



RAM PUMP

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“ I declared that this thesis is the result of my own work except the ideas and summaries which I have clarified their sources. This thesis has not been accepted for any degree and not concurrently submitted in candidature of any degree.”

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ABSTRACT

Hydraulic ram pumps are water-lifting devices that are powered by falling water. Such pumps work by using the energy of water falling a small height to lift a small part of that amount of water to a much greater height. In this way, water from a spring or stream in a valley can be pumped to a village or irrigation scheme on the hillside. The main and unique advantage of hydraulic ram pumps is that with a continuous flow of water, a hydram pump operates automatically and continuously with no other external energy source - be it electricity or hydrocarbon fuel. It uses a renewable energy source (stream of water) and hence ensures low running cost. It imparts absolutely no harm to the environment. Hydraulic ram pumps are simple, reliable and require minimal maintenance. All these advantages make hydraulic ram pumps suitable to rural community water supply and backyard irrigation in developing countries.

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