

## Venture Trust: Executive Summary

Venture Trust develops sustainable markets by promoting earth-conscious technology and improving living conditions by producing potable water, harvesting rainwater, and marketing. We believe that the weight of the world is significant to all. The effects of this weight on the unindustrialized world are severe. We believe that the alleviation of this weight is an imperative to us all.

Our development projects are based on a design integrity, which marks the difference between short-term remedy and long-term solution, the difference between aid and empowerment. Using a framework of technology and entrepreneurship, Venture Trust empowers individual farming households to produce agricultural surpluses, which allow families to lift themselves from poverty to prosperity. We believe that when individuals thrive, communities flourish. At the community level, Venture Trust seeks to provide families and budding entrepreneurs with technical approaches to improving their communities by improving food quality and expanding production capacity of earth-conscious technology.

We hold that genuine sustainable technologies are the result of holistic design processes, which account for environmental externalities, geographic contexts, and social structures. Our current geographic focus is East Africa, specifically Lindi, Tanzania. In response to this, our current product line is based on fixed focus solar concentrators, interlocking stabilized soil blocks, and hydrologic infrastructure (i.e. rainwater harvesters, cisterns, slow sand filters, etc.). These technologies reduce externalities including; deforestation caused by burning firewood, soil erosion caused by deforestation and flash flooding, as well as groundwater depletion caused by reliance on tube wells.

With a focus on the triple bottom line (social, ecological, economic) and working from the bottom up, Venture Trust seeks to empower the individual (social), preserve the environment (ecological), and spur entrepreneurship (economic). To this effect, we raise money through charitable giving campaigns and grants in order to provide flexible financing to agricultural households in water scarce regions. This financing allows families to improve their living conditions and productivity by using the earth conscious technologies listed above. The surpluses these products help to create are then used to buy the products themselves from Venture Trust. We then use the revenue to invest in community entrepreneurs.

We consider the people we help to be customers, and seek to provide them with the best solutions to the challenges they face. Every customer is unique, however, it is not possible to provide individual solutions for every family. The Venture Trust Capacity Survey, however, allows us to build solutions based on characteristics of families and the capacities of the technologies listed above and described below.

As a source of heat energy, Fixed Focus Solar Concentrators can be used in activities, which involve burning firewood, dung and/or biomass. The use of solar concentrators greatly reduces consumption of firewood and by extension deforestation and soil erosion. Important applications include solar ovens, heat production, and agricultural processing. Target customers for the Schefler Reflector are matriarchs, community kitchens, agricultural processors, and process industries requiring mid-range (70° - 300°C) thermal energy.

Interlocking Stabilized Soil Blocks are brick-like earthen blocks that can be used in place of bricks in most construction applications. Stabilized by compression, cementation, and interlocks, these blocks have a high soil to cement ratio and are capable of bearing significant loads without the need for kiln firing. Interlocking Stabilized Soil Blocks allow for environmentally friendly construction of water storage cisterns, rainwater catchments, surface water retention systems, and hydraulic infrastructure. Target customers for Interlocking Stabilized Soil Block technology are farming households, brickwork operators, builders, community authorities, and entrepreneurs.

Venture Trust will focus its efforts in Tanzania, specifically, the southern Lindi Region. The town of Lindi is located at 9°59'49" S and 39°42'52" E. The average rainfall is between 800 and 1,000 mm with most of this falling between November and June.

Prone to drought and lacking a major water utility and infrastructure, the city and surrounding area demonstrate a need for Venture Trust products.

The local economy is characterized by subsistence farming; fishing, curio production, as well as small scale lumber operations. It is outside the reach of traditional infrastructure however; close enough to ports and road networks to allow farmers to market their surpluses. Water is currently provided by water truck through distributors, pumped from tube wells, or collected from the Lukuledi River during the rainy season. Situated in Tanzania's southeastern coastal grassland, Lindi is vulnerable to deforestation and erosion. This unfortunate fact emphasizes

the need for solar concentration technology and stabilized earthen construction.

As noted above, Venture Trust Capacity Surveys allow us to build solutions based on individuals' circumstances. We administer Capacity Surveys through farm-to-farm marketing campaigns and to community members who express interest in improving their conditions. We cannot meet everyone's needs at once, and believe that customers are better served on a needs basis. Therefore, the last are served first. This said if a customer's Capacity Survey suggests that their living condition is the result of their own conscious irresponsibility then we do not provide our services.

Our goal is to reduce groundwater extraction and deforestation. In our first year we aim to provide 250 farming households with Rainwater Harvesting and Surface Water Retention systems. This will amount to a 2.5 million liter reduction in water extraction. Furthermore we plan to provide 750 m<sup>2</sup> of solar concentration, which will provide around 1.2 million-kilowatt hours of thermal energy, saving over 2,500 trees. ISSB technology also reduces wood consumption. As the results of this technical implementation emerge, Venture Trust will work with community entrepreneurs to develop processing technology for agricultural surplus and markets for goods.

Venture Trust is more than just ISSBs and Fixed Focus Solar Concentrators. It is an open framework for the genuine development of potential markets. Unlike the development projects of the past, Venture Trust takes an integral approach to addressing the issues, which lead to economic and social stagnation, and applies solutions, which surpass turnkey technologies. We do not aid, we empower.