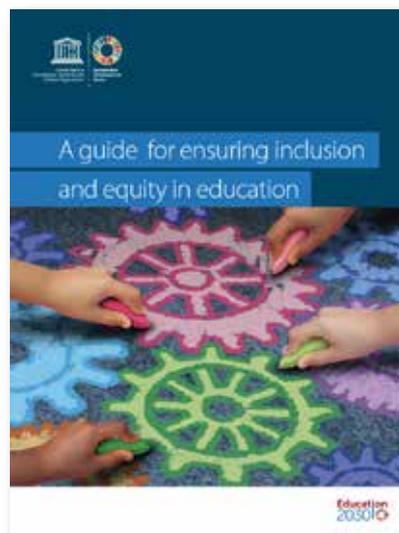
■ Good news on literacy

Yet there are signs that reading literacy is on the rise internationally. A report released in December at UNESCO Headquarters by the International Association for Evaluation of Educational Achievement (IEA) showed that in 2016, 96 per cent of fourth graders (aged 9–10 approximately) from over 60 education systems achieved above the Progress in International Reading Literacy Study (PIRLS) 2016 low international benchmark. Female students outperformed their male counterparts in 48 countries and dependent territories by an average of 19 points.

To show how large-scale assessments, such as PIRLS, can contribute to achieving SDG 4, UNESCO and the International Association for Evaluation of Educational Achievement (IEA) also released a joint booklet 'Measuring SDG 4: how PIRLS can help'. Conducted by IEA, PIRLS provides internationally comparative data and trends on reading achievement. In 2016, its scope was extended to include ePIRLS, an innovative assessment of online reading. The ePIRLS assessment concluded that good readers have an advantage in digital literacy skills, with 50 per cent of students deemed good to excellent readers reaching the PIRLS high international benchmark.

UNESCO celebrated International Literacy Day on 8 September with reflections around its theme of 'Literacy in a digital world'. A wide range of stakeholders and decision-makers used this opportunity to examine how digital technology can help close the literacy gap and gain better understanding of the skills needed in today's societies. Director-General Irina Bokova, emphasized that: 'These new technologies are opening vast new opportunities to improve our lives and connect globally – but they can also marginalize those who lack the essential skills, like literacy, needed to navigate them.' A conference to commemorate the day at UNESCO Headquarters was based on four themes: Rethinking literacy, Moving to action, Assessing risks and responses, and Reinforcing monitoring and assessment. Other events were held around the world, notably in Afghanistan, Bangladesh, India, Iran, Kazakhstan, Kenya, Mozambique, Pakistan, Senegal, Thailand, Tanzania and Sudan.

The prizes awarded on the Day help to publicize the need for initiatives to improve global literacy rates. The UNESCO King Sejong Literacy Prize, sponsored by the Republic of Korea, awarded prizes for mother-tongue literacy education and training to initiatives from Canada and Jordan. The UNESCO Confucius Prize for Literacy, supported by the Government of the People's Republic of China, gave awards to three programmes working with rural populations and out-of-school young people, particularly girls and women, from Colombia, Pakistan and South Africa. In addition, the Initiative for Literacy: Improved Livelihoods in a Digital World, a partnership between UNESCO and Pearson, presented case studies on how inclusive digital solutions can improve livelihoods.



This new UNESCO publication aims to create system-wide change for overcoming barriers to quality educational access, participation, learning processes and outcomes, and to ensure that all learners are valued and engaged equally.

The AdulTiCoProgram for teaching digital competencies to seniors in the city of Armenia (Colombia) was one of the three projects for rural populations and out-of-school young people awarded this year the UNESCO Confucius Prize for Literacy, supported by the Government of the People's Republic of China.



© AdulTiCoProgram



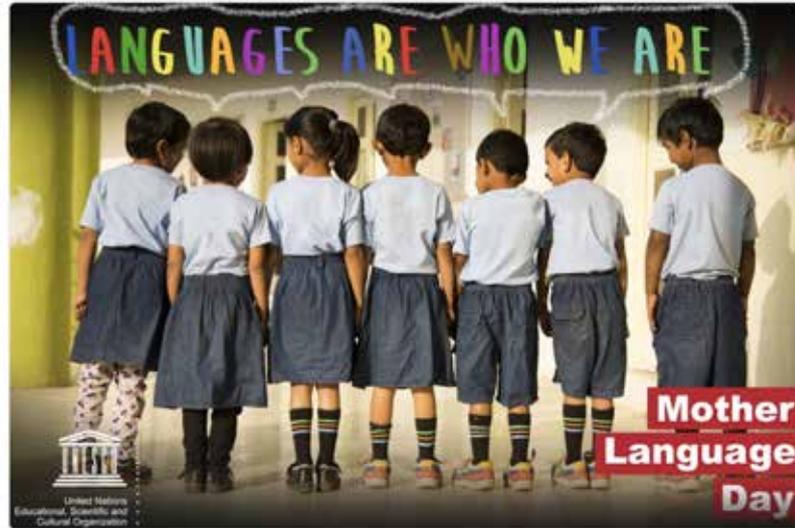


UNESCO

@UNESCO

Suivre

Languages connect the world.
Happy #MotherLanguageDay!



UNESCO tweet on the occasion of International Mother Language Day in 2017. The Organization has been celebrating this Day for nearly 20 years with the aim of preserving linguistic diversity and promoting mother tongue-based multilingual education.

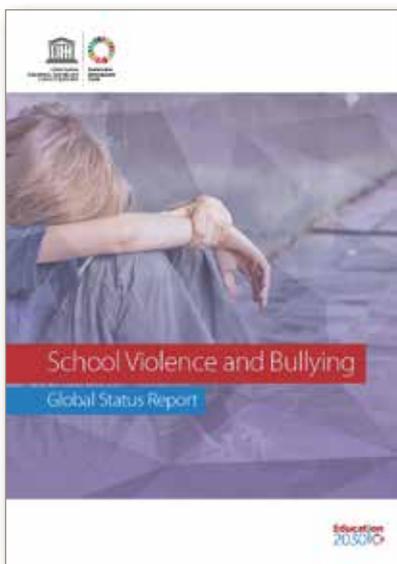
■ Celebrating linguistic diversity

On 21 February UNESCO celebrated International Mother Language Day with the theme 'Towards sustainable futures through multilingual education' in partnership with the Organisation Internationale de la Francophonie (OIF). About a hundred participants were involved in events including presentations and discussions on

An enthralling moment at the Sujat Nagar urban slum school in Dhaka, Bangladesh. This country was the origin of International Mother Language Day, observed annually on February 21 in recognition of the Bengali Language Movement of 1952.

the contribution of languages to sustainable futures. Four speakers gave presentations on multilingual education and access to education in the first language; multilingual education and literacy, and the impact of 50 years of celebrating Literacy Day on mother-tongue education and sustainable development; the concept of 'linguadiversity' with the aim to promote it as the equivalent of biodiversity, and its contribution to sustainable futures; and concrete examples related to multilingualism as an asset for learning to live together better. A special interactive session on Creole languages was held in the afternoon, featuring Radio France Internationale and Kreyolofoni.

Released in 2017 and based on the most up-to-date available information, School Violence and Bullying is UNESCO's first global overview of the nature, extent and impact of this problem, and the efforts to address it.



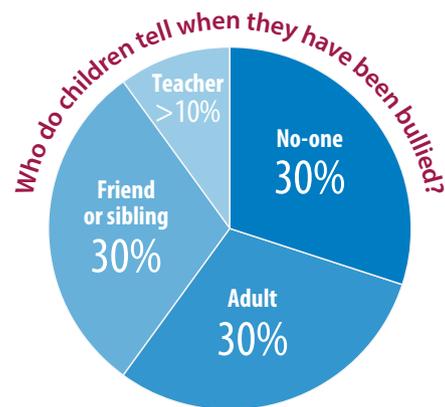
■ Combating violence, in and out of school

School-related violence (SRV) and bullying have a negative impact on students' learning as well as their mental and emotional health. Studies show that children and young people who have experienced homophobic bullying are at increased risk of stress, anxiety, depression, low self-esteem, isolation, self-harm and suicidal thoughts. Other features which are the focus of bullying, according to a 2016 opinion poll to which 100,000 young people in 18 countries

responded, include physical appearance and ethnicity or national origin.

On 17 January 2017 the International Symposium on School Violence and Bullying: From Evidence to Action, was co-organized by UNESCO and the Institute of School Violence Prevention at Ewha Womans University, in Seoul with additional financial support from the Ministry of Education of the Republic of Korea through the National Research Foundation of Korea Grant. It saw the launch of the event partners' *School Violence and Bullying: Global status report*, which outlined research in 19 low and middle-income countries showing that 34 per cent of students aged 11–13 reported being bullied in the previous month, with 8 per cent reporting daily bullying.

More than 270 participants from 70 countries considered how best to fight school violence and bullying, with suggestions in the report including strengthening leadership, promoting awareness, establishing partnerships and engaging children and adolescents, building education staff capacity, establishing reporting systems, and improving the collection of data and evidence. They also examined ways to establish a new platform to strengthen monitoring in this area, in line



Available evidence suggests that many victims of school violence and bullying delay disclosing their abuse for such reasons as lack of trust in adults, in particular teachers, fear of reprisals, feelings of guilt, shame or confusion or not knowing where to seek help. Chart extracted from UNESCO's *School Violence and Bullying*.

with SDG 4. 'School violence and bullying is a grave violation of the right to education,' said Director-General Irina Bokova, adding that 'the symposium and report are part of UNESCO's effort to ensure that schools and other learning environments are safe and secure for all'.

UNESCO's GEM Report team also reviewed cross-national and selected national surveys on SRV and bullying in a policy paper published on 17 January, which presented proposals on how to improve understanding of its global prevalence.

Teachers have a major part to play in ensuring that education fosters peace and non-violence in and out of the classroom. This was the focus of a UNESCO-International Institute for Capacity Building in Africa (IICBA) Training of Teacher Trainers (ToT) workshop co-organized by the UNESCO Kampala Office and held in Entebbe, Uganda from 4–8 September 2017.

World Teachers' Day 2017

World Teachers' Day has been celebrated around the world since 1994 on 5 October. UNESCO's theme in 2017 was 'Teaching in freedom, empowering teachers', focusing on the professors, teachers, researchers and others who provide educational services to students at institutions of higher learning. The event consisted of a series of seminars at the Organization's Headquarters and marked 20 years since the adoption of the 1997 Recommendations concerning the status of higher education personnel. Panel discussions looked at challenges in academic freedom and institutional autonomy, and higher education's responses to new demands for quality, inclusion and equity. The higher education sector will be responsible for training the estimated 68.8 million primary and secondary education teachers needed to meet the SDG target of universal primary and secondary education by 2030.

Palestine

How community libraries are helping university students in the West Bank and Gaza

Twelve community libraries in the West Bank and Gaza, funded by the Saudi Committee for the Relief of the Palestinian People, were started by UNESCO Ramallah Office in 2014, under the Support Programme for Palestinian University Students Under Conditions of Severe Poverty. They provide more than 24,000 vulnerable higher education students with training, scientific research support, textbooks and photocopying services.

Students like Zaid and Mohammad from Hebron or Salsabil from Tulkarem spend a lot of their time in the community libraries. They come mostly to do research, attend the various activities, provide training and even support other students with their research.

‘The students like how we treat them here: they feel at home and anything they need, we can give them,’ says Imtinaan, one of the 12 trained librarians, working at the Nablus Community Library. Zaid, a volunteer at Nayef bin Abdulaziz Al Saud Community Library in Hebron, agrees that these are more than typical libraries. ‘They are knowledge centres that mobilize the community, raise awareness on students’ rights and

needs, and teach you how to speak up and develop a dialogue.’

As well as adding to community cohesion this support has an economic effect, as Adil, a volunteer at Nayef bin Abdulaziz Al Saud Community Library in Tulkarem, explained. ‘As a university graduate, I am learning from this experience, which will give me more opportunity to find employment in the community.’

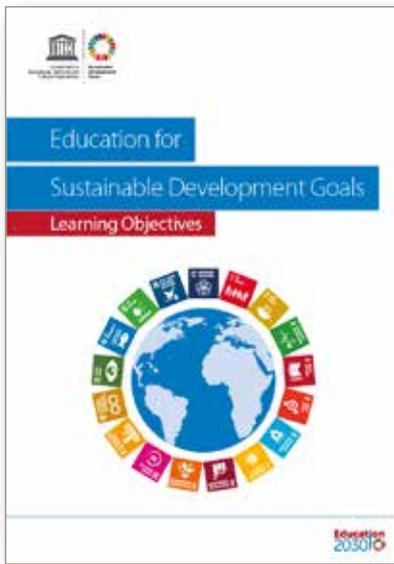
Since the establishment of the programme, the community libraries have taken a central role in the lives of people and have become a second home and a support system for many vulnerable students in Palestine.



© UNESCO/Sarah El Attar

Salsabil is one of the community library volunteers from the city of Tulkarem in the West Bank where the UNESCO Office in Ramallah has been implementing the Support Programme for Palestinian University Students Under Conditions of Severe Poverty since 2014.

UNESCO launched this year Education for Sustainable Development Goals: Learning Objectives, a publication featuring suggestions and activities to address each relevant SDG in the classroom.



It attracted 29 trainees from Eritrea, Ethiopia, Kenya, Somalia, South Sudan and Uganda. ToT is a key part of IICBA's project on Teacher Training and Development for Peace-building in the Horn of Africa and Surrounding Countries, supported by the Japanese government.

UNESCO and the Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP) released in March the SDG-inspired video game World Rescue, in which players should try to solve global problems such as displacement, disease, deforestation, drought and pollution at the community level.



© MGIEP

How can we educate to build peace? As participants discovered, this is largely dependent upon cultivating skills through transformative pedagogy. This approach allows learners to examine their own knowledge and values, consider other perspectives, and be empathetic. Arigatou International shared how peace-building must be approached in a holistic manner that involves in-school, out-of-school and community activities. Adults must also act as role models and include young people in decision-making.

Participants explored the root causes of conflict and debated their nature. They also examined approaches to developing the competencies of peace-builders. The roles of ethics, collaboration and decision-making in the peace-building process were discussed in depth, giving participants knowledge and skills to integrate into their own education systems.

■ Connecting the world for peace and sustainable development

More than 400 experts, practitioners and policy-makers, including teachers of UNESCO's Associated Schools (ASPnet) and 50 young delegates, participated in the UNESCO Week for Peace and Sustainable Development: The Role of Education, in Ottawa, Canada from 6 to 10 March. Organized by UNESCO and the Canadian National Commission for UNESCO (with additional support from the Canada Council for the Arts, the Council of Ministers of Education, Canada, the Ministry of Education, Culture, Sports, Science and Technology of Japan, the Global Centre for Pluralism and the Canadian Museum of History), the event focused on teaching-related aspects of Education for Sustainable Development (ESD) and Global Citizenship Education (GCED) and their contribution to achieving the SDGs, notably Target 4.7 of SDG 4.

In the first half of the week a Global Review Forum took stock of progress with the Global Action Programme (GAP) which was launched in 2014 and examined the way forward. The forum also highlighted good policies and practices for teachers and teacher trainers. In addition, an intergenerational 'Talking Across Generations' (TAGe) session between young people and senior officials, organized by the UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP), was broadcast on webstream with live discussions on Twitter under the hashtag #UNESCOWeekED.



© NaDEET

In support of the Week, the UNESCO GEM Report team launched a youth photo contest on ESD and GCED. UNESCO also launched the publication *Education for Sustainable Development Goals: Learning objectives*, which contains suggestions and classroom activities to address each relevant SDG. In addition, UNESCO and MGIEP launched an SDG-inspired video game, *World Rescue*, in which players try to solve global problems such as displacement, disease, deforestation, drought and pollution at the community level.

In September, UNESCO's third International Conference on Learning Cities, held in Cork, Ireland, attracted more than 700 local government representatives from more than 80 countries. Its aim was to bring together key city stakeholders to share and discuss their experiences and identify good practices in using education

and learning as drivers of sustainable development.

The UNESCO Global Network of Learning Cities, established in 2013, currently comprises more than 200 member cities from across the world. In 2017, 16 of them were awarded the UNESCO Learning City Award for their outstanding progress in building learning cities: Bristol (United Kingdom of Great Britain and Northern Ireland), Câmara de Lobos (Portugal), Contagem (Brazil), Gelsenkirchen (Germany), Giza (Egypt), Hangzhou (China), Larissa (Greece), Limerick (Ireland), Mayo-Baléo (Cameroon), N'Zérékoré (Guinea), Okayama (Japan), Pécs (Hungary), Surabaya (Indonesia), Suwon (Republic of Korea), Tunis (Tunisia) and Villa María (Argentina).

On 3 November MGIEP launched a number of publications and brochures including *#YouthWagingPeace: A youth-led*

Would you spend a week in the Namib desert learning about education for sustainable development?

More than 10,000 beneficiaries have already done so at the Namib Desert Environmental Education Trust (NaDEET Centre), a key partner of the UNESCO Global Action Programme on ESD. Located in the NamibRand Nature Reserve, it offers hands-on immersion in ESD activities for schoolchildren, community groups and educators alike.

guide on prevention of violent extremism through education (PVE-E) during an intersectoral event on prevention of violent extremism (PVE) held under the auspices of the 39th UNESCO General Conference. #YouthWagingPeace was developed by young individuals who work within the area of violent extremism (VE) and have been affected by it. It explores the need to engage young individuals facing on-the-ground, day-to-day struggles relating to VE and the factors that lead to extremism.

■ Using digital skills and access

Mobile phones are often among the few possessions retained by people forced to leave their homes. There were more than 65 million displaced people in 2015, 51 per cent of whom were children, and most take refuge in developing countries where many schools are already struggling to meet local demand. Statistics show that 71 per cent of refugee households own a mobile phone and 39 per cent have internet-enabled phones. As a means to access the internet, the mobile phone represents a doorway to education and empowerment.

From 20 to 24 March more than 750 experts, practitioners, ministers of education and ministers of ICT from

over 60 countries gathered at UNESCO Headquarters for Mobile Learning Week 2017 (MLW 2017) which took as its theme 'Education in emergencies and crises'. Through more than 70 breakout sessions, exhibitions, and a mix of panel discussions and plenary addresses they examined ways to support learners, teachers and systems to better meet the educational needs of displaced persons through harnessing the power of mobile technology.

Among the side events were live demonstrations of mobile learning content given in a UNHCR refugee tent, and a photo exhibition about refugees seeking higher education in Jordan and Kenya. Art works by Edel Rodriguez and Yacine Ait Kaci (Yak) captured themes from the event and findings from individual MLW sessions.

MLW 2017 was organized in partnership with the UN High Commissioner for Refugees (UNHCR) and the International Telecommunication Union (ITU). Three-quarters of the participants were new attendees and over 97 per cent said they would recommend it to colleagues.

On 10–11 July, the UNESCO International Forum on ICT and Education 2030, held in Qingdao, People's Republic of China, attracted around 400 participants from more than 80 countries. Participants exchanged ideas and best practices on leveraging ICT to achieve SDG 4, and looked specifically at how best to use affordable technologies to close the digital divide that affects disadvantaged groups.

The event was co-organized by UNESCO, the Ministry of Education of the People's Republic of China, the Chinese National Commission for UNESCO, and Shandong Provincial Education Committee, and hosted by Qingdao Municipal Bureau of Education with support from the Weidong Group. The delegates also adopted the 2017 Qingdao Statement, which outlines the strategies and prioritized actions to better implement the Qingdao Declaration. The Qingdao Declaration provides UN Member States with policy recommendations to harness the power of ICT to address educational challenges and ensure equitable quality education and lifelong opportunities for all.

These Syrian refugee children learn and play using mobile devices in an apartment in Greece. At the time when this photo was shot, a year had gone by without their attending school. This image was part of the promotional campaign for Mobile Learning Week in 2017.



■ Countering anti-Semitism and hate speech

Every January UNESCO pays tribute to the memory of the victims of the Holocaust and reaffirms its unwavering commitment to counter all forms of intolerance that may lead to group-targeted violence. It renews its commitment to promote education about the history of the Holocaust, and fight racism and anti-Semitism. Events on the theme 'Educating for a better future: the role of historic sites and museums in Holocaust education' took place at the Organization's Headquarters from 24 to 26 January, ahead of the official International Day of Commemoration in Memory of the Victims of the Holocaust on 27 January, the anniversary of the liberation of the concentration and extermination camps of Auschwitz-Birkenau.

These events were organized in partnership with the Shoah Memorial (France) and the Auschwitz-Birkenau State Museum (Poland), with support from the Permanent Delegation of France to UNESCO, the Permanent Delegation of the Principality of Monaco to UNESCO and Metin Ardit, UNESCO Special Envoy for Intercultural Dialogue.

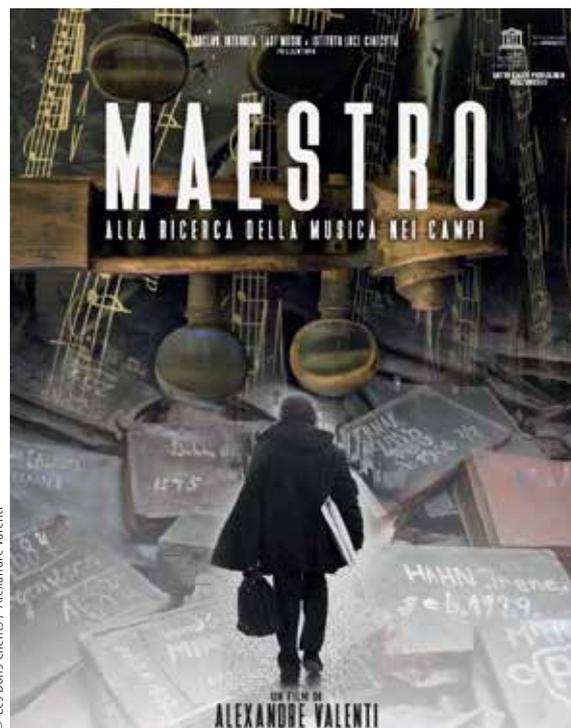
On 24 January, young students and history teachers examined the challenging question of 'How to deconstruct hate speech?' as part of the UNESCO Campus conferences organized in partnership with the Engie Foundation. In partnership with Les Bons Clients production company, a preview was shown of the documentary film *In Search of the Last Music*, directed by Alexandre Valenti, which celebrates

women and men who continued composing music in camps and ghettos, and the man who tracked down and preserved their work, Francesco Lotoro.

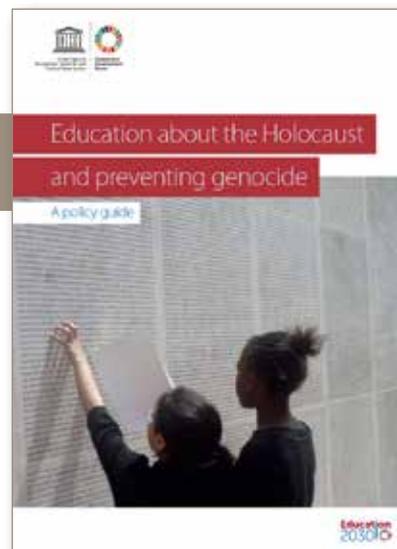
An address and round table discussion focused on the challenges facing historic sites of massacre and persecution, memorials and museums, and their testimonial and educational functions, which are growing in importance as the number of survivors declines. A closing ceremony on 26 January featured a concert by world-renowned musicians Martha Argerich (piano) and UNESCO Goodwill Ambassador Ivry Gitlis (violin), a personal testimony by Raphael Esrail, president of the Union of Auschwitz Deportees, and a reading by actress Anne-Catherine Dutoit of texts written by Holocaust survivor and Nobel Peace Prize laureate Elie Wiesel. Relics bearing testimony to Nazi violence featured in an exhibition of objects excavated near the crematoria of Auschwitz-Birkenau, lost for half a century and recently rediscovered by the Auschwitz museum.

'Education about the Holocaust and preventing genocide'

'We must empower future generations with the lessons from the Holocaust, equip our children and grandchildren with the tools they need to vanquish intolerance and hate, bigotry and anti-Semitism, racism and prejudice,' said Director-General Irina Bokova when she launched 'Education about the Holocaust and preventing genocide', a policy guide for educators on the Holocaust, genocide and mass atrocities, at the 15th Plenary Assembly of the World Jewish Congress in New York on 24 April. The first of a series of projects conducted with the support of the Canadian Ministry of Foreign Affairs, the guide provides effective responses and recommendations to facilitate debate on these issues in classrooms.



Ahead of the 2017 International Day of Commemoration in Memory of the Victims of the Holocaust, UNESCO Headquarters hosted a preview of the documentary film by director Alexandre Valenti which celebrates women and men who composed music in camps and ghettos, and the man who preserved their work.





Ming Kuok Lim (second from right holding the banner) and other colleagues from the UNESCO Office in Jakarta joined journalists from different constituencies of the Indonesian Press Council to march together in a 'Press Freedom Walk' and raise awareness of the importance of press freedom ahead of World Press Freedom Day on 3 May.

CHAPTER 2



Fostering freedom of expression

Fostering freedom of expression

Every aspect of sustainable development is affected by whether the world's entire population has access to reliable information and informed opinion. Without freedom of expression as the foundation for the free flow of information and ideas, and press freedom as a condition for independent journalism, it will be impossible to achieve Goal 16, to promote just, peaceful and inclusive societies, Goal 5 on gender equality and empowerment for women and girls, Goal 4 on inclusive and quality education for all, or indeed any other of the Sustainable Development Goals (SDGs) which UNESCO is committed to help achieve. UNESCO's activities in 2017 focused both on ensuring that media old and new can operate freely and professionally, and on the journalists who often put themselves in danger to ensure that truth is told to the powerful and powerless alike.



World Trends in Freedom of Expression and Media Development 2017/2018 is the first UNESCO global report to monitor the changing media landscape around the world.

The Oxford Dictionary's Word of the Year for 2016 was 'post-truth', said Irina Bokova, then Director-General of UNESCO during 2017. 'We see today the rise of questions that go to the heart of free, independent and professional journalism. We must explore these trends, debate these concepts, and chart new ways forward, together. This is vital for democracy, the rule of law, and good governance.'

These issues were at the core of 'Journalism Under Fire: Challenges of our time', a colloquium held at UNESCO Headquarters on 23 March. It was part of La Presse en Liberté (Free Press) Week, for which other events included an exhibition of first-edition newspapers and debates on press freedom,

organized by the Delegations of France and Switzerland to UNESCO.

The colloquium was co-organized with the World Association of Newspapers and News Editors (WAN-IFRA), with the support of the Governments of Finland, Switzerland, France, Latvia, Lithuania and the Netherlands. About 300 participants, including leading journalists, academics, representatives of social media companies, media development organizations and UNESCO Member States, debated the term 'fake news', the technological and economic transformations reshaping the media landscape, the rise of identity politics, the role of social media platforms, and the importance of journalism training and of media and information literacy.

Monitoring trends in the media landscape

UNESCO's flagship series *World Trends in Freedom of Expression and Media Development*, supported by the Government of Sweden, reports on the Organization's monitoring of trends in the global media landscape, covering developments in media technology, and issues concerned with the maintenance of free and open media. Its *Global Report 2017/2018*, with a special focus on gender equality in the media, was published in November.



© André-Philippe Côté et Le Soleil, Québec, 2015

Christiane Amanpour, UNESCO Goodwill Ambassador for Freedom of Expression and Journalists' Safety and Chief International Correspondent for television broadcaster CNN, moderated part of the event.

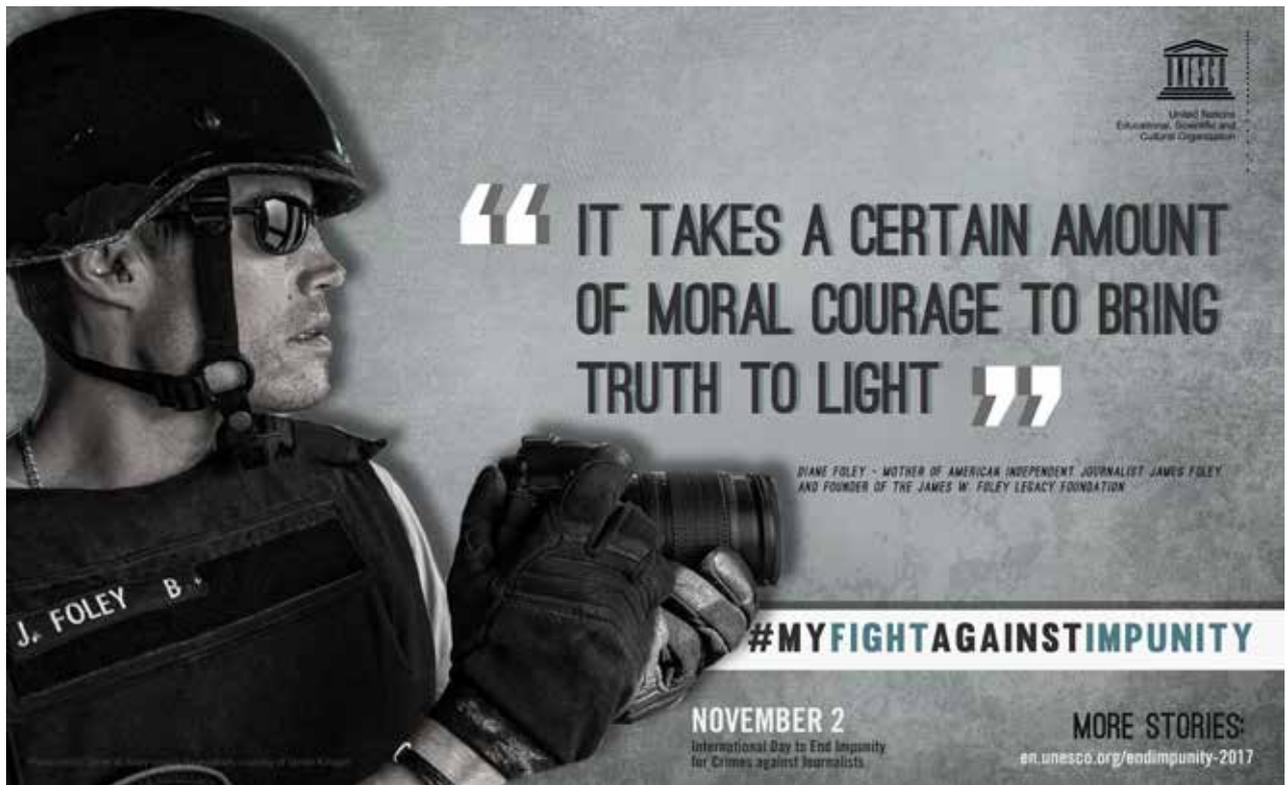
For World Press Freedom Day about 100 events were organized around the world by UNESCO and a wide range of other

organizations. 'Critical Minds for Critical Times: Media's role in advancing peaceful, just and inclusive societies' was the theme of UNESCO's flagship event, held in Jakarta from 1 to 4 May, and organized in partnership with the Government of Indonesia and the Indonesian Press Council. It brought together an unprecedented

1,500 participants and 164 speakers to celebrate the fundamental right to an independent, pluralistic and free press across 19 pre-events, two plenary sessions, an opening and closing ceremony, 12 parallel sessions, a Speaker's Corner, three exhibitions, a cinema and an academic conference on the safety of journalists.

'Not an easy job to frame freedom of expression!', reads this drawing from French cartoonist Côté produced to illustrate real-time discussions organized jointly by UNESCO and Cartooning for Peace on World Press Freedom Day 2017.

The story of American war correspondent James W. Foley, assassinated in Syria, was the object of one of six interviews with inspiring journalists, human rights activists and relatives of killed journalists featured in #MyFightAgainstImpunity, UNESCO's campaign for the International Day to end Impunity for Crimes against Journalists on 2 November.



© UNESCO/James W. Foley Legacy Foundation

Among them were media practitioners, experts, press freedom advocates, academics and government representatives, two-thirds of them from Indonesia itself and 500 from 90 other countries all over the world. Issues discussed included 'fake news', the safety of journalists, gender equality and countering violent extremism. One plenary session highlighted the contribution of journalism to sustainable development and the role of journalists as the guardians of democracy, and a second focused on investigative journalism.

Indonesia issued a special postage stamp to celebrate its hosting of the Day, and four media organizations, Al Jazeera, El País, Rappler and Inter Press Service, invited experts from across the world to write on challenges to press freedom for

blogs and special issues they produced. A group of 46 young journalists travelled from Algeria, Malaysia, Morocco, Palestine, the United States and Finland to work with local aspiring reporters to produce a special digital newspaper, *Voice of Millennials*.

Artists drew cartoons in real time to illustrate the discussions, and a special selection of cartoons on press freedom was curated by UNESCO and Cartooning for Peace, an international organization founded by former UN Secretary-General Kofi Annan and French editorial cartoonist Plantu.

At the close of the conference, participants adopted the Jakarta Declaration. Noting in particular SDG 16, which aims to promote just, peaceful and inclusive societies, and evoking SDG target 16.10, which aims to 'ensure public access to information and protect fundamental

freedoms, in accordance with national legislation and international agreements', it warns of three major challenges to press freedom: safety of journalists, 'fake news' and freedom of speech on the internet. It calls upon UNESCO, its Member States, journalists, media outlets, social media practitioners and internet intermediaries, and civil society, academia and the technical community, to act – and offers proposals for what each group can do to defend these crucial rights and freedoms.

To promote freedom of expression on the ground through concrete media development projects, UNESCO's International Programme for the Development of Communication (IPDC) launched 57 new national media development initiatives in 38 developing countries around the world.

Community media, reporting climate change, access to information, safety of journalists and gender in the media were the most supported areas in 2017, followed by investigative journalism and support to legislative and policy reform.

■ Justice for imprisoned and murdered journalists

Between 2006 and 2016, UNESCO condemned the killing of 930 journalists. Of these, 102 journalists were killed in 2016 alone, according to figures in the *World Trends in Freedom of Expression and Media Development: Global Report 2017/2018*. The vast majority (94 per cent) were local journalists, reporting local stories. Half of the killings occurred in countries where there was no armed conflict, and 10 per cent were women, who also continue to face gender-specific threats including online harassment.

Ninety per cent of cases concerning the killing of journalists remain unpunished, according to information Member States provided in 2017. This is a slight improvement over 2016, when countries' answers to UNESCO's written enquires indicated that only 8 per cent of such cases led to a conviction. Although this reflects a steady improvement, it is still far from sufficient to achieve the objectives of the International Day to End Impunity for Crimes against Journalists (IDEI), observed annually on 2 November. However, progress is evident in Member State responsiveness to UNESCO monitoring, through a unique intergovernmental reporting mechanism established by the IPDC Council in 2008 and strengthened

every year. In 2017, a new dimension of the mechanism was developed enabling capacity-building support to countries willing to improve national monitoring systems and data collection on judicial follow-up.

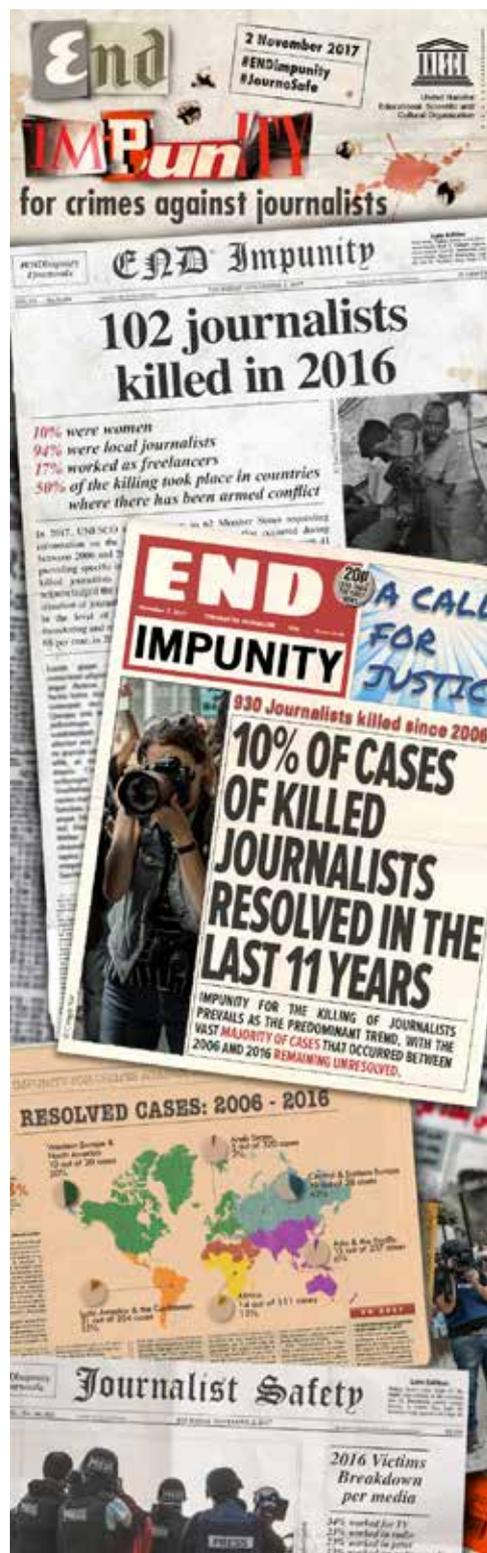
In 2017, UNESCO invited the 62 Member States where cases remained unresolved to provide information on the status of judicial investigations. Of these, 46 responded, with 41 providing specific information.

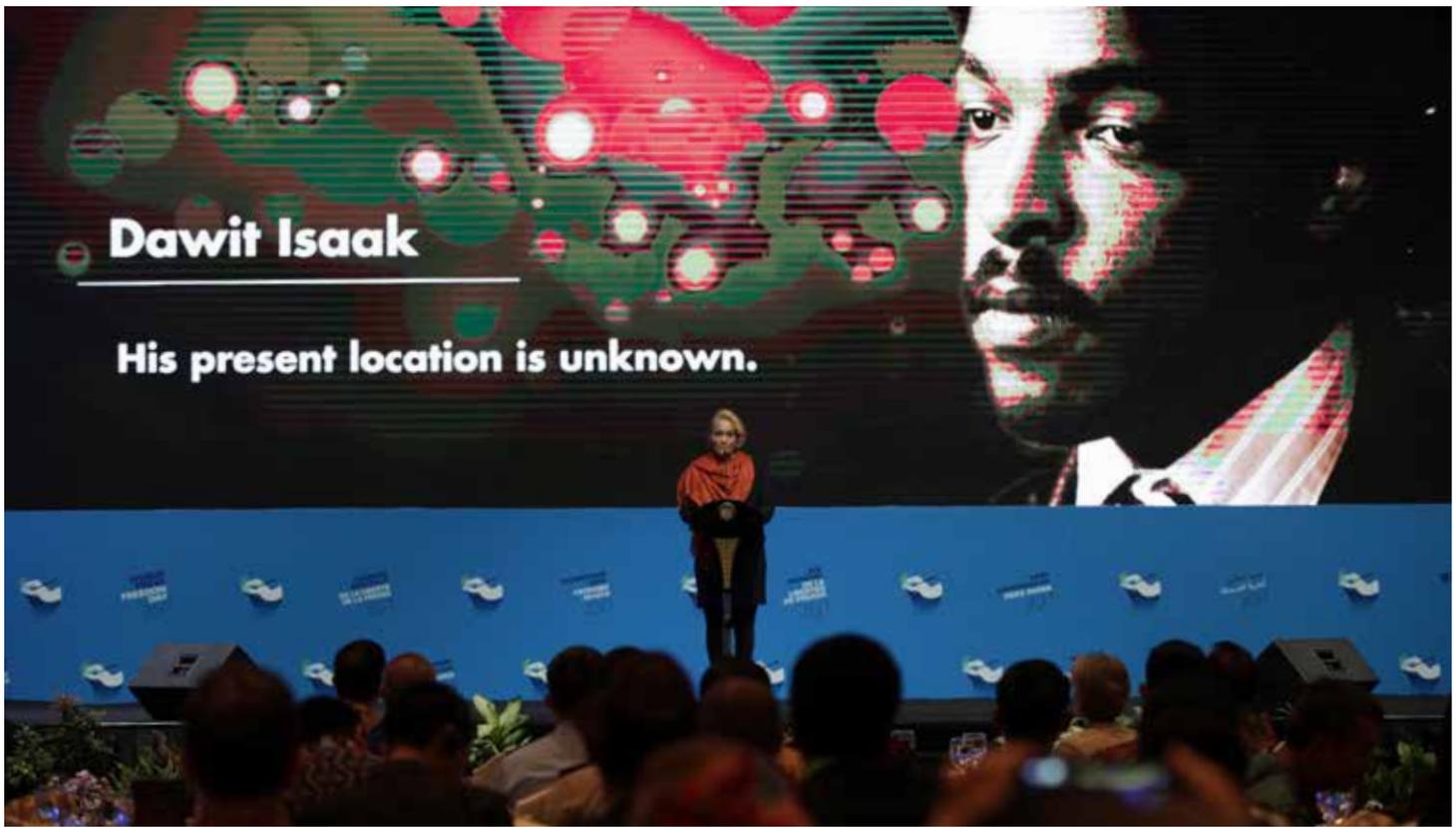
To commemorate IDEI in 2017, UNESCO launched a global campaign in association with media from all over the world and a social media campaign, #MyFightAgainstImpunity. On 4 December, UNESCO and the Sri Lankan Ministry of Finance and Mass Media held a one-day seminar in Colombo on 'Reinforcing Regional Cooperation to Promote Freedom of Expression and the Rule of Law in Asia Through Ending Impunity for Crimes Against Journalists'. The seminar saw intensified pledges by the government to resolve past cases of murders of journalists.

Regional and local events were held in Italy, Kenya, the Philippines, Senegal, Tunisia, the USA and many other countries.

UNESCO also used the occasion of IDEI to launch the fourth edition of its online course 'International Legal Framework of Freedom of Expression, Access to Public Information and Protection of Journalists', which has already been taken by approximately 5,000 judicial operators in Latin America.

Downloadable infographic produced by UNESCO for the promotion of International Day to end Impunity for Crimes against Journalists this year.





