Melting Glaciers and Eroding Unity

*Climate Debt and the Politics of Water in Bolivia*

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SIS 490D
10/12/2010

I. Introduction

¡El agua es del pueblo, carajo!
(The water belongs to the people, damn it!)
-Slogan of the “Cochabamba Water Wars”

In Bolivia, after two bitter protests against water privatization by international corporations, the water may belong to the people in name – but for the residents of El Alto and La Paz, global forces still control their water. The glaciers above the cities that have regulated seasonal flows for thousands of years are melting due to the global warming driven by Northern and “emerging market” industrialization. This reality has prompted many in Bolivia to call for a repayment of a historic “climate debt” from North to South that could pay for, in the short term, a massive reservoir to replace the lost Chacaltaya glacier, and in the long-term, a route for alternative industrialization. The need is urgent: as the citizens of El Alto and La Paz realize the effects of the melting Chacaltaya glacier and the barely surviving Illimani glacier, the potential for a mass civil unrest is very real. Worse, unlike previous “water wars,” the solutions to the demands of the increasingly thirsty populace cannot be regional, but rather national, or even international due to their economic cost. This threatens to be the final straw leading to a return political instability in a society extremely polarized by geography, race, and class. Informed by

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the legacy of Bolivian social responses to water crises - the privatization-induced “water wars” of Cochabamba and El Alto – I argue that the melting of the glaciers around La Paz and El Alto is a potential flashpoint that cannot be ignored by the global North. Without a repayment of the “climate debt” from the North to Bolivia to ameliorate the effects of the melting glacier on the dwindling water supply in El Alto and La Paz, a new water crisis and political instability in Bolivia are imminent.

II. Hydrology: Impacts of the Disappearance of the Chacaltaya Glacier

The full significance of the disappearance of the Chacaltaya glacier requires an appreciation for the hydrology of the region. Until defying predictions and melting six years earlier than expected in 2009, the Chacaltaya glacier provided slow and steady runoff during the dry season for 18,000 years.\(^4\) This acted as a natural reservoir for the cities of La Paz and El Alto.\(^5\) Glaciologists predict its disappearance to decrease annual runoff by 30% in the glacial stream and make its flow regime completely dependent on precipitation variability.\(^6\) The implications of this on the water supply of La Paz and El Alto are thus enormous – the steady source of water they once counted on in the dry season will shrink by a third.

As with most hydrologic events, the impacts of this shift are not immediately apparent. Due to rapid increases in population in El Alto, demand already exceeds supply; however, the glacial melt coming from the last pieces of the Chacaltaya glacier have so far mostly masked the effect – but this is only temporary.\(^7\) When the water shortage becomes more widely felt, there is the potential for major unrest, especially in El Alto, where only five years prior citizens took to the streets against rate hikes by the private water company.\(^8\)

III. Society: The Politics of Water in Bolivia

The successful “water wars” in El Alto and Cochabamba fought over water privatization demonstrate that Bolivian social movements are capable of massive mobilization over issues of water. In 2000 in Cochabamba and in 2005 in El Alto, enormous rate hikes by privatized water utilities were

\(^4\) Painter, James. 2009.


\(^7\) Rosenthal, Elisabeth. 2009.

\(^8\) Ballvé, Teo. 2006.
overturned by the collective action of 100,000 residents in Cochabamba and a three-day general strike in El Alto. To indigenous Aymara sociologist Silvia Rivera Cusicanqui, these uprisings are not “spasmodic, irrational convulsions, product[s] of an accumulated, latent discontent”; instead, they are “coherent expressions of a collective consciousness with deep historical roots.” Indeed, the social movements are a “dominant, oppositional force” on the Bolivian political landscape. They are strong and calculated, and water is a key spark that triggers their visible manifestations on the streets, demanding change from the government.

The reactions of the grassroots movements in El Alto and Cochabamba provide key insights for the potential social and political consequences of the Chacaltaya glacier melt. As the director of the Bolivian Mountain Institute noted, the extreme poverty (especially high in El Alto) only makes the potential for “huge social problems” and “unrest” even higher. The World Bank predicts that the disappearing glaciers in the region will threaten the ability of these regions to maintain “vibrant local economies” and thus only exacerbate the poverty Hoffman worries will drive the unrest. The strength of the grassroots movements and the centrality of water to their past mobilizations only reinforce this prediction. When these demands from the social movements do come, however, the solution to the Chacaltaya melt is unfortunately much more complicated than simply renationalizing the water company. Worse, the potential remedies for the water crisis have the potential to fracture the (relative) cohesion enjoyed by the El Alto – La Paz region and split the country down traditional lines of conflict.

