

Local Policy and Water Access in Baguio City, Philippines

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ABSTRACT

This article focuses on how water users perceive the state of water security and their concerns about water resources in Baguio City using survey data from 300 poor households. The financial and social aspects of the poor household's access to potable water are described before features of the Baguio Water Code on drinking water quality, water permits and groundwater extraction, and rainwater harvesting are tackled. The high expectations that accompanied the approval of this breakthrough legislation to address the city's long-standing water problems which were only partially met as the key provision on water permits remains unimplemented. Drinking water quality and rainwater harvesting have had some success in implementation. Still more needs to be done through measures that rely on the partnership of the local water utility and the city government offices in order to respond to the need of poor households for clean water.

KEYWORDS

Baguio City Water Code, Baguio Water District, Drinking Water Quality, Groundwater Extraction, Minimum Water Tariff, Rainwater Harvesting, Water Access of Poor Households, Water Service Providers

INTRODUCTION

Baguio is a small densely populated city in Northern Luzon, Philippines. It has a land area of about 57.5 square kilometers, an estimated population of 345,000 in 2015¹ and a population density of 6,005 persons per square kilometer². At 3,914 millimeters per year, the city has the highest average rainfall in the entire Philippines (WWF, 2014, p.13), and is cited by the Philippines' weather bureau, as one of three places in the country that receive the greatest amount of annual rainfall (PAGASA, 2018). But despite this, water shortages are a fact of life in Baguio City, especially during the summer months (Gonzalez, 2007, p. 5). Baguio City thus presents itself as an interesting site for analyzing the interaction among water policy, the performance of the local water supply and distribution system, and the perceptions and behaviors of water users, particularly households, shapes the state of water security in a Third World urbanized setting.

First, the paper tackles the poor households' access to water services and its related economic, financial, and social aspects including informal social arrangements that the poor fashion to address

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their water needs. It looks at what water sources are available to them and how they choose what type of water to use for different needs. Factors like low income, high water costs and geographic inaccessibility constrain the poor households' water access. In addition, the local water district's incapacity to ensure a 24-hour supply pushes poor households to consume more expensive water. Unfortunately, cheaper water sources like rainwater or spring water are not guaranteed to be safe for drinking and cooking. All these lead to the poor households' state of water insecurity. The water policy environment may alleviate this situation for poor households since national laws and city ordinances constrain who can access what water type and for what purpose as well as what water harvesting, and management activities can be undertaken in order to ensure the sustainability of water resources. Thus, an assessment of the provisions of the Baguio City Water Code and related ordinances pertinent to water security issues is undertaken.

The household data for this study come from the survey entitled "Water Security, Sanitation and Urban Resilience Challenges in Baguio City" conducted from June 3 to 12, 2016³. The survey focused on the poor households' access to water services during the dry and rainy seasons, the social arrangements that facilitate their water access, and the price and cost of water. The survey's sampling frame was from July 2010 consisting of 2,340 poor household beneficiaries⁴ identified by the Department of Social Welfare and Development (DSWD) of the Cordillera Administrative Region through its National Households Targeting System (NHTS). The barangays⁵ where poor households reside were ranked in terms of the number of poor beneficiaries and the top 9 barangays (constituting 54% of the DSWD beneficiaries) served as the survey's research sites. A total of 300 respondents were chosen through simple random sampling from this 'narrowed-down' DSWD list of poor households. The analysis of the local water policy context was informed by a series of round table discussions⁶, group and key-informant interviews with the concerned personnel of the city government and regional agencies⁷ regarding water quality standards, groundwater extraction, rainwater harvesting and the challenges of implementing the Baguio City Water Code and water-related ordinances.

The paper consists of five sections. The first discusses how policy links to issues of water security; the second characterizes the economic and social aspects of the poor households' access to water and their use of water sources; the third tackles the measures established by local government offices to ensure safe drinking water; the fourth analyzes the features of local ordinances with regard to water permits, groundwater extraction and rainwater harvesting and proposes recommendations for amendments where applicable; and then concludes.

BACKGROUND

Water security is put at risk with the degradation of water sources. Challaney (2013, pp. 8-9) shows that freshwater is being depleted at an alarming rate and groundwater exploitation is being undertaken at rates surpassing nature's recharge capacity. A measure to arrest this degradation may be groundwater regulation as recommended by Reddy (2002) from the study of South Africa. This will entail "approval of drilling, mandatory registration of wells and, in some cases, the right to close down existing wells that are causing damage to the environment" (p. 2880). Such policy of groundwater regulation must be made integral to local water policy. Israel (2009) is in agreement with this as he points to the lack of government regulations [in the Philippines] particularly on small-scale groundwater extraction by the private sector (p. 44).

Regulation of water providers to ensure the quality of drinking water is also an essential aspect of water policy. Despite a "remarkable consensus in the literature that governments should not be in the water provision business" government is expected "to ensure that private providers are regulated with respect to price structures and water quality and should provide incentives for these providers to serve the poor" (McKenzie and Raya, 2009, p. 458). Enabling water supply providers to reach poor households is critical because as Muntalif et al. (2017) show, vulnerable urban households in Indonesia rely more heavily on "water from vendors" for their drinking needs (p. 824).

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