© Presidential Palace Press Bureau

Eritrean-born journalist Dawit Isaak was awarded the UNESCO/Guillermo Cano World Press Freedom Prize 2017

Celebrations of World Press Freedom Day this year in Jakarta, Indonesia also saw the award of the 2017 UNESCO/Guillermo Cano World Press Freedom Prize, funded by the Cano Foundation (Colombia) and the Helsingin Sanomat Foundation (Finland). Each year it honours a person, organization or institution that has made an outstanding contribution to the defence and/or promotion of press freedom, especially in the face of danger. The 2017 prize was awarded to Dawit Isaak, an Eritrean-born journalist who was arrested in a crackdown on the media in September 2001. Never charged with a crime, he has not been heard from since 2005, and his present location is unknown. 'Defending fundamental freedoms calls for determination and courage – it calls for fearless advocates,' said Irina Bokova. 'This is the legacy of Guillermo Cano, and the message we send today with this decision to highlight the work of Dawit Isaak.'

A further course will take place from 2 April to 13 May 2018. Offered free of charge, its main objective is to provide updated information on international frameworks of freedom of expression to justice system operators in Latin America,

especially teachers and students in judicial schools, and magistrates.

Co-organized by UNESCO and the Special Rapporteur for Freedom of Expression of the Inter-American Commission of Human Rights,

On 3 May Bethlehem Isaak, daughter of the 2017 UNESCO/Guillermo Cano World Press Freedom Prize laureate Dawit Isaak, received the award on behalf of his father, missing since 2005.

in cooperation with the Knight Center for Journalism in the Americas of the University of Texas, the course reflects the fact that justice system operators are key actors in ensuring there is justice for murdered and censored journalists, and thus protecting and promoting freedom of expression.

This course takes place exclusively online. Students participate in weekly discussions and complete assigned activities over the six weeks, covering topics such as the new challenges of freedom of expression on the internet, and diversity and pluralism in the media.

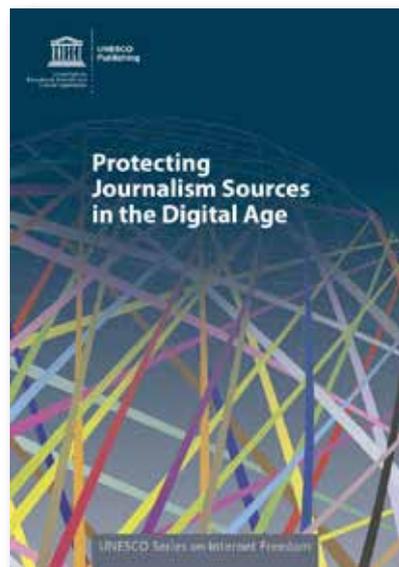
■ Protecting internet freedom

UNESCO convened two sessions at the World Summit on the Information Society (WSIS) Forum, which was held in Geneva (Switzerland) on 14 June. The Organization has facilitated the WSIS Action Line C9 on 'Media', part of the WSIS Geneva Plan of Action, since 2006. A session on 'Strengthening Privacy, Encryption and Source Protection for Media Freedom and Internet Development' brought together stakeholders and experts to brainstorm on a comprehensive strategy for implementing Action Line C9 in its post-2015 phase, particularly on strengthening source protection for media freedom and internet development. The speakers emphasized the importance of preserving the internet's openness, accessibility and multi-stakeholder nature. They included the authors of two related UNESCO publications, *Protecting Journalism Sources in the Digital Age* (2017) and *Privacy, Freedom of Expression and Transparency* (2016).

During a high-level session, UNESCO presented a new project, 'Defining Internet Universality Indicators', and launched a consultation on its implementation. The indicators are intended to become a recognized and authoritative global research tool for assessing internet development under the principles of ROAM (Rights-based, Openness, Accessibility and Multi-stakeholder participation). Speakers praised the ROAM principles and stressed that the linkages between them will help achieve a transparent and inclusive internet. They also debated the future

of the internet and the transition from information society to knowledge society.

The consultation process on the new indicators includes a series of physical consultation events and online consultations through a dedicated website. The Association for Progressive Communications (APC) is leading the work on the project for UNESCO, and the Swedish International Development Cooperation Agency (Sida) and the Internet Society (ISOC) are supporting the project. The indicators are intended to be finalized in 2018.

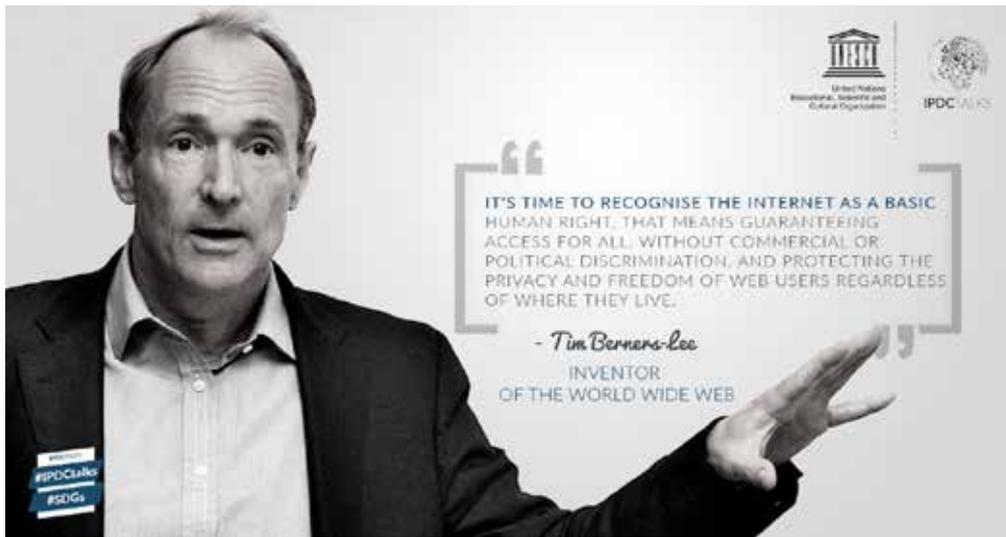


Published by UNESCO in 2017, Protecting Journalism Sources in the Digital Age offers a comprehensive review of developments that can impact on the legal frameworks that support protection of journalistic sources.

The Hack for Health project was one of the top billing events at the 2017 World Summit on the Information Society (WSIS) Forum convened in Geneva, Switzerland by ITU, UNESCO, UNCTAD and UNDP in June. Teams at the global hackathon were given 24 hours to propose technical solutions to urban health challenges such as clean water, pollution and chronic diseases.



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Inspirational quote from the IPDCtalks 2017 Social Media/ Press Kit to raise global awareness on the importance of access to information, free and independent journalism and freedom of expression.

Ensuring access to information for all

The 2017 International Programme for the Development of Communication (IPDC) talks were held at UNESCO Headquarters on 28 September. For the second year running this programme of talks was arranged to mark the International Day for Universal Access to Information.

The event offered short, inspiring talks on the role of independent and pluralistic media, and communications technology, in contributing to the reduction of inequalities, boosting educational achievement and expanding access to clean energy. The contributors also reflected on key issues concerning public access to quality information, such as data protection, anti-corruption, transparency and accountability. Global and community leaders, prominent journalists, media experts, civil society leaders and intellectuals gathered to listen to the roster of prominent speakers. Additional events were held in ten countries around the world.

For the sixth consecutive year UNESCO invited all radio stations and supporting organizations to join the celebration of World Radio Day 2017. UNESCO Instagram banner produced for the Day.



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■ The thriving world of radio

Radio remains of great importance as part of media pluralism, public choice and audience participation in both developed and developing countries, and with audio communication growing both on airwaves and online. The theme for the 2017 edition of World Radio Day celebrated on 13 February was 'Radio is You!', a call for greater participation of audiences and communities in the policy and planning of radio broadcasting. More than simple on-air interaction, the theme proposed, public participation should include mechanisms such as audience engagement policies, public editors and ombudspersons, listener forums and complaints resolution procedures.

Organizations were encouraged to sign up on the World Radio Day website to register their events and special broadcasts on the world map, and access exclusive content and resources. A total of 585 events took place in 110 countries, while the website broke past records for visits over the month, reaching close to 50,000.

A signature event was held in Shanghai, People's Republic of China with the support of the Shanghai Media Group and the European Broadcasting Union. A full day of radio-related discussion involving some of the leading figures in Chinese and global media was followed by a special Chinese New Year concert dedicated to the Day.

Radio is uniquely positioned to bring communities together and promote positive dialogue for change. 'Radio is You!' the theme chosen by UNESCO to celebrate World Radio Day this year was a call for greater participation of audiences and communities in the policy and planning of radio broadcasting.



The poster features a woman with long dark hair, wearing a green jacket and black leggings, sitting on a rocky ledge and listening to music on pink headphones. A brown leather satchel is on the ground next to her. The background is a bright, slightly hazy sky. The text 'Radio is You!' is written in a large, red, handwritten-style font at the top. Below it are three red line-art icons: a person reading a book, a stack of books, and a megaphone. In the bottom right corner, the text 'WORLD RADIO DAY' is written in large, white, bold letters, with '13 FEBRUARY 2017' below it. In the bottom left corner, the UNESCO logo and the text '#worldradioday worldradioday.org' are visible.

Radio is You!

#worldradioday
worldradioday.org

UNESCO
United Nations
Educational, Scientific and
Cultural Organization

WORLD
RADIO
DAY
13 FEBRUARY 2017

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The annual Global Media and Information Literacy (MIL) Week activities are important opportunities for international stakeholders to review the progress achieved towards the 'MIL for all' goal. The Week also enables connections and sharing of creative projects, as was the case with these participants to the Global MIL Week 2017 Youth Agenda Forum in Kingston, Jamaica.



In another initiative for the Day, a UNESCO partnership with Farm Radio and its Uliza platform asked people four questions about how they use radio and why they loved it as part of the 'Radio is You!' theme. A total of 816 people took part, producing 4,283 responses to various questions and 580 recordings from 27 countries. Other new partners in the Day's events for 2017 included Lifeline Energy Radio and the National Association of Broadcasters in the USA, while the International Federation of the Red Cross built on its 2016 partnership, highlighting radio's importance in emergencies.

■ Future technology, future threats

The Internet Governance Forum (IGF) is a global multi-stakeholder forum first convened in 2006 which promotes discussions and dialogue about public policy issues related to the internet. Its 12th annual meeting

was held in Geneva, Switzerland from 17 to 21 December, on the theme 'Shape Your Digital Future!' Six main sessions and 80 workshops were included in the programme.

UNESCO has adopted the concept of internet universality, and advocates that the network is governed by the ROAM principles of human rights, openness, accessibility and multi-stakeholder participation, which provide a framework for international and national policy-making. At IGF, a UNESCO delegation convened four related sessions – covering internet universality indicators, multistakeholder practices in internet governance, issues of artificial intelligence and big data, and world trends in freedom of expression and media development. Participants also talked about privacy and data protection, the misuse of data for oppressive or malicious purposes, data leaks, the need for data use to be accountable, data and information literacy, and the development of guidelines.

In the face of 'fake news', UNESCO has stepped up its work to empower internet users with Media and Information Literacy (MIL). The Global MIL Week signature conference in Kingston, Jamaica saw youth participants produce a 'MIL CLICKS Pact' – with the statement 'I am a MIL CLICKER, I pledge to REVIEW before I click, post and share.' The social media initiative #MILclicks gained traction worldwide, sharing tips on how to be a savvy media consumer and producer in times of disinformation. In Rabat, Morocco, UNESCO partnered with the country's communications regulatory authority to host a conference of Africa-wide regulators with MIL as the central topic. Among other events taking place simultaneously was the world's first 'RadioMIL' – a temporary broadcaster explaining to listeners in Rabat how they can raise their competencies around digital communications.

United Republic of Tanzania

Local radio is transforming perceptions of gender-based violence

UNESCO works through both radio and other media to promote gender equality. The Organization has created Gender-Sensitive Indicators for Media (GSIM) to promote gender parity and women empowerment in all forms of media, in line with SDG 5. Its 'Empowering Local Radio with ICTs' project is helping radio stations to inspire intolerance for gender-based violence and hold perpetrators responsible. Supported by the Government of Sweden, it focuses on giving priority to gender issues in the media, improving access to and control of media, and supplying the tools that radio staff need to make positive change in their communities.

In one reported case from the United Republic of Tanzania, a woman attempting to press charges of rape against an identified suspect faced only indifference among municipal authorities. When local leaders demanded a bribe in exchange for the arrest of the suspect, Dodoma FM, one of the stations involved in UNESCO's project, took up the story. They publicized the woman's ongoing struggle until the district commissioner was stirred into action. Dodoma's coverage of the scandal resulted in the arrest of the perpetrator of the crime, as well as punitive measures taken against the three local leaders accused of blackmail.

Gender issues and their solutions require action that targets both men and women to change social perceptions and tolerance for gender-based violence, especially domestic violence. Aside from evoking support from the community, local radio stations are targeting duty-bearers and holding them accountable for meeting the responsibilities of their office. For example, Tumbatu FM in Zanzibar, United Republic of Tanzania is bringing gender-based violence

and the role of authorities to the forefront of social discussion through its programmes. Broadcasts stressed the importance of intolerance and the necessity to report incidents to the local authorities rather than resolve the issue within the household. As a direct result of the awareness spread, the police have established gender desks at local stations where residents can receive information and report gender-based crimes.



© Rose Haji Mwalimu, 2017.

Dodoma FM, a Tanzanian radio station involved in UNESCO's project 'Empowering Local Radio with ICTs' and actively denouncing gender-based violence, this year helped a woman in her struggle to denounce her rapist and those who were demanding bribes in exchange for his arrest.



The 65m-tall Minaret of Jam in Afghanistan is a graceful, soaring structure, dating back to the 12th century. Covered in elaborate brickwork with a blue tile inscription at the top, it represents the culmination of an architectural and artistic tradition in this region. Its impact is heightened by its dramatic setting, a deep river valley between towering mountains in the heart of the Ghur province.

Since its inscription on the World Heritage List in 2002, UNESCO has undertaken several missions to assess damage to this unguarded property as a result of illegal excavations, removal and reuse of stones from the fortification, and looting of the various archaeological remains in the area. As part of the activities performed under UNESCO's Heritage Emergency Fund, a multi-donor fund for the protection of heritage in emergency situations, the Organization completed in September 2017 a new survey, documentation and assessment mission to ensure the preservation of this property.

An aerial photograph of a rugged, rocky mountain slope. A dirt road winds along the base of the cliff on the left side. In the bottom left corner, a river with clear, turquoise water flows through a rocky bed. The mountain face is composed of dark, layered rock formations with sparse, dry vegetation. The overall scene is arid and mountainous.

CHAPTER 3

**Protecting
our heritage
and fostering
creativity**

Protecting our heritage and fostering creativity

From assessing damage to cultural heritage sites deliberately targeted by violent extremists, to joining forces with major partners and achieving further support from the United Nations Security Council to safeguard cultural heritage, protecting cultural heritage in conflict situations dominated UNESCO's agenda in 2017. The Organization also continued to highlight the power of culture to transform societies and promote sustainable development, launching guidelines to help artists and producers benefit fully from the promise of digital technologies, as well as publishing a new edition of a report monitoring the implementation of cultural policies worldwide.

■ United Nations Resolution 2347 makes history

As major conflicts affecting cultural heritage continued to rage in 2017, UNESCO responded in partnership with a wide range of governmental and non-governmental organizations, supporting the identification, preservation and revitalization of damaged cultural heritage.

2017 marked the first time that a Director-General of UNESCO was invited to speak at a public briefing of the United Nations Security Council. Irina Bokova spoke in New York on 24 March on the 'Maintenance of international peace and security: destruction and trafficking of cultural heritage by terrorist groups and in situations of armed conflict'. The briefing was held at the initiative of

France and Italy and under the Presidency of the United Kingdom.

After the Security Council briefing, its members unanimously adopted Resolution 2347 on the protection of cultural heritage, which includes proposals for measures to monitor, prevent and counter illicit trafficking in cultural property. The first UN Security Council Resolution to focus exclusively on cultural heritage, it welcomes the central role played by UNESCO in protecting cultural heritage and promoting culture as an instrument to foster peace and dialogue.

The first Report on the implementation of Resolution 2347, prepared by UNESCO with the United Nations Office on Drugs and Crime (UNODC), the Analytical Support and Sanctions Monitoring Team and other partners, was launched on 30 November, once again at the United Nations Headquarters in New York. Both Resolution 2347 and the follow-up Report encourage all Member States to ratify all the relevant international conventions on this subject, including the 1954 Convention for the Protection of Cultural Property in the Event of Armed Conflict and its Protocols and the UNESCO 1970 Convention Against Illicit Trafficking of Cultural Property.

Newly elected Director-General of UNESCO, Audrey Azoulay, speaks on 30 November at the UN Headquarters in New York, on the occasion of the launch of the first Report on the implementation of Resolution 2347, prepared by UNESCO, the United Nations Office on Drugs and Crime (UNODC) and other partners. Unanimously adopted by the Members of the UN Security Council in March 2017, Resolution 2347 is the first UN Security Council Resolution to focus exclusively on cultural heritage.



© UN Photo/Kim Haughton



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The Report explores a number of good practices shared by 29 Member States, and presents a series of recommendations on strengthening heritage protection, awareness-raising, data collection and training peace-keepers, with a view to better integrating cultural issues into future peace-keeping missions.

Speaking of the Report, Audrey Azoulay, the newly elected Director-General of UNESCO, declared, 'This Report shows that Resolution 2347 has already resulted in the adoption of strong regulations and growing efforts to document, preserve and safeguard cultural heritage at risk.... I wish to reaffirm UNESCO's determination to

implement this Resolution, in cooperation with all our partners, building on the force of heritage to promote social cohesion, belonging and peace for all peoples in times of conflict.'

From 16 to 19 January, a UNESCO team led an emergency mission to undertake a preliminary assessment of damage at the World Heritage site of the Ancient City of Aleppo, Syria. According to a preliminary assessment, some 60 per cent of the old city of Aleppo has been severely damaged, with 30 per cent totally destroyed. View of the city's extensively damaged Great Umayyad Mosque.

UNESCO's Heritage Emergency Fund in 2017

In 2017, UNESCO's Heritage Emergency fund, a multi-donor fund for the protection of heritage in emergency situations, provided more than US \$1 million to activities related to the conflicts in Syria and Iraq, the earthquake in Iran, Hurricane Irma in the Caribbean, and the floods caused by El Niño in Peru. Since its establishment in 2015, the Heritage Emergency Fund has received donations from the Qatar Fund for Development, Norway, the Netherlands, Luxembourg, Monaco, Andorra, Estonia, Slovakia, and private donors such as ANA Holdings Inc. Pooling its funds rather than earmarking them for specific projects, the Heritage Emergency Fund has allowed UNESCO to respond more quickly, efficiently and effectively to crises around the world.

■ Emergency work undertaken in Syria

The Syrian civil war entered its sixth year in 2017, inflicting heavy casualties and continuing to devastate the country's exceptional cultural heritage. UNESCO joined with other safeguarding organizations to do everything possible to preserve this heritage in the difficult context of the ongoing conflict.

Preliminary assessment of damage to Aleppo

UNESCO staff led an emergency mission to Aleppo from 16 to 19 January to make a preliminary assessment of the damage to the World Heritage site of the Ancient City of Aleppo.

The mission worked on an emergency initiative to coordinate international efforts to improve the situation, and held meetings with the Aleppo City Council, the Syrian Directorate-General for Antiquities and Museums (DGAM) and

NGOs. One of the resulting proposals was to declare the Ancient City of Aleppo an emergency zone.

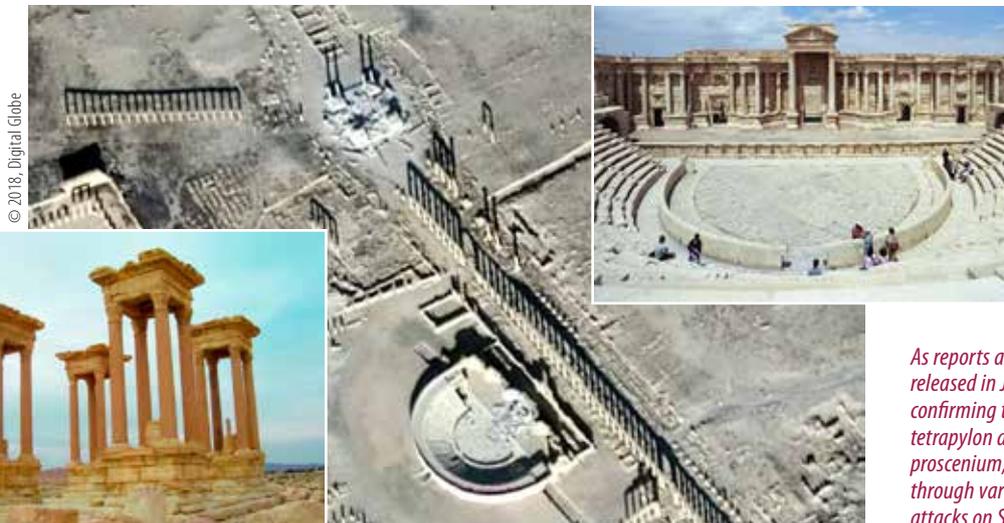
According to a preliminary assessment, some 60 per cent of the old city of Aleppo has been severely damaged, with 30 per cent totally destroyed, including extensive damage to the Great Umayyad Mosque, the Citadel, mosques, churches, souks, khans, madrassas, hammams, museums and other significant historic buildings.

On 2 and 3 March UNESCO brought together Syrian stakeholders and international experts to plan for Aleppo's recovery during a Technical and Coordination Meeting in Beirut, Lebanon, supported by the Heritage Emergency Fund. At the meeting, the participants agreed that UNESCO would coordinate all culture-related recovery efforts. A specific UNESCO unit was set up, and a comprehensive Action Plan was finalized in a follow-up meeting in Aleppo on 15 March.

Loss and recovery at Palmyra

An oasis in the Syrian desert, north-east of Damascus, Palmyra contains the monumental ruins of one of the most important cities of the ancient world, known for its architecture which marries Greco-Roman techniques with local traditions and Persian influences. The site has been on UNESCO's List of World Heritage in Danger since 2013.

In January UNESCO received several reports and satellite imagery released by UNITAR-UNOSAT confirming the destruction of Palmyra's tetrapylon and parts of the theatre's proscenium. Built at the end of the third century AD, the tetrapylon marked a major intersection along the colonnaded street of Palmyra and was a testament to the grandeur of the reign of Queen Zenobia. The theatre dates from the second century AD. Throughout 2017, UNESCO reiterated its calls for the international community to stand united against attacks on culture like those inflicted at Palmyra.



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As reports and satellite imagery were released in January by UNITAR-UNOSAT confirming the destruction of Palmyra's tetrapylon and parts of the theatre's proscenium, UNESCO condemned once again through various media the continuous attacks on Syrian cultural heritage.

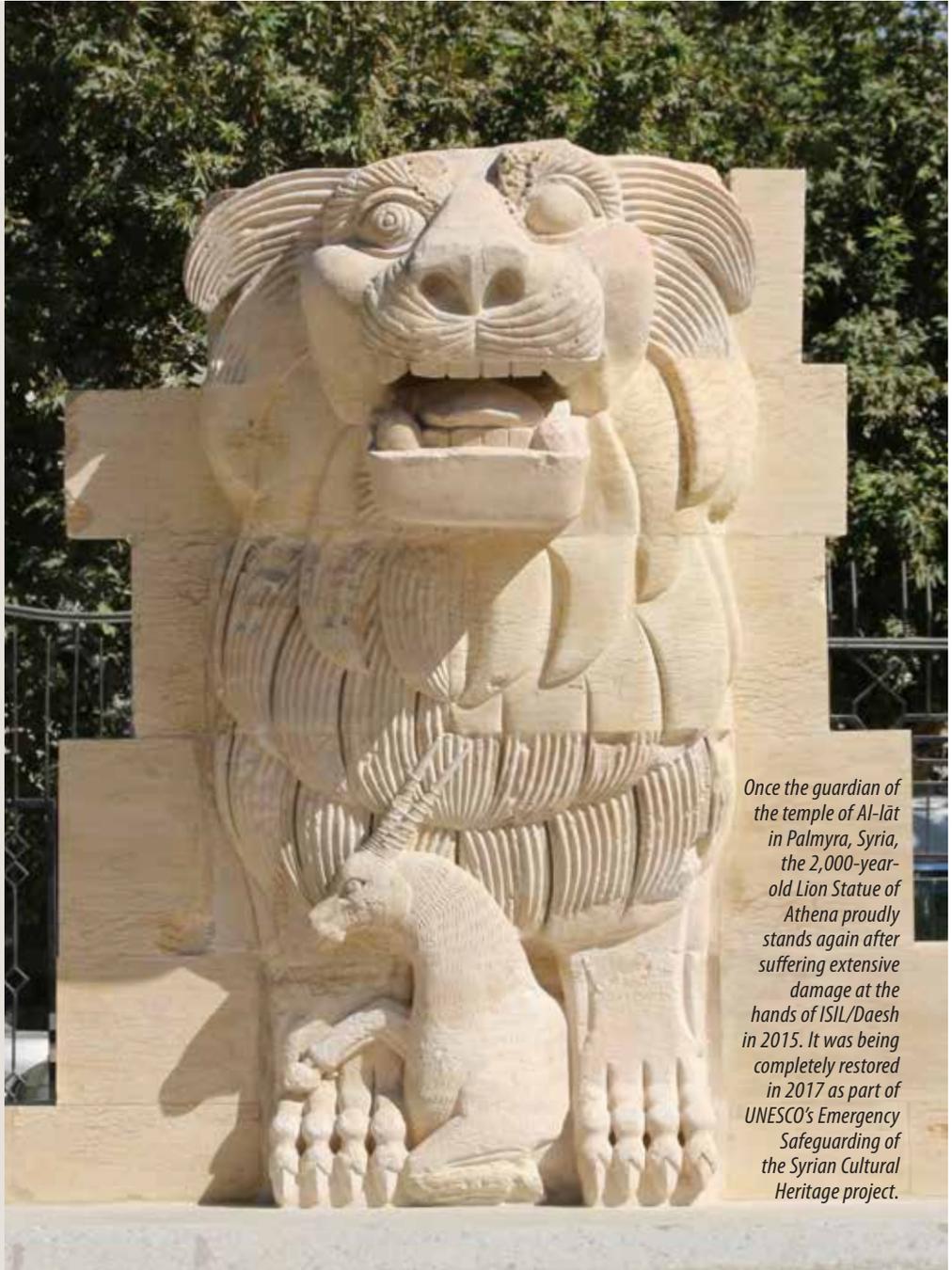
Stories from the field

Syria

A symbol of Palmyra stands again

The 2,000-year-old statue of the Lion of Al-lāt, also known as the Lion Statue of Athena, measuring 345 centimetres tall and weighing 15 tons, once marked and protected the entrance to the temple of Al-lāt in Palmyra. Discovered by Polish archaeologists in 1977, it was the star attraction of the Museum of Palmyra, where it suffered extensive damage at the hands of ISIL/Daesh in May 2015. In response to the destruction of the site, UNESCO sent a Rapid Assessment Mission to Palmyra from 24 to 26 April 2016, supported by the Heritage Emergency Fund. The fragments of the Lion of Al-lāt were moved by the DGAM to Damascus, where its restoration was completed in October 2017 as part of UNESCO's Emergency Safeguarding of the Syrian Cultural Heritage project.

Funded by the European Union with the support of the Flemish Government and Austria, and undertaken in partnership with the International Centre for the Study of the Preservation and Restoration of Cultural Property and the International Council on Monuments and Sites, the project works to protect and safeguard Syrian cultural heritage by providing technical assistance, monitoring and documenting Syrian cultural heritage, developing capacity among Syrian experts and institutions, and conducting national and international awareness-raising efforts.



Once the guardian of the temple of Al-lāt in Palmyra, Syria, the 2,000-year-old Lion Statue of Athena proudly stands again after suffering extensive damage at the hands of ISIL/Daesh in 2015. It was being completely restored in 2017 as part of UNESCO's Emergency Safeguarding of the Syrian Cultural Heritage project.

In reaction to the continuous targeting of Iraqi cultural heritage, UNESCO and the country's Ministry of Culture launched in August a 'Response Plan for the Safeguarding of Cultural Heritage in Liberated Areas of Iraq' to support assessment and recovery operations. Remains of the Great Mosque of al-Nuree in the old city of Mosul, destroyed this year.



■ Moving towards recovery in Iraq

An International Coordination Conference on the Safeguarding of Cultural Heritage in Liberated Areas of Iraq, held at UNESCO Headquarters on 23 and 24 February, brought together more than 100 Iraqi and international experts to examine the condition of cultural heritage in the liberated areas of Iraq, determine priorities for its preservation, identify initiatives to protect archaeological sites, urban heritage, religious monuments and places, museum collections and historical manuscripts, and prevent looting and illicit trafficking. The focus was on sites such as Nimrud and the UNESCO World Heritage sites of Ashur (Qal'at Sherqat) and Hatra.

The meeting was organized by UNESCO and the Iraqi Ministry for Culture, with financial support from the Government of Japan in the framework of the project Preventive Conservation of Iraq's Museum Collections and Cultural

Heritage at Imminent Risk, carried out by the UNESCO Office for Iraq. Participants adopted a prioritized action plan of emergency and mid-term safeguarding projects, and agreed to establish a Joint Steering Committee (JSC) co-chaired by the Ministry of Culture of Iraq and the UNESCO Office for Iraq.

Just weeks later, on 7 March, the Director-General welcomed the liberation of the Mosul Museum, whose collection was largely destroyed in 2015. Plans were quickly made for UNESCO staff to support assessment and recovery operations there.

In April, UNESCO confirmed the liberation of the archaeological site of Hatra, a World Heritage site that has been inscribed on the List of World Heritage in Danger since 2015. According to preliminary reports, Hatra suffered further destruction after its occupation by ISIL/Daesh in 2015. As soon as security conditions allowed, UNESCO, in cooperation with the Iraqi government, planned to send a rapid emergency assessment mission to evaluate the damage more



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precisely and take emergency safeguarding measures, before preparing conservation management plans for the site.

Far less welcome was the news in June that the Great Mosque of al-Nuree in the old city of Mosul had been destroyed. The Great Mosque was originally built by Nureddine Zangi in 1172 AD, and featured a leaning minaret known as al-Hadba (the hunchback). 'The Al Hadba Minaret and Al Nuree Mosque in Mosul were among the most iconic sites in the city, and stood as a symbol of identity, resilience and belonging. When ISIL/Daesh targeted the mosque and minaret a few months ago, the people of Mosul formed a human chain to protect the site, proving once again that the protection of heritage cannot be delinked from the protection of human lives,' Irina Bokova said on 22 June.

August saw the launch of a 'Response Plan for the Safeguarding of Cultural Heritage in Liberated Areas of Iraq', produced by UNESCO and the Ministry of Culture of Iraq. This Response Plan was informed by the recommendations of the February conference.

UNESCO confirmed in April the liberation of the archaeological site of Hatra, an Iraqi World Heritage site inscribed on the List of World Heritage in Danger since its occupation by ISIL/Daesh in 2015. As soon as security conditions allowed, UNESCO undertook an assessment mission and began preparing conservation management plans for the site.

Stronger collaboration with the International Criminal Court against attacks on cultural heritage

On 6 November, the Director-General and the Prosecutor of the International Criminal Court (ICC) signed a Letter of Intent formalizing and further enhancing their collaboration, in the context of an international high-level panel on 'Responding to Cultural Cleansing, Preventing Violent Extremism' held at UNESCO Headquarters.

On 27 September 2016, the ICC declared Ahmad Al Faqi Al Mahdi guilty of the war crime of destroying the mausoleums of Timbuktu and sentenced him to nine years in prison. This historic ruling, the first of its kind by the ICC, sent a clear signal that the intentional targeting of cultural heritage is a serious crime that will be punished accordingly, including through compensation orders where appropriate.

UNESCO is also participating in the ICC Office of the Prosecutor's new policy initiative on cultural heritage, which is scheduled for finalization and adoption in 2018.



■ Enhancing heritage protection in Cambodia

At the request of Cambodia, the Committee for the Protection of Cultural Property in the Event of Armed Conflict, which met at UNESCO Headquarters on 29 and 30 November, granted 'enhanced protection' status to the World Heritage site of Angkor. Enhanced protection, established by the 1999 Second Protocol to the 1954 Hague Convention, increases the legal protection of the designated cultural property, ensuring that it cannot be used for military purposes. Cambodia became the eighth country to receive this designation.

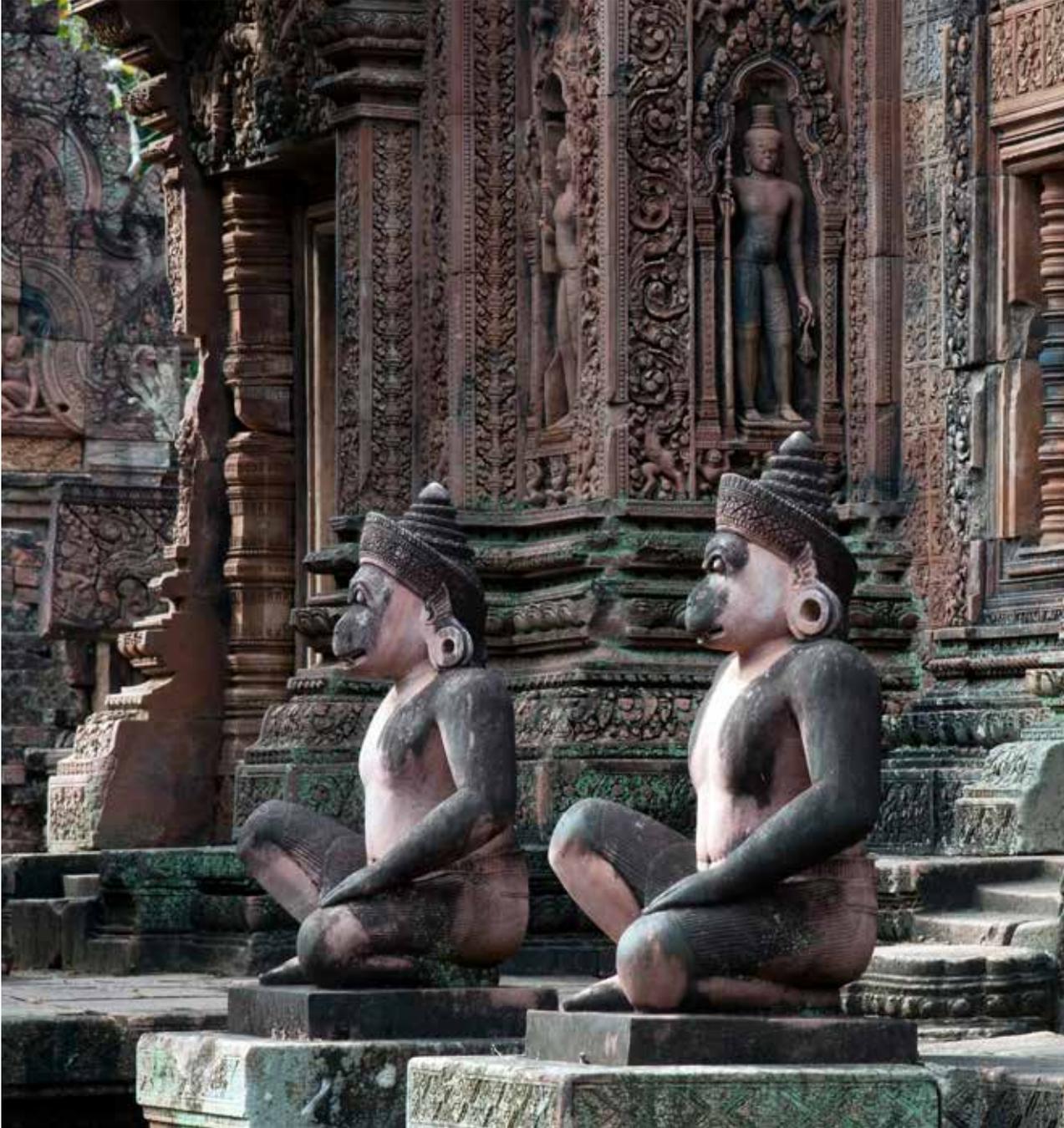
Ancient jewels returned to Cambodia

The return of a set of ancient Angkorian gold jewellery to Cambodia was celebrated on 2 December with an elaborate procession through Phnom Penh. The 10-piece set, which includes a crown, earrings, armbands and a chest ornament, was stolen from Angkor Wat during the civil war of the 1970s and was only recently discovered in the online catalogue of a London art dealer. The items are thought to date back to the Khmer Empire, a once-mighty dynasty that ruled much of modern-day Cambodia, Thailand, Viet Nam and Laos between the 9th and 15th centuries. After the pieces were identified, the Cambodian Government lobbied for their return. UNESCO assisted in the process of verifying that the items were genuine. UNESCO has now been involved in several successful efforts to return stolen heritage objects to Cambodia.

The UNESCO Office in Doha has been collaborating with local partners in Yemen to document damage to heritage buildings there, amid the ongoing conflict. Damage assessments have shown that approximately 20 per cent of the urban fabric in the Old City of Sana'a, where this picture was taken, is in need of urgent reconstruction or conservation. To aid in its documentation efforts, the Doha Office has created a mobile application that has helped to update the GIS database for the Old City and its Rawda and Bir al Azab quarters. The Office is also partnering with Oxford University to develop a GIS platform for Yemen.



*The UNESCO-ICCROM co-publication **Endangered Heritage: Emergency Evacuation of Heritage Collections** released in 2016 was translated this year into Arabic and Nepalese. Japanese, Turkish and Georgian editions will follow in 2018.*



Guardian statues at a doorway of Banteay Srei Temple at Angkor, Cambodia, the World Heritage site to which the Committee for the Protection of Cultural Property in the Event of Armed Conflict this year granted 'enhanced protection'. Cambodia joins seven other States party to the 1999 Second Protocol to the 1954 Hague Convention – Azerbaijan, Belgium, Cyprus, Georgia, Italy, Lithuania and Mali – that have designated properties with enhanced protection status.

■ The World Heritage List continues to grow

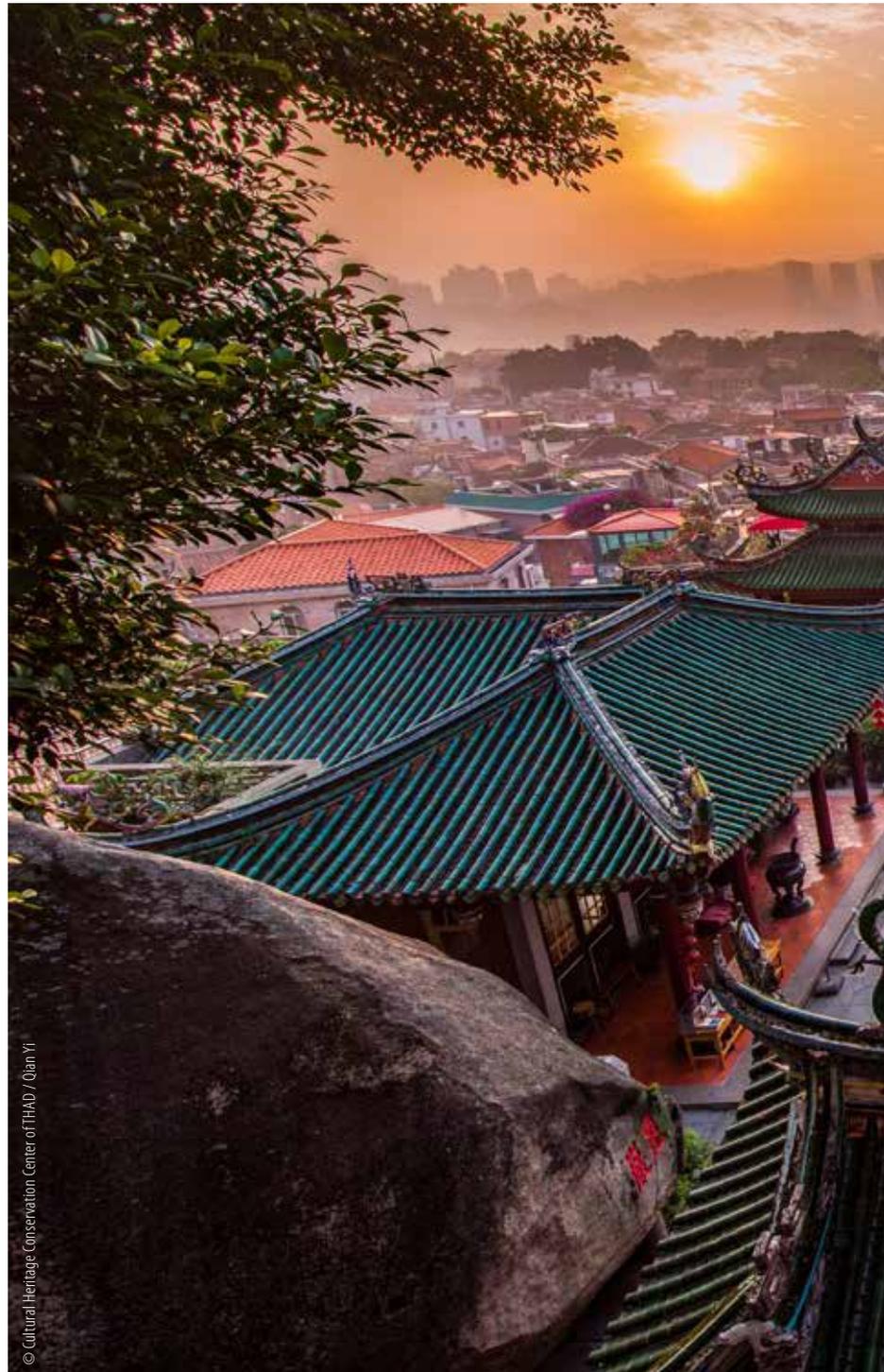
UNESCO's World Heritage List remains one of the Organization's most emblematic programmes, serving as an essential tool for identifying and safeguarding the extraordinary heritage of humanity.

