

# Pillars and Key Strategies for Sustainable Agriculture in Africa



### Introduction

Manor House Agricultural Centre (MHAC) was established in 1984 in response to a three-year drought that caused severe hunger in many areas of rural Kenya. Against this stark background, the need for new approaches to farming was strikingly evident. 75% of Kenyans make their living from farming, and over 85% of these are small-scale, family farmers. Kenya's agricultural policies have historically focused on growth objectives at the expense of equity issues and have largely neglected the small farmer. Despite the fact that the majority of Kenyan farmers work on an average holding of 1.1 hectares, policies have focused on the development of cash crops destined for export. Such policies provided a net gain in exports, but today, Kenya imports 80% of its food.

MHAC is an indigenous organization that for over two decades has been at the forefront of helping the neediest Kenyan families to achieve ongoing food security through improved soil fertility and increased farm production, and a modest level of prosperity through marketing of their excess crops. Since its inception, MHAC has been a leader in the movement in Kenya to increase food security by introducing small-scale farmers to farming practices that make efficient use of limited resources, require few, if any, external inputs, and protect natural resources (particularly soil fertility) for future generations.

The curriculum at MHAC addresses the goals of the United Nations and the World Food Council, which are calling for forms of agriculture that reduce chemical use, conserve and rehabilitate soil, improve farm productivity, conserve plant genetic resources, research and develop organic farming techniques, use and conserve local resources, and produce large amounts of calories from small areas.

## Methods

MHAC promotes GROW BIOINTENSIVE, a low cost agricultural technology suited to smallscale farmers developed at Ecology Action in Willits, California, USA with over thirty-five years of experience and thirty publications in this field, which are used nationally and internationally. Media coverage of this work has included the Chicago Tribune, The Los Angeles Times, The New York Times, Science '80, The Christian Science Monitor, Horticulture, The California Farmer, and the PBS Television Network and many more.

GROW BIOINTENSIVE can make possible:

- 200 400% increase in caloric production per unit of area,
- 67 88% reduction in water consumption per unit of production,
- 100% increase in soil fertility while productivity increases and resource use decreases,
- 50% reduction in the amount of purchased fertilizer required per unit of production,
- 99% reduction in the amount of energy used per unit of production,
- 100% increase in income per unit of area.

In addition, MHAC training programmes provide participants with skills in livestock management, nutrition, appropriate technology, small business management, and agroforestry

### **MHAC Programs:**

MHAC's training programs include a 2-year residential certificate course; 1-week workshops for farmers; and 6-weeks to 3-months short courses for community development practitioners from any country.

To date, more than 450 students have graduated from the MHAC two-year certificate program, and MHAC staff and graduates have trained over 150,000 rural farmers. Kenyan farmers who have benefited from training in GROW BIOINTENSIVE are able to improve productivity, generate income, and at the same time improve soil fertility. This is a major step to combating hunger and malnutrition.

### **MHAC Graduates**

MHAC estimates that well over 100 Kenyan NGOs have been started by its graduates to teach GROW BIOINTENSIVE practices and other related technologies aimed at sustainability.

In one example, GROW BIOINTENSIVE training for two MHAC graduates was multiplied through the Integrated Rural Community Empowerment Program (IRCEP) in Kenya to provide basic GROW BIOINTENSIVE training to over 540 people during a 4-year period. At the beginning of the training, most of these 540 farmers and their families could not grow enough food for three meals a day because of fertilizer and other artificial input costs. In economic terms, their family income amounted to *less than zero*. However, results of an on-farm follow-up survey conducted in the 5th year were dramatic. Farmers using GROW BIOINTENSIVE

techniques were able to provide three nutritious meals per day for their families and generate, on average, \$30 per month in income from excess crops sold at market.

MHAC is a good place to begin these efforts of strong, sustainable, local and regional food systems that ensure access to affordable, nutritious, and culturally appropriate food for all people at all times.

### **MHAC Contact Information:**

Manor House Agricultural Centre Private Bag, Kitale 30200, KENYA Phone: 254 733 837 157 or 722 221 532 Email: mhac@africaonline.co.ke