III. Conflict: Polarization

The possible solutions to the impending water crisis in the region around La Paz and El Alto are divisive due both to the associated hydrologic effects and economic costs. Capturing the runoff traditionally stored in the glacier during the wet season would require a massive reservoir, which would

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11 Ballvé, Teo. 2006. p. 159.


take five to seven years to complete.\textsuperscript{14} Glaciologists like Edson Ramírez are doubtful that such a project will come soon enough to avoid feeling the impacts on the water supply.\textsuperscript{15} More importantly, it is highly unlikely that the local governments could afford the construction costs of the reservoir. Public utilities in Bolivia (especially Cochabamba) already face discrimination from lenders who prefer private water utilities\textsuperscript{16} and the utility in El Alto cannot even afford to connect 53\% of homes to the water system.\textsuperscript{17} This means private financing is unlikely even if the local governments could ever pay back such a large loan. This economic reality necessitates looking higher in the Bolivian government for resources, but there are major associated political costs.

Despite this local unfeasibility, it is unlikely that the social movements will stop until they win concessions or are violently repressed (though this can backfire, as in the case of Cochabamba in 2000\textsuperscript{18}). This means that if the local government cannot respond to their demands, they will force the involvement of the national government to assist in financing the necessary water supply projects. Such funding would invariably draw heavily on the tax revenue extracted from the eastern lowlands around Santa Cruz, which are much wealthier due to gas and oil revenues.\textsuperscript{19}

The largely mestizo, economically prosperous eastern lowlands have a long history of attempting to gain autonomy from the indigenous and poor western highlands,\textsuperscript{20} including attempts to limit tax collection and set state-level economic policies.\textsuperscript{21} A mega-project such as a reservoir to replace the loss of Chacaltaya may become the trigger that would detonate the long-brewing conflict between La Paz-Sucre (the capitals), headed by the indigenous Morales administration, and Santa Cruz, the de facto capital of the east. Such a conflict could threaten the stability of the national government and lead to a return to the tumultuous nature of 20\textsuperscript{th} century Bolivian politics.

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\textsuperscript{14} Rosenthal, Elisabeth. 2009.
\textsuperscript{15} Ibid.
\textsuperscript{16} Spronk, S., and J. R. Webber. 2007.
\textsuperscript{17} Ballvé, Teo. 2006. p. 152.
\textsuperscript{18} Spronk, S., and J. R. Webber. 2007.
\textsuperscript{21} Bolivia regions declare autonomy. 2007.
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IV. Solutions: Political Breakdown or Climate Debt

The costs associated with political instability in Bolivia for Northern countries, especially the U.S., may well exceed the costs of repaying the so-called climate debt demanded by Bolivia. This climate repayment would be able to finance the reservoir for El Alto and La Paz and thereby reduce the chances of a descent back into political instability. Such instability might threaten chief U.S. interests, which Jaime Daremblum claimed before a House subcommittee to be preventing coca production and obtaining natural gas, interests he notes are already under threat by the growing east-west conflict and the Morales government’s polarizing policies.22 Redistribution of a large share of taxes from the eastern lowlands to pay for a water mega-project in the El Alto-La Paz region would be even more polarizing than the current Morales government’s policies. Daremblum continues that such a polarizing climate allows populist anti-American (yanqui) resentment to build and alter the geopolitics of the region – pushing Bolivia closer to Chavez’s Venezuela and by proxy, Iran.

The alternatives to a polarizing mega reservoir are likely inadequate to meet future demands and similarly divisive. One proposed option is the Illimani glacier, but water diversion from the rural Illimani watershed to the urban areas of La Paz and El Alto is a potential major source of regional division where there was once little conflict.23 Furthermore, this glacier itself is retreating and rural demand has been increasing in recent years.24

V. Conclusions

Northern responses to the melting Chacaltaya glacier must recognize the potential for political instability if they do not help to ameliorate the human impacts of the declining water supply to El Alto and La Paz. Beyond moral arguments of responsibility for the climate crisis’ human toll in Bolivia, real economic and geopolitical interests are threatened by a return to political chaos in Bolivia. These tangible interests make the necessity of climate debt repayments very clear, even if negotiators for countries like the U.S. roundly reject any claims of responsibility for the climate crisis.25 The payment of climate debt, regardless of the semantics and moral implications, provides the distinct possibility of political stability and alternative future development for Bolivia.

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25 Ibid.
Bibliography


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