The 41st session of the World Heritage Committee took place from 2 to 12 July in Krakow, Poland – a city that was inscribed on the World Heritage List in 1978 after its near-total destruction and reconstruction in the wake of the Second World War. The Committee's opening ceremony at the Royal Palace of Wawel attracted nearly 1,000 people. In total, 2,921 participants attended the Committee sessions, during which 235 decisions were adopted.

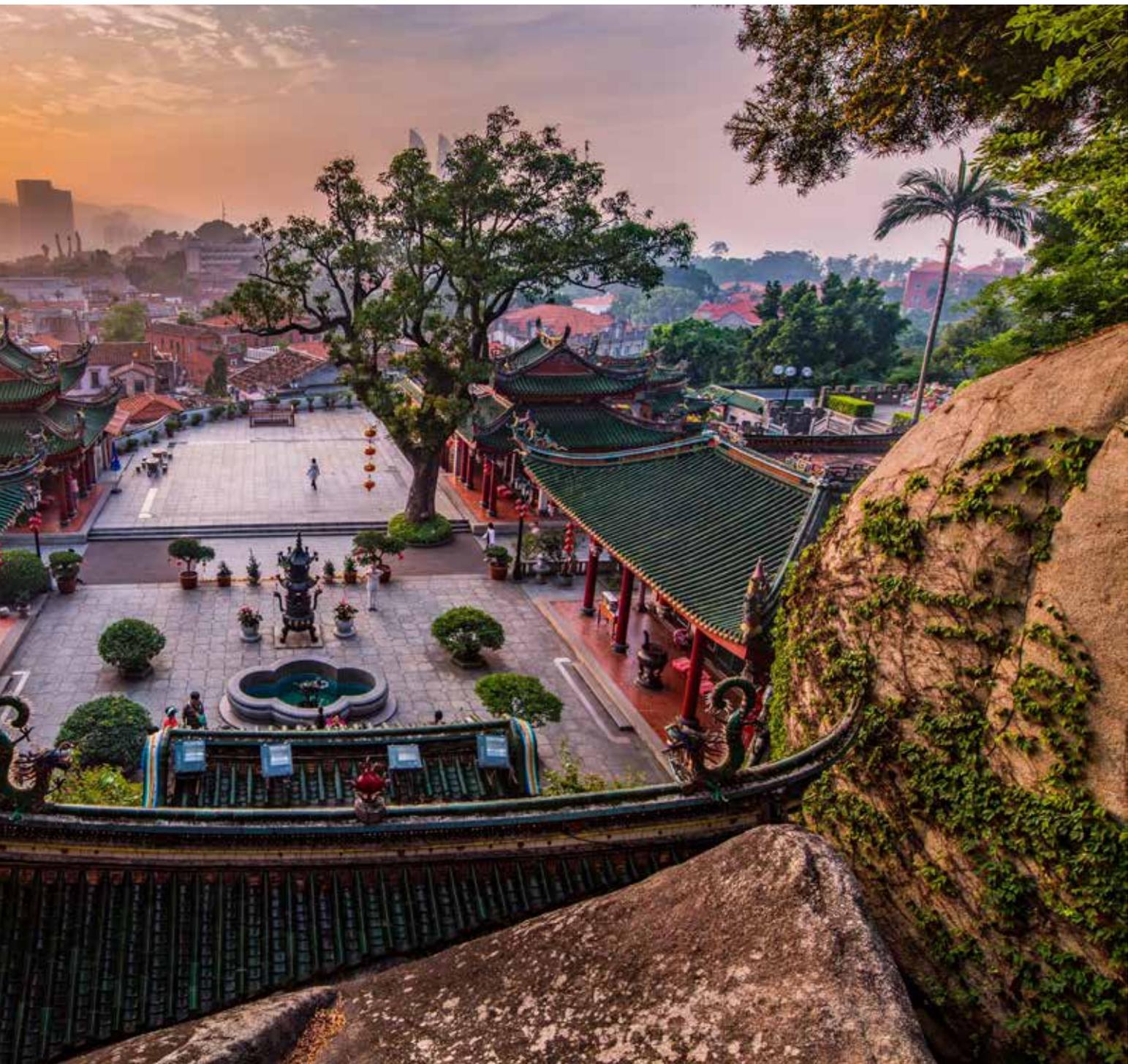
During the session, the World Heritage Committee examined 154 reports on the state of conservation of 99 sites on the World Heritage List and considered nominations for new sites. It inscribed 21 new sites and approved the extension of five inscribed properties.

The World Heritage List now includes 1,073 properties, of which 832 are cultural, 206 natural and 35 mixed. The List of World Heritage in Danger was also reviewed, with two properties added and three removed. There are now 54 properties on this List.

An important window for Sino-foreign exchanges since the mid-19th century, Kulangsu, a Historic International Settlement is a tiny island located on the estuary of the Chiu-lung River, facing the city of Xiamen. This property from the People's Republic of China was inscribed this year on the World Heritage List, which now includes 1,073 sites.



© Cultural Heritage Conservation Center of THAD / Qian Yi



UNESCO assesses the damage following the 7.1 magnitude earthquake in Mexico

The 7.1 magnitude earthquake that struck the states of Puebla and Morelos and the Greater Mexico City area on 19 September inflicted high casualties (370 people were killed and more than 6,000 injured) and damage to the region's heritage. Following the earthquake, the UNESCO Office in Mexico worked quickly to gather information on the effects of the disaster on the three World Heritage sites located in the quake zone – the Historic Centre of Mexico City and Xochimilco, the Earliest 16th-Century Monasteries on the Slopes of Popocatepetl, and the Historic Centre of Puebla – as well as other buildings of historic and cultural significance. It has since worked closely with the Federal Ministry of Culture and INAH, the National Institute of Anthropology and History, to determine the rehabilitation work that will be required at these sites.

■ Safeguarding humanity's intangible heritage

The Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage, made up of the representatives of 24 States Parties to the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003), held its annual meeting from 4 to 9 December on Jeju Island, Republic of Korea. In the 14 years since its creation, the Committee has approved 140 projects to safeguard living heritage in 107 countries, and the Convention has been ratified by 175 States Parties.

Thirty-three new elements were inscribed on the Representative List of the Intangible Cultural Heritage of Humanity during the Committee session, bringing the total number of



inscribed elements under the 2003 Convention to 470. The Committee also granted financial assistance to projects in Uganda and Zambia, and added six elements to the List of Intangible Cultural Heritage in Need of Urgent Safeguarding.

There are currently 47 elements inscribed on the List of Intangible Cultural Heritage in Need of Urgent Safeguarding, a mechanism to mobilize international cooperation and assistance to strengthen the preservation and

Opening ceremony of the 12th annual meeting of the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage, held from 4–9 December on Jeju Island, Republic of Korea.

transmission of intangible heritage. Elements from the United Arab Emirates, Colombia and Venezuela, Botswana, Mongolia, Morocco and Turkey were inscribed in 2017. Two projects from Bulgaria and Uzbekistan were also added to the Register of Good Safeguarding Practices.



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■ Preserving our underwater heritage

At a meeting of States Parties to the Convention on the Protection of the Underwater Cultural Heritage (2001) at UNESCO Headquarters on 30 and 31 May, delegates decided to establish a Register of Best Practices for the Safeguarding of Underwater Cultural Heritage, and gave recognition to seven examples of best practice from Mexico, Portugal and Spain.

At the request of Guatemala, UNESCO agreed to send experts from the Convention's Scientific and Technical Advisory Body (STAB) to study Mayan heritage sites discovered in 1996 on the floor of Lake Atitlán in south-west

Guatemala. Among them is a Mayan village that retains the remains of domestic structures and religious monuments. The mission, conducted in April, aimed to strengthen the technical capacities of national specialists and proposed a management plan for the site in consultation with the local communities.

Fifty-eight countries to date have ratified the 2001 Convention, which aims to help save ancient shipwrecks, sunken cities, decorated grottos and other underwater cultural heritage from increasing pillaging and destruction at the hands of treasure hunters, as well as other threats such as climate change, conflict and aggressive fishing techniques. On 1 June, STAB held a follow-up meeting to discuss the threats facing underwater heritage.

On 5 December, a new Museum of Underwater Archaeology opened in the 18th-century fortress of Reducto San José el Alto in Campeche, Mexico. Designated as a Best Practice example for promoting access to underwater cultural heritage at a meeting of States Parties to the UNESCO Convention on the Protection of the Underwater Cultural Heritage in 2017, the museum retraces Mexican history through underwater archaeological sites and historic shipwrecks. The museum also uses new technologies to reconstruct sites, and different media platforms to present the history of the discoveries.



© Instituto Nacional de Antropología e Historia (INAH), México

Stories from the field

Peru

Art therapy helps children recover from the trauma of major flooding

In March, intense rains generated by El Niño conditions caused major flooding and mudslides in the north and west of Peru, resulting in dozens of deaths, damaging 115,000 homes and forcing 45,000 students to miss school. In response, the UNESCO Office in Lima joined with the Ministry of Education (MINEDU) and Ministry of Culture (MINCUL) for a project entitled 'Art That Strengthens Us', designed to help more

than 500 children at a primary school in the community of Parachique to recover from the trauma of the flooding.

As part of the project, artists and craftspeople from the surrounding area were trained in art therapy techniques, in order to encourage the children to express their feelings through art.

Among them was Iván Paiva Pazos, a 23-year-old artist. Five years ago, he founded the cultural association 'Passion, strength and tradition', dedicated to the promotion of local folk dances. He noted that 'Despite our lack of budget, our group has helped important local dances to achieve recognition. Now our new challenge is for the children of

Parachique, who we are strengthening with our art in each session. It is a mutual learning that we also benefit from.'

Alexandra Vargas Calle, a psychology student and actress working in the Fourth Wall Centre in Piura, believes that theatre can be a powerful way to empower young people, saying, 'We have achieved an incredible psychological and emotional connection with the children who attend. They are acting in complete freedom, and we do not put artistic limitations on them. Obviously, each group brings their own cultural essence, and we have already noticed some changes in them, which will help them in overcoming the shock of the flooding.'

Children from the coastal city of Parachique slowly started to recover from the impact of the flooding and mudslides which affected the provinces in North-Western Peru in early 2017, thanks to art therapy workshops organized by the UNESCO Office in Lima and the Peruvian Ministries of Education and Culture.



© UNESCO Office of Lima

■ Protecting the diversity of cultural expressions in the digital world

Representatives from the 144 countries plus the European Union that have ratified UNESCO's Convention on the Protection and Promotion of the Diversity of Cultural Expressions examined ways to apply its guiding principles in the digital environment at their biennial meeting at UNESCO Headquarters from 13 to 15 June. To this end, they approved *Operational Guidelines on the Implementation of the Convention in the Digital Environment*, to help ensure that artists and producers benefit fully and fairly from the potential of information technologies. The *Guidelines* are the fruit of five years of research and debate among experts, governments and civil society on the challenges and opportunities created by the expansion of social networks and user-generated content, the proliferation of multimedia devices and the emergence of powerful web-based companies. The *Guidelines* notably emphasize the need to respect human rights – particularly freedom of expression, artistic freedom and gender equality – in the digital environment.

On the last day of the meeting, beneficiaries from Burkina Faso, Haiti and Morocco showcased how the International Fund for Cultural Diversity (IFCD) reinforces the cultural industries in developing countries.

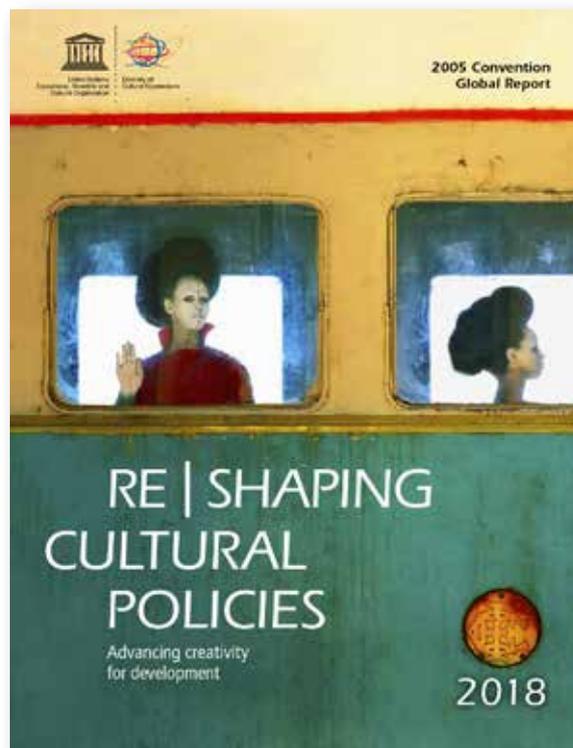
In the lead-up to the Conference of Parties, UNESCO and the International Confederation of Societies of Artists and Composers (CISAC) organized a

Civil Society Organizations Forum on 12 June, which featured speakers such as UNESCO Goodwill Ambassador and CISAC President Jean-Michel Jarre, and Norwegian documentary film director and UNESCO Goodwill Ambassador for Artistic Freedom and Creativity Deeyah Khan.

On 12 December, UNESCO hosted a discussion on 'Cultural and Creative Industries: A New Agenda for the Development Community?', which brought together a panel of experts from governmental and development bodies to explore the new role of the cultural and creative industries in international development strategies. The panel noted that as national sustainable development programmes increasingly include culture and creativity as a major area of intervention, many ministries and development partners are devising specific strategies to address the role of cultural and creative industries in sustainable development.

UNESCO's Intergovernmental Committee for the Protection and Promotion of the Diversity of Cultural Expressions continued to work on these issues during its 11th session, held at UNESCO Headquarters from 12 to 15 December. The Committee selected seven initiatives to boost the creative economy around the world as the new beneficiaries of UNESCO's IFCD. These projects focused on cinema, theatre, public art and policies, and cultural entrepreneurship, and featured important examples of South-South cooperation.

On 14 December, Audrey Azoulay joined representatives of the Swedish Government in launching UNESCO's 2018



Global Report *Re|Shaping Cultural Policies*, which monitors how countries around the world are designing policies in line with the 2005 Convention.

'Diversity remains a battle, in 2018 as in 2005. Culture is not a commodity: it carries values and identities, it gives markers to live together in a globalized world. Our role is to encourage, question, collect data, to understand and energize creative channels, to encourage the mobility of artists, to stimulate a rapidly changing sector in the new digital environment,' Ms Azoulay said in opening a panel discussion with the authors of the Report. She called for bold action to address the major funding gap in culture, as the share of development aid spent on culture is now at its lowest level in over a decade.

The 2018 edition of UNESCO's Global Report Re|Shaping Cultural Policies, which monitors how countries around the world are designing policies in line with the 2005 Convention, was launched on 14 December 2017 at UNESCO Headquarters by newly elected Director-General Audrey Azoulay.



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UNESCO and the World Bank join forces to achieve the 2030 Agenda for Sustainable Development

On 13 July, Irina Bokova and Sameh Wahba, Director of the Social, Urban, Rural and Resilience Global Practice of the World Bank, signed a new Memorandum of Understanding (MoU) at UNESCO Headquarters to reinvigorate the two institutions' joint commitment to advancing sustainable development by investing in culture, urban development and resilience. The MoU provides a framework for joint action to further the achievement of the 2030 Agenda for Sustainable Development, and specifies three strategic areas of action: historic urban landscapes and urban regeneration, cultural and creative industries, and resilience and disaster risk management.

The agreement coincided with the United Nations International Year of Sustainable Tourism for Development, and reflected the need to ensure that the US\$1.8 billion in revenue that the tourism sector is expected to generate by 2030 contributes to sustainability and the preservation of tangible and intangible heritage.

The launch was followed by a panel discussion with film producers and distributors on 'Towards Support Policies for Independent Cinema?' to address the challenges the independent film sector faces in finding funding and distribution channels in the digital environment.

■ The Creative Cities Network grows

From 30 June to 2 July, the French city of Enghien-les-Bains hosted the eleventh meeting of the UNESCO Creative Cities Network, which, as of 2017, includes 180 cities from 72 countries representing seven creative fields (Crafts and Folk Arts, Media Arts, Film, Design, Gastronomy, Literature and Music). In total, the meeting brought together over 250 participants, including dozens of mayors, representing 100 Creative Cities from 53 countries.

'African tom-tom evening' was one in a series of events held in Libreville, Gabon, co-organized by the UNESCO Office In Libreville to celebrate World Day for Cultural Diversity for Dialogue and Development in 2017.

A Creative City of Media Arts since 2013, Enghien-les-Bains held a parallel artistic programme called 'Data Cities', which included exhibitions, interactive presentations and concerts held across the city. The delegates adopted a new Strategic Framework for the Network, which links its strategic objectives to the implementation of the 2030 Agenda for Sustainable Development and the New Urban Agenda.

On 31 October, an additional 64 cities from 44 countries were designated as UNESCO Creative Cities, including 19 cities from countries not previously represented in the Network.



The Tuscan city of Carrara, Italy, this year joined UNESCO's Creative Cities Network in the category of Crafts and Folk Art. Carrara is known around the world for the beauty and mastery of its work on the region's white and blue-grey marble. View of Neoclassic sculptor Carlo Nicoli's marble studio in Carrara.



UNESCO's Networks of Mediterranean Youth (NET-MED Youth) initial three-year project, funded by the European Union, ends in March 2018, but it expects to continue with the implementation of a second phase. With this objective in mind, over 100 people gathered in Brussels, Belgium on 19 September 2017 to network and discuss possible paths to keep shaping the future of the Mediterranean region. The group included young beneficiaries of NET-MED Youth from Algeria, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia, members of European youth organizations, high-level officials from the European Commission, and UNESCO colleagues from both Headquarters and Field Offices.

CHAPTER 4



**Learning
to live together**

Learning to live together

If human beings are to live together in harmony, then every person must have a fair stake in the future: women as well as men, both the young and the old, members of minorities and people from developing as well as developed countries. Much of UNESCO's work is focused on those at a disadvantage, such as women, the poor and the young, who are often insufficiently consulted. Events, networks and publications in 2017 continued this important work of ensuring inclusion and equity, essential foundations for a culture of peace and mutual understanding.

■ Giving a voice and a role to the young

There are currently 1.8 billion young people between the ages of 10 and 24 in the world. This is the largest youth population ever, and a huge opportunity to harness the power of younger generations to drive positive change. One in ten of them live in conflict zones and 24 million are out of school. Other issues that negatively affect many are political instability, lack of jobs and limited space for political and civic participation.

How best can UNESCO engage with and help them? Its first Youth Forum was held in 1999, and the succeeding forums have become an integral part of the Organization's General Conference. A large-scale impact analysis of both previous UNESCO Youth Forums and the *Operational Strategy on Youth 2014–2021* showed however that Forum recommendations were rarely taken on board, the follow-up commitment of young participants has been very low, and many young people felt they were being treated as mere beneficiaries and

not as actors and partners. The message was clear – UNESCO needs to engage differently with young people.

Changes began in 2016, when direct interactions via digital media with young women and men from all over the world were introduced. The UNESCO Youth Facebook community was born, and so was the #YouthOfUNESCO storytelling initiative, which aims to provide a platform for young people leading change in their communities. 2017 saw a radical rethink of the Youth Forum format, with a plan for participants to make recommendations on how UNESCO can better engage with young people, including working with young change-makers at regional and sub-regional levels, and other concrete suggestions for collaboration.

Young people were invited to make submissions on why they should attend, and 60 participants were selected from over 2,500 proposals.

Sessions on how to integrate the SDGs into young leaders' community projects were coordinated by UNESCO colleagues in February in South Sudan and Uganda. This was part of an extensive mission conducted by the Whitaker Peace & Development Initiative founded and headed by Forest Whitaker, UNESCO Special Envoy Peace and Reconciliation and UN Advocate for the SDGs.



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2017 saw a radical rethink of the Youth Forum format. Sixty participants including former child soldiers, young refugees, social entrepreneurs and environmental activists were selected from over 2,500 applications to come to UNESCO Headquarters to discuss how best the Organization can help and engage with young people.





The photo exhibition 'The Power of Empathy', a tribute to young people's understanding and solidarity, was inaugurated during the Second International Conference on Youth Volunteering and Dialogue held in September at UNESCO Headquarters. It is the outcome of a youth photo contest launched by UNESCO early in 2017.

All were leading or co-shaping a social initiative related to a UNESCO area of specialization. They included former child soldiers, young refugees, social entrepreneurs and environmental activists. This excitingly diverse group met at UNESCO Headquarters on 25 and 26 October. Their discussion topics included youth engagement in thematic issues such as peacebuilding, addressing environmental degradation, and young people as effective cultural ambassadors.

This rethink of activity means that UNESCO has started engaging with a range of influential young people from all continents, many of whom are already developing ground-breaking solutions to some of the world's biggest challenges, to better respond to the needs of young people around the world.

UNESCO undertook several other major initiatives in 2017 to empower and give a voice to young people. In the Arab region, where conflict and violence affect the old and the young, how are young people using the power of culture and the arts to resist, preserve and rebuild their society and its diverse identities? A regional conference on 'Cultural Heritage and Identity: An Arab youth perspective', organized by UNESCO in Tunis-Carthage from 1–3 March, brought together a range of cultural heritage experts,

representatives of youth organizations, civil society and municipal authorities, public institutions and academia from a dozen countries to the north, south and east of the Mediterranean. The aim was to support young people in participating effectively in heritage protection and peacebuilding in the Arab region, offering an unprecedented platform for informed debate and creative thinking around the themes of peacebuilding, social cohesion, rights and dialogue.

The conference looked to highlight successful experiences of cooperation in this field, explain the importance of safeguarding heritage for democratic renewal and the development of societies, and identify and support pilot consultation projects for enhanced civic involvement. Participants emphasized the importance of diversity, and their proposals included better formal and non-formal education and training related to cultural heritage, new models of youth-led and gender-sensitive social and private entrepreneurship, better policies to protect and support artists, improved platforms for cultural and artistic projects, especially those drawing on ICT and social media, and crucially, encouraging public and private funders to be more sensitive in supporting culture and the arts.

'Preventing Violent Extremism and Strengthening Social Inclusion' was the theme of the second International Conference on Youth Volunteering and Dialogue, held at UNESCO Headquarters from 25 to 27 September. This initiative was funded by the King Abdullah bin Abdulaziz International Programme for a Culture of Peace and Dialogue.

2017 wraps up on a high note for UNESCO's Networks of Mediterranean Youth

Participating organizations included the United Nations Volunteers Programme, the World Organization of the Scout Movement and the World Scout Foundation.

The idea was to promote solidarity, empathy, critical thinking, social engagement, civic participation and international collaboration among young volunteers from around the world, about a hundred of whom attended. There were four main themes: refugees and migration, the importance of intercultural education, the role of the media and social media in constructing positive dialogue, and youth engagement with cultural heritage and the arts. The conference included dramatic arts workshops, a look at the 'human library' – designed to counter discrimination – and the role of sport in combating violence.

Since its launch in February 2014, UNESCO's Networks of Mediterranean Youth (NET-MED Youth) Project has trained over 4,000 young people in policy analysis, dialogue, strategic planning, advocacy, media, freedom of expression, communication, labour market policies and more. The network can now claim 150 active members in nine countries, seven national youth policies revised or implemented, and 12 studies on youth needs and aspiration. The initial three-year project, implemented by UNESCO and funded by the European Union, ends in March 2018, but it is hoped that a second phase will follow.

NET-MED Youth works with youth organizations from ten countries along the eastern and western basins of the Mediterranean. Its core aim is to energize young people through civic engagement, learning and making an impact, and to create a solid platform for them to become leaders and actors in innovation.

Its projects have included Jeun'Experts in Tunisia, a pilot digital platform which puts in the spotlight 100 active young people with expertise in the fields of economics, politics, social and cultural dynamics, and media, and an online database created by young people in Lebanon, to highlight the skills of young professionals and experts. Training and consultation led to the creation or revision of youth policies and strategies in Palestine and Morocco, with work ongoing in Tunisia and Jordan. Youth unemployment is a central issue, and other key issues on which members have focused include protection of cultural heritage, the Sustainable Development Goals and the Youth, Peace and Security Agenda.

Over 100 participants from all regions of the world interacted and reflected together on preventing violent extremism and strengthening social inclusion during the Second International Conference on Youth Volunteering and Dialogue hosted at UNESCO Headquarters from 25 to 27 September.



The needs of the elderly

From 2016 to 2050 the number of older people in the Asia-Pacific region is expected to more than double, from 547 million to 1.3 billion. Already around 60 per cent of the world's elderly are from this region. By 2050 one in four people there might be over 60, with a fifth of the elderly population aged 80 or more. More will be women than men, and the cumulative effects of discrimination will mean many of the women especially are economically disadvantaged.

How can countries generate economic growth in this situation? And how can the elderly best be supported? The solutions to these problems often lie in social innovations – new ideas for products, services and models that simultaneously meet social needs and create new social collaborations. UNESCO's Management of Social Transformations (MOST) programme aims to identify social innovations in local contexts and help their impact spread more widely.

The First Asia-Pacific MOST Forum of Ministers of Social Development, which the MOST programme co-organized with the Government of Malaysia, was designed to further explore these issues. Ministers and senior officials from Asia and the Pacific joined with researchers and scientists in Kuala Lumpur from 20 to 23 March. The aim was to explore three important related issues reshaping the region – ageing, gender equality and social innovation – under the umbrella theme 'Building inclusive societies in the Asia-Pacific'. The results of the Forum will contribute to implementing the MOST Strategy adopted at the 199th session of the Executive Board and the 2030 Agenda for Sustainable Development.

On the occasion of International Women's Day, an art exhibition was presented at UNESCO Headquarters from 7 to 17 March on the theme of young women's creativity to shape our future.

Works from artists representing all regions of the world were on display, including sculptures from Ms NiaVal Ngaro (Cook Islands), pictured smiling at the audience.

■ Women in the limelight

On the occasion of International Women's Day on 8 March, an art exhibition at UNESCO Headquarters focused on the creativity of young women in shaping our future. The artists from ten countries covering each regional group of UNESCO (Azerbaijan, Belgium, the People's Republic of China, Cook Islands, Egypt, Greece, Honduras, Poland, Dominican Republic and Tunisia) were nominated by Permanent Delegations.

A packed round-table discussion on 'The Courage to Create: Gender equality and the arts' focused on the challenges encountered by female artists, art as a forum for expression for women, and the part that the arts can play in deconstructing gender-based stereotyping. It was followed by a concert by the popular singer Louane with the band Her, which attracted a full audience of 420, and a dance performance, *Des oiseaux* (the birds), choreographed by Axelle Migé.

A two-day meeting linked to International Women's Day and organized by the Division for Gender Equality called on ten UNESCO Chairs in the field of gender equality and women's empowerment to discuss their contribution to UNESCO's Gender Equality Action Plan (GEAP II) and Major Programmes. It also looked to establish future collaboration mechanisms. And CAMPUS UNESCO invited four speakers to share their passion for and engagement with gender equality with young people from high schools in Paris.

International Women's Day was also celebrated around the world, and UNESCO regional events covered topics such as 'Women's rights through jazz music' in Santiago, Chile, 'Empowering women in Sudanese media', workshops on the work of the Ghor el Safi Women's Association in Amman, Jordan, and 'Celebrating Costa Rican women working in science and technology'.



The Intergovernmental Oceanographic Commission of UNESCO organized an online conference in which women oceanographers shared their experiences with young aspirants, and there was a call for candidates for the first UNESCO Prize for Girls' and Women's Education, created to honour outstanding contributions and innovation by individuals, institutions and organizations.

The 2017 'Women Make the News' awareness-raising campaign on the need to improve the representation of women both in newsrooms and in the media's choice of subjects was organized by UNESCO with the Global Alliance on Media and Gender, and UN Women. It invited editors-in-chief, journalists, reporters and bloggers from newspapers on and offline, radio and television, as well as journalism schools, NGOs, intergovernmental bodies and media tech companies, to take part in a Gender Equality Checkup. A new edition of the eAtlas for Gender Inequality in Education was also launched by the UNESCO Institute for Statistics (UIS).

A series of events on 'UNESCO's Soft Power Today' began on 30 June with a high-level conference on 'Fostering Women's Empowerment and Leadership' at UNESCO Headquarters. The first of its kind, it brought together over 50 high-level personalities, leaders and change-makers from different sectors and backgrounds to contribute their visions and perspectives on how UNESCO can contribute to the Sustainable Development Agenda, and particularly to women's empowerment and leadership. It was intended to provide a platform to begin to identify inclusive



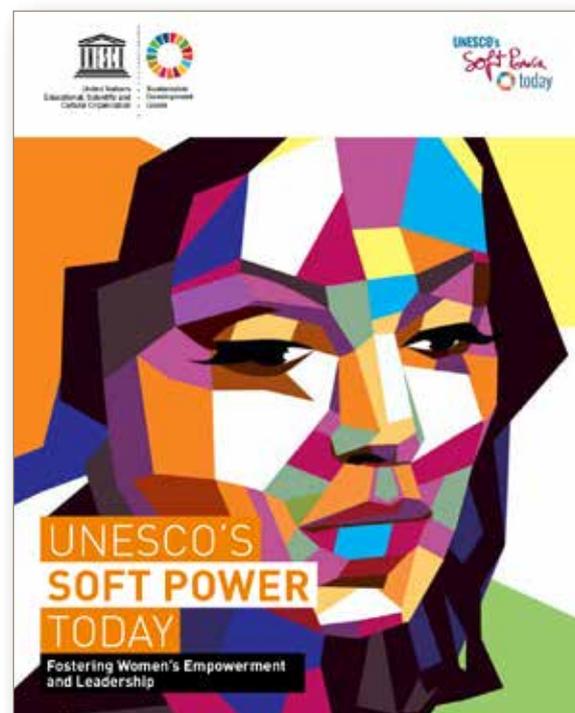
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and innovative partnerships to work on women and girls' empowerment and leadership, and the almost 600 attendees ensured it fulfilled that brief.

The panel sessions considered women's empowerment; education, peace and security; women's leadership in the private and public sectors; and the importance of breaking gender stereotypes. At a closing ceremony a Statement was presented which renewed UNESCO's commitment to act as a champion for the promotion of gender equality in the international arena. Building on its wealth of experience and using its soft power, UNESCO is determined to scale up existing initiatives and good practices, and at the same time identify new areas, new approaches and new modalities that have the potential to contribute to women's empowerment in the future.

A new report entitled UNESCO's Soft Power Today: Fostering women's empowerment and leadership presents the findings and recommendations of the high-level conference held at the Organization's Headquarters on 30 June.

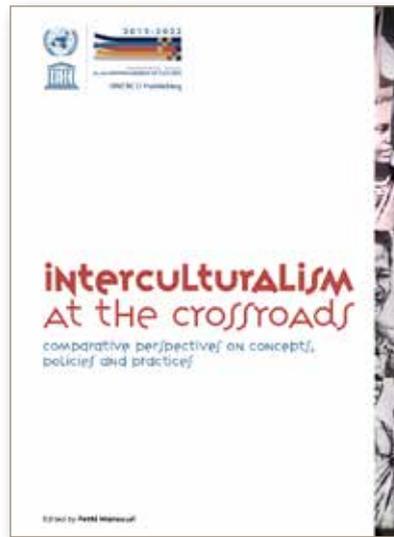
UNESCO fulfils its mission through advocacy for peace and development, and through the soft power of persuasion. Considering this context, a series of thematic discussions were organized by UNESCO on 30 June including a high-level conference with international experts which served as a platform to identify pathways for inclusive and innovative partnerships to work on women and girls' empowerment and leadership.



■ New avenues for peacebuilding

There were more than 800 participants from over 120 countries, including heads of government, ministers, heads of international organizations, scholars, activists and journalists, at the Fourth World Forum on Intercultural Dialogue, 'Advancing Intercultural Dialogue: New avenues for human security, peace and sustainable development', hosted by the Government of Azerbaijan, in close partnership with UNESCO, on 5 and 6 May in Baku. They discussed opportunities to share resources, knowledge and experience, opening new possibilities for joint thinking and action during the International Decade for the Rapprochement of Cultures (2013–22), work towards SDG 16 to promote peaceful and inclusive societies, and the Baku Process.

In 13 UNESCO-sponsored sessions, topics included the prevention of youth radicalization on the internet and the centrality of education for preventing



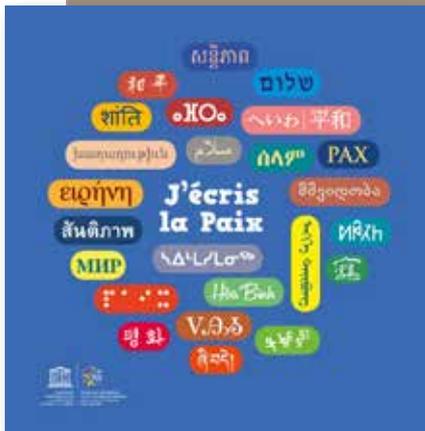
violent extremism, empowering young people through intercultural dialogue, the potential of e-resources, the Muslim-Arab legacy in the West, mobilizing sport as a tool for dialogue, and the history of peace work across the UN system. UNESCO launched an e-Platform on intercultural competences, supported by the Government of Azerbaijan, which aims to become a global hub of resources.

Associated events included the launch of a seminal research publication, *Interculturalism at the Crossroads*;

The UNESCO publication Interculturalism at the Crossroads, launched at the Fourth World Forum on Intercultural Dialogue in Baku, Azerbaijan in May, aims to establish an ambitious new direction for collaboration focusing on intercultural competences.

an e-Learning platform on intercultural competences and one on *The Muslim-Arab Legacy in the West*; and a high-level meeting on girls' education, attended by the first ladies of Azerbaijan, Ethiopia, Mali and Rwanda, which resulted in a Global Humanitarian Call to Invest in Girls' Education.

Key outcomes of a major ongoing research project by UNESCO and the Abat Oliba CEU University in Barcelona, Spain on 'Progress and Challenges for the Peace Agenda of United Nations Entities after 70 years of the Creation of the United Nations: A reflection in the context of the International Decade for the Rapprochement of Cultures' were presented during a panel discussion on 6 May. The panel of international experts looked at a number of different approaches to peace, focusing in particular on the multiple dimensions of, and changes over time in, the peacebuilding work of the United Nations.



Writing peace

Writing Peace is a new UNESCO publication which encourages children aged 11 and over to become aware of the interdependence of cultures through familiarization with contemporary writing systems, their history and their borrowings. Each section presents the characters of a writing system, an introductory text and historical background, the word 'peace' and the word 'hello', the language(s) attached to the system(s), and an activity whose answers appear at the end of the manual. Devised by French linguist Eric Cattelain, this manual derives from the UNESCO exhibition *Writing Peace* inaugurated on International Day of Peace 2012 at the United Nations Headquarters in New York, and one of the major activities of the Programme of Action for a Culture of Peace and Non-Violence. The French edition was co-published in September with Michel Lafon, and the Arabic edition was released in November in co-publication with Samir Éditeur from Lebanon. The network of UNESCO field offices and their local partners are planning training sessions to encourage schools to work with the book, starting with a session in Rabat, Morocco, in February 2018. English and Spanish editions will also follow in 2018.

Burundi

Doves and drums launch a campaign for a culture of peace

Thousands of students and young leaders of political parties and civil society participated in a march-cum-demonstration in Bujumbura on 30 March as part of a two-day event to launch a campaign to mobilize young people to create a culture of peace in Burundi. The Campaign Song was composed by young people and set to music by the group 'Peace and Love'. The National Drum resonated and young girls performed traditional dances.

UNESCO organized this campaign with the Youth Network in Action for Peace, Reconciliation and Development (REJA) and other local partners, following on from campaigns in Gabon and Luena-Angola in 2016, and in parallel with one in Cameroon. The young people made a commitment to 'have a patriotic spirit; be aware of their role in peacebuilding and resist various types of manipulation; adopt responsible behaviour; refrain from adhering to violent movements; cultivate the value of truth'. The ceremonies ended with the launch of three white doves, symbolizing the peace that it is hoped will spread all over the country.

As part of the launch UNESCO representatives opened three capacity-building workshops for local radio stations and handed over cell phones and report jackets, creating synergies between communication and the culture of peace. They also organized meetings with relevant national authorities, representatives of UN Agencies, leaders of women's associations, media aimed at young people, NGO partners and others.

View of the campaign co-organized in March by the UNESCO Office in Yaoundé, the Youth Network in Action for Peace, Reconciliation and Development (REJA) and other local partners in Bujumbura, Burundi for the mobilization of young people to create a culture of peace in their country.



In the past the peace agenda was largely dominated by inter-state or intra-state security considerations, but now the UN system is moving away from a narrow definition of peace, to one implying more than the mere absence of war or violent conflict. The panellists presented peacebuilding as a broad, people-centred transformative process supported by 'soft power' approaches, including education for peace, intercultural dialogue, respect for human rights and human dignity, social inclusion, regional dialogue and sustainable development. They welcomed UNESCO's efforts to harness the power of education to 'build the defences of peace in the minds of women and men'.

On 27 June at UNESCO Headquarters, speeches and music accompanied the award of the 2017 Félix Houphouët-Boigny Peace Prize, which was established in 1990 by UNESCO 'to honour living individuals and active public or private bodies or institutions that have made a significant contribution to promoting, seeking, safeguarding or maintaining peace in conformity with the Charter of the United Nations and the Constitution

of UNESCO'. The two winners in 2017 were Mrs Giuseppina Nicolini, Mayor of Lampedusa, Italy, and the non-governmental French organization SOS Méditerranée. Both have done exceptional work to save the lives of refugees and migrants, and to welcome them with dignity to new lives in Europe.

Zeinab Badawi in Harare, Zimbabwe, during the shooting of the BBC's History of Africa series based on UNESCO's General History of Africa. In this image, she talks to sculptor Alan Adam, whose work was used in the series to illustrate iron-working techniques that helped shape ancient African civilization.

■ Celebrating the history and culture of Africa

'Investing in the youth of Africa' was the theme of UNESCO's Africa Week 2017 celebrations. The activities at Headquarters from 22 to 24 May included fashion shows by young designers Diana Magesa from Tanzania and Tatenda Sipula from South Africa, a workshop on leather craft organized by the Maison Andridz of Madagascar, and a recital of traditional African stories by Fouma Traoré of Burkina Faso.

The General History of Africa on the news

Already very influential, GHA became even more so when it was adopted as the foundation of a nine-part series shown on BBC World News. Sudan-born Zeinab Badawi, presenter of the series, travelled to all four corners of Africa, interviewing African historians, archaeologists and citizens, whose accounts and stories paint a vivid picture of their continent's past and how it informs their present lives. The episodes, on Mother Africa; Cattle, crops and iron; Gift of the Nile; The kingdom of Kush; The rise of Aksum; Kings and emirs; North Africa; Ancestors, spirits and religion; and Islam in Africa, were first shown in July and August.



Other events included a children's programme featuring drums, dance and masks; round-table debates on the role and prospects of Africa's youth; creative gastronomy from young Congolese chef Dieuveil Malonga; and a showing of *Swirl in Bamako*, a feature film directed by Dominique Philippe.

'Africa's history told by Africans themselves' is the concept behind UNESCO's General History of Africa (GHA) series of books. The continent of Africa has a long, complex history, and its people built civilizations which rivalled those that existed anywhere in the world. However, much of the continent's history is not widely known, and presentations from a Western perspective often provide a distorted and partial picture. Initiated in 1964, the UNESCO project aims to reconstruct a history of Africa liberated from racial prejudices inherited from the slave trade and colonization, and to favour an African perspective.

Since then, eight volumes have been published. This major contribution to knowledge has had a great impact in Africa and beyond. In 2013 UNESCO initiated the development of Volume IX, with the support of the Government of Brazil and the South African telecommunications company MTN. It will be one of the highlights of UNESCO's contribution to the UN International Decade for People of African Descent (2015–24). The International Scientific Committee for Volume IX met in Xiamen, People's Republic of China from 4 to 9 December 2017 to discuss and validate the last contributions and to finalize the manuscript.



Performance at the cultural gala evening held at UNESCO Headquarters during Africa Week 2017.

This meeting was unusually held in Asia rather than in Africa since the volume includes contributions on China–Africa relations. It was also an opportunity for Committee members to interact with researchers, artists, representatives of civil society and Chinese journalists.

The future of Africa is one of the major cross-sectoral priorities at UNESCO. A three-day training workshop, ‘Localising SDG 11: Inclusive Urban Planning for City Authorities in Southern Africa’, was held in Swakopmund in the Erongo region of Namibia from 17 to 19 May. The participants at the workshop, organized by UNESCO Regional Office for Southern Africa (ROSA) in collaboration with Namibia’s Ministry of Urban and Rural Development, United Cities and Local Governments (UCLG), the UNESCO Chair for Intermediary Cities and the African Local Government Academy, were mayors, urban planners, councillors, community development officers, representatives of shack dwellers and academics, from Botswana, Malawi, Namibia and Zambia.

Among the presentations were details of the strategic plan of the African Local Government Academy (ALGA), based on ten priority projects including peer learning



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Mr Robert Badinter, former Minister of Justice and former President of the Constitutional Court of France, and newly elected Director-General of UNESCO Audrey Azoulay during the launch on 11 December of the year-long campaign to commemorate the 70th anniversary of the Universal Declaration of Human Rights.

mechanisms; UNESCO’s New Urban Agenda for building peaceful, inclusive and sustainable cities; and the Swakopmund Municipal Institute of Learning (SMILE) as a hub for intermediary cities in the Southern Africa region.

■ A celebration of human rights

The Universal Declaration of Human Rights (UDHR) was adopted by the United Nations General Assembly on 10 December 1948. UNESCO’s year-long commemoration of its 70th anniversary will take place mostly in 2018, but it was launched on 11 December 2017 at UNESCO Headquarters by Director-General Audrey Azoulay in the presence of distinguished guests including Zeid Ra’ad Al Hussein, UN High Commissioner for Human Rights, H.E. Ms Zohour Alaoui, President of the UNESCO General Conference, and Mr Robert Badinter, former Minister of Justice and former President of the Constitutional Court of France.

Although the UDHR has been immensely influential, there is still much to be achieved if human rights are to be upheld in the face of challenges such as the plight of refugees, the prevalence of rape, and modern forms of slavery and servitude.

