

Environmental Change and Security Program

## **Changing Glaciers and Hydrology in Asia**

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## Edited Transcript - Kristina Yarrow

-- melting glaciers and High Asia. We hope that this exercise would give us the tools to better understand the health impacts of climate-related environmental change and how we can plan for addressing these specific impacts.

Now, a note on why specific areas of health were included. USAID receives earmarked funds from Congress, which many times dictate the way we approach topics. In this case, we were able to set aside population and maternal and child health funding for this activity, which led us to focus on water-related health impact of diarrheal disease and other waterborne illnesses, as well as nutritional health and family planning.

Health impacts are divided into two categories -- direct and indirect. In our case, Liz will soon describe direct health impacts of glacier melt are almost exclusively related to these Glacier Lake Outburst Floods or GLOFs. Though it is important to look at GLOFs and their impacts on high-mountain communities, USAID focuses on large populations as well, where our investments can have a greater impact. We want to emphasize the downstream populations. In this case, the indo Indo-Gangetic Plain is home to approximately 1 billion people, one-seventh of the world's population. So there's a lot at stake.

So with that, I'll let Liz take the floor, and then I'll come back up to talk about the health takeaways.

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So before Liz continues with the program concepts, we thought it would be important to share with you some of the takeaways for health so they become more apparent in the program concepts that are described.

In looking more closely at glacier melt, we come to understand that upstream actions and choices have a potentially huge effect on downstream communities, and that is apparent.





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As the science has shown, USAID and other development agency do have some time to address the impacts of glacier melt. But it is important to start looking now at how to make communities more resilient. And resilience is the key here so that when they start facing water quality and quantity issues that may arise from glacier melt, they will be in a situation where they're healthy, strong, and better able to adapt to those changes.

Communities need to be able to manage their water efficiently and effectively. Putting these systems in place, not only helps communities, improve their health and wellbeing, but will also put them in a better place in the future when glacier melt becomes more of a problem. This approach should include community and household programs, focusing on wash water, sanitational hygiene, to encourage proper hygiene behaviors and improve utilization of clean water and sanitation services.

On a global scale, there is, indeed, a relationship between population growth, environmental change, and development. I don't think there are many out there who would dispute this claim. Population growth, which can be changed by the use of family planning, impacts glacial melt indirectly through consumption of the use of resources which exacerbates warming and black carbon, as Liz has described.

Additionally, high population levels and population density exacerbate water stress, poverty, and other human conditions that can increase vulnerability to impacts of glacial melt downstream in these heavily populated areas that we've seen. From the maps, the Ganges and the Indus River basins are among some of the most heavily populated in the world, as I've mentioned already.

Finding innovative ways to improve access to family planning and integrate family-planning messages and services -- that's a key -- messages and services -- about healthy timing and spacing of pregnancy into adaptation programs will prove to yield some very important co-benefits. USAID already has a robust family-planning program, and in this case, it may mean continuing to provide these services in the areas that have been identified as vulnerable to glacier melt impacts. We must realize that there are co-benefits beyond the maternal and child health benefits, namely, building community resilience to environmental changes, some of which are climate driven.

So just a little bit of a conclusion for us on how challenging it was to look at cross-sectors, how challenging it was to get health on the agenda in this activity, from my own perspective, I do believe that this experience has informed the way I advise missions to look at their health programs to try to integrate other sectors, not just the environment,





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but education and others, especially since integration is one of the key pillars of the Global Health initiative, which is coming to the fore as we speak. Though challenging, integrating cross-sectors is absolutely essential. By understanding the multiple issues these communities are dealing with -- poor health, poverty, dependence on natural resources, governance challenges. I mean, we all know the list goes on, though. And addressing them in a comprehensive and holistic fashion to the best of our abilities, we will improve results. We're not experts at it yet, but we're getting better.

And so that is definitely the takeaway from the health side, and we can talk further in the question and answer, but Liz, why don't you continue with the program concepts.

