

## Appendix D: Calculations for Per/Hour Cost for Farmers Pumping River Water

The farmers interviewed in Ebony Park used an average of .35 gallons of fuel per hour of pump usage. The price of fuel was \$JM50/gallon. The base cost of pumping was \$JM17.88/hour. The base amount was increased by 8.6% to account for oil, lube and repairs. The percent increase for oil, lube, and repairs was based on the calculations contained in Virginia Cooperative Extension (1997). The total per hour cost of pumping water from the river was \$JM19.39.

Below is Table D.1 which lists the calculations for the per-hour pumping cost to farmers based on interviews with four farmers. The oil, lube, and repair cost of 8.6% was then added to the per-hour cost of pumping to obtain total variable per-hour pumping cost. Fixed costs: depreciation, interest, insurance, and taxes are not included.

**Table D.1 Calculations for Total Variable Pumping Costs Per-Hour for a Jamaican Farmer in Ebony Park**

Farmer <sup>a</sup>	Hours of pumping/ day	Gallons of fuel used/ day of pumping	Gallon/hour used
1	4	1	.25
2	4	1	.25
3	3	1	.33
4	5	3	.6
Average			.3575
Price of fuel	\$JM50/gallon <sup>b</sup>		
Pumping cost	\$JM17.88/hour		
Oil, lube and repairs	\$JM1.52/hour		
Total cost of pumping	\$JM19.39/hour		

a. Farmer 5 information was not available.

b. The nominal exchange rate is \$JM35:\$US1.