A celebration of Arabic

There are more than 290 million native speakers of Arabic, one of the five most widely spoken languages in the world, and many millions of others speak it more or less fluently as a second language. The annual World Arabic Language Day celebrations at UNESCO Headquarters on 18 and 19 December had the theme of ‘The role of new technologies and how to harness them’. Organized in cooperation with the Permanent Delegation of the Kingdom of Saudi Arabia, with the support of the Sultan Bin Abdulaziz Al-Saud Foundation, the events acknowledged Arabic’s immense contribution to science and culture, including philosophy and the arts, and also featured a concert by Naseer Shamma, Iraqi composer, oud virtuoso and UNESCO Artist for Peace. Round-table discussions explored the Arabic language’s relationship to science, language planning and its role in the dissemination of Arabic, language engineering and the use of new technologies in the teaching of the Arabic language, and the future of the language. This celebration also resonates with the International Decade for the Rapprochement of Cultures (2013–2022), for which UNESCO is the lead UN Agency.

Stories from the field

France

Exploring prejudice and racism

Over 120,000 people attended *Us and Them – From Prejudice to Racism*, the first major temporary exhibition since the reopening of the Musée de l'Homme (Museum of Man) in Paris, an offshoot of the national natural history museum. Organized under the patronage of UNESCO and running from 31 March 2017 to 8 January 2018, its original immersive scenography aimed to shed new light on racist behaviour and prejudices.

How are prejudices constructed? What is the reality of 'races' from a genetic point of view? What are the arguments against dividing humanity into 'races'? Why have states come to institutionalize racism against specific categories of individuals? These were just some of the questions raised by the exhibition, which was backed by expert research in anthropology, biology, sociology and history.

Visitors were invited to consider the individual and collective mechanisms that lead to the rejection of 'others', without any moralizing or judgmentalism. The exhibition also featured UNESCO's International Coalition of Inclusive and Sustainable Cities – ICCAR, a worldwide network working through regional plans of action to provide a robust platform for combating racism and discrimination, and promoting inclusion and diversity in cities. It is hoped to tour the exhibition to UNESCO, other cities in France and farther afield.

Poster for the exhibition Us and Them – From Prejudice to Racism at the Muséum national d'Histoire naturelle - Musée de l'Homme (Museum of Man) in Paris, organized under the patronage of UNESCO.



In her speech Ms Azoulay emphasized four continuing challenges: the risks deriving from the ignorance and disregard of human rights, the dramatic consequences of terrorism and the rise of violent extremism, the resurgence of cultural relativism, and the regression of multilateralism.

The launch was followed on 12 December by a UNESCO Campus for students on Human Rights Today and an interactive workshop on ‘National Initiatives on the Safety of Journalists – What Works?’



■ **Emphasizing the importance of the humanities**

Live interviews on the Facebook page of the World Humanities Conference (WHC), which ran from 6 to 12 August in Liège, Belgium, registered more than 200,000 views in just one week.

More than 750,000 people worldwide looked at the live segments on their Facebook news feed. And there were more than 1,000 participants in person, from all continents and all disciplines of the humanities, social sciences and natural sciences, including 300 speakers from 60 different countries.

How can we face the challenges of climate change unless we understand its history? How can we end identity-based conflicts without studying collective narratives? How can we understand the world without examining cultural forces at play? These were some of the underlying questions tackled by the conference, organized in the framework of UNESCO’s MOST programme and the SDGs.

The conference included seven keynote addresses, six thematic plenary sessions and more than 100 parallel sessions. The six core themes were humanity and the environment; cultural identities and cultural diversity; migrations and borders; cultural heritage; history, memory and politics; and the humanities in a changing world. The participants also enjoyed a rich artistic, cultural and musical programme.

Organized jointly by UNESCO, the International Council for Philosophy and Human Sciences (CIPSH) and the World Humanities Conference – Liège 2017 Foundation, the conference was preceded by preparatory meetings in Brazil, the People’s Republic of China, Colombia, France, Jamaica, Mali, Lebanon, Portugal and the Republic of Korea, and several weeks of public consultation over the content of its outcome document, which adopts a new vision for the humanities in

the 21st century. It calls on UNESCO, through its Secretariat and Member States, and on its partners, to ‘ensure the strong presence of humanities within the . . . MOST Programme, notably by promoting the establishment of a network of UNESCO Chairs in all regions of the world’; ‘to take into consideration the outcomes of the World Humanities Conference in particular in devising research and education policies’; and to ‘ensure that the outcome of the World Humanities Conference is taken into account by the 39th session of the UNESCO General Conference in November 2017’.

As part of its efforts to promote the place and role of the social and human sciences (SHS) in our contemporary societies, UNESCO in partnership with the Moroccan National Commission for Education, Science and Culture (NCEC) organized a series of National Conferences on ‘Social and Human Sciences: Assessment and future prospects’. The first took place in February in Rabat, looking at the current state of play, challenges and future perspectives. The second, in April–May in Casablanca, focused on the contribution of humanities and social sciences to regional and territorial development and the social responsibility of universities. A final session in Casablanca in February 2018 will address the theme of inequalities and human rights, asking in what ways social science and humanities disciplines bring to light the inequalities of our time, and to what extent they enable us to act to improve the situation.



SIN RESPETO NO HAY JUEGO

Spanish Cadena SER's 'No respect, no game' campaign to combat racism and discrimination in football was launched by UNESCO and Prisa Radio (part of the Spanish Prisa Group) on 24 January in Madrid.

The 2016 edition of one of UNESCO's flagship publications, the *World Social Science Report* (produced in partnership with the International Social Science Council, ISSC), focused on the fight against inequalities, and was an influence behind this agenda. SHS are under pressure today, when some see them as less useful topics for study and research than hard science subjects, and others fear their subversive capabilities. The aim of these conferences was to reaffirm their essential role in analysing and understanding the complexity of our contemporary societies, and the global and interconnected challenges they face.

■ The role of sport

Although sport is not specifically mentioned in the SDGs, the participants at the Sixth International Conference of Ministers and Senior Officials Responsible for Physical Education and Sport, MINEPS VI, held in Kazan, Russian Federation, on 13 to 15 July, recognized that the SDGs provide the essential framework within which sport must develop in ways that enhance sustainable development and help to build peaceful, inclusive and equitable societies.

The Kazan Action Plan agreed three priorities for the development of sports for women and men of all ages: universal access, maximizing the contribution of sport to sustainable development and peace, and protecting the integrity of sport (emphasizing the safety of practitioners and the governance of sports organizations and competitions).

Respect in football sends a wide message

An event organized by UNESCO and Prisa Radio (part of the Spanish Prisa Group) launched Cadena SER's 'No respect no game' (with the #SinRespetoNoHayJuego hashtag in Spanish) campaign to combat racism and discrimination in football on 24 January at the Museo del Traje in Madrid. Among the 130 people attending were the presidents of several prominent football clubs, and journalists who provided wide coverage. The campaign continued through the first half of 2017.

In the words of Manu Carreño, director of the radio programme *El Larguero*, who moderated the round table that followed the launch, the public has to understand that 'buying a ticket for a match does not give the right to insult or threaten'. Events in professional football attract a wide audience, so efforts to stamp out abusive behaviour in this field can be expected to have an impact.

Opening ceremony for the Sixth International Conference of Ministers and Senior Officials Responsible for Physical Education and Sport (MINEPS VI) held in 14 July in Kazan, Russian Federation. During this conference a major Action Plan was agreed by more than 50 sport ministers and senior officials from 115 countries with priorities for the development of sports for women and men of all ages.



© Media Department, ANO/Directorate for Sports and Social Projects.

A particular stress was put on youth participation. The Plan was issued by more than 50 sport ministers and senior officials representing 115 countries who were among the almost 500 participants at the conference. Representatives of the People's Republic of China, France, Japan and the Russian Federation made a public pledge to support the international implementation of the action plan.

The actions to be taken should have measurable results. Action 2, for example,

requires signatories to 'Develop common indicators for measuring the contribution of physical education, physical activity and sport to prioritized SDGs and targets.' They comprise a follow-up to the Declaration of Berlin adopted by MINEPS V, and reflect the International Charter of Physical Education, Physical Activity and Sport revised in 2015.

UNESCO's International Convention against Doping in Sport (ICDS), with 187 States Parties, is the only global legal framework under which

governments address anti-doping issues. It provides a framework for anti-doping legislation, policies, rules and guidelines. The sixth session of the Conference of Parties to ICDS (COP6), at UNESCO Headquarters on 25 and 26 September, delivered the message that values-based education programmes and better governance are key elements in advancing the fight against doping. There were more than 300 participants and observers, including representatives of over 100 States Parties, the World

Anti-Doping Agency (WADA), the Council of Europe (CoE), the European Commission, and international, regional and national sports organizations.

The issues debated included the sustainability of anti-doping prevention, sport integrity and values education through sport, and the means of ensuring efficient monitoring of States Parties' obligations.

Among the actions participants endorsed, aimed at reinforcing the implementation of the Convention, were the development of operational guidelines and a framework of consequences for non-compliance, and information-sharing between public service agencies and national anti-doping organizations.

The ICDS's operational arm, the Fund for the Elimination of Doping in

Sport, provides financial support to public authorities for the design and implementation of projects in the fields of anti-doping education, policy advice and capacity-building. It has supported 218 projects in 108 States Parties over the past decade. The Conference adopted the Fund's operational plan for the next two years, and discussed new avenues for investment and a planned evaluation of the Fund's activities.



UNESCO banner for the promotion of Traditional Sports and Games (TSG) on the International Day of Sport for Development and Peace 2017. The Organization safeguards and supports TSG as both sports practices and intangible cultural heritage. TSG are key for the enhancement of intercultural dialogue and peace, youth empowerment and the promotion of ethical sport practices.

The UN International Day of Persons with Disabilities (IDPD) is celebrated around the world on 3 December to draw attention to the benefits of an inclusive and accessible society for all. Among various events held on this Day, UNESCO hosted the theatrical performance 'In Touch', co-produced by the Inclusion Theatre Company and the State Theatre of Nations (Russian Federation), in association with the Graeae Theatre Company, the British Council and the National Theatre (UK). The performance captures real stories of deaf-blind, blind, visually impaired, deaf, hard-of-hearing, sighted and hearing people, told through an eclectic style of spoken, signed and physical theatre. The talented young Mauritian singer Jane Constance, designated a UNESCO Artist for Peace earlier in 2017, shared the stage with the performers.

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CHAPTER 5

Building knowledge societies



Building knowledge societies

Preserving and disseminating the world's knowledge, and supporting the development of new knowledge, are essential roles for UNESCO. Its activities encompass the entire range from the most fragile of old documents to the newest digital techniques. A special emphasis was placed in 2017 on ensuring that the disadvantaged – including the poor, those with disabilities, and those who find it a challenge to keep up with technological change – retain the fullest possible access to the world's store of knowledge. This paves the way for the development of the knowledge society that is a core part of the Agenda 2030 vision.

■ Celebrating access to information

Being informed starts with the commitment of governments to develop, promulgate and enforce policies and laws on the Right to Information to guarantee the respect of this human right. This requires efficient implementation mechanisms and a culture of transparency

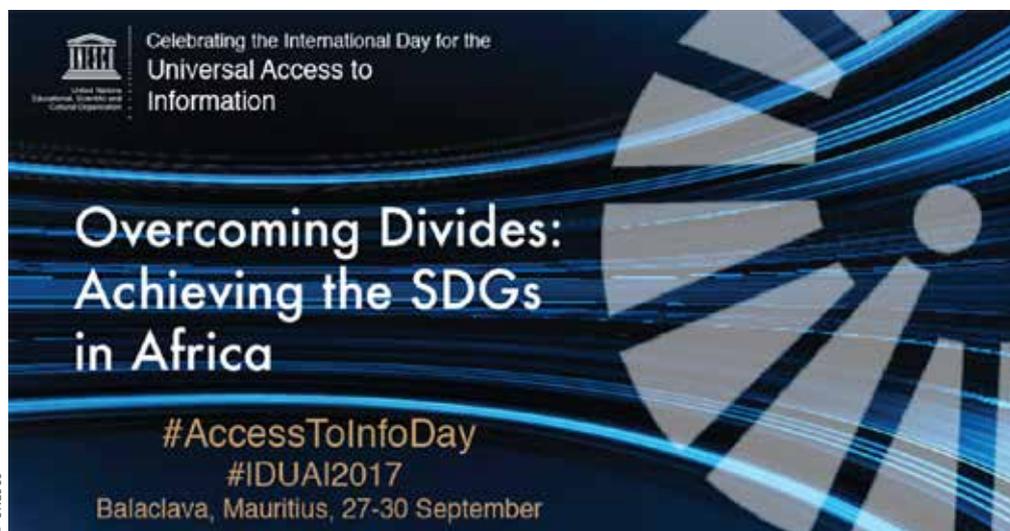
across all types of institution. Citizens need also to have the critical thinking, literacy and digital skills required to access, analyse and use the information in different ways, offline and online.

The International Day for Universal Access to Information (IDUAI, 28 September) was established in 2015 by 195 Member States at the 38th session of the UNESCO General Conference, to

recognize that 'the right to information is an integral part of the right to freedom of expression'. IDUAI has particular relevance for SDG target 16.10, which calls for ensuring public access to information and protection of fundamental freedoms.

Events to commemorate IDUAI in 2017, its second year, to raise awareness on the importance of access to information for inclusive societies, and to promote transparency, the rule of law and good governance, were organized in Brazil, Cuba, Egypt, Indonesia, Jordan, Madagascar, Mongolia, Palestine, Senegal, South Africa, South Sudan, Tunisia and Viet Nam. They included talks hosted by the International Programme for the Development of Communication (IPDC) on 'Powering Sustainable Development with Access to Information' in 11 cities around the world.

The connection between building inclusive and open knowledge societies and the achievement of the SDGs in Africa was the theme of a three-day series of events co-hosted by UNESCO, the Information for All Programme (IFAP), the Government of Mauritius and eLearning Africa, in Balaclava, Mauritius.



The Paris event, at UNESCO Headquarters, attracted around 350 people, who listened to talks and stories from local and global stakeholders, public leaders, community front-runners, leading investigative journalists, media experts and other intellectuals. The speakers included several powerful women, in reflection of the fact that 250 million fewer women than men are online worldwide, and a major effort is needed to redress the balance. Among them were Yemen's first female Minister of Information Nadia AlSakkaf, journalist and *Democracy Now!* host Amy Goodman, and former President of Finland Tarja Halonen.

A three-day series of events, from 27 to 30 September, was held in Balaclava, Mauritius, by UNESCO in partnership with the Information for All Programme (IFAP), the Government of Mauritius, and the eLearning Africa/12th International Conference on ICT for Development, Education and Training, with the support of Talkmate, the William and Flora Hewlett Foundation, INRIA (the French national institute for research in informatics) and the Global Rainbow Foundation. The theme was 'Overcoming divides and achieving the SDGs in Africa'. The event attracted high-level participants from African countries including the Vice-President of the Republic of Mauritius, ministers for education and for information and communication, and permanent delegations to UNESCO.

Topics for the workshops and round tables included cyberlaws, information ethics, open educational resources and digital inclusion, youth mobile app



development, software preservation and the role of space technology, and SMART strategies to support African countries in achieving the SDGs.

A representative of Talkmate, an online language learning portal offering courses in 100 languages, highlighted endangered languages as the rationale for establishing a partnership with UNESCO on the World Atlas of Languages programme, a scalable ICT-supported model to access data on linguistic diversity around the world, encourage collaboration among different stakeholders, and raise awareness on the importance of linguistic diversity and multilingualism for sustainable development.

There was also a one-day YouthMobile workshop, designed to train teachers in the development of mobile apps using MIT

App Inventor, complementing the training of trainers during the 2017 edition of the Africa Code Week, organized by SAP in partnership with UNESCO.

Participants in the Mauritius conference called on UNESCO to continue to support relevant initiatives and play an advocacy role, promoting access to information and knowledge, freedom of expression, privacy and ethical norms and behaviour online as keystones to the development of inclusive knowledge societies.

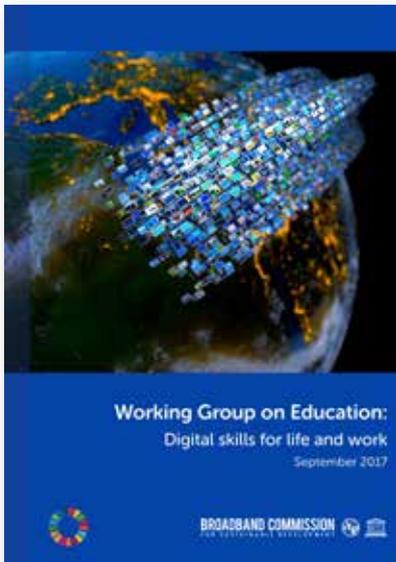
All the IDUAL events benefited from a strong social media campaign. The hashtag #IPDCtalks, and related hashtags promoted from June to September, generated more than 15.5 million impressions in all languages, with a 7.3 million reach.

UNESCO programme specialist Davide Storti teaches coding to young women at a workshop held in Dar es Salaam, United Republic of Tanzania, as part of Africa Code Week 2017, organized by SAP in partnership with UNESCO.

■ Making educational resources available to all

In the run-up to the second World Open Educational Resources (OER) Congress, six regional consultations, organized by the Commonwealth of Learning (COL) in partnership with UNESCO, brought together experts and policy-makers from more than 100 countries to discuss progress in implementation of the 2012 Paris OER Declaration, which encouraged the open licensing of educational materials produced with public funds, and provided an internationally recognized strategy for OER actions. These regional consultations took place from December 2016 to May 2017, in Kuala Lumpur, Malaysia; Valletta, Malta; Doha, Qatar; Port Louis, Mauritius; Sao Paulo, Brazil; and Auckland, New Zealand. National OER Surveys were also received from some 100 countries.

Education systems worldwide are only just beginning to help learners cultivate the digital skills they need to excel in our increasingly digitized societies, according to Digital Skills for Life and Work, a report from the Working Group on Education of the International Telecommunications Union (ITU) and UNESCO's Broadband Commission for Sustainable Development.



The second World OER Congress itself took place from 18 to 20 September 2017 in Ljubljana, Slovenia. Co-organized by UNESCO and the Slovenian Ministry of Education, Science and Sport, in close collaboration with the Commonwealth of Learning, the Slovenian National Commission for UNESCO and the UNESCO Chair on Open Technologies for OER and Open Learning (Jožef Stefan Institute, Slovenia), with the generous support of the William and Flora Hewlett Foundation, it brought together over 500 participants from over 100 UNESCO Member States, including more than 20 ministers of education and science, to discuss how OER can be used to help achieve the Education 2030 goals.

This event marked 15 years of growth and development since the term 'OER' was first coined at UNESCO in 2002. The three core objectives were to examine solutions to meet the challenges of mainstreaming OER content and practices into education systems worldwide; showcase the world's best practices in OER policies, initiatives and experts; and identify recommendations that are demonstrably best practices for the mainstreaming of OER. Among the key issues discussed were how to promote multilingualism and to ensure OER are available to people with disabilities.

The second World OER Congress 2017 culminated in the adoption by consensus of the Ljubljana OER Action Plan and the Congress Ministerial Statement. The Ljubljana OER Action Plan 2017 provides recommendations on mainstreaming open-licensed resources with a view to building inclusive knowledge societies and achieving SDG 4 on 'Quality education'.



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The Ministerial Statement calls for a 'dynamic coalition to expand and consolidate commitments to actions, strategies and legislation' in OER, with a 'call on all educational stakeholders to implement the recommendations of the Ljubljana OER Action Plan 2017'.

■ Digital skills for young and older people

Education systems worldwide are only just beginning to help learners cultivate the digital skills they need to excel in



With the initial ambition of engaging 500,000 young Africans in a week, Africa Code Week 2017 ended up introducing coding to 1.3 million children and young people across 35 countries. In South Africa alone, where this photo was taken, 46,935 young people and 4,252 teachers benefitted from the training.

our increasingly digitized societies. This was the conclusion of *Digital Skills for Life and Work*, a report from UNESCO and the International Telecommunications Union (ITU)'s Broadband Commission for Sustainable Development published in September. The Commission was established in 2010, and comprises more than 50 leaders from across a range of private, public, non-governmental and civil society sectors as well as academia. They are committed to actively supporting countries, UN experts and NGOs to fully leverage the huge potential of information

and communication technologies to drive national SDG strategies in key areas such as education, health care, gender equality and environmental management.

Drafted by the Commission's Working Group on Education, chaired by Irina Bokova and John Galvin, vice-president of Intel, the report identified the essential digital skills and competencies needed for the life and work of today and tomorrow, from basic skills that everyone should acquire to high-level professional skills. It found that the factors determining whether people acquire these skills

include the appropriate involvement of governments, blending traditional 'non-digital' education approaches and digital applications, bridging formal and non-formal digital skills provision, and enhancing the digital competencies of teachers. Where these factors are not present, and education fails to instil the necessary skills, we see the emergence of a new global skills gap. It will reflect differentiating factors such as gender, class, geographic location and age, which together can have a major impact on access to education and skills.

These enthusiastic women showing signs in Nepali reading 'I became literate' and 'Literacy in a digital world' take adult literacy classes in Shikharapur Community Learning Centre in Kathmandu, Nepal. On the day this photo was taken, they had been discussing literacy in a digital world with colleagues from the UNESCO Office in Kathmandu.



© Shikharapur CLC/W. Shrestha

The report gives special attention to the often overlooked complementary skills required to navigate technology-driven societies, such as understanding privacy considerations, knowing how to engage as responsible digital citizens, and being aware how digital technology, big data and algorithms are shaping society.

Underscoring the importance of the new report, Ms Bokova urged the

Broadband Commission and countries around the world to 'support the development of a new generation of "digital citizens", with the right skills for life, work and engagement in the connected communities of today and tomorrow'. To do so, the authors urge engagement with the strategies and recommendations presented in the report for ensuring all groups of people

can develop these skills. Maintaining public involvement in the increasingly commercially driven space of digital skills development, improving data on digital skills across populations, redoubling efforts to address inequalities, promoting open digital resources and addressing needs not met by commercial providers, and working in partnership with stakeholders including industry representatives are all important measures that can help to prepare populations for the demands of the future.

Included in the report is a compendium of case studies illustrating successful examples of public and private sectors working together in Africa, Asia, Europe and North America to ensure that all people have the skills and competencies they need to participate in the knowledge-based economy of the future.

■ An explosion of new technology

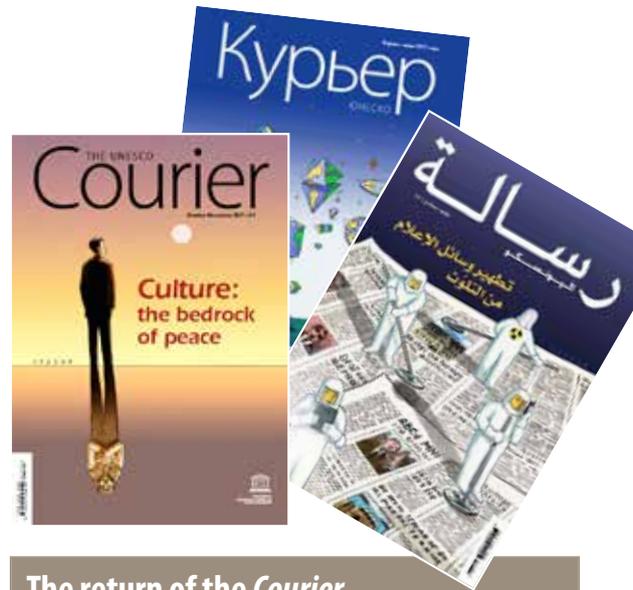
3D Printed Dog Nose, an explosive detector inspired by dog truffle, developed by scientists from the American Institute of Standards and Technology; Abalobi, a free application for small-scale South Africa fisherfolk; Dexmo, a project from the People's Republic of China to create bionic gloves that enable people to sense textures and forces in virtual reality; The Next Rembrandt, a Dutch project to produce works in the style of the great painter using a 3D printer and AI software; Qure.AI, a medical diagnosis application from India; Premonition, intelligent robotic traps developed by US scientists to counter mosquito-linked epidemic outbreaks; Sixgill, an Israeli cybersecurity application capable of browsing Dark Web sites; Your

MD, developed in the USA and validated by the UK National Health Service, to help patients obtain a diagnosis and identify the most appropriate healthcare professional to assist them; and India stack, building on an earlier prize-winning project to provide a digital identity to 1.1 billion Indian citizens, and facilitating concrete applications and services for citizens, businesses, education and administration. These were among the brilliantly innovative projects presented at the tenth Netexplo Forum, organized by the Netexplo Observatory in partnership with UNESCO on 26 and 27 April.

The featured projects derive from a year-long discovery process involving a network of partner universities all around the world. Each one received a Netexplo Innovations Awards, but after two days of meetings and debates among entrepreneurs, leaders, start-ups, researchers, philosophers and sociologists, and a vote by the public, the Grand Prix of 2017 was awarded to 'BitNation Refugee Emergency Response (BRER)'. This Swedish

project aims to provide an official and unfalsifiable identity to undocumented migrants. It uses the blockchain, the technology used to develop virtual currencies, which allows authentication and security of virtual transactions. Each person assisted also receives a Bitcoin payment card, which gives them access to funds without the need for a bank account.

The 2017 Netexplo report, presented by Professor Julien Levy, identified three major trends: human focus, meaningful technological progress that enables individuals and communities to thrive under control; nature made human, quantified, corrected and protected; and post-human machines that interact with us, augment us, replace us and challenge us. There was a live debate on the central theme of artificial intelligence, and this tenth anniversary also provided an opportunity to look back at innovations that received awards in the earlier years and have now made a major global impact, including Twitter, Spotify, Waze and Airbnb.



The return of the *Courier*

The UNESCO *Courier* is a key element of the Organization's identity as well as one of the most powerful tools for its humanistic mandate. Founded in 1948, it started as a monthly black-and-white, 8-page tabloid issued in English, French and Spanish. Its format changed in 1954 when it became an illustrated magazine. Nowhere is the memory of UNESCO's history best stored than in the *Courier*. Throughout all continents, the *Courier* has embodied UNESCO's mission: to build peace by disseminating knowledge and cultures, the free flow of ideas and information by word and image, and to help strengthen mutual understanding, the spirit of tolerance and informed debate. Due to financial strains, publication of the *Courier* was interrupted for five years. The reappearance of this historic journal in April 2017, through the generous support of the People's Republic of China, is much more than the resumption of an editorial endeavour: it is a valuable opportunity to renew UNESCO's commitment to the *Courier's* founding values. The magazine is henceforth available as a quarterly print and online publication in the six official languages of the United Nations as well as Portuguese and Esperanto.



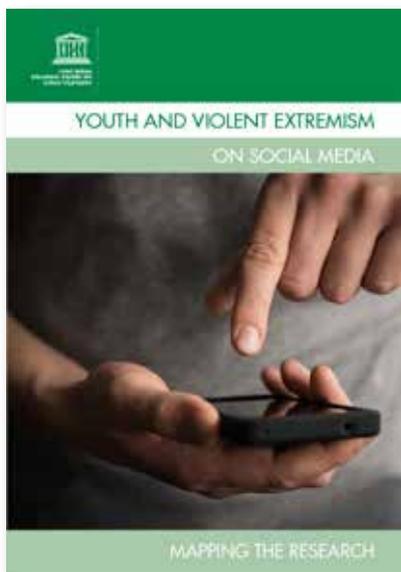
Using a 3D printer, scientists at the USA's National Institute of Standards and Technology produced an artificial nose, based on a female golden retriever's and with its same olfactory capabilities, which can detect smells imperceptible to humans, including explosives, drugs or even some types of cancer. This is one of the ground-breaking projects presented at the tenth Netexplo Forum, organized by the Netexplo Observatory in partnership with UNESCO in April.

■ The challenges of the Dark Net

How can we tackle the challenges posed by the Dark Net, a parallel cyberworld often used for criminal purposes? This was the topic of one of a series of international conferences organized by IFAP, which looked at ways to counter internet radicalization and violence in cyberspace. Over recent years, attacks by violent extremists have become more numerous, posing a global threat to peaceful and sustainable ways of life. Violent extremism is not confined to any age, group or gender, but young people are particularly vulnerable. Many extremists spread their views and organize action with their colleagues in cyberspace, so this is an area where urgent action is essential.

The series of events began in 2015, and two events were held in 2017.

Does social media lead vulnerable individuals to resort to violence? The new UNESCO publication Youth and Violent Extremism on Social Media provides a global mapping of research into the assumed roles played by social media in violent radicalization processes, especially as they affect young people and women across all regions of the world.



The first was an international conference in Beirut organized by the Lebanese National Commission for UNESCO in partnership with IFAP, the UNESCO Office in Beirut and the Rotary Club of Beirut, on 'Youth and ICT: Towards Countering Violent Extremism in Cyberspace'. Its aim was to help inform young people about the threats, and empower them to act to counter them.

From 17 to 19 May about 200 participants from 20 countries, including scholars, policy-makers and researchers,

discussed issues such as finding a common space to counter deliberate attempts by extremists to distort religion; teaching young people how to live together peacefully regardless of their religious, ethnic, cultural and other differences; and developing new forms of global citizenship, including digital citizenship. Participants, particularly young ones, were able to exchange ideas and experiences with the objective of exploring ways to prevent radicalization and uncovering the progress to date.

Useful apps and useful knowledge for their developers in Yemen

UNESCO has run its YouthMobile Initiative projects in several countries to introduce young people to computer science programming and problem-solving, and help them develop mobile apps that solve local issues of sustainable development. Nowhere is it more important than in Yemen, which is undergoing continuing conflict and one of the world's most critical humanitarian crises. For this reason, UNESCO partnered with the Internet Society Yemen Chapter to launch a YouthMobile project there in 2017.

In Sana'a and Aden, 40 young people received two weeks of training, and developed ten mobile apps on issues such as health, human rights, the integration of internally displaced persons (IDPs), and first aid tips, using App Inventor, an open-source web application developed by MIT Media Lab.

Abdullah Raweh and his group, from Sana'a, created 'save.life'. 'Because of the humanitarian situation, we created an app that serves as a health guide to save lives. The app includes many features such as first aid instructions, how to deal with the difficult cases as well as information and instructions about a number of treatable diseases, including cholera,' he explained. Nada Al-Maktary's group in Sana'a developed 'Displaced' to help her community and particularly IDPs by offering them tips and advice about daily life. The app also collects statistics, which will be shared with international NGOs and humanitarian organizations so they can reach out and provide assistance to IDPs. Hanane Abdo, a young programmer from Aden, said she had gained confidence in herself and in the fact that, through coding, she can be 'part of the solution and not the problem' in her home country. 'I believe many problems and crises often start because people aren't aware of their rights and of what they can do to contribute to building peaceful environments around them. I therefore built an app that focuses on sharing practical steps, messages and tips on human rights, peace and reconciliation and allowing users to share personal messages in favour of the peacebuilding process,' Hanane explained.

The initiative will continue to be rolled out in Yemen including through mentoring and peer support. A Facebook page, 'YouthMobile-Yemen' has also been created to help young people exchange ideas and support each other.

Speakers expressed their commitment to facilitating access to all types of information and communication platforms, and to promoting narratives that condemn violence and hate speech, encouraging inclusion, equality, intercultural dialogue and peace. On 19 May the Conference adopted a Final Statement, which calls for effective measures to prevent and combat the online propagation of violence, and for using the internet to promote a culture of peace.

The Dark Net was the topic for the second 2017 event, an expert meeting organized on 14 September at UNESCO Headquarters. Entitled 'Dark Net: the New Societal, Legal, Technological and Ethical Challenges', it explored themes such as the dangers of an underground internet accessed anonymously, potential strategies for avoiding the negative consequences of this system which can be used as a platform for violent extremism, and the technical and legal implications of this parallel internet. The aim was to

further international understanding of this complex, shifting and little-known phenomenon. Participants included experts in cybersecurity, the chair of the IFAP's Intergovernmental Council, and a representative from INTERPOL.

In March, as part of the Organization's YouthMobile Initiative, the UNESCO Office in Doha co-organized with several partners, including the Qatar National Commission for UNESCO, a series of mobile application development workshops for girls between 12 and 15 years old, during QITCOM, Qatar's biggest ICT event.



Myanmar

Empowering farmers with information

Win Oo, a farmer from Pauk township in Myanmar, said the new update of the Greenway app, launched by UNESCO Myanmar and local agri-tech startup Greenovator, has proved 'really beneficial' in his daily life. 'I've recommended the application to other farmers,' he said.

The app gives farmers access to a wide range of informational and educational

materials – including television and radio programmes, a variety of print materials, and media toolkits produced under a LIFT-funded project implemented by UNESCO. Its launch in Yangon in December was attended by more than 100 people from government, media, international organizations and civil society. In the spirit of the project's aim to be inclusive and ensure farmers' voices are heard, UNESCO also invited people from the agricultural sector from throughout the country.

Access to information in Myanmar was severely restricted for decades by tight censorship and a poor telecommunications infrastructure, but

improvements are being supported by the government as part of the ongoing democratic transition process, and the Ministry of Information facilitated access to development information on topics like nutrition, food security, weather, innovative agricultural techniques and market prices.

UNESCO is also collaborating with the Myanmar Book Aid and Preservation Foundation to train people in Myanmar to use apps such as Greenway. Ei Thin Htike, a librarian in Htantabin township, said that she and the farmers who attended the training 'will not forget the content but apply it in our daily lives'.

Co-launched by the UNESCO Office in Myanmar, the Greenway application has the potential to inform, guide and advise Myanmar's farmers, which make over 60 per cent of the country's workforce. Thein Soe Min (middle), one of the founders of Greenovator, promotes this mobile application at an agricultural convention in 2017.



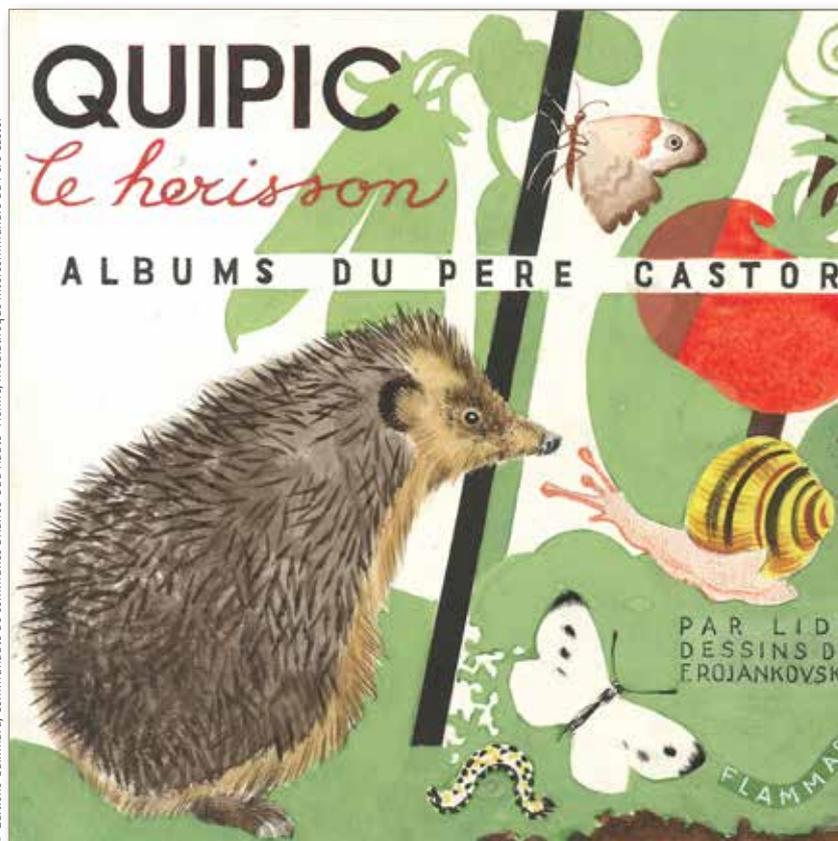
■ Curating the world's memory

The memory of the world is not a simple or uncontentious concept. It embraces slavery as well as freedom, human cruelty as well as kindness, responses to disasters as well as human triumphs of imagination. UNESCO's Memory of the World (MoW) Programme, first established in 1992, acknowledges the importance of retaining our memory of all these aspects of our human history. It derives too from a growing awareness of how poorly much of our worldwide documentary heritage is preserved, and how difficult it can be to access. Looting and dispersal, illegal trading, destruction, inadequate housing and funding all contribute to the challenge. War and social upheaval worsen problems which have existed for centuries. Inscription on the Memory of the World International Register acknowledges the importance of documents both tangible and digital, and increases the chances of their safe preservation.

The MoW International Advisory Committee (IAC) met at UNESCO Headquarters from 24 to 27 October to consider nominations to the register made in 2016 and 2017. It recommended 78 new inscriptions, proposed three additions to existing inscriptions, and recommended provisional inscription for two items.

In a recent decision 202 EX/15 of the Executive Board, Member States reaffirmed the goal of the MoW Programme as expressed by the General Conference in 2015 in the Recommendation concerning the preservation of, and access to, documentary heritage including in digital

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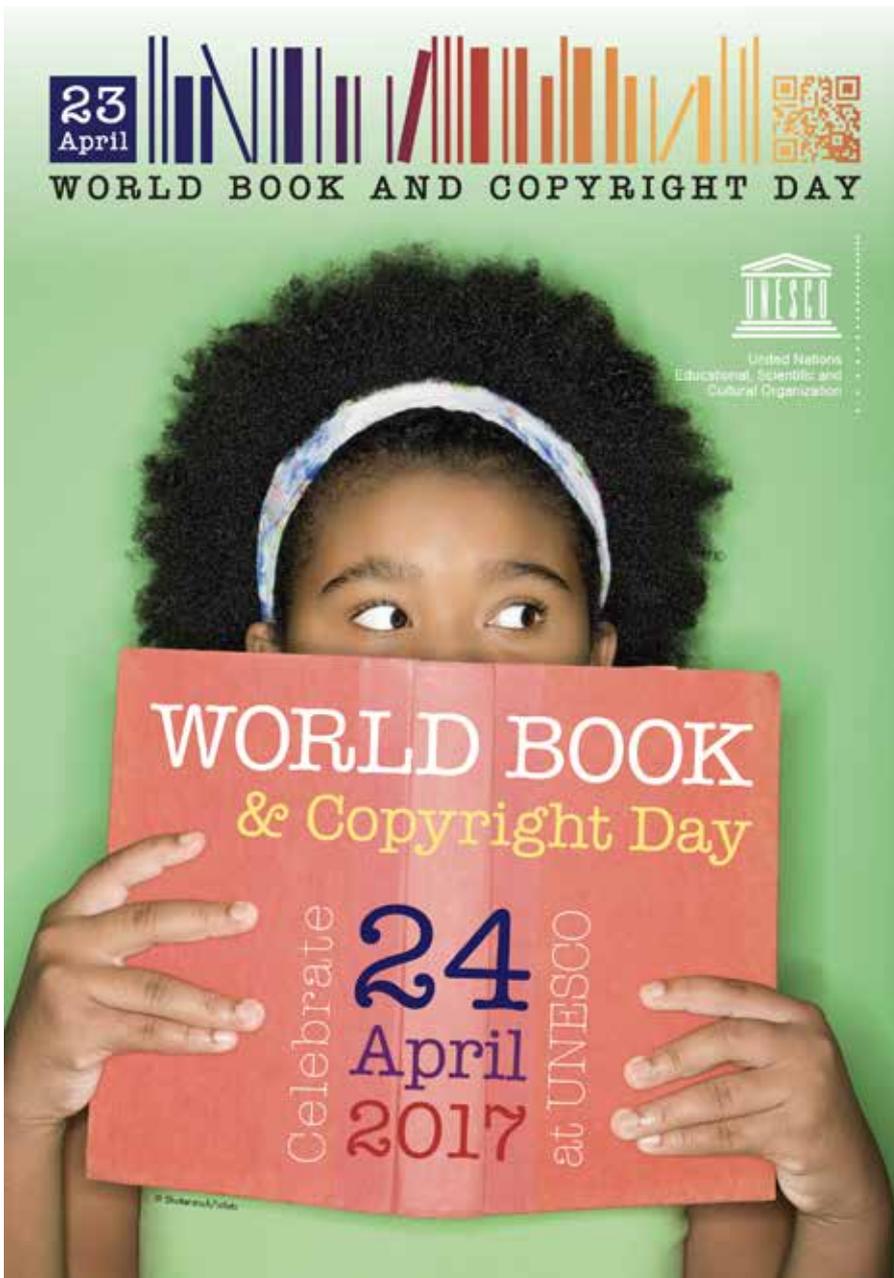
form, which underlines 'the importance of documentary heritage to promote the sharing of knowledge for greater understanding and dialogue, in order to promote peace and respect for freedom, democracy, human rights and dignity', and considered 'at the same time that the preservation of, and long-term accessibility to documentary heritage underpins fundamental freedoms of opinion, expression and information as human rights'.

Member States also supported a comprehensive review of the programme, leading to an action plan for presentation

to the Executive Board in spring 2018. In addition, Member States called upon the Director-General, the members of the IAC, and all stakeholders of the MoW Programme to abide by the principles of dialogue, mutual understanding and respect and to avoid further political tensions concerning the MoW Programme.

The Memory of the World Register now includes a total of 429 documents and collections, coming from all continents and safeguarded on various materials from stone to celluloid and from parchment to sound recordings.

The Archives of Père Castor were submitted as documentary heritage by France and recommended for inclusion in the Memory of the World Register in 2017. These include mostly documents for the design, manufacture and distribution of the collection 'Les albums du Père Castor' (1931–1967), now considered as children's literature classics and translated into many languages.



Poster designed by UNESCO to celebrate World Book and Copyright Day in 2017.

