

Case study 2



Community gardens grow food and cash, southern Zimbabwe



A busy productive water point

- ◆ In rural Zimbabwe, there are few sources of cash income for rural families. The relatively small but regular sums of cash that can be earned from sale of vegetables from gardens are therefore particularly important to these families. Research has shown that money earned is often invested in saving schemes or other ventures, such as dryland cropping or petty businesses like buying and selling clothes. Household or community-managed gardens therefore contribute significantly to the overall local economy.
- ◆ Community gardens are typically around 1 hectare in size, and each member family has several small vegetable beds. Crops are cultivated and watered individually by members, but some decisions are taken collectively. For example, which crops to grow, how to manage limited water supplies and how to tackle pest problems. Crops grown include leafy vegetables, tomatoes, onions and often an early crop of green maize to catch good prices at the start of the season.
- ◆ It is relatively difficult to get good amounts of water from the aquifers (underground stores of water) found within the hard basement rocks that lie under much of southern Zimbabwe and Africa. But utilising decision support methods and improved well and borehole construction technology, these aquifers are able to provide sufficient water for both domestic consumption and small-scale irrigation.
- ◆ Collector wells are one such technology. Instead of a deep but narrow borehole, a well about 2 metres wide is dug to the base of the weathered rock (often around 10 to 15 metres down). Then instead of going deeper into the hard unweathered rock, which often will not yield much water, horizontal boreholes are drilled from the bottom of the well. These extend for up to 30 metres and collect water from a large radius around the well.
- ◆ Using such methods, enough water can be abstracted to meet the basic needs of households and also to irrigate a community garden near to the well. During the 1992 drought such wells were able to meet the domestic water needs of surrounding villages, when conventional sources had dried up, and still be used for some vegetable cropping albeit on a reduced extent.

Sources of information and further details

For further details please see:

Lovell, C. 2000. Productive water points in dryland areas: guidelines on integrated planning for rural water supply. ITDG/CEH, London/Wallingford

Waughray, D.K., Lovell, C.J., & Mazhangara, E. 1998. Developing basement aquifers to generate economic benefits: A case study from southeast Zimbabwe. *World Development*, Vol. 26(10), pp 1903-1912.

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Irrigating vegetables in a community garden



Producers and traders can make money



Another successful harvest