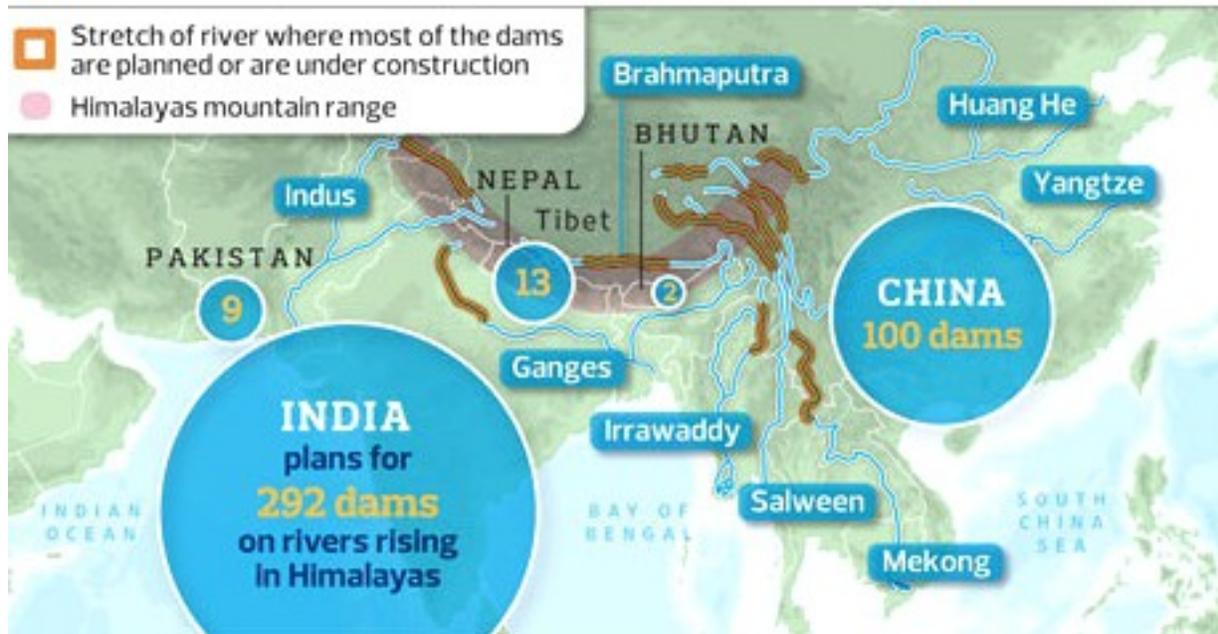


Water grab in the Himalayas



Most of the Himalayan rivers have been relatively untouched by dams near their sources. Now the two great Asian powers, India and China, are rushing to harness them as they cut through some of the world's deepest valleys.

The result, over the next 20 years, "could be that the Himalayas become the most dammed region in the world", said [Ed Grumbine, visiting international scientist](#) with the Chinese Academy of Sciences in Kunming. "India aims to construct 292 dams ... doubling current [hydropower](#) capacity and contributing 6% to projected national [energy](#) needs. If all dams are constructed as proposed, in 28 of 32 major river valleys, the Indian Himalayas would have one of the highest average dam densities in the world, with one dam for every 32km of river channel. Every neighbour of India with undeveloped hydropower sites is building or planning to build multiple dams, totalling at minimum 129 projects," said Grumbine, [author of a paper in Science](#). (<http://www.sciencemag.org/content/339/6115/36.summary>)

China, which is building multiple dams on all the major rivers running off the Tibetan plateau, is likely to emerge as the ultimate controller of water for nearly 40% of the world's population. "The plateau is the source of the single largest collection of international rivers in the world, including the Mekong, the Brahmaputra, the Yangtze and the Yellow rivers. It is the headwater of rivers on which nearly half the world depends. The net effect of the dam building could be disastrous. We just don't know the consequences," said [Tashi Tseri](#), a water resource researcher at the University of British Columbia in Canada.

"China is engaged in the greatest water grab in history. Not only is it damming the rivers on the plateau, it is financing and building mega-dams in Pakistan, Laos, Burma and elsewhere and making agreements to take the power," said Indian geopolitical analyst [Brahma Chellaney](#). "China-India disputes have shifted from land to water. Water is the new divide and is going centre stage in politics.

China and India have both displaced tens of millions of people with giant dams such as the Narmada and Three Gorges over the last 30 years, but governments have not published estimates of how many

people would have to be relocated or how much land would be drowned by the new dams. "This is being totally ignored. No one knows, either, about the impact of climate change on the rivers. The dams are all being built in rivers that are fed by glaciers and snowfields which are melting at a fast rate," said Tsering.

Climate models suggest that major rivers running off the Himalayas, after increasing flows as glaciers melt, could lose 10-20% of their flow by 2050. This would not only reduce the rivers' capacity to produce electricity, but would exacerbate regional political tensions.

Governments have tried to calm people by saying that many of the dams will not require large reservoirs, but will be "run of the river" constructions which channel water through tunnels to massive turbines. But critics say the damage done can be just as great. "[These] will completely shift the path of the river flow," said Shripad Dharmadhikary, a leading opponent of the Narmada dams and [author of a report into Himalayan dams](http://www.internationalrivers.org/resources/mountains-of-concrete-dam-building-in-the-himalayas-3582). (<http://www.internationalrivers.org/resources/mountains-of-concrete-dam-building-in-the-himalayas-3582>) "Everyone will be affected because the rivers will dry up between points. The whole hydrology of the rivers will be changed. It is likely to aggravate floods.

"A dam may only need 500 people to move because of submergence, but because the dams stop the river flow it could impact on 20,000 people. They also disrupt the groundwater flows so many people will end up with water running dry. There will be devastation of livelihoods along all the rivers."

(taken from: <http://www.theguardian.com/global-development/2013/aug/10/china-india-water-grab-dams-himalayas-danger>)