© UNESCO

■ Books across the world

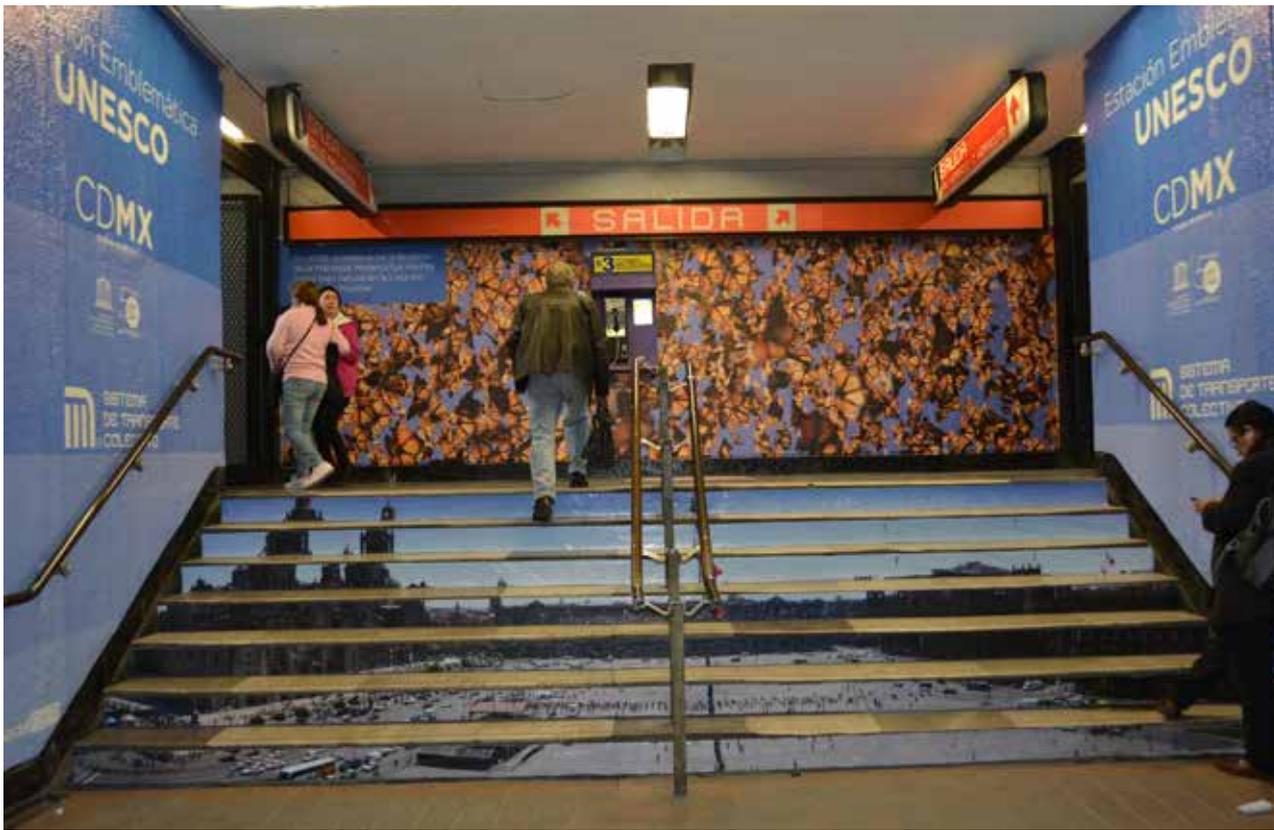
Although World Book and Copyright Day 2017 fell on a Sunday (23 April), it received considerable media attention. There were

more than 630 articles published in the six official UN languages which referred to the Day and to UNESCO, in Spain, the United States, Egypt, Mexico, Saudi Arabia,

the People's Republic of China and many other countries. Spain also had especially extensive social media coverage, with the hashtag #DíaDelLibro trending strongly.

The theme for 2017 was people who are blind or have visual impairment. UNESCO teamed up with Asford (the Association for Training and Professional Development in the Publishing Sector, France) for the events at Headquarters on the morning of 24 April, including a lecture on the theme 'Accessibility: what issues for publishing?' In the afternoon, UNESCO Headquarters hosted a celebration of the selection of Conakry (Republic of Guinea) as World Book Capital 2017–18 and the event 'Read Africa!', which honoured not just Conakry but literature across Africa, with round tables on today's literary Africa and on African women, a source of literary inspiration. Eleven African authors took part – Christian Abegan, Sophia Ammad, Kidi Bebey, Sonia Houenoude, Jussy Kiyindou, Mbougar Sarr, Hemley Boum, Selma Guettaf, Yves Berthrand Nguyen Matoko, Fathia Radjabou and Michelle Tanon-Lora – and several publishing houses presented their collections. There were activities and workshops, and the day ended with three shows in which stories were accompanied by music on African instruments.

The events in Conakry during its year as World Book Capital provide an opportunity to extend appreciation for the written word in a nation where most people are illiterate. Its celebrations began with acrobatics and slam poems. Images of authors' faces and dust jackets featured on walls and billboards, and lots of books were available for people to browse.



The UNESCO Office in Mexico joined the Collective Transport System and the Government of Mexico City to give Polanco Metro station a makeover on the occasion of the 50th anniversary of the Office's foundation. The walls, staircases and corridors of this major station with over 25,000 daily passengers on average were decorated with information on historical links between Mexico and UNESCO.

© UNESCO/Gabriela Velázquez Álvarez

Celebrating inclusion through the arts



Since 1992, the UN International Day of Persons with Disabilities (IDPD) has been celebrated around the world on 3 December. IDPD mobilizes support for critical issues relating to the inclusion of persons with disabilities, promotes awareness-raising about disability issues and draws attention to the benefits of an inclusive and accessible society for all. UNESCO's 2017 celebration took the theme 'Transformation towards sustainable and resilient societies for all', and was held at its Headquarters on 4 December in cooperation with the Permanent Delegation of the Russian Federation and the Inclusion Arts Centre.

The focus was on the role of inclusive arts in creating sustainable and resilient societies, where persons with disabilities will be entirely integrated among the main actors. This event echoes the UN Convention on the Rights of Persons with Disabilities (UNCRPD) and reflects the intention of the 2030 Agenda for Sustainable Development to 'leave no one behind'.

Among the events were a high-level round-table discussion on the role of inclusive arts for persons with disabilities, with speakers working in the fields of art and digital inclusion; a theatrical performance by the 'In Touch' artistic project group, part of a long-term programme between the Inclusion Theatre Company and the State Theatre of Nations (Russian Federation), which uses the arts to connect deaf-blind, sighted and hearing people through professional theatre, humanitarian actions and cultural projects; a brief learning session on sign languages; and a concert by Zarifa (Zara) Mgoyan, a UNESCO Artist for Peace with a long-standing commitment to helping people with disabilities.



In 2017 a record was achieved with over 740,000 people from Bermuda through Brazil and across the entire Caribbean basin participating in the CARIBE WAVE 17 tsunami exercise held on 21 March, under the coordination of UNESCO's Intergovernmental Oceanographic Commission (IOC-UNESCO). This level of participation makes CARIBE WAVE exercise yet again the largest international tsunami drill in the world. In Venezuela alone, where this picture was taken, some 238,000 people joined in.

An aerial photograph of a coastal town. In the foreground, a group of people, including children and adults, are gathered on a grassy slope. Behind them is a large, sandy area that appears to be a baseball field or a similar sports field. The town is built on a hillside, with many houses and buildings. In the background, the ocean is visible, with a white boat on the water. The sky is clear and blue.

CHAPTER 6

**One planet,
one ocean**

One planet, one ocean

Nearly 3 billion people depend on marine and coastal biodiversity to meet their needs, while the well-being of every citizen, every society and every country, landlocked or coastal, depends on the health of our oceans. Oceans make up 71 per cent of our planet, absorb around a third of the carbon dioxide produced by humans, and reduce the impact of climate change. The efforts made by UNESCO, and particularly by its Intergovernmental Oceanographic Commission (IOC-UNESCO), are crucial to the achievement of SDG 14, to ‘Conserve and sustainably use the oceans, seas and marine resources’.

■ A decade to celebrate and focus on protecting the ocean

Surveying the ocean requires costly ships and equipment, satellite imaging, underwater robots and remotely controlled vehicles. It also involves thousands of scientists collecting and

analysing the data in laboratories or in marine environments. It was in this context that on 2 November IOC-UNESCO, with the support of the Government of Norway, hosted a side event during UNESCO’s 39th General Conference to mobilize more coordinated efforts across nations and sectors for generating new knowledge and understanding

of the oceans, and therefore improve management, stewardship and sustainable development of oceans and coasts. UNESCO’s then Director-General Irina Bokova, Peter Thomson, the UN Secretary-General’s first-ever Special Envoy for the Ocean, and a representative of Norway called jointly for a UN Decade of Ocean Science for Sustainable Development (2021–2030), The Ocean We Need for the Future We Want. The United Nations formally announced the Decade on 5 December.

Among the aims of the Decade are to stimulate a global partnership on the marine science requirements needed to support implementation of the 2030 Agenda; to gain a better quantitative knowledge of ocean ecosystems and their contribution to society, from the ocean surfaces to their depths; to map the ocean floor and its resources, and support their sustainable management; to understand the impacts of cumulative stressors and seek sustainable solutions for sustaining benefits from the ocean; to enhance research, knowledge-sharing and technology transfer; and to strengthen and diversify financial sources, particularly for small island developing states (SIDS) and least developed countries (LDCs).

The United Nations has proclaimed a Decade of Ocean Science for Sustainable Development (2021–2030) to gather ocean stakeholders worldwide behind a common framework that will ensure ocean science can fully support countries in the achievement of SDG 14 on the ocean. As mandated by the UN General Assembly, IOC-UNESCO will coordinate the Decade’s preparatory process.



© UNESCO



(From left) David Eades from BBC World, Sweden's Environment Minister Karolina Skog, then Director of UNESCO Irina Bokova, President of the UN General Assembly Peter Thomson, Executive Director of UN Environment Erik Solheim, and Science Correspondent at Sky TV Thomas Moore were brought together by IOC-UNESCO to discuss the state of global ocean science at the UN Ocean Conference held in June.

■ The first UN Ocean Conference

On 5 June 2017, the first ever UN Ocean Conference opened in New York, gathering stakeholders from across the world in support of the implementation of SDG 14.

IOC-UNESCO co-organized various side events. Touching on the importance of blue carbon ecosystems and their sustainable management, a side event co-organized with the Government of Australia launched the Global Blue Carbon Data and Knowledge Network, organized by the IOC-UNESCO-supported Blue Carbon Initiative.

Regarding capacity-development, IOC-UNESCO partnered with the Scientific Committee on Oceanic Research (SCOR) and the Partnerships for Observation of the Global Ocean (POGO) to identify national capacity-development needs and promote the sharing of information across countries. A side event organized with UN-Oceans, the coordination mechanism involving all ocean-related UN agencies, provided an opportunity to discuss the future implementation of the SDGs. Finally, from a discovery angle, IOC-UNESCO launched a major initiative, 'Seabed 2030', to complete the mapping of the global ocean floor by 2030.

IOC-UNESCO honours countries and organizations for their contribution to global ocean science

With 364 ocean science researchers for every 1 million inhabitants, Norway has established itself as a global ocean science powerhouse. The Republic of the Seychelles has developed an innovative debt swap scheme to finance local ocean science and climate resilience programmes. It aims to increase protection for the country's coastal and marine biodiversity from less than 1 per cent to more than 30 per cent by 2020, and is setting up a Seychelles Conservation and Climate Adaptation Trust. These were among eight countries and organizations honoured by IOC-UNESCO on 6 June for their contribution to global ocean science. The other members of the 'Ocean's 8' were the United States of America, Argentina, Morocco, Portugal, the Nippon Foundation and the UN Environment Agency's #CleanSeas campaign.



IOC-UNESCO's Global Ocean Science Report assesses for the first time the status and trends in ocean science capacity around the world. The report offers a global record of who, how and where ocean science is conducted.

The mapping project is a collaboration between the Nippon Foundation and the General Bathymetric Chart of the Oceans (GEBCO), of which IOC-UNESCO is a parent organization.

The UN Ocean Conference came to its climax during the celebration of the World Oceans Day (WOD) on 8 June, giving IOC-UNESCO a perfect opportunity to launch the new United Nations central online portal for WOD. The portal was developed in partnership with the UN Division for Ocean Affairs and the Law of the Sea (UN/DOALOS) and the World Ocean Network. This global portal will provide ocean stakeholders with the opportunity to share their events and increase their visibility. WOD celebrations also saw the organization of the UNESCO Campus 'Save Our Ocean', which convened young people at UNESCO Headquarters to discuss with ocean experts and participate in a live exchange with the UN General Assembly in New York.

■ Another first, for the *Global Ocean Science Report*

World Oceans Day, 8 June, saw the launch by IOC-UNESCO of the first ever *Global Ocean Science Report (GOSR)* at a side event to the UN Ocean Conference. 'Building knowledge for sustainable development' was co-hosted by the governments of Norway, Maldives and Samoa.

The Report identifies and quantifies key elements of ocean science at the national, regional and global scales, including workforce, infrastructure and data. This first collective attempt to systematically highlight opportunities as well as capacity gaps to advance ocean science and technology is a resource for policy-makers, academics and other stakeholders seeking to harness the potential of ocean science to address global challenges.

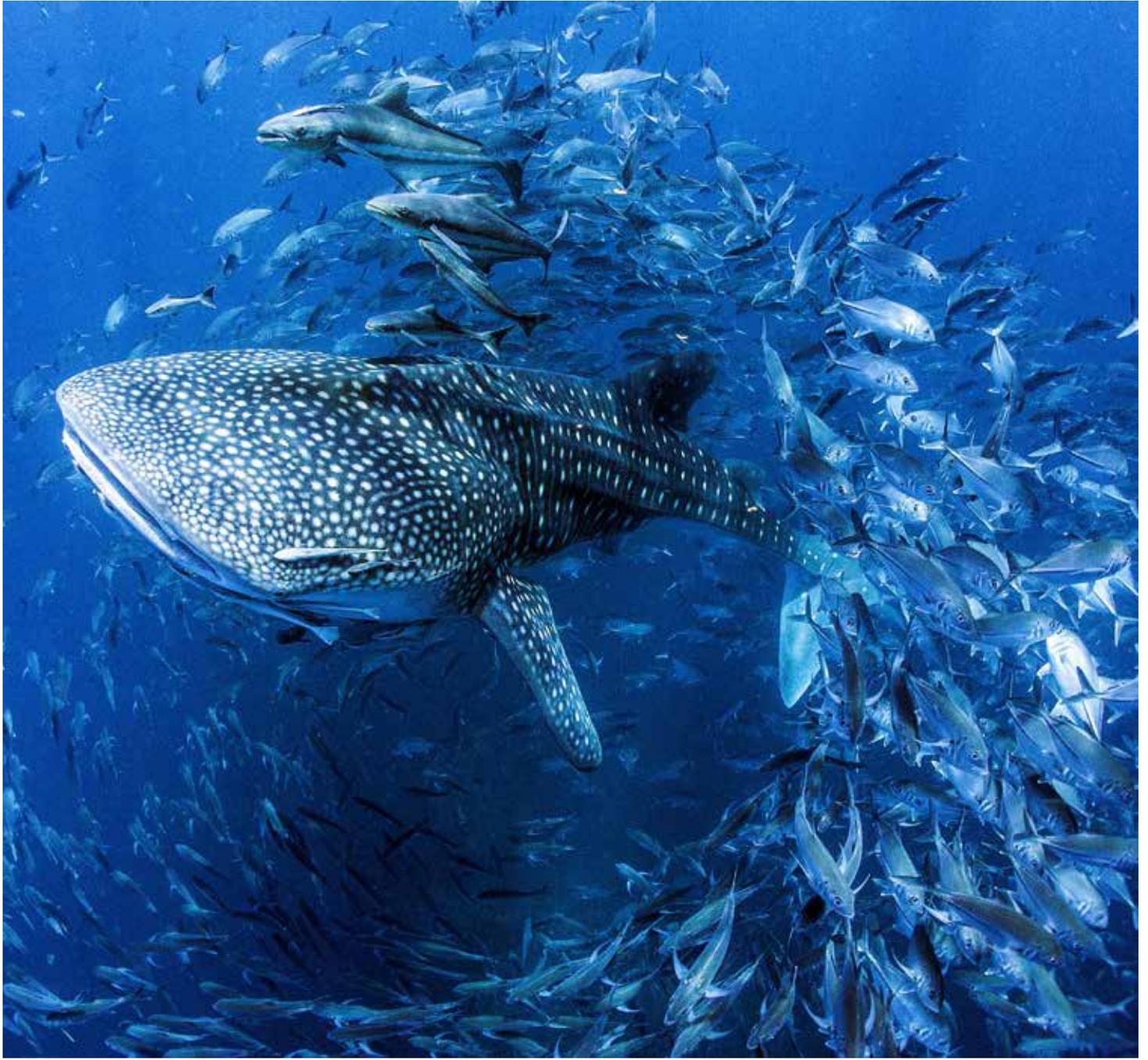
According to the *GOSR*, national spending on ocean sciences accounts for between 0.04 and 4 per cent of the total invested in research and development. More effort must be made if we are to achieve SDG 14. The *GOSR* also notes that ocean sciences are currently led by a small number of industrialized countries, and makes recommendations for how marine scientific capacities could be strengthened worldwide through international cooperation.

Selected from hundreds of entries, this striking picture of a whale shark captured off the coast of Thailand by UK photographer Dan Charity was the winner of the 2017 World Oceans Day's photo contest in the category of underwater life.

Member States mobilize for the 29th session of the IOC-UNESCO Assembly

IOC-UNESCO is the only UN body with an ocean science mandate, and is custodian agency for SDG targets 14.3 and 14.a on ocean acidification and marine research capacity. It also contributes to the science base across several other targets. Success in achieving SDG 14 also calls for increasing public awareness about the state of the ocean, which IOC-UNESCO works to accomplish by cultivating a culture of caring through ocean literacy activities, and more generally education for sustainable development through other UNESCO programmes.

The 148 Member States of IOC-UNESCO held the 29th session of its Assembly from 21 to 29 June at UNESCO Headquarters in Paris. They reviewed the work of the Commission, including the work of the Secretariat and the regional Sub-Commissions, and formulated a common work plan for the coming two years.





© UNESCO/Fundo Vale

The UNESCO Office in Brasília and the Vale Fund have been working for over two years to improve fishing sustainability and promote the inclusion of women and young people from traditional communities of the Brazilian Amazon coastal zone.

Sustainable fishing on the Amazon coast

Generally fishers in Brazil obtain low prices from intermediaries who resell the fish at high prices. In several coastal regions, stocks of fish and crustaceans are increasingly threatened by pollution, predatory practices and overfishing. The Sustainable Fishing on the Amazon Coast project seeks to improve sustainability and promote the inclusion of young people and women from traditional communities and peoples of the Brazilian Amazon.

A cooperation between the UNESCO Office in Brasília and the Vale Fund, with the participation of communities and local institutional partners in ten municipalities where almost 10,000 families live, the project began in January 2015 and was planned to last up to ten years. It works with 30 riverside and coastal communities in the states of Amapá, Pará and Maranhão, a region rich in coastal and marine biodiversity that is home to the world's largest continuous stretch of mangrove swamps. It looks to develop and apply low-cost social technologies such as septic tanks adapted to floodplain areas, community-based medicinal gardens and special traps for sustainable shrimp fishing in rivers.

The complementary 'Young Leaders for Sustainability' (YLS) initiative engages approximately 300 sons and daughters of fishers, aged from 15 to 29, in activities using art, education, communication and various participatory methodologies. Among the outcomes are a project to remove garbage from local beaches, and training in fishing legislation, good practices for the transport of fisheries and food processing, and resolution of socio-environmental conflicts.

■ Improving ocean literacy

Most of us live our lives unaware of how our day-to-day actions affect the health of the ocean, its sustainability and its many resources on which we depend. Ocean literacy is the understanding of our individual and collective impact on the ocean and its impact on our lives and well-being. More than a concept, it is a fundamental tool to enhance ocean knowledge, and encourage citizens and stakeholders to take an active role. Accurate and compelling ocean education is essential to combat ‘ocean blindness’.

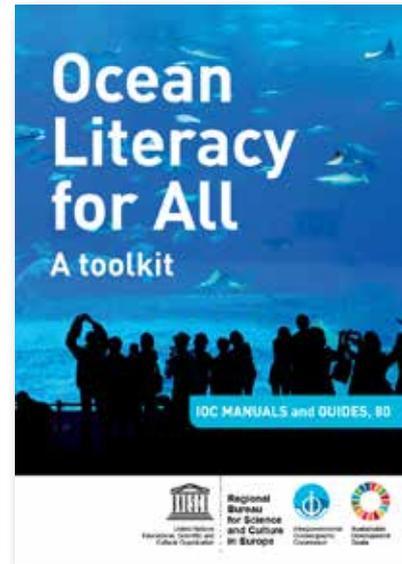
High-level world experts gathered on 4 and 5 December in Venice, Italy for an International Ocean Literacy Conference hosted by the UNESCO Regional Bureau for Science and Culture

in Europe with support from the Swedish Government. The aim was to define a roadmap to advance ocean literacy on a global scale. UNESCO released *Ocean Literacy for All: A toolkit*, to highlight experiences of promoting ocean literacy as a major tool for sustainable development in classrooms, boardrooms and governmental institutions. It builds on IOC-UNESCO’s ‘Ocean Literacy for All’ initiative which is also supported financially by the Kingdom of Sweden.

According to IOC-UNESCO’s Ocean Literacy for All: A toolkit, schools should develop ideal conditions so that the young and their teachers can reach higher levels of ocean knowledge and take an active role in the school community and in society at large. In this photo, schoolchildren visit the Osaka Aquarium Kaiyukan in Osaka, Japan.



© Shutterstock/Isarescheewin



The joint publication project Ocean Literacy for All: A toolkit by IOC-UNESCO and the UNESCO Office in Venice provides educators worldwide with innovative tools, methods and resources to understand the complex ocean processes and most pressing issues.

Highlighting the connection between underwater cultural heritage, ocean preservation and SDG 14

On 29 May, an ‘Exchange Day’ was organized for delegations participating in the Meeting of States Parties to the Convention on the Protection of the Underwater Cultural Heritage (2001), which focused on the relationship between underwater cultural heritage and the SDGs. This was one of a series of events organized by UNESCO in the lead up to World Oceans Day on 8 June, including an exclusive screening of a new film on the deep-sea Danton shipwreck, which was attended by about 700 people, a photo exhibition and reception to raise awareness about the Cuban Cervera Fleet shipwrecks, and the launch of a flyer on underwater cultural heritage and ocean preservation under SDG 14.

The new IOC-UNESCO brochure One Planet, One Ocean received a warm reception, including an offer from the German Maritime and Hydrographic Agency to print and distribute it among German policy-makers and the wider scientific community.



For the last decade, IOC-UNESCO has been instrumental in assisting countries to implement ecosystem-based management of the marine environment through its Marine Spatial Planning Programme. View of the programme's website.

■ Marine spatial planning

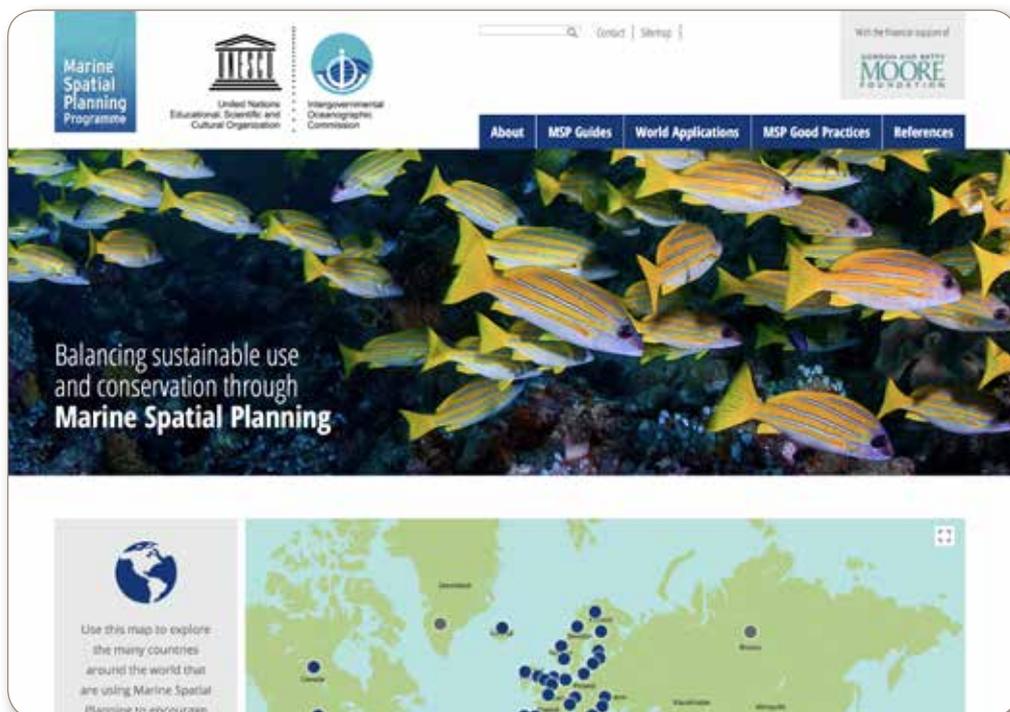
Since 2006, IOC-UNESCO has been assisting countries in implementing marine spatial plans (MSPs), which aim to coordinate decision-making and avoid intersectoral conflicts and resource overexploitation in coastal exclusive economic zones (areas within 200 nautical miles of the coast where states exercise sovereign rights). In these areas, traditional fishing and shipping can conflict with activities such as marine aggregates extraction, offshore aquaculture and renewable marine energy generation. MSPs today cover almost 10 per cent of these areas, but the objective is to triple this area by 2025. An International Conference on Marine Spatial Planning organized by

IOC-UNESCO and the Directorate-General for Maritime Affairs and Fisheries of the European Commission brought more than 350 experts from all over the world to UNESCO Headquarters from 15 to 17 March to discuss how to achieve this. Participants also joined a role-playing game, the MSP Challenge, in which they took the parts of environmental activists, industrialists and decision-makers.

UNESCO's long-standing work for the protection and conservation of ocean ecosystems now includes 49 Marine World Heritage sites in 37 countries – covering about 10 per cent of all existing marine protected areas – as well as its network of 212 Biosphere Reserves with marine, island and coastal areas in 74 countries.

■ CARIBE WAVE 17, the largest international tsunami drill in the world

Though rare, tsunamis are among the most devastating natural disasters. Since 2000 more than 11 million people have been affected and about 250,000 killed. IOC-UNESCO works to coordinate national and regional tsunami early warning services, raising global awareness about effective actions, policies and practices to reduce exposure to disaster risk through its four Tsunami Warning and Mitigation Systems for the Pacific, Indian Ocean, Caribbean, and North-Eastern Atlantic, Mediterranean and Connected Sea (NEAM) regions. It also helps Member States with education programmes and regular tsunami communication and evacuation exercises. In 2017 World Tsunami Awareness Day focused on celebrating efforts to reduce the number of affected people.





© UNESCO/COPECO

After Caribe WAVE 2017, Honduras held a second regional tsunami simulation exercise co-organized by IOC-UNESCO and the Honduran Permanent Contingency Commission (COPECO) in August, with the purpose of perfecting implementation of Tsunami Early Warning System (EWS) preparedness measures.

This year, over 740,000 people from 32 countries located from Bermuda to Brazil and across the entire Caribbean basin participated in the CARIBE WAVE 17 tsunami exercise held on 21 March under the coordination of IOC-UNESCO. As well as the tsunami warning and emergency network it involved schools, government agencies, colleges and universities, health care facilities and hotels. They received an alert through sirens, emails, emergency alert systems, text messages, media outlets, radio messages and social media. The events ranged from seminars and table-top exercises to full-scale evacuation. This level of participation makes the CARIBE WAVE exercise yet again the largest international tsunami drill in the world.

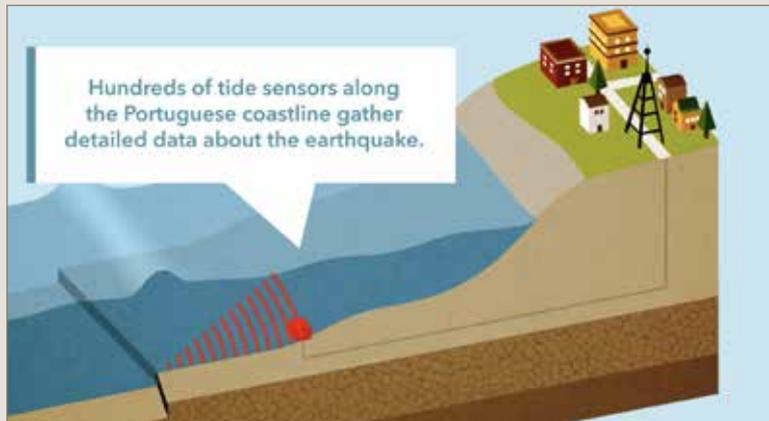
The latest scientific knowledge on projected sea level changes

The US East Coast is projected to experience some of the highest increases in sea level as a result of climate change, so New York City was an appropriate location for a week-long conference on 'Regional Sea Level Changes and Coastal Impacts' organized by the World Climate Research Programme (WCRP), its CLIVAR (Climate and Ocean: Variability, Predictability and Change) project and IOC-UNESCO. It attracted hundreds of scientists to Columbia University to provide 'a collective voice and expertise of the international sea level community to address existing challenges in describing and projecting regional and coastal sea level changes, and in quantifying intrinsic uncertainties'.

The next Intergovernmental Panel on Climate Change (IPCC) assessment (AR6) will give governments scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation. Participants were given its schedule, which includes a special report on the impact of 1.5°C of global warming (foreseen for late 2018) and an oceans and cryosphere special report (scheduled for late 2019).

Stories from the field

Selection of images from the YouTube promotional video on the new tsunami warning service provider in Portugal. The video was produced by the UN Office for Disaster Risk Reduction (UNISDR) with the support of IOC-UNESCO.



© UNISDR

Portugal

Portuguese coasts now guarded by new tsunami warning provider

Although most tsunamis happen in Asia and the Americas, parts of Europe are also exposed. The Portuguese coast is extensive, with more than 943 km of coastlines in continental Portugal and a further 667 km of coasts in the archipelagos of the Azores and 250 km in Madeira. Not all are at earthquake risk but many are located along the Africa-Eurasia plate boundary, which makes them very vulnerable to seismic activities. In 1755 an earthquake measuring 8.5 to 9 on the Richter scale killed more than 70,000 people and triggered tsunami waves up to 5–6 metres high in Lisbon, Portugal. Today an earthquake off the coast of south-west Portugal or Spain – thought probable by experts – would affect hundreds of thousands of people on the increasingly urbanized shores of the Iberian Peninsula. Portugal has now followed France, Turkey, Italy and Greece in the NEAM region and established its National Tsunami Warning Center. Housed at the Portuguese Institute for Sea and Atmosphere (IPMA) and coordinated by IOC-UNESCO, it uses hundreds of sensors and should be able to give people at risk 8 minutes warning to evacuate to safer areas. Fernando Carrilho, director of the IPMA, said, 'These sensors will send the information to the Portuguese authorities who will issue a tsunami message to communities and people at risk via messages and sirens.' This new Portuguese provider will considerably increase Europe's capacity to issue tsunami alerts to its citizens.

■ New frontiers for ocean science

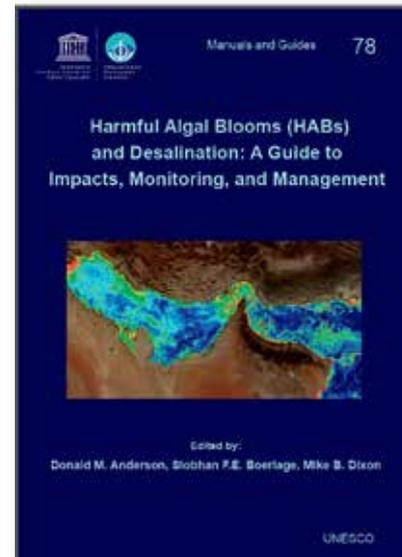
Oxygen is critical to the health of the ocean and of the planet. It affects the cycles of carbon, nitrogen and other key elements, and is a fundamental requirement for marine life from the seashore to the greatest depths of the ocean. However human activities are increasing deoxygenation in both the coastal and the open ocean. In 2016 IOC-UNESCO established the Global Ocean Oxygen Network (GO2NE), a working group seeking to provide a global and multidisciplinary view of deoxygenation, understand the full scale of the problem and offer science-based policy advice. GO2NE organized a side event at the UN Ocean Conference, and plans further events including expert workshops and a summer school. The Network is exploring possibilities for joint actions in the upcoming years with a group of experts on the Variability in the Oxycline and its Impacts on the Ecosystem (VOICE).

Absorption of carbon dioxide by the oceans leads to changing acidity levels: in the open ocean and coastal areas marine acidity has increased on average by about 26 per cent since the start of the Industrial Revolution. Among the effects are problems in building coral reefs and the shells of marine organisms. To tackle this issue, Target 14.3 of SDG 14 seeks to 'minimize and address the impacts of ocean acidification'. However, ocean acidification observation gaps exist in a lot of areas expected to be particularly vulnerable to changes in ocean acidity, such as the Coral Triangle in the Western Pacific and the Western Indian Ocean.

Absorption of carbon dioxide by the oceans leads to changing acidity levels. Among the effects are bleaching and productivity loss in coral reef builders, as with these foliose and staghorn corals which have begun to bleach on a reef in Sulawesi, Indonesia. To tackle this issue, Target 14.3 of SDG 14, for which IOC-UNESCO is the custodian agency, seeks to 'minimize and address the impacts of ocean acidification'.



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The new IOC-UNESCO Harmful Algal Blooms (HABs) and Desalination: A Guide to Impacts, Monitoring and Management is the first ever guidebook on the growing problem harmful algal blooms pose to seawater desalination plants.

New IOC-UNESCO guidebook on Harmful Algal Blooms and Desalination

The International Desalination Association World Congress in São Paulo, Brazil, on 16 October was the venue for the the launch of IOC-UNESCO's *Harmful Algal Blooms (HABs) and Desalination: A Guide to Impacts, Monitoring and Management*, the first ever guidebook on the growing problem harmful algal blooms pose to seawater desalination plants. Many arid countries are increasingly reliant on seawater desalination for drinking water. An emerging threat to this critical societal need is from HABs. Some HABs produce potent neurotoxins that can persist in treated water, threatening human health. Others restrict desalination plant operations by clogging intake filters, fouling surfaces and compromising membranes, and/or by producing taste, odour and skin-irritating compounds. Impacts can be severe, including that desalination plants have to cease operations for months. Experience is growing on how to best deal with HABs, but this information needs to be put into a form that desalination plant operators can understand and use in their day-to-day operational activities. The IOC-UNESCO guidebook is therefore aimed at helping the desalination industry tackle an issue that represents a potential threat both to human health and to the distribution of desalinated water on which an increasing number of arid countries rely for their freshwater needs.



© WESTPAC/DMCR, Thailand

Toxin-producing harmful algal blooms (HABs) constitute a serious threat to public health as well as to sustainable coastal and marine development. IOC-UNESCO has since 1992 provided training opportunities for Member States' institutions in monitoring and management of harmful algae. Algal bloom research in Phuket, Thailand.

These are places teeming with biodiversity, but where long-term observations and relevant experiments have not been carried out. The Global Ocean Acidification Observing Networks (GOA-ON), an IOC-UNESCO initiative with 412 members from 75 countries, supports the development of an ocean acidification coral reef observation network in the Western Pacific. This is one of many regional initiatives and research hubs developing to try to close existing ocean acidification knowledge and data gaps. Events such as the Western Indian Ocean Marine Science Association (WIOMSA) Ocean Acidification Workshop (24 and 25 October, Dar es Salaam, United Republic of Tanzania) bring together international experts to discuss how to improve knowledge on the impacts of reduced pH on the region's marine life.

■ Ocean observation

Today we need more than ever to observe the ocean, in order to predict the evolution of the climate and to plan its preservation for the well-being of generations to come. An Ocean Observers workshop, held in Brest, France on 13 and 14 June, brought together ocean scientists, educational authorities and teachers, marine communicators, the sailing community and other stakeholders to explore the possibilities for establishing new international collaborative activities. One key aim is to create a unique repository of educational materials, held by UNESCO and providing a freely available learning

Looking at new knowledge in West Africa

In the Canary Current Large Marine Ecosystem (CCLME) region, the CCLME Eco-GIS Viewer, which was introduced at a workshop in July and received its public launch in September, is a geographic information system (GIS) dynamic analytic tool which aims to create meaningful data products at regional scale, providing new scientific knowledge on the ocean and coastal areas of this Western African region. The workshop took place in the Centro Oceanográfico de Canarias of the Instituto Español de Oceanografía (IEO) in Santa Cruz de Tenerife, Spain on 11–13 July, with 25 participants from 14 organizations, including experts from Morocco, Mauritania, Senegal, the Gambia, Guinea, Cabo Verde, Kenya, France and Spain. It was part of the second phase of the 'Enhancing Oceanography Capacities on CCLME Western Africa Countries' project, funded by the Spanish Cooperation Agency for Development (AECID) and implemented by IOC-UNESCO in partnership with the IEO, which has also issued several reports on related topics.

platform for global ocean observations. This first Ocean Observers workshop was jointly organized by the Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology in-situ Observations Programme Support Centre (JCOMMOPS) and the European contribution to the Argo Program (EuroArgo ERIC) in collaboration with the Argo Project Office and IOC-UNESCO. The Second International Indian Ocean Expedition is providing exciting new scientific advances and transfer of knowledge and capacity in understanding Indian Ocean science, and also its role in global Earth ocean and climate cycles. The expedition is on track to extend into the next decade, both in activity and legacy.

New Guide for Designing and Implementing a Plan to Monitor Toxin-Producing Microalgae

Toxin-producing HABs constitute a serious threat to public health as well as sustainable coastal and marine development. Reports on the socio-economic impacts of HABs from many parts of the world are emerging in parallel with increased tourism, aquaculture exploitation and artisanal fisheries in many coastal and marine areas. In addition to their immediate use for protection of public health, the international seafood trade and natural resources, observations and time series on HAB occurrences and associated biotoxins are a valuable source of data to document and understand both natural and anthropogenic ecosystem change. IOC-UNESCO has since 1992 systematically facilitated international research and provided training opportunities for Member States' institutions in research, monitoring and management of harmful algae. This includes the publication of manuals and guides, and March saw the publication of IOC-UNESCO and the International Atomic Energy Agency's (IAEA) *Guide for Designing and Implementing a Plan to Monitor Toxin-Producing Microalgae* as part of an international programme to deal with HABs. This manual is intended as an introduction to basic analytical techniques that can be applied when designing a standard sampling protocol for microalgae and vectors of biotoxins (shellfish and fish). This standardization of methods will enable more robust data comparisons between countries and will yield improved risk assessments of potentially toxic harmful algal bloom events.



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Plastic for your supper?

An estimated 10–12 per cent of the global population rely on fisheries and aquaculture for their livelihood – but today, to eat seafood is also to eat plastic. Scientists recently calculated that an average shellfish consumer is eating up to 11,000 plastic fragments in their seafood each year. Plastic particles are also known to be present in other marine organisms including finfish. We still know very little about the impact on the marine organisms themselves of these plastic particles or the potential impact on human health from eating marine organisms containing plastic particles, and these questions are therefore the subject of many ongoing research projects.

In February the Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), whose members are nominated by nine UN Sponsoring Agencies including IOC-UNESCO, published *Sources, Fate and Effects of Microplastics in the Marine Environment: Part 2 of a Global Assessment*, which confirmed that microplastic contamination has been recorded in tens of thousands of organisms and more than 100 species. GESAMP's Working Group 40 on Sources, Fate and Effects of plastics and micro-plastics in the marine environment also identified regional 'hot-spots' of microplastic sources, distribution and accumulation zones. IOC-UNESCO is lead agency on Working Group 40 with UN Environment.

Microplastic contamination has been recorded in tens of thousands of organisms and more than 100 species, according to a report published in February by the Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), whose members are nominated by IOC-UNESCO and eight other UN Sponsoring Agencies.



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Building partnerships and strengthening frameworks

In Cape Town, South Africa on 27 and 28 November more than 130 people from 40 countries, representing UN agencies, international organizations, the private sector, NGOs and national governments around the world, met to discuss ‘Building international partnerships to enhance science-based ecosystem approaches in support of regional ocean governance’. The aim was to strengthen collaboration within the existing frameworks for regional management of ocean and coastal resources: Large Marine Ecosystem (LME) programmes, Regional Seas programmes and Regional Fisheries programmes. It was part of the LME:LEARN Project, funded by the Global Environment Facility (GEF), implemented by the UN Development Programme (UNDP), managed by IOC-UNESCO, and ran in parallel to the second leg of the Volvo Ocean Race.

■ Racing to learn more about our oceans

The seven teams competing in the 2017–18 Volvo Ocean Race set sail in November 2017, and should finish in mid-2018. In their 45,000 nautical mile journey they will not just race each other, they should also add considerably to our knowledge of the oceans.

All of the boats send 36 pieces of data on temperature, barometric pressure, wind strength and direction every 10 seconds to Race Control at Volvo’s Headquarters in Alicante, Spain, which passes it on to NOAA and the European Centre for Medium Range Weather Forecasts. It should contribute to more accurate weather forecasts and climate models. During the most isolated legs the boats will launch their scientific-drifter buoys, floating sensors that will

By completing a 128,000 km journey across the five ocean basins, the Challenger Glider Mission is the first science expedition to circle the entire globe. Launched on 5 November 2016, it reached its first recovery point off the Sri Lanka coast on 27 September 2017, and provided an unprecedented wealth of undersea data.

drift with ocean currents and transmit data on surface pressure, temperature and ocean currents through a global satellite network. Some boats also carry groundbreaking instruments to test salinity, partial pressure of carbon dioxide, dissolved carbon dioxide and Chlorophyll-a (algae), and to check on concentrations of microplastics.

Volvo Cars and a scientific consortium including NOAA (the US National Oceanic and Atmospheric Administration), JCOMMOPS, GEOMAR and SubCtech, planned a science programme focused on improving meteorological data and learning more about microplastics in the ocean.

■ Developing guidance for use of the high seas

On 24 December 2017, after ten years of working group and preparatory committee meetings, the UN General Assembly decided to begin elaboration of a new legally binding instrument under the UN Convention on the Law of the Sea (UNCLOS), on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ) – also known as the ‘high seas’. The topics to be covered include marine genetic resources (MGRs) and benefit-sharing; area-based management tools, including marine protected areas (MPAs); environmental impact assessments (EIAs), capacity-building and the transfer of marine technology. IOC-UNESCO has been actively involved in the BBNJ process in accordance with its mandate in areas related to marine scientific research, capacity development and transfer of marine technology, as well as data and information management.

