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The Value of Water: Economic Value: Botswana

Water supply agencies (now only the Water Utilities Corporation-WUC) use step tariffs, the equivalent of the Increasing Block Rate (IBR) tariff system, to assign a value to water and charge for its use (Hambira and Gangdidzanwa 2006). The IBR tariff system allows for different charge rates to be assigned to the different water user groups. Charges are also different depending on the tariff band (based on the amount of water consumed) that the user falls into. The rate per cubic meter for a user that only uses 0-10 m³/ month is lower than the rate per cubic meter for a user that consumes 16-25 m³ for example.

Industry and individual domestic users pay the same tariffs, a system unique to Botswana; only the government departments pay an extra "super" tariff. There are recommendations to lower the tariff for the private sector, but this has not yet been implemented. One might think that businesses should be charged a different rate than domestic users; however, this grouping can be explained by the fact that the government wants to provide financial incentives for businesses to be based in Botswana (Hambira and Gangdidzanwa 2006).

Tariffs were raised annually by about 14 % for urban centres and 18 % for rural villages from 2003 to 2005 (Republic of Botswana 2009). Water tariffs are to continue to increase over the next six years in order to recover 70 % of operating costs. A water affordability tariff study is being conducted in 17 major villages, the results of which will be released in 2010 and incorporated in future tariff pricing. Water is supplied to six urban areas, 17 major villages and 200 small villages respectively (Hambira and Gangdidzanwa 2006).

Self-providers account for nearly half of all water consumption and include operations in livestock, irrigation, mining and electricity production. These providers generally incur the full, direct user costs and do not pay a resource price or opportunity costs(Lange and Hassan 2006).

Monetary accounts

The following is a monetary account for tariffs for Domestic and Business consumers(Table 1) compared with Government and Town and District Council (Table 2).

Table 1: WUC 2003 Tariffs for Domestic and Business Consumers

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Tariff Band	Consumption per month (m³)	BW Pula per m³								
		Gab/LS	Phikwe	Jwaneng	F/Town	Sua				
1	0-10	2,35	1,85	2,65	1,85	1,85				
2	11-15	7,05	3,65	6,35	4,15	2,95				
3	16-25	9,00	4,75	9,25	5,95	3,65				
4	Above 25	12,45	5,45	10,35	6,60	4,75				
	Raw water (untreated)	3,65		2,20		2,60				
	Raw water Botash/BCL				2,10	1,00				

Source: WUC Revised Water Tariffs, November, 2003

Table 2: WUC 2003 Tariffs for Government & Town and District Council.

Tariff Band	Consumption per month (m³)	BW <u>Pula</u> per m ³						
		Gab/LS	Phikwe	Jwaneng	F/Town	Sua		
1	0-10	4,85	2,65	5,50	2,65	2,65		
2	11-15	14,25	5,25	12,95	5,95	4,25		
3	16-25	18,30	6,85	18,65	8,65	5,25		
4	Above 25	25,00	8,00	20,80	9,60	6,55		
	Standpipe ¹	21,85	7,15	14,65		5,60		
	Bulk Water Treated ²	17,75	6,45	13,10				
	Bulk Water Untreated	6,5				3,10		

1-Council, 2- DWA and District Council

Challenges

A continual disregard for water conservation and improved practices indicates that the current water pricing regime may not be effective. The pricing method is likely cost based, meaning that it does not reflect the true value of water because it neglects the costs associated with environmental damage. An effective pricing regime that promotes conservation needs to consider both financial and environmental goals (Hambira and Gangdidzanwa 2006).

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ater: Economic Value:







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