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Urban Food Production in Bulawayo

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[Submitted Paper]

The problem

Almost 600,000 people live in the former African-only areas of Bulawayo – the western suburbs. The older suburbs were intended to house transient single male workers. Today, the dwellings house whole families. Housing built in the last twenty years has continued the tradition of small and inadequate homes built on small plots of land; hence they are described as the ‘high-density’ suburbs. While substantial numbers of the more affluent have now moved to the low-density eastern suburbs, the conditions of living of the majority have remained largely unchanged.

Characterized by high unemployment (around 50%), low wages (minimum wage is now Z\$500 = A\$60 per month), high inflation (25%), inadequate health, educational and recreational facilities, the high cost of food alone can absorb up to 80% of the family budget. In addition, many families are deprived of bread-winners by the AIDS pandemic, with at least 10% of the population being HIV positive. It was in this context that in 1994 an experiment in urban food production (urban agriculture) incorporating soil and water conservation was commenced at Njube Secondary School. Permaculture principles and practices were adopted.

The solution

Three demonstration models (or microcatchments) were constructed. Microcatchment I demonstrated water capture and soil conservation with the focal point being the growth and sustenance of a fruit tree. Microcatchment II added a food trench (fertility trench) producing vegetables within six weeks and continuously after that.

The practical knowledge and experience gained was then combined to construct a microcatchment, measuring only six metres by four metres which would comfortably fit into the plots of the two end homes of the typical Njube block homes. This microcatchment (microcatchment III), can almost provide vegetable self-sufficiency for the average family throughout the year. It contained four door-sized food trenches, planted at two-week intervals and, in addition, has one exotic and four indigenous fruit trees, all rich in vitamin C. Natural rainfall is captured in a swale or directed

into the fruit tree basins. The microcatchment is surrounded by ridges which are stabilized by vetiver grass, which further prevented water run-off and top-soil erosion. Total food production amounted to Z\$1804 nett at 1994 prices.

Because of the success of this experiment in environmentally-friendly and sustainable urban agriculture, it was decided to extend these ideas to the community. The response of the local citizens has been enthusiastic. Many discussions held over six months led eventually to the formation of the Urban Conservation Society of Bulawayo. This Society is intended to be the vehicle through which the project will be implemented. As can be seen from its aims, the Society is clearly permacultural. The word 'Conservation' in the title was used because it is a word with which people, governments and corporations are familiar.

Its aims are:

- Care of the earth, both living and non-living, including soils, flora and fauna, the atmosphere, forests, microhabitats and water through active conservation and the sustainable use of resources.
- Extension of this principle to benefit the community through:
 - Encouragement of urban food production based on maximum use of minimal water and intensive use of limited space based on permaculture principles and practices.
 - Conservation education and resource management, through demonstration centres, resource centres, schools, school-leaver programmes, youth centres, community centres, rehabilitation programmes for the disabled, prisons and so on.
 - Employment creation through small-scale ventures such as urban agriculture, nurseries, compost and mulch production, small-scale woodlots, tool and implement manufacture and waste recycling.
- Establishment and/or affiliation of other community organizations pursuing these aims.

The committee which emerged and which is now legally constituted contains a careful balance of community leaders (the city council representative, Resident's Association, Parents etc.) and other interested groups (the Permaculture Association of Matabeleland, Rotary, etc.). The emphasis has been on self-reliance, and what has been achieved so far has been without any external donor support. Having thus far perspired and persisted, we have now reached a point where a small external input is needed. For example, a hand-operated chaff-cutter is required before we can begin income-generating compost and mulch production. The cost of this is only A\$180 (but three month's wages in Zimbabwe). We would welcome any assistance or suggestions.