From 7 to 9 March, in preparation for the third Preparatory Committee meeting on BBNJ (27 March to 8 April, New York), IOC-UNESCO organized a workshop attended by 100 representatives of 35 SIDS, together with scientists, UN and European Union officials. Part of the workshop took place at the IOC-UNESCO Project Office for International Oceanographic Data and Information Exchange (IODE) in Oostende, Belgium, a global capacity-building hub which hosts the Ocean Biogeographic Information System (OBIS), the world’s largest global

database on marine biodiversity. The emphasis of the workshop was on capacity-building and transfer of marine technology (CB/TMT), a subject at the heart of the BBNJ negotiations.

The 72nd session of the UN General Assembly recognized the contribution of OBIS to marine scientific research. OBIS currently provides seamless access to over 50 million observations of 120,000 marine species, integrated from over 2,000 databases worldwide. It provides equitable open access to data and benefits to research and enhances

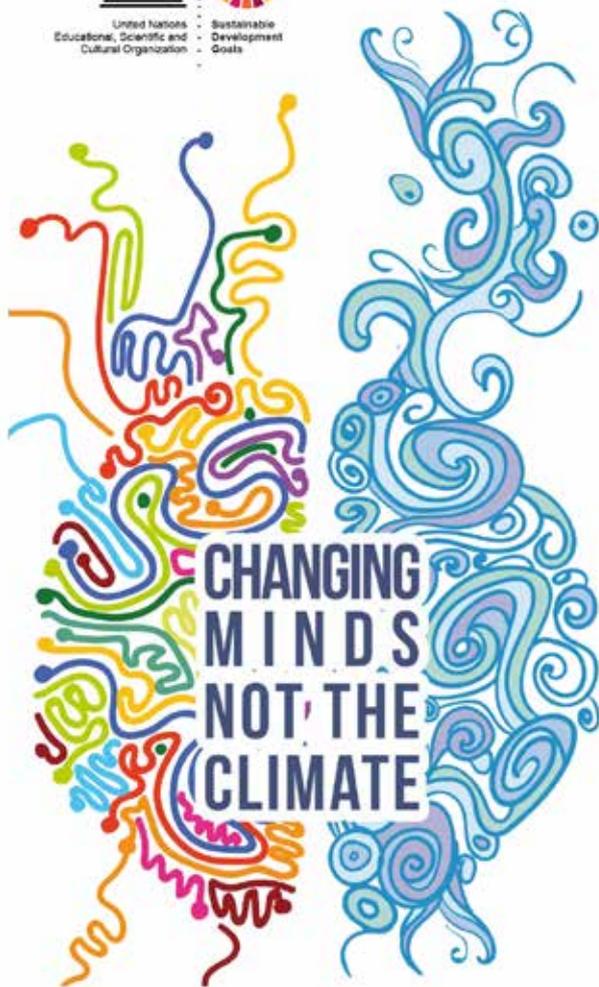
international collaboration. Based on an analysis of publications recorded in Web of Science, 2,700 scientists from 75 countries collaborated in 590 research papers citing OBIS. Over 100 new studies were published in 2017.

Through OBIS, IOC-UNESCO provides baseline information on marine biodiversity, supporting global assessments such as the UN World Ocean Assessment and those undertaken by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).



© NOAA Okeanos Explorer Program

The 72nd session of the UN General Assembly recognized the contribution of the Ocean Biogeographic Information System (OBIS) to marine scientific research. Hosted at the IOC-UNESCO Project Office for International Oceanographic Data and Information Exchange (IODE) in Oostende, Belgium, OBIS currently provides seamless access to over 50 million observations of 120,000 marine species, integrated from over 2,000 databases worldwide.



UNESCO's communication material for COP23.

■ UNESCO's presence at COP23

A key event of the year was COP23, the 23rd annual Conference of the Parties to the 1992 United Nations Framework Convention on Climate Change (UNFCCC). It was the first COP to be hosted by a small island developing state, since Fiji took up the presidency, but it was held in Bonn, Germany, from 6 to 17 November. Two years after the 2015 Paris Agreement, COP23 focused on continuing negotiations on the implementation of the agreement from 2020 onwards.

The UNESCO pavilion provided a space for experts, civil society representatives and UNESCO specialists to collectively address climate change during a series of thematic days: 7 November was designated Indigenous Peoples Day, 10 November Water Action Day, 11 November Ocean Action Day, 13 November focused on the Impact of Climate Change in Africa, and 14 November was shared between Disaster Risk Reduction and the UNESCO Action Plan for SIDS. On 15 November sessions explored how UNESCO designated sites (World Heritage sites, Biosphere Reserves and UNESCO Global Geoparks)

can help in implementing innovative ways of dealing with climate change at national and local levels. As climate change observatories, many UNESCO-designated sites contribute to mitigation solutions including by promoting green economies and the sustainable use of renewable energy sources. Experts shared their vision on how to upscale good practices of climate change adaptation through these networks. The theme for 16 November was education, and events included a high-level debate (co-organized with Fiji and UNFCCC) on 'Education and global partnerships working to combat climate change' and discussions on school climate readiness, teacher education for climate change, youth leadership, and greening technical and vocational education and training.

On 11 November, Oceans Action Day, IOC-UNESCO joined over a dozen scientific institutions, international and civil society organizations, and governments to highlight ongoing actions on the ground and lessons learned, best practices and recommendations for replication and upscaling, with an emphasis on SIDS. IOC-UNESCO co-organized two of the seven parallel sessions, on 'Science and oceans: IPCC report and other developments' (with the Ocean and Climate Platform) and 'Blue carbon and nationally determined contributions (NDCs): where and how' (with IUCN and Conservation International). It also co-moderated a panel side event by UN-Oceans with the IAEA, which sought to address climate-related stressors on the ocean through improved scientific capacity, carbon dioxide mitigation strategies and innovative adaptation approaches.

A joint ocean and climate initiative

It has become clear since COP21 in Paris that international organizations and national governments must join with civil society and private sector stakeholders to ensure effective and timely action on the oceans and climate. In February the Ocean and Climate Initiatives Alliance (OCIA), a coalition of 70 non-governmental organizations, supported by the Ocean and Climate Platform and IOC-UNESCO, was launched at UNESCO Headquarters. In another side event at COP23, the first OCIA *Report of Progress on Ocean and Climate Action*, emphasizing key findings and suggesting OCIA's future role, was presented. The round-table discussion highlighted the results generated from the strong cooperation between scientific researchers and NGOs working on ocean and climate issues, and called for a common framework of action to implement the Paris Agreement and the 2030 Agenda.

Throughout the week the ocean community insistently called for more science-based actions. On 16 November host country Fiji launched the Ocean Pathway Partnership. It proposes to enhance funding opportunities to support

ocean health and the maintenance of critical ocean ecosystems, and encourages the insertion of ocean-based action into countries' Nationally Determined Contributions to the Paris Agreement. On 13 November, the UNESCO Africa

Department organized the second edition of the round table 'Climate Change: What is the impact for Africa?' under the Flagship Programme 4 of the Operational Strategy for Priority Africa, following a first successful edition at COP22 in Marrakech (Morocco).



The Pacific is one of the most vulnerable regions in the world to the adverse impacts of climate change. Towards Climate Change Resilience: Minimising loss and damage in Pacific SIDS communities, published in 2017 by the UNESCO Office in Apia, collects information on the loss and damage affecting agriculture and tourism at community level in five Pacific SIDS: Cook Islands, Fiji, Samoa, Timor-Leste and Solomon Islands, portrayed in this photo.

UNESCO's Declaration of ethical principles in relation to climate change adopted

UNESCO is asserting that at its core, climate change is an ethical issue. In a broad consensus, the Organization's 195 Member States adopted a global Declaration of ethical principles in relation to climate change during the 39th Session of its General Conference this year.

The process leading to the Declaration was initiated in 2008, when the World Commission on the Ethics of Scientific Knowledge and Technology (COMEST), a global advisory body of experts, started to frame the issues and urge policy responses.

This Declaration aims to help governments, businesses and civil society mobilize people around shared values on climate change, designed to prevent unacceptable damage and injustice. It also says that 'Decision-making based on science is critically important for meeting the mitigation and adaptation challenges of a rapidly changing climate. Decisions should be based on the best available knowledge from the natural and social sciences.'

A few days earlier, at COP23, UNESCO organized an international panel on the Declaration to discuss the role of ethics in understanding and formulating responses to climate change.

This side-event brought together high-level international scientists, representing various actors (CNRS, NGOs and academics) to discuss mitigation and adaptation initiatives and measures to address the impacts of climate change in Africa. The panellists raised key issues of particular relevance in Africa, such as gender, biosphere reserves, island states, water, energy and desertification.

In light of climate change impacts that are causing catastrophic damage, UNESCO organized on 14 November a SIDS Action Day to bring together experts, policy-makers, government officials, civil society and community representatives to engage in a transdisciplinary dialogue about SIDS and climate change impacts, mitigation and adaptation.

On this occasion, UNESCO was joined by the University of the South Pacific's Pacific Centre for Environment and Sustainable Development (USP PACE-SD) and launched materials sharing outcomes of the project 'Towards Climate Change Resilience: Minimising loss and damage in Pacific SIDS communities'. This project aimed to generate and share new knowledge and raise awareness on loss and damage caused by the adverse impacts of climate change in five Pacific SIDS: the Cook Islands, Fiji, Samoa, Solomon Islands and Timor-Leste. This pilot project developed and tested tools and approaches to better understand loss and damage at the community level, identified challenges in coping and adaptation, and made recommendations for follow-on interventions.

On 12 December, newly elected Director-General of UNESCO Audrey Azoulay joined world leaders at the One Planet Summit organized by the United Nations and the World Bank, at the initiative of the French Government in Paris. UNESCO tweet to raise awareness on this day.

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Retreating glaciers in the Andes

The Andes is the longest mountain chain in the world, extending across Venezuela, Colombia, Ecuador, Peru, Bolivia, Chile and Argentina. More than 40 per cent of South America's total population – over 160 million people – live in these countries. Part of the snow that falls on the Andes turns to ice in glaciers. Several Andean valleys suffer from drought, and they need meltwater from the glaciers to maintain a relatively constant water flow throughout the year. However climate change, especially temperature increases, has led to a rapid retreat of the glaciers in all the countries of the Andean region. The problem has grown worse since 1990, and is predicted to worsen further during the 21st century. The likely higher temperatures and much greater interannual variability will affect environmental services, biodiversity and socio-economic activity.

A project on 'Impact of the Glacial Retreat in the Andes: International Multidisciplinary Network for Adaptation Strategies' was started in 2012, with the aim to establish an international multidisciplinary network to improve adaptation to climate change through improved understanding of vulnerabilities, opportunities and adaptation potentials. It was organized by the UNESCO International Hydrological Programme together with IANIGLA (Instituto Argentino de Nivología, Glaciología y Ciencias Ambientales) with the support of the Government of Flanders, and its Final Synthesis Meeting was held at the IANIGLA Institute, Mendoza, Argentina from 23 to 25 August. Outstanding national and international professionals in the area of snow and glacier management presented the project results and discussed challenges and future opportunities in relation to the glacier retreat.

In August 2017, experts analysed the impact of the glacier retreat in the Andes during the final synthesis meeting of the project 'Impact of Glacial Retreat in the Andes: International Multidisciplinary Network for Adaptation Strategies' co-organized by UNESCO's International Hydrological Programme in Mendoza, Argentina. View of the Quelccaya Ice Cap in the Peruvian Andes, which has lost 20 per cent of its area since 1978.



The SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East) Centre in Allan, Jordan, was officially opened by His Majesty King Abdullah II on 16 May. SESAME is the fruit of UNESCO's action in 1999 to set up an international body to make preparations for the establishment of a synchrotron light source in the Middle East following the need for this expressed by scientists in the region.

Today, SESAME is a fully independent intergovernmental organization and a beacon of science diplomacy, as the project brings together representatives of Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestine and Turkey. SESAME is also designed to help stem the brain-drain and to attract many of the region's brightest young talents to pursue higher education in the sciences and contribute to the development of a knowledge-based economy.

A close-up photograph of a complex scientific instrument, likely a particle detector or accelerator component. The device is primarily yellow with metallic parts. It features several large, cylindrical coils with copper windings, various colored cables (orange, green, red, white), and a central metallic chamber. The background is a yellow perforated metal grid.

CHAPTER 7

**Science for
a sustainable
future**

Science for a sustainable future

In a world of rapid technological change, beset by violent conflicts and disasters, science has an essential role to play, and it is equally essential that this role should be understood, discussed and set within ethical limits. UNESCO is working to ensure that scientific endeavours focus on the issues that most concern humanity, especially those who are disadvantaged, such as water security, and ways to predict and respond effectively when natural hazards strike. It is also concerned to ensure that women and minorities have access to scientific careers, and that traditional forms of knowledge are appreciated and respected along with cutting-edge technology. With UNESCO's help and support, science in its widest sense can be harnessed to help achieve the Sustainable Development Goals and promote a worldwide culture of peace.

■ Building bridges through a network of scientists

The 2030 Agenda for Sustainable Development offers an immense opportunity to reconnect science to society and to build a new basis for research and development. In this context, the 172 UNESCO Chairs and

UNITWIN Networks that specialize in science have an important role to play as bridge-builders between the scientific community, decision-makers and society.

Members of this network met for its first conference in Geneva from 5 to 7 July. The event was organized by UNESCO with the support of the Swiss Federal Department of Foreign Affairs, in

collaboration with Université de Genève, CERN and École Polytechnique Fédérale de Lausanne. The aim was to unite Chairs' efforts to contribute to the 2030 Agenda.

The participants agreed the 'Geneva Milestone', an outcome document to improve cooperation between Chairs, UNESCO and the United Nations System. At the heart of this endeavour are the five Cs: Concern about the great challenges facing our world today, their Commitment to engage for the 2030 Agenda and to Connect to networks, and to Cooperate with the Confidence that science will make a difference to promote peace in the minds of all people.

■ Advancing knowledge through the basic sciences

The SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East) Centre in Jordan was officially opened by His Majesty King Abdullah II on 16 May in front of an audience of about 300, including high-level officials from the SESAME Members and Observers, ambassadors,



Sharing an important role as bridge-builders between the scientific community, decision-makers and society, the 172 UNESCO Chairs and UNITWIN Networks that specialize in science met for the First Conference of UNESCO Chairs in Natural Sciences in Geneva, Switzerland, from 5 to 7 July. In this photo, Assistant Director-General Flavia Schlegel on day one of the conference.

© UNESCO



Egyptian physicist Gihan Kamel, 41, an infrared beamline scientist working in SESAME's infrared beam lab says she hopes this newly inaugurated centre will open doors for women in science. The centre will enable female graduate students and doctoral candidates to conduct their research in the region.

members of SESAME's advisory committees, the directors of numerous synchrotron radiation facilities, scientists and then Director-General of UNESCO, Irina Bokova, as well as the Directors-General of the IAEA and CERN, the EC Commissioner for Research, Science and Innovation and H.R.H. Princess Sumaya bint El Hassan.

SESAME is the fruit of UNESCO's action in 1999 to set up an international body to make preparations for the establishment of a synchrotron light source in the Middle East following the need for this expressed by scientists in

the region; it is now a fully independent intergovernmental organization. It is a beacon of science diplomacy, with partners from across the globe leaving their differences aside to share knowledge and resources. It will be open to all scientists of the world, although it will primarily serve scientists from its Members: Cyprus, Egypt, the Islamic Republic of Iran, Israel, Jordan, Pakistan, Palestine and Turkey. The facility is expected to boost research and scientific cooperation in the Middle East and neighbouring countries across inter-regional divides.

Honouring graduates in Trieste

Abdus Salam, Nobel Laureate in Physics and founder of the International Centre for Theoretical Physics (ICTP), wanted to create a research home away from home for developing-country scientists, as well as a resource base and training centre. The Spirit of Salam Award Ceremony on 28 August honoured both his legacy and the 201 graduates from the ICTP Postgraduate Diploma programme. The programme helps fill in any past gaps in students' education, exposes them to many different subfields, and prepares them to apply to PhD programmes. Four of the 34 graduating students received special acknowledgement for coming top of their programmes, and each one has been accepted onto a prestigious PhD programme outside their home country.

Ensuring refugees are not lost to science

Many scientists who become refugees experience unemployment, or take low-skilled, temporary or low-paying jobs, so their skills are significantly underutilized. If this situation continues, their chances of returning to professional careers fall dramatically. A bold set of recommendations advises science organizations, universities and policy-makers to make wider and more extensive efforts to identify research professionals in refugee populations, and help them to resume their work in their host countries.

The recommendations stem from a workshop held in Trieste, Italy in May and co-organized by the World Academy of Sciences for the advancement of science in developing countries (TWAS, a UNESCO programme), the Italian National Institute of Oceanography and Experimental Geophysics (OGS) and the Euro-Mediterranean University (EMUNI, Piran, Slovenia). The week-long high-level meeting attracted more than 50 participants from 12 nations, including policy-makers, representatives of scientific and educational institutions and refugee agencies, and current or former refugee scientists. It focused on refugees from Syria, Yemen, Iraq, Afghanistan and Libya.

Some excellent policies and programmes exist, and some refugee scientists are making a successful transition, but in other cases the only programmes are scattered and fragmented. There is no mechanism for taking the lessons learned from one policy or programme and making them available more broadly. At the same time, scientists who are refugees or at risk of displacement can improve their chances of success in a new country by, for instance, keeping digital copies of their degrees and other records in the Cloud, and beginning as soon as possible to seek connections in their host country's science community. A holistic, long-term approach is essential, participants concluded.

dream and a vision shared by a few pioneers, who met some 20 years ago, at UNESCO Headquarters, to launch this project,' said Irina Bokova at the opening ceremony.

SESAME is a particle accelerator-based facility, which uses electromagnetic radiation emitted by circulating electron beams to study a range of properties of matter. The extraordinary power of synchrotron light has made it an essential tool for studying matter on scales ranging from biological cells to atoms, using radiation on a spectrum from infrared to X-rays. SESAME's experimental stations, or beamlines, are designed to produce light with a range of characteristics suited for different types of investigation. Three will be operational in 2018 and a fourth in 2019.

Several hundred scientists, working in the biological, medical, physical and environmental sciences, and in archaeology are expected to use the facility. Among the subjects likely to be studied in early experiments are pollution in the Jordan River valley with a view to improving public health in the area, studies aimed at identifying new drugs for cancer therapy, and cultural heritage studies ranging from bioarchaeology – the study of our ancestors – to investigations of ancient manuscripts.

UNESCO played a crucial role in the establishment and development of SESAME. Germany donated the BESSY I machine thanks to which the project started, the Members (Israel, Jordan and Turkey), the European Union, the IAEA and Italy provided substantial funding, and international laboratories and synchrotron light sources elsewhere, such as CERN, ALBA, Elettra, ESRF, PSI or Soleil, have provided invaluable help in the form of expertise, equipment or training opportunities.

Thousands of scientists and engineers have fled conflict zones in recent years, seeking safety. Their journey and their struggle are the focus of the new documentary film Science in Exile, directed by Italian filmmaker Nicole Leghissa in cooperation with UNESCO's The World Academy of Sciences (TWAS) and premiered at the 2017 World Science Forum in Jordan in November.

It is also designed to help stem the brain-drain and to attract many of the region's brightest young talents to pursue higher education in the sciences and contribute to the development of a knowledge-based economy. 'The opening of SESAME is the result of a lot of work, a lot of patience, but, above all, it is the result of a



■ Science for peace

The World Science Forum (WSF) 2017 took the theme of 'Science for Peace'. It brought together more than 1,000 delegates from 120 countries, encouraging scientists to build links with industry and policy-makers. Delegates met in Jordan from 7 to 10 November for plenary sessions, short seminars and individual lectures to discuss critical global issues and the potential of science to address them.

The 2017 Forum had a strong focus on the role of science, business and the innovation ecosystem in bringing about the SDGs, with sessions focusing on 'Opportunities and challenges of digital transformation' and 'Building resilience in an interconnected world'. Broader social issues took their place in 'Promoting inclusion through science education, outreach and engagement' and 'Rebuilding broken societies through reconstruction and recovery'.

© CTBTO/Sameer Karam



Theoretical physicist Dr Michio Kaku from the City University of New York and 'Pepper', a humanoid robot able to perceive emotions, lightened up the opening session of the 2017 World Science Forum (WSF), held in Jordan. The WSF is a unique global platform for fruitful dialogue on new emerging issues affecting science, policy and society, co-organized every two years by UNESCO and hosted this year by the Royal Scientific Society of Jordan.



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The concluding Science for Peace Declaration is a global call for action to strengthen the ties between science and society, reflecting on 'the role of science in building a future that promises greater equality, security and opportunity for all, and in which science plays an increasingly prominent role as an enabler of fair and sustainable development'.

Five short-listed teams of students – whittled down from 365 entries – spent a week at the Airbus ProtoSpace facility in Toulouse, France in May to visualize, prototype and test their ideas for the Airbus Fly Your Ideas 2017 competition, organized in partnership with UNESCO. Team DAELed from the University of Hong Kong won for their design for a private stowage compartment underneath passengers' feet.

Staff of the Namibia University of Science and Technology demonstrating an experiment to learners at the Goethe Institut in Windhoek for Science Week in November. Namibian events included a science quiz, experiments, looking at the Sun Solar telescope, and learning about Namibian birds.



© NIJST

In 2017, GO-SPIN published the sixth volume in its series of national profiles of STI policy, covering Guatemala – the first to focus on a Latin American country.



GO-SPIN continues to rotate

Many countries lack accurate information, adequate indicators and capacities to analyse and monitor policies and instruments in science. The Global Observatory of Science, Technology and Innovation Policy Instruments (GO-SPIN) aims to fill this gap by providing key information on science, technology and innovation (STI) governing bodies, legal frameworks and policy instruments, and producing a long-term series of indicators for evidence-based policy analysis, design and foresight studies. Member States were shown its progress on 7 November in a side event to UNESCO's General Conference, including the GO-SPIN online platform, which will be launched publicly in April 2018, with information on more than 50 countries in Latin America, Africa, the Arab States and Asia.

■ Improving water security for better lives

Lagos, Nigeria generates 1.5 million m³ of wastewater every day, most of which ends up untreated in the Lagos Lagoon. Pollution from pathogens in human and animal excreta affects almost one-third of rivers in Latin America, Asia and Africa, and 842,000 deaths in low and middle-income countries were linked to contaminated water and inadequate sanitation services in 2012. The lack of treatment also contributes to the spread of tropical diseases such as dengue and cholera. An estimated 245,000 km² of marine ecosystems – roughly the size of the United Kingdom – are currently affected by eutrophication, which is caused by pollutants and negatively affects marine ecosystems. These are just some of the problems that inadequately treated wastewater can cause: and we have yet to fully understand the impact of newer types of pollutant such as hormones, antibiotics, steroids and endocrine disruptors.

As well as the discharge of contaminated water being deleterious for the environment and public health, this is a waste of what could be a precious resource, in a world where freshwater is becoming ever more scarce.

The UN World Water Development Report, which gives updates on the state of the world's freshwater resources, focused this year on *Wastewater: The Untapped Resource*. The report argues that we need a paradigm shift, from viewing domestic, agricultural and industrial wastewater as a costly problem to seeing it as invaluable in meeting the growing demand for freshwater and other raw materials.

SDG 6 on water and sanitation calls for a halving of the proportion of untreated wastewater and an increase in safe water reuse by 2030. 'Raising social acceptance of the use of wastewater is essential to moving forward', argues then UNESCO Director-General Irina Bokova in her foreword to the Report.

The Report was launched on World Water Day, 22 March, in Durban, hosted by the Government of South Africa. The UN World Water Assessment Programme (WWAP) took the lead in developing the programme of the Day in partnership with UN-Water and the four lead agencies, UNEP, UN-HABITAT, UNU and WHO. There were about 1,000 participants, and supporting events were held in more than 20 cities worldwide.

World Water Day also saw the Second International Forum for 'Water Unites Us' in Quito, organized by the Water Secretariat of Ecuador (SENAGUA) with UN and other partners. The Government of Peru and SENAGUA signed a specific agreement for the development of the binational Puyango-Tumbes irrigation project, which includes the construction of a dam in the Peruvian city of Linda Chara so that 22,000 hectares of land in Ecuador and 19,500 hectares in Peru can be irrigated.

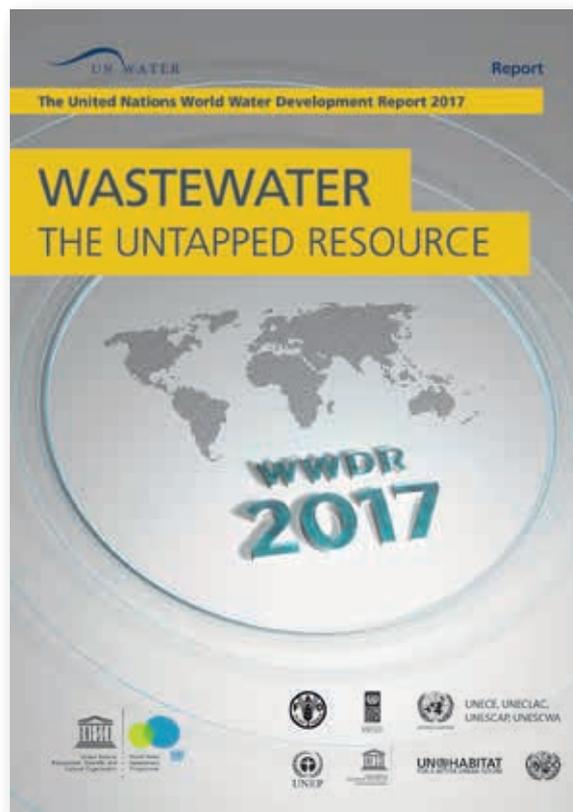
The Water Information Network System (IHP-WINS), an open access interactive database that will have continuous updates, aims to become a global reference on the water cycle. It allows users to create tailor-made maps incorporating information about arid zones, rainfall, transboundary water basins and irrigation. Developed after a resolution adopted by UNESCO's

International Hydrological Programme (IHP) Intergovernmental Council in June 2016 to help Member States implement SDG 6 on access to water and sanitation, it was launched on 31 January.

IHP populates the database with officially validated information provided by Member States and by UNESCO's water programmes and networks, comprising over 1,500 water professionals worldwide. WINS also draws on data from global sources such as AQUASTAT, the WHO/UNICEF joint monitoring programme, UNSTAT, and other key UNESCO programmes concerned with water-related issues, notably World Heritage, Biosphere Reserves and UNESCO Global Geoparks. Users will be able to visualize and generate tailor-made products, exchange data and create interdisciplinary networks.

UNESCO implements the IHP, the intergovernmental programme of the UN system dedicated to research, education and capacity-building in hydrology. It is now in its eighth phase (2014–21), which has as its central theme 'Water security: responses to local, regional and global challenges'. Water security is defined as 'the capacity of a population to safeguard access to adequate quantities of water of acceptable quality for sustaining human and ecosystem health on a watershed basis, and to ensure efficient protection of life and property against water related hazards – floods, landslides, land subsidence and droughts'.

Water is a particularly pressing issue for all Pacific small island developing states (SIDS), where problems include droughts, demographic pressures, and increasing demands related to economic development and urbanization.



The UN World Water Development Report, which gives updates on the state of the world's freshwater resources, focused this year on Wastewater: The Untapped Resource. The report argues that we need a paradigm shift, from viewing domestic, agricultural and industrial wastewater as a costly problem to seeing it as invaluable in meeting the growing demand for freshwater and other raw materials.

Theatrical wastewater in Ulaanbaatar

The launch of *Wastewater: The Untapped Resource* in Mongolia was complemented by a conference for students at the Mongolian State University of Education, which organized it in cooperation with the UNESCO Office in Beijing, the National Commission for UNESCO and the Ministry of Environment and Tourism. Student presentations on wastewater issues were accompanied by a competition for theatrical performances and artworks.

According to the 2017 World Water Development Report, concerted efforts are needed urgently to minimize further contamination of water resources in Lagos, Nigeria, where 1.5 million m³ of wastewater is generated every day, most of which ends up untreated in the Lagos Lagoon.



The UNESCO Conference on Water Security in the Pacific Small Islands Developing States (SIDS): Bringing UNESCO's International Hydrological Programme (IHP) to the Pacific, hosted by Fiji's Ministry of Infrastructure and Transport on 23 and 24 October, provided an opportunity to identify key water quality challenges in the Pacific SIDS and identify IHP's potential support, with particular reference to climate change and disaster resilience. More than 40 participants from 14 Pacific Island Countries and Territories, and representatives from the UNESCO International Centre for Water Security and Sustainable Management, a research and education institute based in the Republic of Korea, participated in this high-level technical meeting.

■ Knowing what to do when an earthquake strikes

Natural hazards may seem beyond our control, but much can be done to anticipate and prepare for them, and to plan for how to respond to and recover from disasters. This is one of the core areas of work for UNESCO.

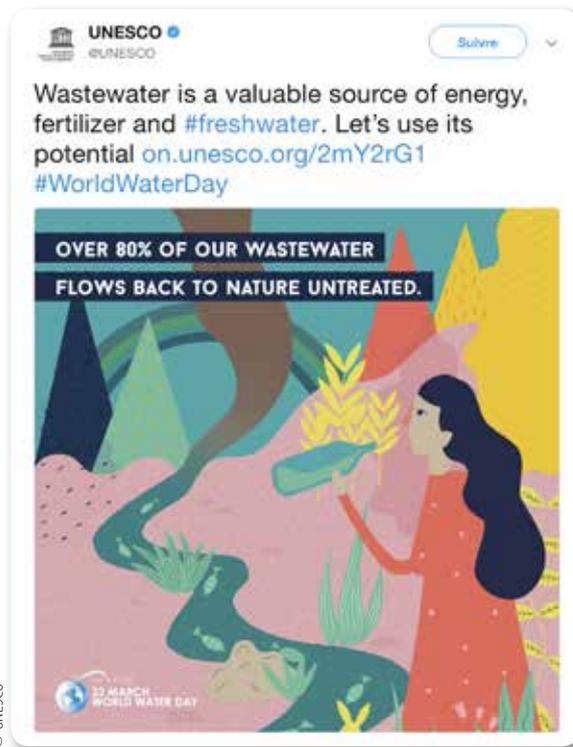
By simulating earthquake situations in schools and communities, the International Institute of Earthquake Engineering and Seismology (IIEES) based in the Islamic Republic of Iran aims to increase disaster risk reduction awareness and preparedness throughout its earthquake-prone region. It started annual earthquake drills in schools in the Islamic Republic of Iran nearly two decades ago, and has since extended them to include local people, who use the school as the base for local disaster management.

UNESCO has helped to extend the practice to Afghanistan and Pakistan, and from 28 April to 4 May a team of experts from IIEES supported the Afghanistan National Disaster Management Authority (ANDMA) in carrying out the country's first school-based earthquake and safety drill. After assessment of prior knowledge, and training including videos, the drill at Ghazi Boys' School in Kabul took place on 3 May under heavy rainfall. When the earthquake alarm went off, students and staff took shelter under desks and tables; when the alarm stopped, they performed an orderly evacuation.

Students from the Ghazi Boys' School in Kabul measured their level of preparedness as part of a first-ever exercise of earthquake simulation situations in schools and communities in Afghanistan, co-organized this year by the International Institute of Earthquake Engineering and Seismology (IIEES), the Afghanistan National Disaster Management Authority (ANDMA) and UNESCO.



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One of UNESCO's tweets for raising awareness on wastewater issues on World Water Day 2017.

Antigua and Barbuda

Assessing one disaster and planning for the next

Hurricane Irma was at its peak intensity, with near 300 km/h winds, when it moved across Barbuda on 5 and 6 September, destroying much of the island's infrastructure. Antigua and Barbuda's Ministry of Education, Science and Technology called on UNESCO to help assess the post-disaster needs and contribute to rebuilding the island's educational and cultural infrastructure. A fact-finding mission was thus rapidly organized and conducted over three days in October.

After pupils and teachers from Barbuda were temporarily transferred to schools in Antigua, which had suffered less from the storm, all 49 public educational institutions on both islands were inspected by the UNESCO Office in Kingston, together with experts from the Italian Fire Corps. The assessment used the VISUS methodology for safety assessment in schools, developed by SPRINT-Lab researchers at the University of Udine in Italy, a UNESCO Chair, in close collaboration with UNESCO. This methodology helps authorities to make science-based decisions on where and how to invest in strengthening the safety of schools, their students and staff. VISUS considers site conditions,

structural performance, local structural needs, non-structural components and functional aspects. Data is collected through a mobile application, and simple graphical indicators summarize the main weaknesses identified and the necessary interventions.

The mission also assessed damage to historical and archaeological sites, traditional housing, the National Archives of Antigua and Barbuda, and the Barbuda Research Complex. Many of these sites suffered heavy damage, particularly in the city of Codrington in Barbuda. The mission noted that as there is a sizeable risk of future hurricanes in Antigua and Barbuda, it is essential to plan for them when rebuilding the infrastructure.

Hurricane Irma, a tropical storm of historic intensity, had a devastating impact across the Caribbean islands.

As Antigua and Barbuda started to plan for recovery, its Ministry of Education, Science and Technology called on the UNESCO Office in Kingston to perform an assessment and inform the process of rebuilding the educational and cultural infrastructure.



© UNESCO/Yuri Peshkov

■ Preserving and sustaining the diversity of natural resources

UNESCO Global Geoparks demonstrate the great diversity of global geology, and promote geodiversity through community-led initiatives to enhance regional sustainable development. They help monitor and promote awareness of climate change and natural hazards, and many help local communities prepare disaster mitigation strategies.

Delegates from the Chinese Geoparks Network met their counterparts in Japan from 11 to 19 April on a first-ever visit and exchange programme. Links were forged during the September 2016 International Conference on UNESCO Global Geoparks in Torquay, United Kingdom, and this led to an official framework of cooperation with a view to creating a stronger Asia-Pacific Geopark Network. Five Chinese and six Japanese Global Geoparks were represented in the exchange visit. They shared their experiences, learned from each other and identified common challenges to work on together. This was the beginning of a much-anticipated effort to build bridges between the UNESCO Global Geoparks of both nations. In September the exchange was reversed, and Japanese delegates visited the People's Republic of China. All the involved UNESCO Global Geoparks are also working on a joint publication to highlight the excitement of geology and broaden the awareness of UNESCO Global Geoparks in the region.

The Torquay conference also saw the first session of the UNESCO Global Geoparks Council. It proposed eight sites in the People's Republic of China, France, the Republic of Korea, Mexico, Spain and the Islamic Republic of Iran for addition to the network, all of which were endorsed by UNESCO's Executive Board in May 2017. The world network now numbers 127 UNESCO Global Geoparks in 35 countries.

The Man and the Biosphere (MAB) programme was created by UNESCO in the early 1970s as an intergovernmental scientific endeavour to improve relations between people around the world and their natural environment. Its International Coordinating Council met in Paris from 12 to 15 June, and added 23 new sites to the World Network of Biosphere Reserves. The Council also approved extensions to 11 reserves and the renaming of another, as well as requests to withdraw some reserves from the World Network.

Managed with local communities, Biosphere Reserves test ways to reconcile the conservation of biodiversity with economic development and the sustainable use of resources.

The first-ever visit and exchange programme for Chinese and Japanese Geopark delegates took place in April, at Oki Islands UNESCO Global Geopark, Japan. This is the beginning of a much-anticipated effort to build bridges between the UNESCO Global Geoparks of both nations. During this first exchange, the participants shared their experiences and identified common challenges that they will work on together.

Involving civil society in Qatar

In 2017 the UNESCO Office in Doha supported Qatar's Ministry of Municipality and Environment (MME) in preparing an Integrated Management Plan for Al Reem Biosphere Reserve for 2018–22. Home to unique flora and endangered fauna such as the Arabian oryx, the Reserve joined the Man and the Biosphere Programme in 2007. It also hosts Qatar's only World Heritage property, Al Zubarah.

A pilot programme under the Management Plan aims to increase environmental awareness around the Reserve. Local ecologists lead educational tours for the public and for middle-school students, including a participatory clean-up activity. Visitors can see a rawdah (a vegetated depression) and hazm (a gravel ecosystem). Updated informational packages are being prepared to emphasize the value of the reserve and its ecology, aspects of waste pollution, and to encourage environmental sustainability. Qatari experts are also supporting their colleagues in the United Arab Emirates in preparing a nomination for the Wadi Wurayah ecosystem to join the MAB programme.



MAB Youth Forum



© Gianluca Costantini 2017

Giving young people a voice to shape their territories

Fostering attractive long-term employment opportunities linked to the values of biosphere reserves was a particular concern of the young delegates, living or working in more than 140 Biosphere Reserves in 85 countries, who met for a week of debates at the 2017 MAB Youth Forum in the Po Delta Biosphere Reserve, Italy from 18 to 23 September. Their suggestions for enabling young people to live successfully in biosphere reserves while supporting their values included hubs, incubators and training programmes to support business creation.

The forum was organized by MAB with the UNESCO Regional Bureau for Science and Culture in Europe (based in Venice, Italy), the Po Delta Biosphere Reserve and other local and national partners. In their closing declaration the delegates also called on the World Network of Biosphere Reserves to share scientific and indigenous knowledge widely and to support knowledge transmission to future generations, and made several proposals to encourage young people to be more active in, and act as ambassadors for, their biosphere reserves.

The World Network now contains 669 sites in 120 countries and 16 that straddle national borders.

In the context of the Process for Excellence and Enhancement of the WNBR, 24 Biosphere Reserves voluntarily withdrew over the period, and more than 160 improved, demonstrating that the Periodic Review process is successful in maintaining the high quality of Biosphere Reserves and the commitment of member states.

Savegre Biosphere Reserve in Costa Rica is located on the central Pacific coast, 190 km from San José. It is home to 20 per cent of the country's flora, 54 per cent of its mammals and 59 per cent of its birds. It has approximately 50,000 inhabitants, whose main activities are agriculture and livestock rearing. This biosphere reserve is one of the 23 new inscriptions to the World Network of Biosphere Reserves in 2017.





© UNESCO / Juan Criado

Diversification helps preserve the biosphere in Ghana

The people living in and near the Bia Biosphere Reserve, Ghana, are mainly cocoa farmers, and used to harvest wild honey, mushrooms and other non-timber forest products during the lean season. Population growth added to an alarming depletion of the natural resources, so UNESCO and the Korea International Cooperation Agency (KOICA) worked with the local community to help develop green alternatives. The project, 'Green Economy in Biosphere Reserves (GEBR): A means to biodiversity conservation, poverty reduction and sustainable development in sub-Saharan Africa', was launched in Ghana in September 2013, and also encompassed initiatives in Nigerian and Tanzanian Biosphere Reserves.

Potential new activities identified in consultation with local people in Bia were mushroom production, bee-keeping, snail rearing and palm oil production. The project supported and trained 235 people, including 91 women, to develop businesses in these fields. They were also trained in book-keeping, marketing and packaging, and how to reinvest their profits, and they were given start-up equipment such as beehives, protective clothing for harvesting honey, snail-pens and mushroom cropping houses.

Palm fruit processing centres and a mushroom incubator house were constructed near the Biosphere Reserve. 'The palm oil processing machines has made my work more efficient' explained Nana Abena Ataah. 'I'm now able to extract more volumes of palm oil which I sell to obtain a good income.'

Georgina Kyeremaah said, 'I now produce and sell mushrooms to augment my income during the farming off-seasons.' Biosphere staff have observed that the local communities are also more aware of the importance of biodiversity, and are helping to preserve the Biosphere Reserve by reducing their claims on its resources.

Georgina Kyeremaah from the Bia Biosphere Reserve in Ghana often went through financial challenges during the cocoa farming off-season, but since she took up mushroom growing she has managed to increase her income. Georgina is one of the beneficiaries of the Korea International Cooperation Agency (KOICA)-UNESCO joint project 'Green Economy in Biosphere Reserves', which helps local communities to develop green alternatives.



© UNESCO

■ Honouring women in science

A hundred and fifty years after the birth of Marie Curie, only 28 per cent of scientific researchers are women, and they are awarded only 3 per cent of scientific Nobel Prizes. That is why the L'Oréal-UNESCO For Women in Science programme has worked since 1998 to honour eminent women researchers and support young scientists at key moments in their careers. Since the programme began, it has supported more than 2,700 young women from 115 countries and awarded 97 laureates.

The 2017 Awards Ceremony was held at the Maison de la Mutualité in Paris on 23 March. Five women, one from each major region of the world, received €100,000 to honour their scientific contributions in front of an audience of 850. 'Each and every UNESCO L'Oréal Laureate is an inspiration to me and to girls and to women across the world to work harder to promote and recognize the contribution of women to science,' said Irina Bokova in her message.

For the first time a separate event on 21 March celebrated 15 scientists chosen as International Rising Talents. At a gala dinner 15 women from Argentina, Australia, Brazil, the People's Republic of China, Germany, Hungary, Lebanon, Poland, the Republic of Korea, South Africa, Tunisia, Turkey, the United Arab Emirates and the United Kingdom were given diplomas.

The five laureates of the 2017 L'Oréal-UNESCO for Women in Science Awards are (clockwise, starting from top left) Professor Zhenan Bao (United States of America); Professor Niveen Khashab (Saudi Arabia); Professor Nicola Spaldin (Switzerland); Professor Michelle Simmons (Australia), and Professor María Teresa Ruiz (Chile).

