The global change research community has shown that:

• Most of the world’s glaciers are stagnant or in hasty retreat.
• Glaciers are responding to climate change.
• Glacier retreat and other changes will accelerate over next 100 years as climate change accelerates.

We estimate that glacier change directly and severely impacts 500 million people in South Asia alone.

Some impacts and results of glacier change:

• Contributions to sea level rise and coastal flooding
• Changes in glacier meltwater production, storage, and release:
  - Agriculture and food security (THE BIGGEST ISSUE)
  - Hydroelectric power
  - Other nonagricultural industries
  - Drinking, cooking, and sanitation
  - Glacier lake outburst floods
• Loss of glaciers and formation of "new lands"
  - Mining of newly exposed mineral deposits
  - New overland transportation links in alpine regions
  - Tourism and mountain recreation
• Impacts on military security & international relations (esp. High Asia)
  - Political instability related to reduced water resources, other impacts
  - Refugees from drought in lands affected by wasting glaciers.
  - Jockeying for "new land" and claim to water resources in disputed territories (e.g., Kashmir)
  - Refuge of militants among glacier peaks
  - Changing strategic and economic alignments relative to reduced Himalayan barrier and increased trade and human migration
• Ecological impacts
  - New habitat
  - New migration corridors; genetic diffusion across prior barriers
  - Dissection of pristine habitat by development in former glacier valleys

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