

Behind the Global Monitoring Plan

In conversation about monitoring persistent organic pollutants (POPs)

UNEP/GEF Projects on Continuing Regional Support for the POPs Global Monitoring under the Stockholm Convention

Stories

told by the people behind the Global Monitoring Plan (GMP) for persistent organic pollutants (POPs)

The Global Monitoring Plan (GMP) monitors the presence of persistent organic pollutants (POPs) in the environment and humans. POPs are hazardous chemicals that threathen human health and the planet's ecosystems. They are extremely toxic to humans and wildlife, remain intact for exceptionally long periods of time, accumulate in the food chain and can travel long distances to the most remote places of our planet, such as the Arctic.

Monitoring POPs is essential to assess whether the Stockholm Convention remains an effective tool to protect human health and the environment from POPs. The data generated by the GMP hows to what degree people and the environment have been exposed to POPs and allows policy makers to make informed decisions and take action where needed.

Where are we monitoring?

UNEP implements projects that contribute to monitoring POPs and the implementation of the Stockholm Convention. Monitoring happens globally in all UN regions and capacity building support is provided in Latin America and the Caribbean, Africa, Asia and the Pacific.

What are we monitoring?

Why are we monitoring?

Samoa

UN region: Asia and Pacific Group Capital city: Apia **Population:** 197 thousand (UN DESA 2019)

Did you know?

S.A.M.O.A. also stands for 'SIDS Accelerated Modalities of Action' and is part of the approach to achieve the Sustainable Development Goals.



he Global Monitoring Plan (GMP) has enabled Samoa to take part in scientific research at a global level," says Afele Faiilagi, national coordinator of the GMP. "Now we have locally trained staff and the necessary equipment that enables us to participate in the research. Both are crucial when we look at future plans."

"We have chosen a site in Samoa's mountainous area for air sampling," says Faiilagi. "The direction of the wind was one of the things we took into account for choosing a suitable site. Our water sampling site is located in the lower part of one of our major rivers, the Vaisigano river."

Women who are breastfeeding their first**born child** are able to participate in the human milk sampling. "The Ministry of Health and the Ministry of Women, Community and Social Development have assisted us in setting up the human milk sampling," says Faiilagi. "We decided to work with female mayors to select women who would qualify in the villages. The collection of human milk has two major purposes. While collecting the milk samples we also aim to raise awareness about what persistent organic pollutants (POPs) are and their possible presence in our environment."

Faiilagi.

"Our future generation is our main motivation for participating in the GMP," says Faiilagi. "The GMP is an opportunity for Samoa to assess human and environmental exposure to POPs. The data that we acquire enables the observation of trends, assesses risks, points out the priorities and is taken into account for our future planning. Without the GMP, Samoa wouldn't be at this level of understanding and it would have missed out."

Samoa works closely together with other Pacific countries and translates these collaborations into national programs. "In the Pacific, we all face the same kind of issues," adds

"We are one global family. POPs are part of a global agenda. Our little bit of paradise in the Pacific is part of the global fight for a healthy planet and healthy people."

"Women who are breast feeding their first-born are able to participate in the milk sampling. We select female mayors to work with the women"

Afele Faiilagi

Samoa



Egypt

UN region: African Group Capital city: Cairo Population: 100,4 million (UN DESA 2019)

Did you know?

Chemical pollution can increase pressure on coral reefs. The Red Sea in Egypt is known for its many coral reefs.



t the time the Stockholm Convention entered into force, we did not have a clear overview of the situation regarding hazardous chemicals in our country. After a first field visit to Shoubra El Khima, a large industrial area in Egypt where among others smelters, petro-chemicals and fertilizers were found, we started to understand the issues we had," explains Elham Refaat Abdel Aziz, national coordinator of the Global Monitoring Plan (GMP).

"Some people were using PCB oil to make their hair smell nice, remove pain or get a better skin. We started to question how these chemicals are affecting our people," says Adbel Aziz.

"The GMP has had a postive effect with regard to accrediting our laboratory, Residue, for environmental analysis," says Adbel Aziz. "Before the GMP, the laboratory was only carrying out food analysis. Today, the laboratory is accredited to analyse food, meat, milk, eggs, pesticides, heavy metals, and persistent organic pollutants (POPs)."

"Personally, I have always believed that the human milk component of the GMP is very important," continues Abdel Aziz. "How do hazardous chemicals affect our mothers in

"Air samples are taken in the area around the city of Alexandria. This area was chosen because it is an industrial area. Yet, we were told by experts from the GMP that the area can be industrial, but not too polluted in order to obtain representable data. Lake Esmalia is a major source for drinking water in Egypt, and this was therefore chosen," says Abdel Aziz.

Abdel Aziz.

Egypt? And how can we raise awareness at the same time? We see the human milk sampling since 2010 as one of the main successes of our participation in the GMP."

Thanks to the GMP Egypt has reliable data on the presence of POPs in the country. "In one case, we took note of very high levels of hazardous chemicals in Egypt, and thanks to the GMP data we were able to correct this," says

"In the future we hope to accredit more laboratories and further specialize in POPs analysis. Also, we aim to integrate this project with other Global Environment Facility (GEF) and World Bank projects concerning chemicals management in Egypt. The GMP is a global effort, and this makes it a very special project," concludes Abdel Aziz.

"How do hazardous chemicals affect our mothers in Egypt?" Elham Refaat Abdel Aziz Egypt



Japan

UN region: Asia and the Pacific Group Capital city: Tokyo Population: 126.9 million (UN DESA 2019)

Did you know?

Throughout much of the 20th century the chemical industry was based largely in Europe, North America and Japan.



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U apan is a pioneer when it comes to monitoring of hazardous chemicals in the environment," says Tetsuro Fujii, representative of Japan. "The Japanese Government initiated environmental monitoring long before the Stockholm Convention came into force in 2004. Environmental surveillance of chemicals initiated in 1974, and biological monitoring of selected chemicals that were found in the surveillance were added in 1978. These selected chemicals were characterized by persistent, bioaccumulative and toxic properties and included persistent organic pollutants (POPs)."

"This project is very important to Japan as the country has a history of severe pollution," says Fujii. "Since its beginning 15 years ago, Japan has been very supportive of the GMP." Nowadays, air, water, sediment and biota samples are collected at different locations with support of dozens of local governmental institutes all over Japan, and selected companies analyze POPs in these samples. "Economic factors are involved as well," says Fujii. "Companies can compete and can offer lower prices. Every year, data is submitted by the laboratories and experts from the overseeing committee visit the laboratories to make sure the data quality fulfills the standards."

"Regional activities are essential to the monitoring of POPs," says Fujii, "and we pay specific attention to capacity building and the transfer of technical knowledge. At regional meetings technical and political officers from the different governments come together, as well as experts. Currently, 11 East Asian countries are involved in the regional program."

Japan has, together with South Korea, been leading the regional activities in East Asia. Currently, the possibility of having a core lab in the region is being explored. Such a laboratory could play a leading role together with Japan and South-Korea. Another activity, led by South-Korea, is the development of a database for the subregion that would add to the currently existing one under the Stockholm Convention. Japan aims to coordinate and harmonize regional activities as much as possible with the GMP.

Fujii concludes that obtaining data is important in order to set priorities and that sustainability is essential. "We always keep in mind this very fitting quote by Katarina Magulova from the Basel, Rotterdam and Stockholm Conventions Secretariat: we are taking small steps, but in the right direction."

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