© Thierry Bouët for L'Oréal Foundation





Supporting the next generation of great female scientists

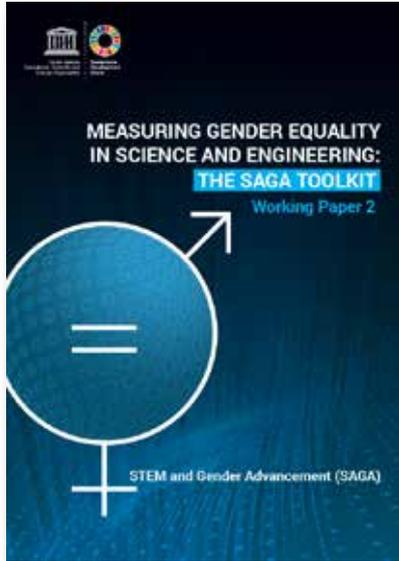
'We don't often realize we're experiencing discrimination because it is the status quo.' 'I have always been doubting whether I would be good enough for all of the necessities of a scientific career. I think I will gain more confidence and motivation here.' 'It provides skills and networking opportunities to women who many otherwise be very isolated – and prepares them to help other women physicists in their home countries (a multiplier effect).' Those were among the feedback comments from the more than 40 women from all over the world who attended the 2017 Career Development Workshop for Women in Physics in Trieste, Italy on 26 October, held by the ICTP with support from UNESCO and the International Atomic Energy Agency (IAEA). They attended sessions on networking, support, advice and skill development.



Other major events during the week-long programme were the presentation of the Laureates' research in an extraordinary session at the French Académie des Sciences, and an information and discussion session entitled 'Engaging with UNESCO Networks and Programmes in Gender and Science' at UNESCO Headquarters.

Canada's International Development Research Centre (IDRC) and the Swedish International Development Agency (Sida) agreed to pool resources in support of the Organization for Women in Science for the Developing World (OWSD) – hosted by UNESCO's World Academy of Sciences (TWAS), based in Trieste.

*The new UNESCO publication **Measuring Gender Equality in Science and Engineering: The SAGA Toolkit**, was launched during the Eighth World Science Forum in Jordan on 9 November. It sets out standard definitions and classifications to help address the gender gap in STEM more effectively.*



IDRC's pledge of approximately US\$6 million over the next five years, matching the contribution renewed by long-term donor Sweden, allows OWSD to provide a comprehensive career development programme for women scientists from 66 of the world's least developed and scientifically lagging countries (STLCs). The aim of the programme is to enable women from STLCs to leave their home countries and travel to better equipped laboratories and departments in other developing countries in order to complete their PhD training to internationally competitive standards.

With IDRC funding, OWSD will target early-career women employed at their home institutes in the South and provide the individual and institutional support

they need to make sustainable links with industry and the private sector. A total of 60 women are expected to start and complete their fellowships by 2021, receiving support and training to set up laboratories and head research teams as well as transform their research ideas into marketable products. The first call for applications will go online in March 2018 and the first cohort of 20 fellows will be announced by October 2018.

The STEM and Gender Advancement (SAGA) project is helping countries in reducing the gender gap and promoting girls' and women's participation in science, technology, engineering and mathematics (STEM). A global UNESCO project, it is supported by the Government of Sweden through the Swedish International Development Cooperation Agency (Sida).

Measuring Gender Equality in Science and Engineering: The SAGA Toolkit, a new UNESCO publication, was launched during the Eighth World Science Forum in Jordan on 9 November. The SAGA Toolkit is part of the SAGA methodology on measuring gender equality in science and engineering, intended to assist policy-makers in the design and evaluation of gender-sensitive and evidence-based policies. It sets out standard definitions and classifications which should help address the gender gap in STEM more effectively. The tools are currently being piloted and a final version of the methodology is expected at the end of 2018.

The EXPO 2017 held in June in Astana, Kazakhstan, under the theme 'Future Energy' was the occasion for UNESCO to feature some of its main projects in connection with renewable energy. These include capacity-building, promoting the development of energy policies, supporting pilot initiatives and providing technical assistance to Member States.



© UNDP

■ Communicating with and learning from indigenous peoples

The 2030 Agenda commitment to ‘Leave no one behind’ brings new impetus to ensuring that indigenous peoples’ priorities are heard. UNESCO’s policy on Engaging with Indigenous Peoples seeks to outline a house-wide approach that will guide the entire Organization in its interactions with indigenous peoples’ organizations. Discussed and ‘noted with satisfaction’ at the 202nd session of the Executive Board, the new policy highlights the role of UNESCO programmes in addressing indigenous peoples’ concerns. These include UNESCO’s work on local and indigenous knowledge systems, endangered languages, mother tongue education, education for sustainable development and building knowledge societies.

The knowledge of indigenous peoples and local communities – often referred to as local, indigenous or traditional knowledge – is now recognized as an essential complement to scientific knowledge. Indigenous knowledge is already seen as pivotal in fields such as agroforestry, biodiversity conservation, natural resource management, traditional medicine and sustainable development. Indigenous communities are also increasingly being recognized as important source of knowledge for climate change assessment and adaptation. UNESCO is working to further enable the dissemination of this vital fund of knowledge.

Revitalising

knowledge across generations

Education programmes are important for human development, but they may also compromise the transmission of indigenous knowledge.

With formal education, children learn passively in classroom settings, rather than engaging in hands-on learning on the land. Teachers replace parents and elders as the holders of knowledge and figures of authority. National languages are the medium of instruction instead of vernacular languages. Formal education may therefore contribute to the erosion of cultural diversity and social cohesion, and heighten the alienation and disorientation of indigenous youth.

There is an urgent need to enhance the intergenerational transmission of indigenous knowledge, alongside and within formal education. Efforts are being made to bring indigenous language and knowledge into school curricula, as well as to move learning back into the community, thus reaffirming the status of elder men and women as knowledge holders.



AN INUIK BOY LEARNS to butcher caribou by helping his father in Arctic Quebec, Canada.



THE MAYANGNA COMMUNITY in the BOSAWAS Biosphere reserve brought their language and knowledge of biodiversity into the classroom.



THE CANOE IS THE PEOPLE project promotes indigenous knowledge of navigation in Pacific schools.



THE GLOBAL GOALS



With the support of



From the Friends of UNES

To celebrate the 15th anniversary of the LINKS programme this year, UNESCO featured a poster exhibition around the theme ‘Local Knowledge, Global Goals’, with the purpose of reflecting indigenous and local knowledge systems, and their interaction with science and policy. This exhibition and a publication on the programme were financially supported by the Japanese Funds-In-Trust for UNESCO and the Swedish International Development Agency.

Youth Leadership Camp for Climate Change 2017

At three UNESCO sites in Indonesia, 150 young people explored the impact of climate change on agriculture and energy, the marine environment, fisheries and forestry at the 'Youth Leadership Camp for Climate Change 2017'. The camp activities occurred in February and follow-up continued until May. UN CC:Learn, UNESCO's partner in the 2017 programme, sponsored three winners of the camp activities to travel to the United States of America for the Tribal Climate Camp at the University of Washington's Pack Forest Conference Center in Eatonville, Washington from 30 July to 4 August.

One hundred and fifty lucky Indonesian students were selected to participate in the 'Youth Leadership Camp for Climate Change 2017' to acquire a good understanding of climate change in agriculture, forests and marine environments. This camp was organized by the UNESCO Office Jakarta, in collaboration with UN CC:Learn (The One UN Climate Change Learning Partnership) and the Climate Reality Project Indonesia (TCRPI).

'Science, Technology, Innovation and Knowledge Dialogue – A view from the Andean Countries' was the title of a workshop organized by the UNESCO Office in Quito and Representation for Bolivia, Colombia, Ecuador and Venezuela together with Bolivia's Ministry of Education and other partners. It took place in La Paz from 22 to 24 November. The workshop aimed to promote an open dialogue to seek synergies in national efforts, facilitate collaboration beyond borders, and clarify some of the challenges in the region, particularly at the intersection of STI and traditional knowledge.

■ Ethics of science and technology

The beginning and end of human life, including abortion, assisted fertilization, advance directives, dignified death and organ transplants; the proper limits to research involving human beings; rights of patients; the responsibilities of scientists and others to the environment, including climate change, pollution with agrochemicals and genetically modified food; blurred boundaries between human subjects and technological objects: these are just some of the issues that are the focus of debate in the area of ethics of science and technology.

At every level, climate action requires a responsible approach. UNESCO is asserting that at its core climate change is an ethical issue. In a broad consensus, the Organization's 195 Member States adopted a global Declaration of ethical principles in relation to climate change during the 39th session of its General Conference in November 2017. UNESCO's Declaration aims to help governments, businesses and civil society mobilize people around shared values on climate change. It sounds the alarm that, unless ethical principles become the basis of climate action, both climate change and responses to it could create unacceptable damage and injustice. The Declaration advocates sustainability, solidarity and the prevention of harm.

Robotic technologies have great implications for our societies, and for ethical issues such as our concepts of agency and responsibility, and our value frameworks. Robots using artificial intelligence (AI) to mimic



© Sukma Impian Riveringtyas, 2017



human abilities in sensing, language, interaction, problem-solving, learning and even creativity give rise to still larger ethical issues. Their actions depend on random situations and on experience, and the decisions these generate can be unpredictable. We need to be clear about accountability for their actions.

UNESCO's World Commission on the Ethics of Scientific Knowledge and Technology (COMEST) has prepared a report on these issues, which aims to raise awareness and promote public dialogue. It was released in October 2017. The report

proposes a technology-based ethical framework to consider recommendations on robotics ethics based on the distinction between deterministic and cognitive robots, and makes a number of specific recommendations concerning the application of robotic technologies.

The UNESCO Recommendation on Science and Scientific Researchers is an important standard-setting instrument which not only codifies the goals and value systems by which science operates, but also emphasizes that these need to be supported and protected if science is to flourish.

In May, the German Government and the UNESCO Office in Addis Ababa signed an agreement to produce a set of films on the Ethiopian Lake Tana Biosphere Reserve's most pressing environmental issues such as deforestation, massive soil erosion and siltation, and management options. This photo of a young man collecting fodder for his livestock on Lake Tana was shot by a camera drone during a field mission for pre-production.

A revised Recommendation was adopted by the General Conference at its 39th session, superseding the 1974 text.

The 39th session of the General Conference of UNESCO marked a turning point as Member States adopted the programme for the Organization and elected the new Director-General for the coming four years. View of the Hall Ségur at the Organization's Headquarters during the reception hosted on 13 November by the Permanent Delegation of France to UNESCO.

© UNESCO/N. Houguenade



39th session of the General Conference



On 10 November, as Ms Irina Bokova's term of office as Director-General of UNESCO came to an end, the General Conference paid tribute to her during a plenary session in Room I. A homage ceremony followed with presentations from major international artists including a classic Chinese Guanyin thousand-arms dance performance (below).

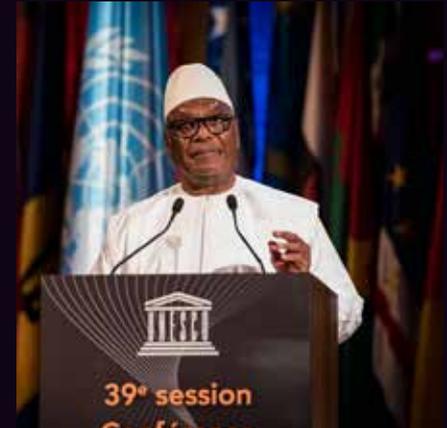
© UNESCO/N. Houguenade



The General Conference appointed Ms Audrey Azoulay as the new Director-General of UNESCO during a plenary session on 13 November. At her right, Deputy Director-General Getachew Engida.

© UNESCO/C. Alix





H. Exc. Mr Henry Puna, Prime Minister of the Cook Islands (left) and H. Exc. Mr Ibrahim Boubacar Keita, President of Mali (right) address the audience gathered in Room I during the Leaders' Forum. The Forum's theme was the centrality of the 2030 Agenda for Sustainable Development in all of UNESCO's fields of competence.

© UNESCO/C. Alix

(Left) H. Exc. Ms Zohour Alaoui, Ambassador, Permanent Delegate of Morocco to UNESCO since December 2011, was unanimously elected President of the 39th session of the General Conference.

© UNESCO/C. Alix

(Below) Excitement took over following the election of the new Members of the Executive Board on 8 November.

© UNESCO/F. Gentile





H. Exc. Mr Olivier Mahafaly Solonandrasana, Prime Minister of Madagascar, arrived at UNESCO Headquarters on 31 October to deliver a speech at the Leaders' Forum.

© UNESCO/C. Alix



A colourful show by Nigerien fashion designer and UNESCO Artist for Peace Mr Sidahmed Alphadi Seidnaly aka 'Alphadi' brightened up the end of the Leaders' Forum. © UNESCO/N. Houguenade

An open conversation between Lech Wałęsa, Nobel Peace Prize laureate and former President of Poland, and Liv Torres, Executive Director of the Norwegian Nobel Peace Center, closed the Leader's Forum on 1 November.

© UNESCO/C. Alix



H. R. H. Princess Lalla Meryem of Morocco (right), a UNESCO Goodwill Ambassador, was one of the keynote speakers at the Leaders' Forum.

© UNESCO/C. Alix



Appealing to the need to strengthen efforts to protect cultural heritage, UNESCO, Italy and Iraq inaugurated on 6 November a replica of the Lamassu Statue of Nimrud (Iraq) at the Organization's Headquarters. The original statue, which once protected Ashurnasirpal II's North-West Palace in the ancient capital of the Assyrian Empire, was deliberately destroyed by violent extremists in 2015. It was later rebuilt under the initiative of the Italian Associazione Incontro di Civiltà and the Fondazione Terzo Pilastro – Italia e Mediterraneo, using 3D printing and robotic engineering.

© UNESCO/C. Alix



As a side event to the General Conference, photo kakemonos on Malian cultural heritage printed on Korean thousand-year-old Hanji paper were dedicated to UNESCO on 7 November, as a follow-up to the project 'Pedagogical Supports based on African Cultural Heritage in Post-Conflict Situations', supported by partners from the Republic of Korea.

© UNESCO/C. Alix



UNESCO's Room I, hosting the plenary meetings of the General Conference, was inaugurated after more than a year of unprecedented renovation. An official ceremony was held in the presence of H.H. Sheikh Hamdan bin Rashid Al-Maktoum, Deputy Ruler of Dubai and Minister of Finance and Industry of the United Arab Emirates, who generously funded this renovation.

© UNESCO/C. Alix







Highlights of UNESCO's actions in the field

UNESCO colleagues are working every day, often in difficult conditions, to help improve the lives of local communities around the world and fulfil the Organization's mandate. This section illustrates only a few of their extraordinary efforts. We wish to thank each and every one of them for sharing their best photos.

Students at Pikine 12 School in Pikine, Senegal. Their teachers benefitted this year from UNESCO's Capacity Development for Education Programme (CapED) activities coordinated by the UNESCO Office in Dakar.

© UNESCO/Marion Piccio





Some 4,000 ancient manuscripts from Timbuktu, Mali were damaged or completely destroyed by armed groups in 2012 and 2013. UNESCO, the Government of Mali, local NGOs and other partners are supporting ancient manuscript conservation projects to rehabilitate cultural heritage in the country, including the manufacture of boxes to ensure their lasting preservation.

© UNESCO/Bagayoko Modibo

Cambodia's Angkor looked its best on 14 December for the celebration of the 25th anniversary of its inscription to the World Heritage List. Over 3,000 people including youth associations came to celebrate one of the most important archaeological sites in South-East Asia, and take part in this historic picture. Among them were our colleagues from the UNESCO Office in Phnom Penh.

© APSARA National Authority-Union of Youth Federations of Cambodia



In March, intense rains generated by El Niño conditions caused major flooding and mudslides in the north and west of Peru, resulting in dozens of deaths and damaging 115,000 homes. This child is one of 500 at primary school level who participated in art therapy sessions coordinated by the UNESCO Office in Lima, the Peruvian Ministries of Education and Culture, and Grupo SURA, and designed to help them recover from the trauma of the flooding.

© UNESCO/Miguel Arreategui





On the occasion of World Environment Day and World Oceans Day 2017, the UNESCO Office in Nairobi helped organize activities to raise awareness of the importance of environment protection and ocean conservation. Among these was the symbolic release into the Indian Ocean of a green turtle, rescued from the sea and treated for an infection resulting from plastic consumption, by our colleague Abdul Rahman Lamin.

© UNESCO/David Onyango

Dancers of the Bwiti – an exclusively masculine rite of passage originally from central Gabon – were among the guests of honour on the 'Night of Traditions', one of the events co-organized by the UNESCO Office in Libreville to celebrate World Day for Cultural Diversity for Dialogue in Development in May 2017.

© UNESCO/Frank Mays Assoumou Mvomo



Proud smiles after three days of planting trees and releasing wild animals for these participants in the 'Youth Leadership Camp for Climate Change 2017', held in Lampung, Indonesia in February. The event is one in a series co-organized by the UNESCO Office in Jakarta, UN CC:Learn through UNITAR and the Climate Reality Project Indonesia.

© UNESCO/Vann Rantini



Khaled (left) and his fellow students are off to a good start to become top chefs, thanks to the culinary courses they received in 2017 as part of the UNESCO Office in Amman's technical and vocational training project to support Syrian refugees and young Jordanians.

© UNESCO/Christien van den Brinck



Children in one of the 9,000 families involved in the Sustainable Fishing on the Amazon Coast Project, a joint effort of the UNESCO Office in Brasilia and the Vale Fund to generate improvement in the life of the 30 communities of crab and shrimp fishers along the coasts of the Brazilian Amazon states of Pará, Amapá and Maranhão.

© UNESCO/Milena Argenta

Children in a classroom at Tadbikat Maslakieh School in Damascus, Syria. This is one of the 25 schools selected by the UNESCO Office in Beirut to benefit from education management information systems (EMIS) for school-level data collection and analysis, in the context of UNESCO's Education Response Strategy for the Syria Crisis.

© UNESCO/Amita Vohra



Organic quinoa production in Peru has increased up to 57 per cent, partly thanks to the joint efforts of the UNESCO Office in Lima, the Food and Agriculture Organization (FAO) and the International Labour Organization (ILO), which have been building capacity among farmers in the regions of Ayacucho and Puno for the past two years, to strengthen the value chain of this increasingly popular grain.

© UNESCO/José Luis Matos Muñasqui





Our colleagues from the UNESCO Office in Quito are very proud to have participated for almost two years in the restoration of Saint Francis Convent in Quito, Ecuador, one of the city's most remarkable historic buildings in which the Quito Baroque School style is represented at its best.

© UNESCO/Santiago Calero – ZonaSiete

Local performers during the opening ceremony of the 2017 'Emoi du Jazz' Festival, held in the city of Grand-Bassam, Côte d'Ivoire in April. The festival was supported by the UNESCO Office in Abidjan and was one in thousands of worldwide celebrations of International Jazz Day.

© UNESCO/Eddy Dagher



Headquarters



Field Offices



Category I Institutes

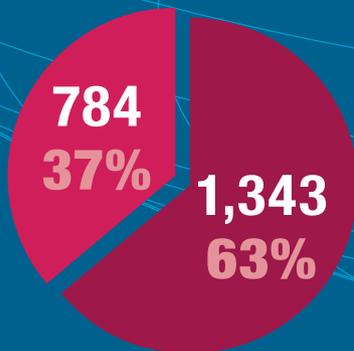


Women
Directors

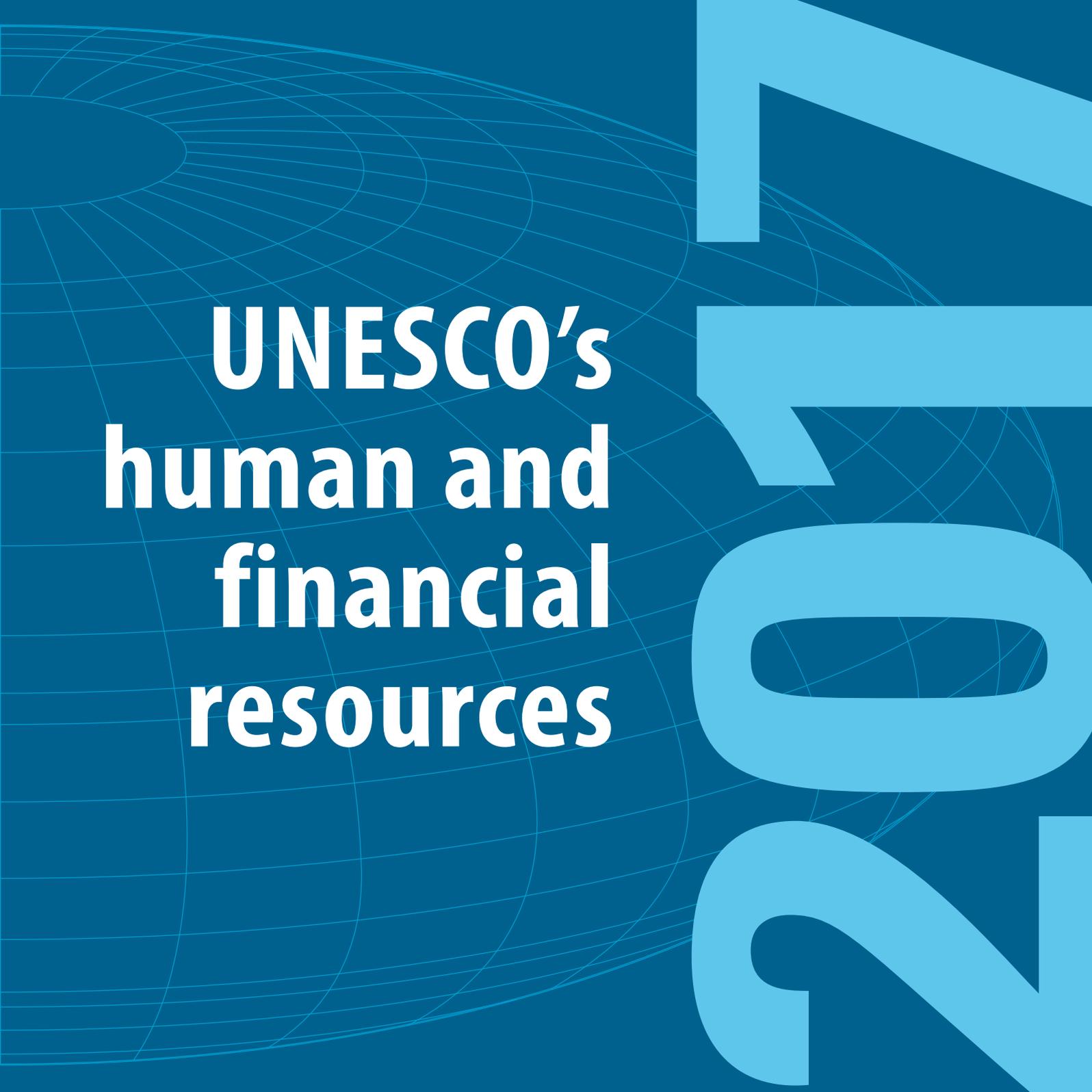


Women
International
Professional
Staff

Staff on
Extrabudgetary
funds



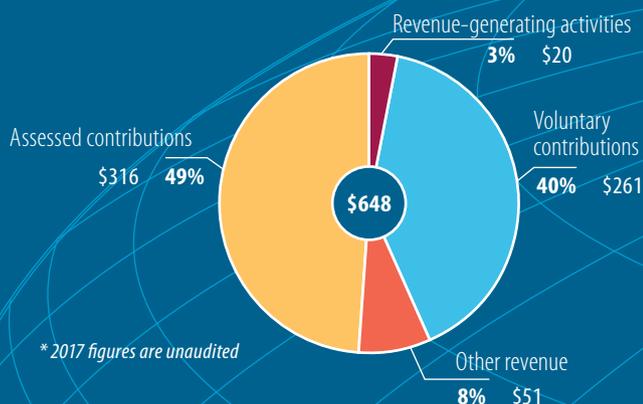
Staff on Regular
Programme funds

The background features a dark blue color with a faint, light blue grid pattern resembling a globe. On the right side, the word 'UNESCO' is written in large, bold, light blue capital letters, with only the right portions of the letters visible. The main text is centered on the left side.

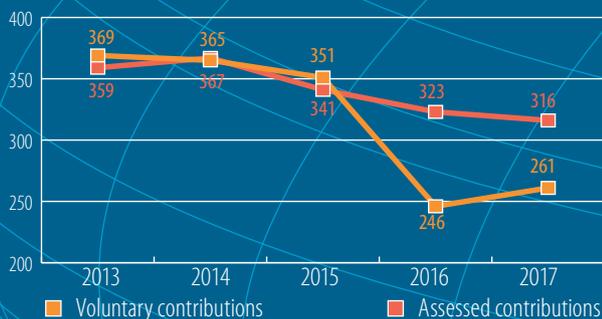
**UNESCO's
human and
financial
resources**

Financial information

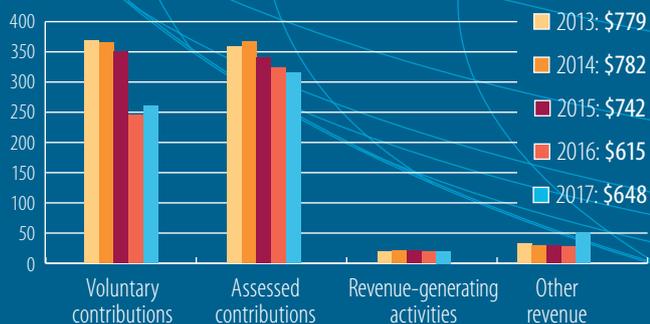
Total revenue by nature, 2017* *in millions of US\$*



Revenue trend, 2013–2017 *in millions of US\$*



Revenue by nature, 2013–2017 *in millions of US\$*



Top 25 donors to extra-budgetary projects and Institutes, 2017 *in thousands of US\$*

1	Italy	28,055
2	Sweden	24,997
3	European Union (EU)	21,553
4	Brazil	20,606
5	Norway	17,854
6	Republic of Korea	14,379
7	Peru	9,919
8	Switzerland	8,201
9	Canada	5,346
10	Japan	5,232
11	China	5,043
12	UNDP	4,419
13	UNICEF	4,028
14	IAEA	4,016
15	Germany	3,542
16	France	3,167
17	India	2,513
18	World Bank/I.B.R.D.	2,448
19	UNAIDS	2,424
20	Finland	2,313
21	Education Above All Foundation	2,289
22	African Development Bank	2,252
23	Afghanistan	2,174
24	Australia	2,101
25	Belgium	2,045

Summary of financial position *in millions of US\$*

	2017	2016
Cash & cash equivalent and investments	688	667
Property plant & equipment	538	550
Other	87	82
Total assets	1,313	1,299
Employee benefits	821	828
Other	234	216
Total liabilities	1,055	1,044
Net assets	258	255

Assessed contributions to the regular budget: Top 25 assessments, 2017 *in thousands of US\$*

Rank		Scale of assessment in %	Amount assessed for 2017	Unpaid contributions as at 31 December 2017**		
				Contributions unpaid for the year	Contributions unpaid for previous years	Total unpaid
1	United States of America*	22.000	71,830	71,830	470,842	542,672
2	Japan	9.679	31,602	-	-	-
3	People's Republic of China	7.920	25,859	-	-	-
4	Germany	6.389	20,860	-	-	-
5	France	4.859	15,865	-	-	-
6	United Kingdom of Great Britain and Northern Ireland	4.463	14,572	-	-	-
7	Brazil	3.823	12,482	12,482	4,968	17,450
8	Italy	3.748	12,237	-	-	-
9	Russian Federation	3.088	10,082	-	-	-
10	Canada	2.921	9,537	-	-	-
11	Spain	2.443	7,976	-	-	-
12	Australia	2.337	7,630	-	-	-
13	Republic of Korea	2.039	6,657	-	-	-
14	Netherlands	1.482	4,839	-	-	-
15	Mexico	1.435	4,685	-	-	-
16	Saudi Arabia	1.146	3,742	1,933	-	1,933
17	Switzerland	1.140	3,722	-	-	-
18	Turkey	1.018	3,324	-	-	-
19	Sweden	0.956	3,121	-	-	-
20	Argentina	0.892	2,912	2,089	-	2,089
21	Belgium	0.885	2,890	-	-	-
22	Norway	0.849	2,772	-	-	-
23	Poland	0.841	2,746	-	-	-
24	India	0.737	2,406	14	-	14
25	Austria	0.720	2,351	-	-	-

* The United States of America has suspended the payment of its contributions since 2011 and has announced its withdrawal which will be effective 31 December 2018.

** Amounts due in Euros are reported using the constant rate of USD 1=EUR 0.869.

Annual programme expenditure, 2017 *in millions of US\$*

Sector*	Core funding	Voluntary funding	Total
Education	91.0	42.7	133.7
Natural sciences	28.6	23.6	52.2
Social and human sciences	8.1	14.2	22.3
Culture	35.9	23.2	59.1
Communication and information	12.5	12.2	24.7
Total	176.1	115.9	292.0

* Excluding category 1 Institutes and Brasilia office.

Expenses by category, 2017–2016 *in millions of US\$*

	2017	2016
Employee benefits	318	313
Consultants & missions	53	47
External trainings, grants & transfers	41	46
Consumables & supplies	55	52
Contracted services	120	109
Allowance for unpaid contributions and other	101	97
Total	688	664

Note: Revenue and Expenses are recognized in accordance with International Public Sector Accounting Standards (IPSAS).



UNESCO Headquarters' Japanese Garden or Garden of Peace is a living work of art. Created in 1957 by Japanese-American designer and sculptor Isamu Noguchi, it is a striking combination of the Japanese tradition and the artist's modern and personal stamp. Originally commissioned to design the upper patio, Noguchi suggested enhancing with greenery the adjoining sunken courtyard. To build the garden, Noguchi called on Toemon Sano, the 15th generation in a family of 'Cherry Tree Doctors'.

Whereas the garden is supposed to be trimmed every two years, eight years went by without any maintenance. In 2017, UNESCO invited the family firm Uetoh Zohen, in business since the Meiji Period, and run today by the son of Toemon Sano to carry out an overhaul. Takuru, Toemon's grandson, oversaw the garden's restoration. He mentioned he was the same age his grandfather was when he created the garden.



Annexes

1. Fellowships

A total of **217** fellowships were awarded by the Participation Programme and Fellowships Section covering the period from 1 January to 31 December 2017 under the Regular Programme for a total value of about **US\$4,095,796**. The breakdown by fellowship programmes is presented below.

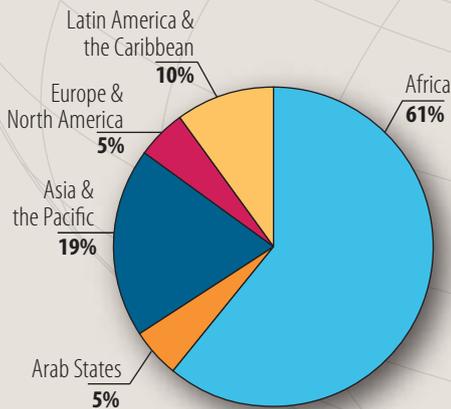
UNESCO Regular Budget (RP)

217 fellowship awards, under the Co-Sponsored Fellowships Scheme with UNESCO seed money (RP) totalling **US\$497,943**.

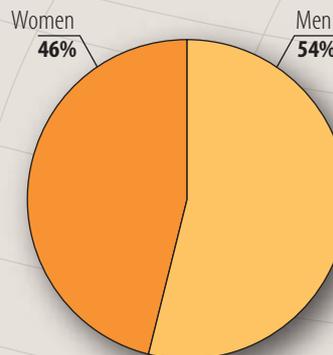
UNESCO/Poland	42 awards
UNESCO/Russian Federation	22 awards
UNESCO/People's Republic of China – The Great Wall	75 awards
UNESCO/Republic of Korea – KOICA	25 awards
UNESCO/Israel – MASHAV	52 awards
UNESCO/Czech Republic	1 awards

Distribution of the fellowships

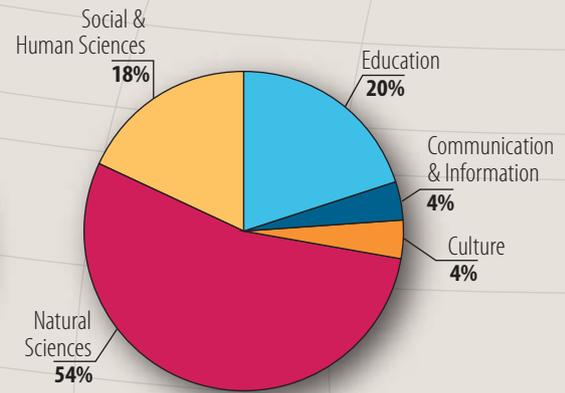
By region



By gender



By field of study



2. Prizes

Education

UNESCO-KING SEJONG LITERACY PRIZE

We Love Reading (Jordan), Centre for the Study of Learning and Performance (CSLP) at Concordia University (Canada)

UNESCO-CONFUCIUS PRIZE FOR LITERACY

Secretariat of Information and Communications Technologies of the city of Armenia (Colombia), Citizens Foundation (Pakistan), FunDza Literacy Trust (South Africa)

UNESCO-JAPAN PRIZE ON EDUCATION FOR SUSTAINABLE DEVELOPMENT

Zikra for Popular Learning (Jordan), Hard Rain Project (United Kingdom of Great Britain and Northern Ireland), Sihlengeni Primary School (Zimbabwe)

UNESCO PRIZE FOR GIRLS' AND WOMEN'S EDUCATION

Development and Education Programme for Daughters and Communities Center in the Greater Mekong Sub-Region (Thailand), Mini Academy of Science and Technology (Peru)

Natural Sciences

L'ORÉAL-UNESCO AWARDS FOR WOMEN IN SCIENCE

Laureates: Niveen Khashab (Saudi Arabia), Michelle Simmons (Australia), Nicola Spaldin (Switzerland), María Teresa Ruiz (Chile) and Zhenan Bao (United States of America)

UNESCO KALINGA PRIZE FOR THE POPULARIZATION OF SCIENCE

Erik Jacquemyn (Belgium)

UNESCO SULTAN QABOOS PRIZE FOR ENVIRONMENTAL PRESERVATION

National Parks Board of Singapore (Singapore)

CARLOS J. FINLAY UNESCO PRIZE FOR MICROBIOLOGY

Shahida Hasnain (Pakistan) and Samir Saha (Bangladesh)

UNESCO-EQUATORIAL GUINEA INTERNATIONAL PRIZE FOR RESEARCH IN THE LIFE SCIENCES

Agricultural Research Organization (Volcani Center, Israel), Rui Luis Gonçalves dos Reis (Portugal) and Ivan Antonio Izquierdo (Brazil)

Social and Human Sciences

UNESCO-UNAM/JAIME TORRES BODET PRIZE IN SOCIAL SCIENCES, HUMANITIES AND ARTS

Casa de las Américas (Cuba)

UNESCO-SHARJAH PRIZE FOR ARAB CULTURE

Bahia Shehab (Lebanon, Egypt) and eL Seed (France, Tunisia)

Communication and Information

UNESCO/GUILLERMO CANO WORLD PRESS FREEDOM PRIZE

Dawit Isaak (Eritrea, Sweden)

3. World Heritage inscriptions

Sites added to the List of World Heritage in Danger

AUSTRIA

- Historic Centre of Vienna

PALESTINE

- Hebron/Al-Khalil Old Town

Inscriptions

Cultural sites

ANGOLA

- Mbanza Kongo, Vestiges of the Capital of the former Kingdom of Kongo

BRAZIL

- Valongo Wharf Archaeological Site

CAMBODIA

- Temple Zone of Sambor Prei Kuk, Archaeological Site of Ancient Ishanapura

CROATIA, ITALY, MONTENEGRO

- Venetian Works of Defence between the 16th and 17th Centuries: Stato da Terra – Western Stato da Mar

DENMARK

- Kujataa Greenland: Norse and Inuit Farming at the Edge of the Ice Cap

ERITREA

- Asmara: a Modernist City of Africa

FRANCE

- Taputapuātea

GERMANY

- Caves and Ice Age Art in the Swabian Jura

INDIA

- Historic City of Ahmadabad

IRAN (ISLAMIC REPUBLIC OF)

- Historic City of Yazd

JAPAN

- Sacred Island of Okinoshima and Associated Sites in the Munakata Region

PALESTINE

- Hebron/Al-Khalil Old Town

PEOPLE'S REPUBLIC OF CHINA

- Kulangsu, a Historic International Settlement

POLAND

- Tarnowskie Góry Lead–Silver–Zinc Mine and its Underground Water Management System

RUSSIAN FEDERATION

- Assumption Cathedral and Monastery of the town-island of Sviyazhsk

SOUTH AFRICA

- †Khomani Cultural Landscape

TURKEY

- Aphrodisias

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

- The English Lake District

Natural sites

ARGENTINA

- Los Alerces National Park

MONGOLIA, RUSSIAN FEDERATION

- Landscapes of Dauria

PEOPLE'S REPUBLIC OF CHINA

- Qinghai Hoh Xil

4. Intangible Cultural Heritage inscriptions

List of Intangible Cultural Heritage in Need of Urgent Safeguarding

BOTSWANA

- Dikopelo folk music of Bakgatla ba Kgafela in Kgatleng District

COLOMBIA, VENEZUELA (BOLIVARIAN REPUBLIC OF)

- Colombian–Venezuelan llano work songs

MONGOLIA

- Mongolian traditional practices of worshipping the sacred sites

MOROCCO

- Tasqiwin, martial dance of the western High Atlas

TURKEY

- Whistled language

UNITED ARAB EMIRATES

- Al Azi, art of performing praise, pride and fortitude poetry

Representative List of the Intangible Cultural Heritage of Humanity

ARMENIA

- Kochari, traditional group dance

AZERBAIJAN

- Dolma making and sharing tradition, a marker of cultural identity

BANGLADESH

- Traditional art of Shital Pati weaving of Sylhet

BOLIVIA (PLURINATIONAL STATE OF)

- Ritual journeys in La Paz during Alasita

BOSNIA AND HERZEGOVINA

- Konjic woodcarving

BULGARIA, THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA, REPUBLIC OF MOLDOVA, ROMANIA

- Cultural practices associated to the 1st of March

CÔTE D'IVOIRE

- Zaouli, popular music and dance of the Guro communities in Côte d'Ivoire

CUBA

- Punto

GERMANY

- Organ craftsmanship and music

GREECE

- Rebetiko

INDIA

- Kumbh Mela

INDONESIA

- Pinisi, art of boatbuilding in South Sulawesi

IRAN (ISLAMIC REPUBLIC OF)

- Chogān, a horse-riding game accompanied by music and storytelling

IRAN (ISLAMIC REPUBLIC OF), AZERBAIJAN

- Art of crafting and playing with Kamantcheh/Kamancha, a bowed string musical instrument

IRELAND

- Uilleann piping

ITALY

- Art of Neapolitan 'Pizzaiuolo'

KAZAKHSTAN

- Kazakh traditional Assyk games

KYRGYZSTAN

- Kok boru, traditional horse game

LAO PEOPLE'S DEMOCRATIC REPUBLIC

- Khaen music of the Lao people

MALAWI

- Nsima, culinary tradition of Malawi

MAURITIUS

- Sega tambour of Rodrigues Island

NETHERLANDS

- Craft of the miller operating windmills and watermills

PANAMA

- Artisanal processes and plant fibers techniques for talcos, crinejas and pintas weaving of the pinta'o hat

PERU

- Traditional system of Corongo's water judges

PORTUGAL

- Craftmanship of Estremoz clay figures

SAUDI ARABIA

- Al-Qatt Al-Asiri, female traditional interior wall decoration in Asir, Saudi Arabia

SERBIA

- Kolo, traditional folk dance

SLOVAKIA

- Multipart singing of Horehronie

SLOVENIA

- Door-to-door rounds of Kurenti

SWITZERLAND

- Basel Carnival

THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA, TURKEY

- Spring celebration, Hidrellez

TURKMENISTAN

- Kushtdepdi rite of singing and dancing

VIET NAM

- The art of Bài Chòi in Central Viet Nam
- Xoan singing of Phú Thọ province, Viet Nam

Register of Good Safeguarding Practices

BULGARIA

- Bulgarian Chitalishte (Community Cultural Centre): practical experience in safeguarding the vitality of the Intangible Cultural Heritage

UZBEKISTAN

- Margilan Crafts Development Centre, safeguarding of the atlas and adras making traditional technologies

International assistance requests approved in 2017 by the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage

UGANDA

- Community self-documentation and revitalization of ceremonies and practices associated with Empaako naming system in Uganda

ZAMBIA

- Strengthen the capacity for the safeguarding and management of intangible cultural heritage in Zambia

5. UNESCO Biosphere Reserves

BENIN Mono

BENIN, TOGO Mono Transboundary Biosphere Reserve

COSTA RICA Savegre

DENMARK Moen

DOMINICAN REPUBLIC, HAITI La Selle - Jaragua-Bahoruco-Enriquillo Transboundary Biosphere Reserve

ECUADOR, PERU Bosques de Paz Transboundary Biosphere Reserve

ETHIOPIA Majang Forest

GERMANY Black Forest

HONDURAS San Marcos de Colón

ITALY Tepilora, Rio Posada and Montalbo

JAPAN Sobo, Katamuki and Okue

JAPAN Minakami

KAZAKHSTAN Altyn Emel

KAZAKHSTAN Karatau

MYANMAR Indawgyi

NIGER Gadabedji

PARAGUAY Itaipu

PORTUGAL Castro Verde

RUSSIAN FEDERATION Khakassky

RUSSIAN FEDERATION Kizlyar Bay

RUSSIAN FEDERATION Metsola

RUSSIAN FEDERATION, REPUBLIC OF KAZAKHSTAN Great Altay Transboundary Biosphere Reserve

SERBIA Backo Podunavlje

SOUTH AFRICA Garden Route

SUDAN Jebel Al Dair

TOGO Mono

Extensions of Existing Reserves:

AUSTRALIA Fitzgerald extension and renaming of the former Fitzgerald River National Park Biosphere Reserve

BULGARIA Central Balkan (encompasses former Steneto, Tsaritchina, Djendema and Boatin Biosphere Reserves)

BULGARIA Uzunbudzhak

BULGARIA Chervenata Stena

BULGARIA Srébarna

PERU Manu

POLAND Masurian Lakes Extension and renaming of the former biosphere reserve of Lake Luknajno

SPAIN Marismas del Odiel

UNITED REPUBLIC OF TANZANIA Lake Manyara

UNITED REPUBLIC OF TANZANIA Serengeti-Ngorongoro

UNITED REPUBLIC OF TANZANIA East Usambara

Renaming of Existing Reserves:

IRELAND Kerry (renaming of Killarney Biosphere Reserve)

ISRAEL Meggido (Renaming of Ramat Menashe Biosphere Reserve.)

