GARDENS/MINI-FARMS NETWORK

USA: TX, MS; FL, CA, AR, NM, WA; México, Rep Dominicana, Cote d'Ivoire, Nigeria, Haití, Honduras, Kenya, Malawi, Mozambique, England, Nicaragua, India, Uzbekistan and www.nabuur.org

Workshops [urban & rural] in organic, no-till, permanent-bed, gardening, mini-farming, mini-ranching,

with bucket drip irrigation, worldwide, in English & Español

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Farmer Training

The farmers need help to reduce their labor, provide better food for better health and increase their income. This training helps people help themselves. Many are hungry and/or suffering from malnutrition and there is no excuse for that. 50% of the hungry people in the world are subsistence farmers. They have land, water and labor; all they need is knowledge. These practices stop the migration of farm families from rural areas to urban areas [Honduras]. Nothing else will. These practices make farming profitable. "There's this belief that in order to stop poverty, we have to find ways to get people to stop being farmers. What we need to do is find ways to stop them from being poor farmers." Amy Smith, MIT

Organic, no-till gardening/farming [hand tools only] in permanent beds doubles or triples yields, reduces labor by 50% or more, reduces inputs/expenses to nearly 0 [need seed for new crops and green manure/cover crops], increases fertility, stops soil erosion [no rain water runoff], eliminates most

disease and insect problems and greatly increases profits. Use bucket drip irrigation [made by gardener/farmer] to produce during the dry season and in areas of low rainfall.

Every farmer in the world should use the following. There is unlimited, documented proof it works.

- A. No-outside inputs: You do not have to buy anything, at anytime, from anybody. [except seed?]
- B. Organic: Organic restores/maintains a healthy soil. Healthy soil produces healthy plants, for high yields, for healthy people and solves most disease, pests and weed problems. Biochar destroys organic matter.
- C. No-till: no plowing, no digging, no cultivating, no machinery: only planting and harvesting. After two or three years the yields can double while reducing the labor by half compared to traditional farming. One farmer can farm ten acres alone using hand tools only [Honduras].
- D. Permanent beds: They were used 2000 BC in Guatemala, Mexico and other countries. Because 20% of the land is in permanent paths/tracks that saves 20% of the seed, fertilizer, irrigation water but yields will be higher.
- E. Livestock: Raised using cut and carry or in pens over beds and/or rotational grazing.

No technique yet devised by mankind has been anywhere near as effective at halting soil erosion and making food production truly sustainable as no-tillage (Baker, 1996)

E. <u>Bucket drip irrigation</u> should be used to produce during the dry season and in areas of low rainfall: Bucket drip kits are US\$25 or a <u>bucket drip line made locally from poly tubing [US\$3, Nicaragua]</u>. It will irrigate a row of vegetables 33 meters long using only 20 liters of water per day. Water can be from a

stream, pond or well. Two lines will irrigate all the vegetables needed by a family of seven during the dry season [Kenya]. A drip returns \$20 per month to the farmer [FAO study].

<u>Hillsides:</u> Can be used on steep hillsides which many subsistence farmers must use. In Honduras [Aug 99] I saw beds on 73º slope with no erosion from the flooding rains of Hurricane Mitch. No grasses, rocks or trees used.

<u>Seeds for new crops</u>: The farmers are more interested in this than anything I do. There is no profit in corn, rice, beans, coffee, pineapple or bananas except by alternative marketing. I take open pollinated seed.

Hand tools: The local blacksmith can make most of them.

Workshops are practical and how-to. I take reference books, videos, free magazines. I demonstrate drip irrigation, tools, make a no-till bed. Funds must be provided.

Ken Hargesheimer, I volunteer my time and all expenses must be covered. Scheduled: May, South Africa; October, Indonesia