

MICRODISTILLERIES

ENERGY INDEPENDENCE FOR COMMUNITIES

Communities around the world are already making ethanol from various crop and agricultural wastes.



FARMS >> FUEL >> STOVES >> KITCHENS

www.projectgaia.com · info@projectgaia.com · (717) 334-5594





ENERGY INDEPENDENCE

Small and micro-scale distilleries create an opportunity for community-based fuel and power while helping to diversify the local economy. Ethanol fuel can be produced on a large, small or "micro" scale from a variety of feedstocks. We generally define "micro" as less than 5,000 liters per day. These distilleries can be flexible, fit neatly into the community and achieve economies not available to large plants. Generally, more than half of the sales income from the ethanol fuel from a micro plant will go back to the farmer.

Domestic production of alcohol fuels for cooking decreases reliance on costly fuel imports. Many of the least developed countries are fuel importers. Their economies suffer from a deficit of trade. Local biofuels production and use build the national economy and produce jobs and wealth in the rural areas. Farmers prosper and the entire nation benefits.

ECONOMIES OF SCALE

Microdistilleries can be linked to feedstocks that might otherwise be wasted. They can rely on non-industrial, alternative feedstocks, including root and agroforestry crops that may produce well even in time of drought. Since feedstocks represent the largest cost in the production of ethanol, savings realized in feedstocks mean cheaper ethanol. Thus, a microdistillery in the right setting can be competitive even with large distilleries.

OUR PROJECTS

Local production is well suited for stoves. As production is scaled up, stoves are scaled up, matching demand to supply, reducing risk on both sides.

On the supply side, we work with microdistillery experts as well as with agronomists, economists and government and community leaders to determine the opportunities for local ethanol fuel production. On the demand side we work with stoves and local businesses that want to supply good quality stoves locally.

Our role is to make the connection between local businesses and technology providers and assist in technology transfer. In Ethiopia we have built a distillery and we operate it with our clients, the Former Women Fuelwood Carriers Association. This gives us first-hand experience that helps us to serve our clients better and replicate our model in other communities.