UNITED STATES OF AMERICA Congaree (renaming of South Atlantic Coastal Plain Biosphere Reserve)

UNITED STATES OF AMERICA Crown of the Continent (renaming of Glacier Biosphere Reserve)

The two Brazilian biosphere reserves of São Paulo Green Belt and Mata Atlântica, which were until now joined under the name of Mata Atlântica, are hitherto to be considered as two distinct biosphere reserves.

6. New UNESCO-assisted Global Geoparks

FRANCE Causses du Quercy

ISLAMIC REPUBLIC OF IRAN Qeshm Island

MEXICO Comarca Minera, Hidalgo

MEXICO Mixteca Alta

PEOPLE'S REPUBLIC OF CHINA Arxan

PEOPLE'S REPUBLIC OF CHINA Dunhuang

PEOPLE'S REPUBLIC OF CHINA Keketouhai

PEOPLE'S REPUBLIC OF CHINA Leiqiong
(extension of an existing UNESCO Global Geopark)

PEOPLE'S REPUBLIC OF CHINA Zigong
(extension of an existing UNESCO Global Geopark)

REPUBLIC OF KOREA Cheongsong

SPAIN Las Loras

7. Inscriptions on the Memory of the World International Register

ALGERIA

- Al-Mustamlah Min Kitab Al-Takmila

ARGENTINA, UNITED STATES OF AMERICA

- The Villa Ocampo Documentation Center

AUSTRALIA

- Giant Glass Plate Negatives of Sydney Harbour

AUSTRIA

- The Documents on the Semmering Railway from the Imperial & Royal Historical Museum of Austrian Railways

AUSTRIA, CANADA, NETHERLANDS, UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

- Philosophical Nachlass of Ludwig Wittgenstein

AZERBAIJAN

- The copy of the manuscript of Mahammad Fuzuli's 'divan'

BANGLADESH

- The Historic 7th March Speech of Bangabandhu Sheikh Mujibur Rahman

BARBADOS, UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

- An African Song or Chant from Barbados

BOSNIA, HERZEGOVINA

- The Sarajevo Haggadah manuscript
- Manuscript collection of The Gazi Husrevbeg Library

BRAZIL

- Collection Educator Paulo Freire
- Nise da Silveira Personal Archive

BRAZIL, ITALY

- Antonio Carlos Gomes

BULGARIA

- Boril's Synodicon or Synodicon of King Boril

BULGARIA AND THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

- Gospels of Tsar Ivan Alexander

CAMBODIA, INDONESIA, THE NETHERLANDS, MALAYSIA, UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

- Panji Tales Manuscripts

CANADA

- Marshall McLuhan: The Archives of the Future
- Mixed Traces and Memories of the continents
- The Sound of the French people of America

COSTA RICA

- Abolition of the Army in Costa Rica
- Central American Court of Justice

CZECHIA

- Archives of Leoš Janáček
- The Kynzvalt Daguerreotype
- The Birth of Modern Visual Media

CZECHIA, MALTA

- Camocio Maps

DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA

- Comprehensive Illustrated Manual of Martial arts

EL SALVADOR

- Ignacio Ellacuría's Documentary Fond: Historical Reality and Liberation

FRANCE

- Archives of Père Castor

GEORGIA

- The Tetraevangelion-palimpsest

GERMANY

- Constitutio Antoniniana
- Frankfurt Auschwitz Trial

GUATEMALA

- The Florid Recollection, a historical speech and natural, material, military and political account of the Reyno of Guatemala

HAITI

- Odette Mennesson Rigaud holdings

INDIA

- Gilgit Manuscript
- Maitreyavarakarana

INDONESIA

- Borobudur Conservation Archives

INDONESIA, SRI LANKA

- The Indian Ocean Tsunami Archives

IRELAND

- The Irish Folklore Commission Collection 1935–1970

ISLAMIC REPUBLIC OF IRAN

- Jāme' al-Tavarikh

ISRAEL

- Israel Folktale Archives

JAPAN

- Three Cherished Stelae of Ancient Kozuke

JAPAN, REPUBLIC OF KOREA

- Documents on Joseon Tongsinso/Chosen Tsushinshi: The History of Peace Building and Cultural Exchanges between Korea and Japan from the 17th to 19th Century

MALI

- Kitāb Shifā al-Asqām al-Āridat min al-Zahir wa al-Bāṭin min al-Ajsām/the Book of Healing from internal and external diseases affecting the body
- Tadrirat al gāfilin 'anqubhihtilāf al-mu'minin/ Reminder to those who do not pay attention to the harms caused by the divergence between believers

MALI, NIGERIA

- Maṣāliḥ al-Insān al-Muta'alliqat bi al-Adyānwa al-Abdān, The human being interests linked to the religions and the body

MEXICO

- The Archives of negatives, publications and documents of Manuel Álvarez Bravo

MOROCCO

- Manuscript of al-Zahrāwīsur

MYANMAR

- King Bayinnaung Bell Inscription

NETHERLANDS

- The Archive of the Amsterdam Notaries 1578–1915
- Westerbork films

NETHERLANDS, UNITED STATES OF AMERICA

- Aletta H. Jacobs Papers

NORWAY

- The Castbergian Child Laws of 1915

OMAN

- Ma'den Al Asrar Fi Elm Al Behar

PEOPLE'S REPUBLIC OF CHINA

- Chinese Oracle-Bone Inscriptions
- The Archives of Suzhou Silk from Modern and Contemporary Times

POLAND

- Documents of Polish radio intelligence from the period of the Battle of Warsaw in 1920
- Jürgen Stroop's Report

POLAND, LITHUANIA, UKRAINE, BELARUS, LATVIA

- The Act of the Union of Lublin document

PORTUGAL

- Register Books of visas granted by Portuguese Consul in Bordeaux, Aristides Sousa Mendes (1939–1940)

PORTUGAL, PEOPLE'S REPUBLIC OF CHINA

- Official Records of Macao During the Qing Dynasty (1693–1886)

REPUBLIC OF KOREA

- Archives of the National Debt Redemption Movement
- Royal Seal and Investiture Book Collection of the Joseon Dynasty

RUSSIAN FEDERATION

- Album of Indian and Persian Miniatures from the 16th through the 18th Century and Specimens of Persian Calligraphy

SINT MAARTEN

- Route/Root to Freedom: A case study of how enslaved Africans gained their freedom on the dual national island of Sint Maarten/ Saint Martin

SPAIN

- Archives of Santiago Ramón y Cajal and the Spanish Neurohistological School
- The General Archive of Simancas

SPAIN, PORTUGAL

- The Codex Calixtinus of Santiago de Compostela Cathedral and other medieval copies of the Liber Sancti Jacobi: The Iberian origins of the Jacobian tradition in Europe

SWEDEN

- Dag Hammarskjöld Collection

SWITZERLAND

- Documentary heritage of the former Abbey of Saint Gall in the Abbey Archives and the Abbey Library of Saint Gall
- Statements made by Indigenous Peoples at the United Nations 1982 to 2015

THAILAND

- The Royal Photographic Glass Plate Negatives and Original Prints Collection

TUNISIA

- The Abolition of Slavery in Tunisia 1841–1846

TURKEY

- Compendium of the Turkic Dialects
- The Piri Reis World Map (1513)

UKRAINE

- Documentary Heritage Related to accident at Chernobyl

UNESCO ARCHIVE

- Archives of the International Institute of Intellectual Cooperation, 1925–1946

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

- The Gertrude Bell Archive
- The Orwell Papers

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND, UNITED STATES OF AMERICA

- The ‘Shakespeare Documents’, a documentary trail of the life of William Shakespeare

UZBEKISTAN

- Archives of the Chancellery of Khiva Khans

VIET NAM

- Imperial Archives of Nguyen Dynasty (1802–1945)

WORLD HEALTH ORGANIZATION

- Records of the Smallpox Eradication Programme of the World Health Organization

Recommended as an addition to an existing inscription:

ISRAEL, UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

- The Scientific and Mathematical Papers of Sir Isaac Newton

MONGOLIA

- Stone Stele Monument for Mongolian Tanjur

ST. VINCENT, GRENADINES

- Records of the Indian Indentured Labourers

8. New UNESCO Creative Cities

Crafts and Folk Art

- Baguio City (Philippines)
- Barcelos (Portugal)
- Cairo (Egypt)
- Carrara (Italy)
- Chiang Mai (Thailand)
- Chordeleg (Ecuador)
- Gabrovo (Bulgaria)
- João Pessoa (Brazil)
- Kütahya (Turkey)
- Limoges (France)
- Madaba (Jordan)
- Ouagadougou (Burkina Faso)
- Porto-Novo (Benin)
- Sheki (Azerbaijan)
- Sokodé (Togo)
- Tétouan (Morocco)
- Tunis (Tunisia)

Design

- Brasília (Brazil)
- Cape Town (South Africa)
- [City of] Greater Geelong (Australia)
- Dubai (United Arab Emirates)
- Istanbul (Turkey)
- Kolding (Denmark)
- Kortrijk (Belgium)
- Mexico City (Mexico)
- Wuhan (People’s Republic of China)

Film

- Bristol (United Kingdom of Great Britain and Northern Ireland)
- Łódź (Poland)
- Qingdao (People’s Republic of China)
- Terrassa (Spain)
- Yamagata City (Japan)

Gastronomy

- Alba (Italy)
- Buenaventura (Colombia)
- Cochabamba (Bolivia [Plurinational State of])
- Hatay Metropolitan Municipality (Turkey)
- Macao Special Administrative Region, People’s Republic of China (Associate Member, UNESCO)
- Panama City (Panama)
- Paraty (Brazil)
- San Antonio (United States of America)

Literature

- Bucheon (Republic of Korea)
- Durban (South Africa)
- Lillehammer (Norway)
- Manchester (United Kingdom of Great Britain and Northern Ireland)
- Milan (Italy)

- Québec City (Canada)
- Seattle (United States of America)
- Utrecht (Netherlands)

Media Arts

- Braga (Portugal)
- Changsha (People's Republic of China)
- Guadalajara (Mexico)

- Košice (Slovakia)
- Toronto (Canada)

Music

- Almaty (Kazakhstan)
- Amarante (Portugal)
- Auckland (New Zealand)
- Brno (Czechia)

- Chennai (India)
- Daegu Metropolitan City (Republic of Korea)
- Frutillar (Chile)
- Kansas City (United States of America)
- Morelia (Mexico)
- Norrköping (Sweden)
- Pesaro (Italy)
- Praia (Cabo Verde)

9. Ratifications of conventions adopted under the auspices of UNESCO

Convention against Discrimination in Education (1960)

BOLIVIA (PLURINATIONAL STATE OF)
17/08/2017 *Ratification*

Convention on Technical and Vocational Education (1989)

BENIN 01/03/2017 *Ratification*

Asia-Pacific Regional Convention on the Recognition of Qualifications in Higher Education (2011)

NEW ZEALAND 01/08/17 *Ratification*

JAPAN 06/12/2017 *Ratification*

REPUBLIC OF KOREA 19/12/2017 *Ratification*

Convention for the Protection of Cultural Property in the Event of Armed Conflict (1954)

TOGO 24/01/2017 *Accession*

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND 12/09/2017 *Ratification*

AFGHANISTAN 26/10/2017 *Accession*

Protocol to the Convention for the Protection of Cultural Property in the Event of Armed Conflict (1954)

TOGO 24/01/2017 *Accession*

BOTSWANA 23/08/2017 *Accession*

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND 12/09/2017 *Accession*

Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict (1999)

TOGO 24/01/2017 *Accession*

LIECHTENSTEIN 31/01/2017 *Accession*

FRANCE 20/03/2017 *Accession*

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND 12/09/2017 *Accession*

SWEDEN 10/11/2017 *Ratification*

Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property (1970)

BENIN 01/03/2017 *Ratification*

BOTSWANA 23/08/2017 *Acceptance*

MONACO 25/08/2017 *Ratification*

UNITED ARAB EMIRATES 09/10/2017 *Ratification*

ETHIOPIA 22/11/2017 *Ratification*

Convention on the Protection of the Underwater Cultural Heritage (2001)

BOLIVIA (PLURINATIONAL STATE OF)
24/02/2017 *Ratification*

KUWAIT 30/05/2017 *Ratification*

EGYPT 30/08/2017 *Ratification*

Convention for the Safeguarding of the Intangible Cultural Heritage (2003)

MALTA 13/04/2017 *Ratification*

TUVALU 12/05/2017 *Acceptance*

SURINAME 05/09/2017 *Ratification*

Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005)

TURKEY 02/11/2017 *Accession*

International Convention against Doping in Sport (2005)

LAO PEOPLE'S DEMOCRATIC REPUBLIC
23/01/2017 *Accession*

YEMEN 23/03/2017 *Ratification*

UNITED REPUBLIC OF TANZANIA 29/08/2017
Ratification

10. Permanent Delegates who presented their credentials

Permanent Delegates are listed per region and in the chronological order of their visit to UNESCO.

Africa

MALAWI HE Mr Tedson A. Kalebe, Ambassador Extraordinary and Plenipotentiary of Malawi to Belgium *Permanent Delegate (20/01/2017)*

UNITED REPUBLIC OF TANZANIA
HE Mr Samwel William Shelukindo, Ambassador Extraordinary and Plenipotentiary to France *Permanent Delegate (21/04/2017)*

SEYCHELLES HE Mr Louis Sylvestre Radegonde, Ambassador *Permanent Delegate (16/08/2017)*

MAURITIUS HE Mr Vijayen Valaydon, Ambassador Extraordinary and Plenipotentiary of Mauritius to France *Permanent Delegate (11/09/2017)*

GHANA HE Ms Anna Bossman, Ambassador Extraordinary and Plenipotentiary of the Republic of Ghana to France *Permanent Delegate (26/09/2017)*

UGANDA HE Mr Richard Nduhuura, Ambassador Extraordinary and Plenipotentiary *Permanent Delegate (28/09/2017)*

BURUNDI HE Mrs Christine Nina Niyonsavye, Ambassador Extraordinary and Plenipotentiary to France *Permanent Delegate (23/10/2017)*

CABO VERDE HE Mr Hércules do Nascimento Cruz, Ambassador Extraordinary and Plenipotentiary of Cabo Verde to France *Permanent Delegate (05/12/2017)*

Arab States

SAUDI ARABIA HE Mr Ibrahim Albalawi, Ambassador *Permanent Delegate (22/05/2017)*

ALGERIA HE Mr Abdelkader Mesdoua, Ambassador Extraordinary and Plenipotentiary to France *Permanent Delegate (04/10/2017)*

Asia and the Pacific

BHUTAN HE Mr Kinga Singye, Ambassador Extraordinary and Plenipotentiary, Permanent Representative of the Kingdom of Bhutan to Geneva *Permanent Delegate (16/01/2017)*

AUSTRALIA HE Mr Angus Mackenzie, Ambassador *Permanent Delegate (20/01/2017)*

TIMOR-LESTE HE Mrs Maria da Paixão Costa, Ambassador Extraordinary and Plenipotentiary *Permanent Delegate (22/03/2017)*

COOK ISLANDS HE Mrs Nathalie Rossette-Cazel, Ambassador *Permanent Delegate (21/04/2017)*

NEW ZEALAND Mr Charles Kingston, *Permanent Delegate (21/04/2017)*

LAO PEOPLE'S DEMOCRATIC REPUBLIC
HE Mr Yong Chanthalangsy, Ambassador Extraordinary and Plenipotentiary of Lao People's Democratic Republic to France *Permanent Delegate (26/06/2017)*

BRUNEI DARUSSALAM HE Mrs Datin Malai Hajah Halimah Malai Haji Yusoff, Ambassador Extraordinary and Plenipotentiary of Brunei Darussalam to France *Permanent Delegate (28/09/2017)*

VIET NAM HE Mrs Tran Thi Hoang Mai, Ambassador *Permanent Delegate (28/09/2017)*

SRI LANKA HE Mr B. K. Athauda, Ambassador Extraordinary and Plenipotentiary to France *Permanent Delegate (04/10/2017)*

INDIA HE Mr Vinay Mohan Kwatra, Ambassador *Permanent Delegate (09/10/2017)*

BANGLADESH HE Mr Kazi Imtiaz Hossain, Ambassador Extraordinary and Plenipotentiary to France *Permanent Delegate (31/10/2017)*

JAPAN HE Mr Takio Yamada, Ambassador Extraordinary and Plenipotentiary *Permanent Delegate (06/12/2017)*

Europe

CYPRUS HE Mr Pantelakis D. Eliades, Ambassador Extraordinary and Plenipotentiary to France *Permanent Delegate (06/02/2017)*

CZECHIA HE Mr Petr Drulak, Ambassador *Permanent Delegate (24/02/2017)*

LITHUANIA HE Mrs. Irena Vaisvilaitė, Ambassador *Permanent Delegate (04/08/2017)*

SWITZERLAND HE Mr Martin Michelet, Ambassador *Permanent Delegate (08/09/2017)*

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND Mr Matthew Lodge, *Permanent Delegate (12/09/2017)*

CROATIA HE Mr Filip Vučak, Ambassador Extraordinary and Plenipotentiary of the Republic of Croatia to France *Permanent Delegate (26/09/2017)*

GREECE HE Mr Michel Spinellis, Ambassador *Permanent Delegate (26/09/2017)*

AUSTRIA HE Mr Walter Grahmmer, Ambassador Extraordinary and Plenipotentiary to France *Permanent Delegate (02/10/2017)*

LUXEMBOURG HE Mrs Martine Schommer, Ambassador Extraordinary and Plenipotentiary *Permanent Delegate (02/10/2017)*

REPUBLIC OF MOLDOVA HE Mr Emil Druc, Ambassador Extraordinary and Plenipotentiary to France *Permanent Delegate (18/10/2017)*

Latin America and the Caribbean

CHILE HE Mrs Marcia Covarubias, Ambassador *Permanent Delegate (23/02/2017)*

BRAZIL HE Mrs Maria Edileuza Fontenele Reis, Ambassador *Permanent Delegate (08/09/2017)*

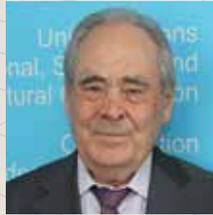
11. Designations of eminent personalities

UNESCO Special Envoys



JUDITH PISAR
United States of America

On 15 July, Judith Pisar was appointed as UNESCO Special Envoy for Cultural Diplomacy in recognition of her commitment to cultural diversity. Ms Pisar has devoted her career to building transatlantic cultural bridges. She has acted as Chair of the American Center of Paris, Director of Music at the Brooklyn Academy, Executive Director of the Merce Cunningham Dance Company and President of Arts France–USA. She also founded The Composer Speaks, a bureau helping some of the greatest 20th-century composers to travel throughout the United States.



MINTIMER SHAIMIEV
Russian Federation

Born in the Tatar Autonomous Soviet Socialist Republic (TASSR), Mr Shaimiev was designated a UNESCO Special Envoy for Intercultural Dialogue on 21 August, in recognition of his lifelong commitment to promoting and disseminating values, attitudes and behaviours conducive to dialogue, non-violence and the rapprochement of cultures. A former Minister of Irrigation and Water Resources, and member of the Supreme Council of the TASSR, which adopted the Declaration of State Sovereignty of the Republic of Tatarstan, he was elected as the first President of the Republic of Tatarstan in 1991.



HRH PRINCESS SUMAYA BINT EL HASSAN
Jordan

A leading advocate for science in the Arab World, Her Royal Highness Princess Sumaya bint El Hassan of Jordan was named UNESCO Special Envoy for Science for Peace on 2 October. Princess Sumaya's passion for science has led her to act as Chair of many scientific organizations and President of the Royal Scientific Society of Jordan. She has long been an active supporter of the Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) laboratory, the first major international research centre of the region, which opened earlier in 2017 in Allan, Jordan.

UNESCO Goodwill Ambassadors



HRH PRINCESS DANA FIRAS
Jordan

President of the Petra National Trust, Her Royal Highness Princess Dana Firas of Jordan was designated a UNESCO Goodwill Ambassador on 29 June. This title was bestowed upon HRH Princess Dana Firas in recognition of her outstanding commitment to heritage protection and preservation as pillars for sustainable development, her contribution to responsible tourism and community participation.



MARIA FRANCESCA MERLONI
Italy

Writer and poet Maria Francesca Merloni was designated as UNESCO Goodwill Ambassador for Creative Cities on 4 October. She has been artistic Director of Poiesis, a festival in the Marche region (Italy) combining music, poetry, cinema and philosophy. Thanks to her initiative, the city of Fabriano was designated Creative City of UNESCO in 2013 for its craft activities, which represent a very old and rich tradition encompassing great knowledge.



ANDRÉS ROEMER
Mexico

Andrés Roemer, the famous Mexican writer and public figure, was designated a UNESCO Goodwill Ambassador for Societal Change and the Free Flow of Knowledge on 9 September. He is the author of numerous books on diverse topics such as freedom, gender equality, art, social development, soccer, law, economics, crime, evolutionary psychology, cultural mobility and public policy. He achieved international recognition after creating with Ricardo Pliego the 'City of Ideas' festival, considered one of the most important conferences in Latin America.

UNESCO Artists for Peace



JANE CONSTANCE
Mauritius

The talented young Mauritian singer Jane Constance was designated a UNESCO Artist for Peace on 26 September. This title was bestowed upon Ms Constance in recognition of her commitment to promoting the rights of persons with disabilities, her work for their empowerment and inclusion and her dedication to the ideals of the Organization. Blind at birth, she took up singing at the age of 5 and started learning to play the piano at 7. In 2015, Ms Constance won the French television competition *The Voice Kids* and released her first album, *A travers tes yeux* (Through your Eyes) the following year.



NASEER SHAMMA
Iraq

Internationally known for being one of the world's greatest oud virtuosos as well as a music composer for numerous films, theatre productions and television shows, Naseer Shamma was appointed a UNESCO Artist for Peace on 23 February. Mr Shamma taught oud at the Tunisian Higher Institute of Music and served as Director of the Arabic Oud House in Cairo. Famous for playing the oud with one hand, Mr Shamma has developed a technique to allow the injured children of the Gulf War to play music. He has also created several humanitarian associations to assist children and displaced people.



MAGALY SOLIER
Peru

Singer and actress Magaly Solier was designated a UNESCO Artist for Peace on 26 June. Ms Solier grew up in a region strongly affected by the 1980s guerrilla insurrection. Her singing career started in 2003, when she won a prize at the Ayacuchana Song Festival in her home town. A year later, she got her first role in the Peruvian movie *Madeinusa*, and achieved international praise for her role in *La Teta Asustada*. Most of the songs in her first album, *Warmy*, are in Quechua. Her career reflects her commitment to peace, social justice, environmental protection, inclusion and rights for children to study in their mother tongue, and her support for gender equality.

12. Highlights of partnerships signed in 2017

JANUARY

- **Netherlands** renewal for 4 more years of thematic support for implementation of the World Heritage Convention for *US\$1,601,248*
- **The China Youth Development Foundation** provided an additional *US\$1,667 million* for an initiative in support to the conservation and management of World Heritage in the People's Republic of China.

FEBRUARY

- **Republic of Korea** – the **Cultural Heritage Administration** contributed the amount of *US\$300,000* to support the period reporting mechanism of the 2003 Convention for the

Safeguarding of the Intangible Cultural Heritage.

MARCH

- **Canada** launched the UNESCO USHMM Joint Programme to Promote Education about the Holocaust and Its Relevance to Other Genocides Worldwide (*US\$500,000*).
- **Beijing Caofeidian Vocational Educational City Investment** signed a Project Agreement for the implementation of the project 'Developing TVET institutions for entrepreneurship, innovation and sustainability' (*US\$800,000*).
- **Madagascar** – Ministère de la Culture, la Promotion de l'Artisanat et la Sauvegarde

du Patrimoine (Ministry of Culture, Promotion of Crafts and Safeguarding Heritage) – Self-benefitting funds provided for the Restoration of the Collections of Manjakamiadana Palace (*US\$244,914*).

APRIL

- **Benin** – Strategic Framework Agreement signed with Benin for an amount of *5,897,855,800 FCFA*.
- **Peru** – Renewal of the partnership with Peru in view of strengthening of the development of professional skills and the quality of educational resources for teachers for *US\$10,339,530*, allowing the overall support provided by UNESCO to amount to over *US\$40 million* during the past 4 years.

- **Dubai Cares** signed an agreement to support IBE's work in the area of early childhood care and education (ECCE) systems. (*US\$963,000*).

MAY

- **Spain** – Renewal of Spain's support for the 'Programa Conjunto AECID - OREALC/ UNESCO Santiago: Aprendizajes y Docentes para la calidad en la Agenda E2030' valued at *US\$385,000*.
- **The Municipality of Nanjing** contributed *US\$750,000* to UNESCO's work on the protection and conservation of urban cultural and natural heritage in the city.
- **African Development Bank** support for a joint CLT-SC project: 'Applying the model of trans-boundary biosphere reserves and World Heritage sites to promote peace in the Lake Chad Basin by the sustainable management of its natural resources', amounting to *US\$6.4 million*.
- **Sweden's** outstanding contribution to TWAS for around *US\$7.2 million*, as well as around *US\$7.6 million* to TWAS and OWSD covering the period 2017–2021. This support has been complemented, in December 2017, with an additional *US\$1.6 million* to both Programmes, making Sweden the major funding source to TWAS and OWSD programmes. The Swedish International Development Cooperation Agency (Sida) provides essential support to TWAS, OWSD and GenderInSITE. Sida-supported programmes focus on research grants and PhD fellowships in 66 countries with limited science and technology capability, and support the TWAS Regional Offices and its science diplomacy programme.
- Sweden extended support to Sexuality Education with an additional funding amounting to *SEK 10 million*.
- **Saudi Arabia:** support of *US\$300,000* to the Preservation and Safeguarding of the Cultural Heritage of Bukhara.

- **The Norwegian Refugee Council (NRC)** continued its outstanding support to UNESCO field offices throughout the year 2017, supporting several areas and countries, such as Mauritania, Kenya, Lebanon, Tunisia, Somalia, in the fields of education in emergencies, freedom of expression and safety of journalists and prevention of violent extremism (PVE).

JUNE

- **Canada** – Canada joins Sida in supporting the Women's Leadership in Science, Technology and Innovation through Early-Career Fellowships (2017–2021) for *US\$5,832,037*.
- **The Education Above All Foundation** contributed *US\$6,1 million* to support UNESCO's efforts to respond to the needs of out-of-school children in Pakistan.
- **Republic of Korea** – The **Ministry of Education** provided support to a new phase of the project 'Enhancing National Capacity to Foster Digital Citizenship Education in Asia Pacific' with an amount of *US\$1,500,000*.

JULY

- **Netherlands** – Signature by the Netherlands of an agreement in favour of Strengthening Media Self-Regulatory Mechanisms in Timor Leste for *US\$613,710*.
- **The Chinese Cultural Communication Centre** provided *US\$500,000* to support UNESCO's communication and outreach work.
- **Republic of Korea** – A funding agreement was concluded with the **Korean International Cooperation Agency (KOICA)** for the support of the project 'Better Life for Out-of-School Girls to Fight Against Poverty and Injustice in the Philippines' with an amount of *US\$6 million*.
- **Italy AICS (Italian Agency for Development Cooperation)** – A funding

agreement was concluded for the project on 'Local Community Empowerment and Preservation of Shahr-e Gholgola, the World Heritage Site in Bamiyan, in Afghanistan' (*€1 million*).

AUGUST

- **Canada** – Launching of the Technical Support for Jordan's Education Strategic Plan supported by Canada for *US\$498,345*.
- **France** – Renewal of France's support to the Pole de Dakar of IIEP for *€8,000,000*.
- **The Delegation of the European Union to Haiti** supports the analysis and capacity building of planning and management of the Haitian education system by providing *€335,030 (US\$414,733)*.
- **Norway (Joint Programme with UNESCO/ UNHCR/ILO and UNICEF)** The project aims to coordinate a harmonized multi-partner approach to support four developing countries in Africa in strengthening their teacher policies as integrated components of their education sector plans for the achievement of the teacher target of SGD 4. The approved budget is *NOK45 million*.
- **Peace-Building Fund administrated by UNDP:** Support to endogenous mechanisms for community dialogue and the improvement of the economic situation of vulnerable populations (Madagascar). The approved budget is *US\$816,984*.
- **Sweden** has committed 79.7 million SEK (approximately *US\$10 million*) over the next three years to the 'Our Rights, Our Lives, Our Future' project, bringing their total support for CSE to *SEK220 million* (approximately *US\$30 million*) over an 8-year period.

SEPTEMBER

- **William and Flora Hewlett Foundation** provided a grant of *US\$600,000* to UNESCO for its work on Open Educational Resources.
- **Yong Xin Hua Yun Cultural Industry Investment** provided *US\$1.5 million* to

support a project on Intangible Heritage and Creativity for Sustainable Cities.

- In the broad context of diversification of funding sources, UNESCO is working for the first time with the **European Service for Foreign Policy Instrument** – Instrument contributing to Stability and Peace (IcSP), which is contributing to the Protection of Cultural Heritage and Diversity in Complex Emergencies for Stability and Peace – €1 070 000 (US\$1,324,552), and strengthening Education Sector Planning Capacities for Conflict Prevention and Crisis Preparedness €2 302 928 (US\$2,850,793), the latest to be implemented by IIEP.
- **Italy AICS (Italian Agency for Development Cooperation)** – A funding agreement was concluded for the project on ‘Support to girls’ right to education and safeguarding cultural heritage through education in Pakistan’ (€1.5 million).
- **German Archaeological Institute - DAI** – A funding agreement was concluded for the project on ‘Capacity Building Technical and Media Support for the Protection of Syrian Cultural Heritage’ (€199,700).

OCTOBER

- **Japan** renewed the Funds-in-Trust for the Preservation of World Cultural Heritage, for the promotion of the Global Action Programme on ESD, for the Safeguarding of Intangible Cultural Heritage, for the Capacity-Building of Human Resources, and the promotion of education and science in Asia and the Pacific Region (US\$3.1 million).
- **Worldbank** renewed support for Cultural heritage in Afghanistan: ‘The Afghanistan Heritage and Extractive Industries Development Initiative Phase II’ (US\$3.1 million).
- **Republic of Korea** – A new funding agreement was concluded with the Ministry of Land Infrastructures and Transports to support the project ‘Sustainable Water

Security for Human Settlements in Developing Countries under Climate Change’ with an amount of US\$3,130,000.

- Signature of a Funds-in-Trust Framework Agreement between **Shanghai Municipal Government of the People’s Republic of China** and UNESCO to Support UNESCO’s Activities in favour of Education Development in Asia and Africa for US\$2 million.
- OCP Foundation provided US\$2.1 million to an intersectoral project on the future of Africa.
- **Hamdan Bin Rashid Al Maktoum Award** for Distinguished Academic Performance signed a Strategic Partnership Framework Agreement of US\$1 million to support UNESCO’s activities in the field of education.
- **Irish Aid** – A funding agreement was concluded for the project on ‘Our Rights, Our Lives, Our Future – Making Positive Sexual and Reproductive Health and Education Outcomes a Reality for Adolescents and Young People in Sub Saharan Africa’ (€350,000 – with possibility of further funding maximum for a total amount up to €1,850,000 subject to Governmental Approval).
- **Saudi Arabia** – In 2016, Saudi Arabia expanded its support to the strengthening of the Arabic language within UNESCO through the Prince Sultan Foundation and pledged US\$5 million. In October 2017, UNESCO and the Foundation launched the Programme with the signature of two operational project funding agreements.

NOVEMBER

- **France** – Launching of the project ‘Promoting living together in the liberated territories of Iraq through community media France’ supported by France with US\$170,000.
- Support by **Switzerland** of two initiatives in the field of culture in Pakistan in favour

of Improving the Educational Role of Hund, Chitral and Islamabad Museums (US\$136,650) and Strengthening the resilience of Kalasha communities through protecting and promoting their cultural heritage (US\$599 880).

- **Sabrino Ho** signed a Strategic Partnership Framework Agreement of US\$1.5 million to support cultural and educational projects.
- **The European Union**, through the Directorate General for Neighborhood and Enlargement Negotiations (NEAR) is Supporting Youth Employment in the Mediterranean (YEM) – €100 000 (US\$2,600,000).
- **Republic of Korea** – The Government of Jeju Special Self-governing province has renewed the support to the project ‘the Biosphere Reserves as tools to reach the Sustainable Development Goals in island and coastal areas’ with an amount of US\$500,000.
- **The Government of Norway’s** outstanding and streamlined support to the Organization: A range of programmes from education to freedom of expression to the protection of African World Heritage Natural sites, among others, benefited from a new annual funding agreement between UNESCO and Norway for approximately US\$14 million, representing a nearly 30 per cent increase in the Government’s voluntary contribution over the last year.
- **Sweden** – In addition to its generous annual contribution under a Programme Cooperation Agreement (2014–2017), the Government of Sweden decided in November 2017 to provide additional financial support to UNESCO in the amount of SEK3,200,000 (around US\$400,000) to strengthen the protection of heritage, as well as to promote independent, free and pluralistic media.

DECEMBER

- **Netherlands** – Launch of a joint partnership in favour of Empowering pupils, teachers and school inspectors to prevent hate speech and violent behaviour through the promotion of global citizenship education and living together concept, with the support by the Netherlands for *US\$500,000*.
- **GPE** – Grant for *US\$600,000* on ‘GPE’s Assessment for Learning (A4L) initiative regional assessment network’, implemented by the UNESCO Office in Bangkok.
- **The European Union** is supporting a Training for the European judiciary and law enforcement officials on the fight against the illicit trafficking in cultural property – *€333 333 (US\$412,632)*, as well as UNESCO Cultural World Heritage sites in Europe (Phase II) – *€1 666 667 (US\$2,063,166)*.
- Through the European Union’s Horizon 2020 Programme of the Directorate for Research and Innovation, UNESCO is participating in two Consortia for the following projects: Inventing a Shared Science Diplomacy for Europe (InsSciDE) – *€252 093 (US\$312,065)* and European Climate Prediction system (EUCP) – *€502 250 (US\$621,735)*.
- **UNODC** – the aim is to provide support to UNODC in the development of policy and education materials on crime prevention, criminal justice and other rule of laws aspects, as well as for UNODC to support UNESCO activities on the prevention of violent extremism within the latter’s Global Citizenship Education Programme. The budget is *US\$2,212,202*.
- **UNAIDS** – Letter of agreement covering funding of UNESCO’s activities included in the UNAIDS 2018–2019 budget (*US\$4,000,000*).
- **UNCCT** – Project on the prevention of violent extremism through youth empowerment in Jordan, Libya, Morocco and Tunisia (*US\$1,864,409*).
- **Peace-Building Fund administrated by UNDP** – Les jeunes acteurs pour la Paix et la Réconciliation Nationale (Mali) – *US\$864,406*.
- **UNDP** – Strengthened capacity of media professionals to develop balanced, inclusive and objective election reporting and foster peaceful democratic disclosure (Pakistan) – (*US\$430,000*).
- **Republic of Korea** – two new funding agreements were concluded with the **Ministry of Foreign Affairs** which is providing support to the projects ‘Provision of technical and technical and vocational education for Syrian and vulnerable Jordanian youth’ with an amount of *US\$1 million* and ‘Support for adult literacy in Afghanistan’ for an amount of *US\$3,750,458*.
- **Italy AICS (Italian Agency for Development Cooperation)** – A funding agreement was concluded for the project on ‘Rehabilitation and Valorization of Wadi Qadisha’ (*€500,000*).
- **Germany – The Federal Ministry of Education and Research- BMBF** – Amendment of the agreement funding UNEVOC providing maximum up to *€2,630,000* for the period 2018–2020 in annual installments.
- **Germany – The Federal Ministry for Economic Cooperation and Development -BMZ** – A funding agreement was concluded for the project on ‘Music for Sustainable Development in Morocco’ (up to *€400,510*).
- **Germany – GIZ** – A funding agreement was concluded for the project ‘Defining, Measuring and Promoting Gender Transformative Skills for Women and Girls in the Digital Age’ (*€202,609*).
- **Finland** continued its generous annual support to CapED (*€2 million*) and IPDC (*€400,000*), while enhancing the predictability of its funding with a two-years commitment covering 2017 and 2018.
- **Sweden** provided additional financial support to the Literacy Programme in Afghanistan, while informing UNESCO that it intends to scale up its partnership with the Organization concerning this Programme. A strategic partnership is currently under negotiation.

13. New institutes and centres under the auspices of UNESCO (Category 2)

BANGLADESH

- International Mother Language Institute, in Dhaka

AUSTRIA

- International Centre for the Promotion of Human Rights at the Local and Regional Levels, in Graz

GHANA

- African Institute for Mathematical Sciences, in Biriwa

INDIA

- International Training Centre on Operational Oceanography, in Hyderabad

INDONESIA

- Regional Centre for Human Evolution, Adaptations and Dispersals in Southeast Asia, in Jakarta

ISLAMIC REPUBLIC OF IRAN

- International Centre for Health-Related Basic Sciences and Human Nutrition, in Mashhad

KAZAKHSTAN

- International Centre for the Rapprochement of Cultures, in Almaty

MEXICO

- Regional Centre on Water Security, in Mexico City

NETHERLANDS

- Institute for Water Education, in Delft

PEOPLE'S REPUBLIC OF CHINA

- Teacher Education Centre, in Shanghai

REPUBLIC OF KOREA

- International Centre for Documentary Heritage, in Cheongju City

RUSSIAN FEDERATION

- International Competence Centre for Mining-Engineering Education, in Saint Petersburg

UKRAINE

- Junior Academy of Sciences, in Kiev

14. Non-governmental organizations accredited by UNESCO in 2017

NGOs admitted to official partnership with UNESCO, with consultative status

INTERNATIONAL FEDERATION OF ARTS COUNCILS AND CULTURE AGENCIES (IFACCA)

Australia (March)

WORLD COMMITTEE FOR LIFELONG LEARNING (CMA) France (March)

FEDERATION INTERNATIONALE DES VEHICULES ANCIENS (FIVA) France (April)

SWEDISH ASSOCIATION FOR SEXUALITY EDUCATION (RFSU) Sweden (April)

AKHIL BHARTIYA SANSKRUTIK SANGH (ABSS) India (June)

LINGUAPAX INTERNATIONAL Spain (July)

UNIVERSITY OF THE ARCTIC ASSOCIATION (UARCTIC) Finland (September)

WAPIKONI MOBILE Canada (October)

ALADDIN PROJECT France (November)

Foundations and similar institutions admitted to official relations with UNESCO

AL SAAD FOUNDATION FOR KNOWLEDGE AND SCIENTIFIC RESEARCH Kuwait (June)

FONDATION ESPRIT DE FES Morocco (November)

EDUARDO DOS SANTOS FOUNDATION (FESA) Angola (December)

15. Condemnation of the killing of journalists

Journalists are listed under the country where they have lost their lives in the line of duty.

AFGHANISTAN

- Mohammad Ali Mohammadi
- Farida Mustakhdim
- Noorullah
- Mollakhil Zeinoloh Khan
- Ghani Naghdi
- Shinwari Momhammad Amir Khan
- Amiril Abdollatif
- Aziz Navin
- Mohammed Nazir
- Hussain Nazari
- Sayed Mehdi Hosaini

BANGLADESH

- Abdul Hakim Shimul

BRAZIL

- Luís Gustavo da Silva

COLOMBIA

- Efigenia Vásquez Astudillo

DENMARK

- Kim Wall
- Dominican Republic
- Luis Manuel Medina
- Leónidas Martínez

GUATEMALA

- Manuel Salvador Villagrán Trujillo

HONDURAS

- Igor Padilla
- Carlos William Flores
- Carlos Oveniel Lara Domínguez

INDIA

- Kamlesh Jain
- Gauri Lankesh
- Shantanu Bhowmick
- Sudip Dutta Bhaumik
- Naveen Gupta

IRAQ

- Shifa Zikri Ibrahim (aka Shifa Gardi)
- Bakhtyar Haddad
- Stephan Villeneuve
- Véronique Robert (died in France after sustaining injuries in Iraq)
- Harb Hazaa al-Dulaimi
- Soudad al-Douri
- Arkan Sharifi
- Souhaib Al-Hiti

MALDIVES

- Yameen Rasheed

MALTA

- Daphne Caruana Galizia

MEXICO

- Cecilio Pineda Birto
- Ricardo Monlui Cabrera
- Miroslava Breach Velducea
- Maximino Rodríguez Palacios
- Filiberto Álvarez Landeros
- Javier Arturo Valdez Cárdenas
- Héctor Jonathan Rodríguez
- Salvador Adame Pardo
- Edwin Rivera Paz
- Luciano Rivera Salgado
- Cándido Ríos Vázquez
- Edgar Daniel Esqueda Castro
- Gumaro Pérez Aguilando

MYANMAR

- Wai Yan Heinn

NIGERIA

- Famous Giobaro
- Ikechukwu Onubogu

PAKISTAN

- Muhammad Jan
- Taimur Abbas
- Baksheesh Elahi

- Haroon Khan

PERU

- José Feliciano Yactayo Rodríguez

PHILIPPINES

- Joaquin Briones
- Rudy Alicaway
- Leo Diaz
- Christopher Iban Lozada

RUSSIAN FEDERATION

- Nikolay Andrushchenko
- Dmitry Popkov

SOMALIA

- Abdullahi Osman Moallim
- Ali Nur Siad-Ahmed
- Mohamed Ibrahim Gabow

SOUTH SUDAN

- Christopher Allen

SYRIAN ARAB REPUBLIC

- Khaled Alkhateb
- Osama Nasr al-Zoabi
- Dilshan Ibash
- Hawker Faisal Mohammed
- Quays al-Qadi
- Alaa Kraym
- Mohamed Abazied
- Bassel Khartabil Safadi (condemned in 2017 since killing was confirmed only then, but died in 2015)

TURKEY

- Saeed Karimian
- Orouba Barakat
- Hala Barakat

YEMEN

- Taqi Al-Din Al-Huthaifi
- Wael Al-Absi
- Sa'ad Al-Nadhari



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