HANDS-ON PROJECTS

RICO ZOOK

Greywater

Digging tools (shovel, mumti, etc.) Rock + Gravel: bigger that fist down to pea size Mulch: mostly leaves and straw, some sticks for top Some Beneficial Water Loving Plants Fruiting (Banana, Pineapple, Papaya, etc.), Fiber, Fodder, Ect., <u>no</u> <u>root crops</u>

NOTE: Depending on the situation a 2 inch (5cm)+ pipe could be useful to move water from source to mulch pit

Solar Hot Water:

Flat Panel

20m to 40m <u>Very</u> Flexible Irrigation Pipe !darker the colour the better! Corrugated Metal Roof Sheet: old rusted one great Wood for Framing Sheet Greenhouse Plastic to cover Sheet Wire Tools for assembly hammer, pliers, wire cutter, nails for framing Tools to make holes (in sheet metal)

Batch

Corrugated roof sheet *(see drawing for size)* Inside Tank of old Geyser (india) or Water Heater (USA) Box Big enough for Tank Window for top of Box Insulation: used building type, old clothes, straw In & Out Pipe Fittings Valves

Tools

** this is an involved project that takes time and some carpentry skills to construct

Spiral Garden

Soil Short Wall Material *(for example: Bricks, concrete chunks, stones, boards, ect)*, seeds and plants Mulch Material: leaves and straw

Worm Box:

Box can be any non-metal container of the appropriate size Plastic tub or a woven basket will work as premade box For plastic tub need a hole making tool

Materials for 30 cm by 45 cm by 75 cm wooden box 4 @ 30 by 75 (one is the top) boards, 2 @ 30 by 45 boards framing material: 4cm square slats; 4 30cm lengths, 4 45cm lenghts Hammer & Saw nails/screws Tools to make holes Newspaper (no colour), kitchen scraps, ready compost and soil 1/2 kg (or less) of worms-*if someone is going to take care of them!! You can get from someone already doing worm compost or dig them up

Sheet Mulch and Roof Top Garden:

Newspaper (no colour) and/or Plain Cardboard: plain brown, unwaxed Any Other Old not usable <u>Organic</u> Materials (cotton, wool, silk, etc.): sheets, clothes, blankets, sacks Manure or Compost*: new & old Mulch: dead leaves, straw, vegetative material) (*compost optional, good for demonstrating instant garden bed or rooftop garden)

<u>IMO's</u>

2 or 3 segments, 5+ cm diameter Fresh Green Bamboo: bigger diameter better (cut day of or day before use. segment will have two joints at each end) Day old cooked Rice: enough to fill bamboo interior Machete Water: small amount Location to Bury: good soil. the richer the better ~ 1 kg Raw Sugar or Molasses (not refined white) Non Metal Bucket (plastic or wood) Cloth to cover: breathable String or Fiber *Can be old bamboo turned brown, green is just better will need to bury one set [2 or 3] 5-7 days prior to above demo) as such we will need two sets of Bamboo and Rice

Seed Balls

Seeds appropriate to site and intention (smaller easier, ones to grow without care, wild or fukuoka style) Soil with some clay content Some manure Soft rock phosphate or dolomite Water

A-Frame construction

should have enough sets so groups of 3- 5 people can work on one THE FOLLOWING IS FOR <u>ONE</u> A-FRAME

1 piece, 2m length, 2 - 4 cm dia (larger will work) Old bamboo (new will work for demo, but is very much not the best)

1 pc, 1m length, 2 - 4 cm dia. old bamboo

or

2 pieces, 2m long, milled wood (lumber, construction wood)

1 piece, 1m long milled wood

the above bamboo or wood needs to be as straight as possible if it curves to much it will not work

twine or wire (strong enough to tie bamboo)

2+ m string or twine

machete or kukuree 3 colours of permanent markers Tape measure (for calibrating 2% to 4% slope)

SWALE, BUND or TERRACE CONSTRUCTION

A-Frame or Bunyip Digging tools (shovel, mumti, etc.) Small Wire Flags, Bamboo stakes, or Rocks

<u>HAYBOX</u>

This is an insulated box. Idea is that you put a pot of food that has come to a boil into it, close it up, and the food gets completely cooked without further heating Cardboard box just bigger than cooking pot Larger cardboard box, 2 of these smaller one fits into larger one with at least 10cm space around sides, about 4 -5cm gap on bottom, tops of boxes level with each other (remember 4-5cm gap at bottom) exactness not necessary as we can cut boxes to sizes we need. Straw, old clothes/rags, or similar insulating material 2cmx2cm strips of wood 2 strips length of big box, 3 strips length of box width. Glue Wide Strong Tape

COMPOST SOUP

5 gallon bucket or similar item *if possible any or all of the following* seaweed or kelp powder soft phosphate or rock phosphate (organic source)

Compost Pile

Manure Small finished compost Green leaves and vegetation Brown leaves, vegetation and/or straw Bucket Hoe

Bamboo Planters

Widest diameter Bamboo available, one with big Open center Machete Planting soil Seeds or small vegetable starts

Bamboo Raft

Long poles of bamboo [see drawing for estimate number] Natural fiber cord to tie raft together, or scrap plastic cord string Larger used plastic water bottles (100+?) Machete Straw Soil seeds