

From VOA Learning English, this is **Science in the News**. I'm June Simms.

And I'm Faith Lapidus. Today we will tell you about a new report on pollution. It says pollution problems are threatening the health of up to 200 million people worldwide. We will also report on concerns about dam projects in Vietnam. And we will tell you how some Buddhist monks are learning to protect fresh water supplies high in the Himalayan Mountains.

Two independent environmental groups have produced a report listing 10 of the world's most dangerously-polluted places. The two are the American-based Blacksmith Institute and Green Cross Switzerland. The 10 places are spread over eight countries in Africa, Asia, Eastern Europe, and Latin America. The report says open areas polluted by dangerous environmental toxins are threatening the lives of tens of millions of people.



The report says the substances are affecting people through the air they breathe, the food they eat or skin contact. The toxins include lead, cadmium, chrome, oil, pesticides, phenols, mercury, sarin, radionuclides and organic compounds.

David Hanrahan is a technical adviser with the Blacksmith Institute. He told VOA that four of the places on the list were on his group's first list, which was released in 2006.

"We have Chernobyl -- which is not going to go away, obviously - in the Ukraine. We have two sites in Russia -- which one is a
huge smelter, the other is a major chemical complex, which we
think used to do a lot of chemical weapons. We have the mining
site in Zambia, which I said work has been done to improve. But,
unfortunately, it's an extremely poor, abandoned place."

The other areas are in Argentina, Bangladesh, Ghana, Indonesia and the Niger River Delta of Nigeria.



David Hanrahan notes progress in cleaning up some of world's most dangerously-polluted places. For example, he says, the Dominican Republic was on the first top 10 list because of high levels of lead at a recycling center. He says the country was removed from the list after the center was cleaned up and made into a playground for children.

Mr. Hanrahan is reporting similar successful clean-ups in other places. They include India and eastern Russia, and in some Chinese cities, which have reduced air pollution.

He says in the past, experts often underestimated the link between health and the environment. But he says public health officials in many countries now understand the need to deal with pollution.

"...problems that are, are really of the similar order as the big international public health concerns like tuberculosis and malaria, HIV/AIDS. Toxic pollution is in many countries the same order of magnitude and that is being recognized, which is one of the things we're really quite pleased about."



David Hanrahan says more and more governments recognize that environmental pollution is a problem that can be solved. He says developing countries are seeing improvements in the health of their citizens -- especially among children who are most at risk of getting sick or dying.

Policymakers, activists and others gathered recently for talks about water, food and energy in the Mekong River Basin. The discussions took place in Vietnam's capital, Hanoi.

Over the past three years, work crews have been building the Xayaburi dam in Laos. The dam is one of the most controversial hydropower projects in the Mekong. It has tested the strength of the Mekong River Commission, which represents Laos, Cambodia, Thailand and Vietnam.

Some countries say the dam could affect fish populations downriver from the dam. But work on the project has continued.



Hans Guttman is the chief executive officer of the Mekong River Commission. He says he believes the dam showed the commission's member countries could talk about difficult issues.

Carl Middleton is a lecturer at Chulalongkorn University in the Thai capital, Bangkok. He says he was not sure anything had been learned, especially about listening to the public and talking with people about the effect of dam projects. He says Laos started working in October on another dam -- the Don Sahong.

"The opportunity that cross-border cooperation agreements say the Mekong agreement offers -- the way of creating channels for responsibility to move across borders easily -- it essentially failed in the case of Xayaburi because those mechanisms didn't facilitate great cross-border responsibility and the issue of justice got caught up in national territories rather than having a regional justice system. Can things be better for Don Sahong? We'll have to wait and see."



The meeting in Hanoi was the idea of the Consultative Group on International Agricultural Research. The group provides financial support for research on agricultural crop breeding. It hopes a new map of dam projects in the Mekong would persuade governments to consider their effect on communities and the environment.

Carl Middleton says mapping is useful. But he thinks more needs to be done to include people whose occupations are affected in the decision-making process.

"The energy security comes at the expense of the forms of security that come from rivers, like food security and water security, so the question is: 'How do you have a more integrated policy making that recognizes the current value that rivers provide whilst at the same time helping meet everyone's energy needs as well?' 'Is it necessary that one be sacrificed for the other?"



Mr. Middleton says countries need energy for economic development. But he thinks they should think about ways to produce energy that do not require the building of hydropower dams.

Representatives from 50 Buddhist monasteries gathered in India late last year for talks on protecting the high Himalayan mountain ranges and the Tibetan plateau. The meeting was called the 5th Khoryug Conference on Environmental Protection for Tibetan Buddhist Monasteries and Nunneries in the Himalayas. The organizers were the World Wildlife Fund's Sacred Earth program and Khoryug -- an organization of 50 Buddhist monasteries.

The representatives discussed how to protect the area and its fresh water supplies. They also heard how some grass lands are becoming deserts, and how lakes and river systems are drying up.

The Buddhist monks and nuns heard how to protect local water sources. They also were told how to increase the amount of groundwater by harvesting rainwater.



Organizers of the conference hope the representatives will tell local villagers, and workers in other monasteries, what they learned.

Tenzin Norbu is the Director of Environment and Development in the Central Tibetan Administration in Dharamsala.

"When they go back, they should respect the value of the water. So I think since most of these are from the Himalayan area which is connected to the Tibetan plateau, I think they should know the importance of the place where they came from, so that they can also create local awareness on how important it is to protect the Himalayan glaciers and the Himalayan area as such."

Ogyen Trinley Dorje also was at the meeting. He is expected to become the spiritual leader of Tibet when the current Dalai Lama dies. He says studies show that the entire world faces an environmental emergency. But he says Tibet and all of Asia face what he calls a "very immediate emergency." He spoke to a VOA reporter in New Delhi through a translator.



"Among particular concerns I think the unprecedented amount of development in Tibet is causing serious pollution of water sources and also of course the melting of the glaciers and permafrost caused by climate change are an immediate source of threat to Tibet, Tibetan water and therefore to all of Asia which gets much of its water from the Tibetan plateau."

Ogyen Trinley Dorje has not involved himself with political issues linked to Tibet, and he has not spoken much in public since he fled Tibet in 2000. But he is concerned about the environment and has been speaking about the issue.

He says the Buddhist value of contentment -- being pleased -could help save the environment by pushing back against consumerism, which he says is eating up the Earth's resources.

This Science in the News was written by Christopher Cruise. It was based on reports from Lisa Schlein in Geneva, Marianne Brown in Hanoi, and Anjana Pasricha in New Delhi. Our producer was June Simms. I'm Faith Lapidus.



And I'm June Simms. You can comment on this story on our website, learningenglish.voanews.com. Follow us on Facebook, Twitter, LinkedIn and iTunes and our YouTube Channel, all at VOA Learning English.

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