

Climate Change and POPs Press Conference

Cancun, Mexico - 7 December 2010

Summary Report

Donald Cooper presented the key findings of the global study, Climate Change and POPs Interlinkages, at a press conference organized by UNEP at the UN Climate Change Conference in Cancun, Mexico, on 7 December 2011. Mr. Cooper was joined by Nick Nuttall, UNEP Spokesperson, Dr. Adrian Fernandez, President, National Institute of Ecology, Mexico, and H.E. Dr. Cameron Munter, U.S. Ambassador to Pakistan (via video).

Mr. Nuttall introduced the session by noting how the release of persistent organic pollutants (POPs) was impacting the entire globe population, making the issue truly one of global concern. He drew attention to the release earlier that same day of a UNEP report on glaciers in Southern South America and Alaska melting faster than those in Europe as one of the mechanisms by which POPs are increasing becoming bioavailable and entering the global food chain.

Mr. Cooper reviewed the major findings of the Climate Change and POPs study.

“The growth of the importance and significance of the global Chemicals Management Program and how it interacts with other global initiatives such as Climate Change, Biodiversity and food security has accelerated in recent years,” he said.

“The recognition that Climate Change cannot be seen in isolation but has to be addressed in relation to its impact on other key sectors calling for a coordinated mechanism of addressing the issues”, he continued.

Among the key messages of the study Cooper highlighted:

- Climate change may affect primary emissions to air of POPs by changing their rate of mobilization from materials or stockpiles, or by altering use patterns. This could result in increased primary emissions that could offset some of the efforts undertaken to reduce emissions of POPs under the Stockholm Convention.
- Higher temperatures will also increase secondary emissions of POPs to air by shifting the partitioning of POPs between air and soil, and between air and water.

- Releases from environmental reservoirs such as soil, water and ice will also increase due to these higher temperatures. The effect of temperature on semi-volatile POPs is probably the most important effect and stronger than any other effect of climate change on the environmental cycling of POPs.
- The expected increase in the incidence of vector-borne disease associated with climate change, such as malaria, may lead to enhanced demand for and release of DDT in some regions.
- Extreme weather events pose a greater threat than previously anticipated. The devastation of safe storage areas and the spread of POPs chemicals to large land areas and water bodies pose a direct threat which calls for a re-evaluation of our short term solutions as climate variability increases.
- Implementation of various climate change mitigation options targeted to reduce CO₂ emissions such as improvement of energy efficiency in power stations, replacement of fossil fuels by renewable sources, and improvement of combustion, industrial and transportation technologies is likely to have a positive impact on the reduction of releases of unintentionally produced POPs (mainly PCDDs/PCDFs, HCB, PCBs). These measures could also reduce the emissions of several non-POPs contaminants of concern (e.g., nitrogen and sulphur oxides and other gases, particulates, metals).

Key knowledge gaps:

The following key knowledge gaps were identified during the course of the technical review:

- There is a need to improve characterization of both primary and secondary emission sources of several POPs.
- There is a lack of long term monitoring data to evaluate the impact of climate change on changing POP emissions and concentrations.
- There is a need to build or improve models for forecasting POPs fate, transport and impact on exposure under projected climate change scenarios.
- To better assess POPs exposure pathways and species impacts, there is a need to better understand how food web structures will be affected by climate change.
- There is a need for toxicology studies of some of the newly listed POPs. These studies also need to consider the effects of mixtures of POPs now found in various regions of the world.

- There is a need for more studies to better understand the combined effects of POPs exposure and climate change stressors on human populations and other biota.
- There is a need for climate change mitigation options to fully take into account influences associated with production and distribution of unintentionally produced POPs and improved coordination between policy makers who address climate change and those who address POPs management domestically and internationally.

These gaps will be addressed in order to provide better guidance to Policy Makers going forward, Cooper said.

Reacting to the study's findings, Dr. Fernandez called for more attention to be given to preparing for the impacts of increased global temperatures. Global warming increases the incidents of fires and floods, which can release dangerous loadings of chemical pollutant into the atmosphere.

He called attention to the El Nino phenomenon of warm currents, which alters the distribution of aquatic species who are vulnerable to bioaccumulation of toxic chemicals, such as DDT.

Ambassador Munter, participating via video from Islamabad, noted that catastrophic flooding as had taken place in Pakistan during the summer of 2010 risks inundation of stockpiles of obsolete POPs pesticides, threatening agriculture and exposure of the population to these chemicals. He noted that his Government had contributed 600 million USD to flood relief and, in partnership with the Food and Agriculture Organization of the UN, had launched a capacity building programme in 2010 to train local authorities in hazardous chemicals management.

Taking questions from the media following the presentation, Mr. Cooper added that the problem of hazardous pesticide stockpiles was one facing many African countries.

These results of the Climate Change and POPS global study will be presented in full to the Stockholm Convention Conference of The parties in April 2011 where it is anticipated that the parties will evaluate them for any global guidance and decisions, Mr Cooper concluded.