AGRICULTURAL MECHANIZATION DEVELOPMENT PROGRAM

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VILLAGE LEVEL ETHANOL PRODUCTION SYSTEM

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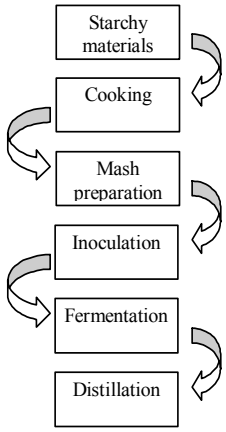
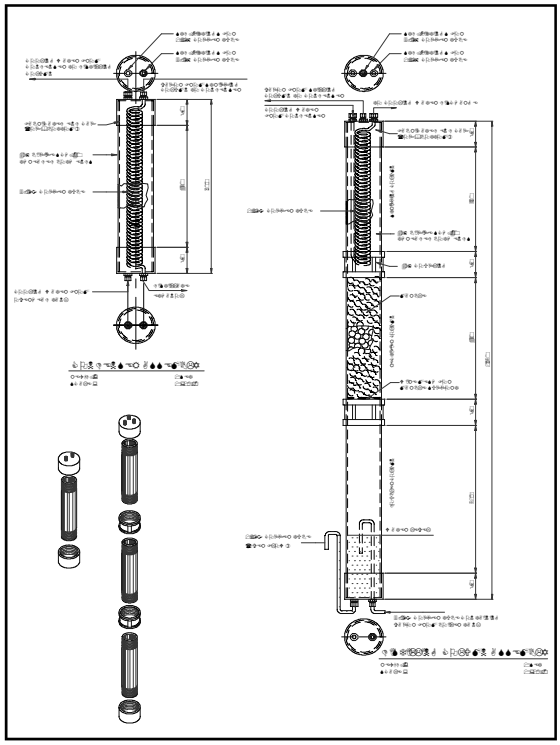


Figure 1 – Pre-distillation process for Starchy materials



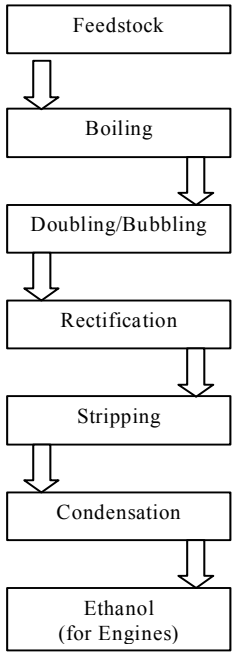


Figure 2 – Distillation process

FEATURES:

- Utilizes a technology that is simple, practical and efficient
- The distilling apparatus is portable and easy to assemble
- Low cost and easy to fabricate using locally available materials
- The apparatus can distill fermentation broth (beer) from different feedstocks such as starchy materials (corn, cassava, sakwa), saccharine materials (sugarcane, molasses, fruits) and coconut toddy (tuba)
- Easy and safe to operate

SPECIFICATIONS:

- Distilling capacity is 1 liter of anhydrous ethanol, 170 proof (85%)
- Heat source of the apparatus could be fuelwood, bagasse, rice hull or any farm by-products
- Can be operated by one person
- Dimension

Length:	1.745 m
Width:	1.230 m
Height:	2.400 m

DESCRIPTION

This technology would offer the rural livelihoods an accessible and dependable source of energy and fuel. Ethanol can be used as fuel to slightly modified gasoline engines which when coupled to generator would provide electricity for lighting. It could also be readily fueled into modified engine to serve as power source for power tiller, irrigation pump, thresher and other agricultural machines and implements needing power.