

AIDFI HYDRAULIC RAM PUMPS GIVING WATER TO RURAL COMMUNITIES IN PHILIPPINES

Recognized by different international awards, the [AIDFI Ram Pump](#) is a device which utilizes the energy contained in falling water (hydro power) to lift a portion of this water to higher elevations.

The [Alternative Indigenous Development Foundation Inc. \(AIDFI\)](#) has been working in ram pumps since the 80s, recovering the forgotten technology of Hydraulic Pumps and producing an efficient model based on locally available parts and spare parts. The AIDFI ram pump operates without external energy like electricity or fuel and only on the power/energy of water. It needs free flowing water, like springs, streams, creeks and rivers. The falling water contains the energy to pump the water up and it is converted in the ram system into pressure.

The [characteristics of the Ram Pump](#) are described on the AIDFI web page. An effective video illustrates *How it works*.

The AIDFI Ram Pump compared to other models uses a steel to steel impulse valve mechanism, making regular and costly replacement of gaskets unnecessary. This unique mechanism makes the model very efficient too. The highest elevation reached by the AIDFI Ram Pump has been 240 meters, but AIDFI is working to reach more performing results. The pumps are already available in ten different sizes, with each pump having a specific flow range making it a perfect solution for either drinking or irrigation projects.

The pump is fabricated in the AIDFI's plant, but once it is installed, it can be operated, maintained and repaired by locally trained technicians. The device is a combination of the models commercially available and the do-it-yourself ram pumps, ensuring high technical performance and low cost.

The AIDFI Ram Pump presents the following advantages:

- Operates 24 hours a day, 7 days a week without supervision.
- Ten different sizes are available.
- No fuel or electricity cost. Zero pollution. High efficiency.
- Steel to steel valve mechanism eliminating the need for rubber gaskets.
- Simple spare parts are available in local hardware's.
- Installation is up to 80% cheaper than other water system models.



- Low maintenance and low repair costs. Repairs are done locally. Local manufacturing generates employment.

AIDFI is organized as a social enterprise and can sell pumps directly to individual people, groups or companies interested. In many cases, however, AIDFI works with community projects, ensuring the survey of the sites, technical studies, design and costing of the project and if requested the technical assistance to install the Ram Pumps.

The Ram Pump is one of the components of a Ram Pump System that shall be implemented to bring water to rural communities for drinking or irrigation purposes. Each Ram Pump System has more components, its size and complexity depends on the available budget and requires financial available sponsors. An example of partnership established by AIDFI is the collaboration with the Pasali Philippines Foundation for the installation of 26 Ram Pumps in Mindanao, in 2009, creating a [Hydraulic Ram Pump System](#).

The AIDF Ram Pump has been recognized, among others, by international initiatives such as the [Ashden Award 2007](#), the [Energy Globe Award 2008](#), the [BBC World Challenge 2010](#) and the [Empowering People Network Award](#),

Also thanks to the international promotion assured by the organizations that have given international awards and prizes to the AIDFI Ram Pump, this effective hydraulic pump has attracted great interest in many countries.

Through technology transfer activities sponsored by these organizations, the AIDF technical staff has been able to inform the interested actors of other countries of the characteristics and quality of this hydraulic pump and to provide technical assistance in the design of projects for its use. These activities have been realized in Indonesia, Malaysia, Cambodia, Nepal, Afghanistan, Peru, Colombia, Costa Rica and Cameroon.

Consistent with its social enterprise approach, AIDFI promotes the creation of pumps production plants directly in the countries, in order to make permanently available to the interested groups and communities not only the technology for its manufacture, but also the technical assistance for its installation and use.

To know more

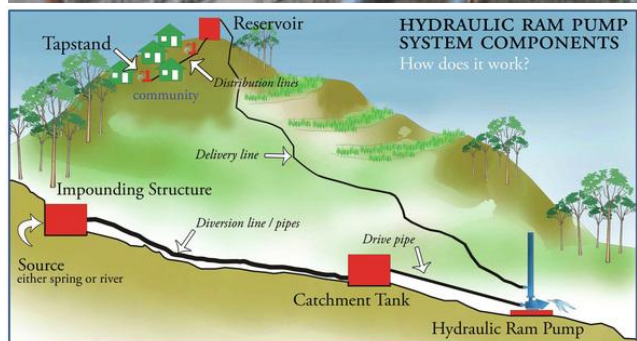
[AIDFI website](#)

[AIDFI in Facebook](#)

[How the Ram Pump works videos in Youtube](#)

[Ram Pumps videos in Youtube](#)

[Pasaliphilippines.org website](#)



[Ram Pump in empowering people network website](#)

[Article in changemakers.com](#)

[Article in blog.movingworlds.org website](#)

[Article in globalgiving.org website](#)

[Article in mccormick.northwestern.edu website](#)

