

IDE 50/50 Deep-Lift Pump



The 50/50 pump is a simple piston pump that has a target depth of 50ft, retails for less than \$50, and has a flow rate of 500gph. The 50/50 pump incorporates the following three design innovations that have made it affordable, efficient, and easy to repair.

1. It eliminates the use of a separate riser pipe and uses the tube-well itself as the riser pipe.
2. It uses a foot valve that seals against the bottom of the tube well and is easy to install/ replace.
3. It has a simplified piston design.
4. It has a simple frame that is cheap and easy to manufacture.

Team Pump-it-Up has continued work with IDE (International Development Enterprises) over the last year to develop the first functional prototype, which has an estimated retail cost of \$30 and a tested flow rate of 500gph at depth of 35ft. IDE is currently working on the second iteration of this prototype and plans to optimize different parts of the pump. The plan is to test a few units in the field during this dry season, make changes to the pump design, and start production for the coming year in 2009.

More than 700,000 farmers living in the dry zones in northern Myanmar cannot access water for farming during the dry season. With the IDE 50/50 Deep Lift Pump, they will be able to farm during the dry season and increase their annual income by \$200 (double their current income). The social benefits include additional income for education and health, pride, and keeping families together during the dry season as an alternative to migrant work.

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