

► 21 million before the ongoing conflict there began four years ago, has produced the most refugees, with 7.6 million people displaced internally and a further 4 million forced to flee the country. Around 10% of those people are of university age, estimates James King, who is a senior researcher at the Scholar Rescue Fund, part of the Institute of International Education (IIE), a non-profit, educational-exchange organization in New York City.

Yet the university system in Syria has all but collapsed, and few of the young people who have left the country are receiving higher education. Of those refugees who fled abroad, most have found temporary shelter in neighbouring countries — Turkey is hosting some 1.8 million, Lebanon 1.2 million and Jordan 630,000 — but only around 5% of the university-aged refugees in these countries are enrolled at local institutions, according to a March report funded by the European Commission (see go.nature.com/9ljbpl).

Before the conflict began, 26% of young adults in Syria were receiving tertiary education. That leaves hundreds of thousands of people who would normally be attending university going without.

Even when universities in the refugees' host countries have capacity — and this in itself is an issue; Turkey, for example, is struggling to accommodate all of its own eligible and interested students — there are a string of further impediments to enrolment. Many students have fled without documents, says King, including records of past academic credentials. Other issues are financial and material hardships, which can force young adults to work, leaving them no time for education. In Turkey, where just 1% of Syrian refugees aged 18–24 have found university places, language

difficulties are a big problem.

Scholarships are available. The IIE-led Syria Consortium for Higher Education in Crisis, a network of higher-education institutions worldwide that was created in 2012, has provided US\$4.5 million to support 333 Syrian students, including 158 scholarships to attend universities in Western countries. At least 20 similar initiatives also offer scholarships to institutions across the globe. However, demand far outstrips supply: these combined efforts have been able to provide only around 7,000 students with some form of tertiary education.

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only thing we can do is — one by one, family by family, scholar by scholar, student by student — try to help individuals.”

He also says that humanitarian efforts have tended to focus on saving lives and relieving misery among those fleeing conflict. “Education is the orphan of all these crises,” he says. “People are so concerned about food, water, shelter and other basics, and we haven't thought enough about education.” The 1.5% of global humanitarian aid that goes to education, meanwhile, is spent largely on primary and secondary schooling, not higher education, which traditionally has been seen as a luxury.

There are signs that attitudes are changing. In May, the European Union's trust fund for the Syrian crisis committed €12 million (US\$14.5 million) to assist 20,000 Syrian

refugees in obtaining higher education through scholarships and other means. As the European Commission report notes, however, scholarships cannot meet the enormous need, which would amount to billions, not millions, of euros.

It would be more cost effective to provide direct financial aid to universities in the countries with the most Syrian refugees, the report states. And various organizations, including the UN children's charity, UNICEF, are exploring whether the massive open online courses (MOOCs) now offered by some top universities could also help. By using recorded lectures and social-networking-style communication, for example, MOOCs are intended to democratize access to a world-class education. But they are largely untested in a refugee situation, Goodman says, and most students still want a diploma accredited by a ministry of education. “A MOOC from Stanford or MIT isn't the same,” he says. “The most durable situations are those that seek to integrate students into national university systems.”

Clearly, a long-term solution will require enormous investment and much greater involvement by higher-education institutions worldwide, Quinn says. Next month, the IIE and other organizations will hold a two-day workshop in Istanbul, Turkey, aimed at better coordinating efforts and exploring fresh approaches to scaling up access.

The challenge is great — not least because the conflicts seem set to get worse before they get better. “But this must be measured against the costs of not doing it,” says Quinn. “If we invest over the next five or ten years in educating and strengthening as many Middle East citizens and children as possible, we will have planted the seeds of a transformed region and much brighter future for the world.” ■

SUSTAINABLE AID

UN sets out next development goals

Scientists call for sharper focus in anti-poverty push.

BY JEFF TOLLEFSON

On 25 September, Pope Francis will address the United Nations just before a three-day meeting that will set the agenda for international development efforts over the next 15 years. At the Sustainable Development Summit in New York, global leaders will adopt 17 goals that are meant to improve the lives of the world's

poorest people by 2030, without jeopardizing the health of the planet.

Ambitious and broad, these Sustainable Development Goals (SDGs) would, if met, greatly improve human welfare. But some experts fear that the goals are too numerous and vague to have practical value. “I'm a little worried that there are too many of them,” says Steven Radelet, director of the Global Human Development Program at Georgetown

University in Washington DC. “They may fall prey to the old adage that if everything is a priority, then nothing is a priority.”

First on the list: “End poverty in all its forms everywhere”. Second is to end hunger and achieve food security while improving nutrition and promoting sustainable agriculture. The list goes on to address fundamental issues such as education, gender equality and access to water and basic sanitation services. It also calls for economic growth, environmental conservation and clean energy for all people, while urging action to combat climate change. The goals are supplemented by 169 specific targets that are meant to clarify the work that needs to be done.

Under discussion since 2012, the SDGs replace the expiring Millennium Development Goals, which the UN adopted in 2000. Those eight objectives called, among other things, for halving extreme poverty, reducing mortality among children under five by two-thirds and instituting universal primary



MICHAEL CHRISTOPHER BROWN/MAGNUM

The UN goal of ending poverty would help these street children in the Democratic Republic of the Congo.

education, all by 2015. Although the world has made considerable advances in many of these areas, it has been debated how much impact the goals themselves have had. Much of the progress in alleviating poverty over the past two decades, for example, has come from rapid economic development in southeast Asia and China.

Moving forward, the challenge for governments will be to invest limited resources effectively and track progress towards the goals. The UN is discussing how to structure a progress-assessment system based on a list of measurable indicators that it is developing for the targets. As it stands, the list is too long for governments seeking to measure their progress, says Mark Stafford Smith, a researcher at Australia's Commonwealth Scientific and Industrial Research Organisation in Canberra.

It will be up to the scientific community to identify simpler indicators and policies that will promote progress, says Stafford Smith, who chairs the scientific committee of Future Earth, an international clearing house for sustainability research. Replacing firewood with a more sustainable fuel source, for instance, would boost air quality and therefore improve human health (goal 3), while reducing the impact on local ecosystems (goal 15). And by reducing time spent foraging for fuel, it would free children to go to school (goal 4) and empower women to

contribute to economic growth by earning money (goals 5 and 8).

Researchers also want to find ways to prevent conflicts between goals. For example, without advances in efficiency and a shift towards renewable energy, the expansion of access to modern energy sources (goal 7) would interfere with the goal of keeping global warming in check (goal 13).
“People have piled everything in there, but the research community can focus on a much smaller set of integrated goals.”

Stafford Smith. “If we don’t do that, then we will find that these potential conflicts become real ones.”

Through a project called The World in 2050, researchers who have used computer models to explore the socio-economic implications of climate change are leading an analysis to identify policy scenarios that can assure that the goals are met over the next few decades.

One of the institutions leading the effort is the International Institute for Applied Systems Analysis in Laxenburg, Austria. Its deputy director-general, Nebojsa Nakicenovic, says: “The idea is to understand how one can achieve all of those goals together.” ■