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## Drip Irrigation

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Drip Irrigation was demonstrated at our conference this year by Dick Chapin and former ECHO intern Beth Adams, who taught vegetable production in Malawi. Chapin Watermatics produces "bucket kits" of gravity-run drip irrigation used in vegetable garden projects in developing countries. These kits enable people to produce vegetables with the same efficient use of water that commercial drip systems provide.

The system consists of a 5-gallon bucket mounted 1 m above soil level, a filterstopper fitted into a hole in the bottom of the bucket, two connecting tubes, and two 50-foot (15m) lines of 15-mil drip tape with outlets 12" (30cm) apart. (Buckets are not provided with the kits.) Prepare the garden beds 15 m x 1 m for two rows of plants. Lay one drip line along each side on the surface of the bed. Fill the buckets and transplant alongside the drip tapes near the holes. The buckets need to be filled twice daily with water; soluble fertilizer or manure tea can be used as needed. Mulch placed over the tape reduces surface evaporation. The kits can produce vegetables for up to 5 years if carefully maintained.

ECHO is evaluating this drip system in some of our garden beds. The plants are growing very well. We anticipate that foliar diseases, sometimes spread by overhead irrigation, should be reduced. They are suitable for vegetable production in our dry season.

Kits may be purchased from ECHO - <http://www.echobooks.net/>