

Point-of-Collection Chlorine Dispenser

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Our objective is to design a chlorine dispenser that will allow community members in rural villages in western Kenya to treat individual water containers at the water source. The device should be easy to use, sturdy, inexpensive, safe, and it should accommodate various container sizes. The design should ideally be tamper proof and have the flexibility to be used in other locations.

The Existing Prototype

Developed by Innovations for Poverty Action Kenya and the Kenya Rural Water Project



Table 1: Dispenser Prototype Costs	V1	V2
Metal stand and housing	\$88.00	\$44.00
Rust-proof paint	\$2.00	\$1.00
Cement (25kg)	\$5.33	\$5.33
PVC tank + adapter	\$21.33	\$10.67
Dosing valve (custom made in US) including shipping and taxes*	\$22.50	\$22.50
Labor for installation (1/3 of day)	\$2.67	\$2.67
Transport of stand and dispenser from IPA office to field site (1/3 of vehicle-day)	\$16.67	\$16.67
Total	\$158.50	\$102.83

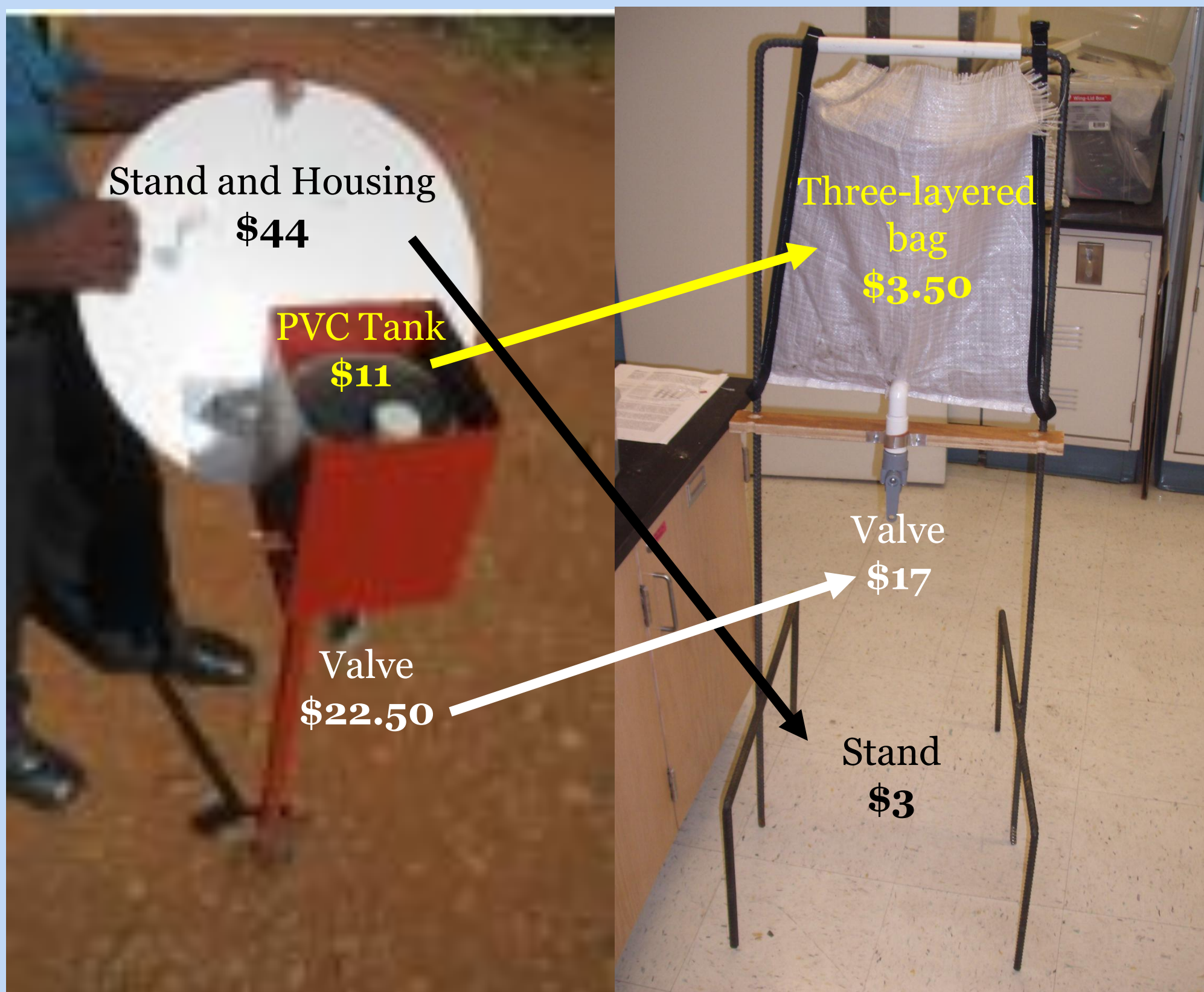
*Cost expected to come down to \$5.00 when produced at scale.



Issues:

- Too costly
- Valve difficult to turn
- No easy way to tell when to refill

The Solution



Existing Prototype	New Prototype
Wood and Metal Stand/Housing - \$44	Rebar Stand - \$3
PVC Tank - \$11	Three-layered bag - \$3.50
Valve - \$22.50	Modified valve - \$17



Valve and connectors

Cost Comparison