



## **Renewable Energy Project, Boisar, India Training and Empowering Survivors of Trafficking**

The Emancipation Network fights human trafficking and slavery with empowerment, offering economic alternatives and education to rescued survivors and high risk communities

Our newest project is to build a biodiesel plant in Boisar, India, at the **Rescue Foundation** shelter for survivors of brothel slavery. The plant will enable us to train survivors in renewable energy management, agriculture, and animal husbandry, and will provide dairy products and fuel for the shelter home. Excess energy and dairy products will be sold locally to provide sustainable income for the survivors and shelter.

### **The Emancipation Network's Mission Is:**

- to improve the lives of survivors through economic empowerment and education
- to assist rescue shelters, using job programs to improve rehabilitation and reintegration
- to raise awareness about slavery and engage people to action against it
- to prevent trafficking among high risk groups with economic empowerment & education

*These sisters used revenues from our paper-making program to buy chickens and this coop, to support their family and prevent younger sisters from being trafficked*

*Revenues from their mothers' beading collective keeps Ugandan survivors of child soldier slavery and sex trafficking - in school*

*Survivors in Calcutta find dignity and fairly paid employment at our Destiny Production Center*

**Women Renewing the Earth  
and Rebuilding their Lives**

# Biogas Project at Rescue Foundation Shelter and Farm

**THE VENUE:** The Rescue Foundation, one of India's most respected and effective rescue and shelter organizations, houses 100 young slavery survivors on a 40 acre farm in Boisar, less than an hour from Mumbai, India.

**THE NEED:** The farm currently spends \$900 a month on fuel for cooking and electricity, and \$500 on dairy products to feed the girls living there. The shelter also struggles to find sustainable employment for older girls and young adults, due to the extreme stigma surrounding trafficking/prostitution, and the lack of available local jobs for poor and untrained women.

**THE SOLUTION:** We plan to install a 1.5 TPD capacity Cattle Dung-based Biogas Plant on the property., recycling dung from cattle on the farm, and employing survivors to maintain the facility and care for the animals. This facility will be profitable, generating a estimated 26% return on investment, but just as importantly it will train the survivors in dairy and farming skills that will help them reintegrate into their communities.

**TECHNOLOGY:** The proposed plant will generate about 60 cubic meter of biogas per day, assuming there are 100 cattle available on the farm, each giving 15 kg of dung per day. It is expected that roughly 30 kWh (units) of electricity can be produced from 30 cubic meters of biogas. 30 cubic meters of biogas replaces 1 Domestic LPG cylinder (15Kg) per day. The shelter's cooking and heating needs are about 30 cubic meters per day, so 30 cubic meters will be available for export/sale to the grid. The milk from the cows will generate an additional \$36,000 per year in dairy profits.

The process we will be using for electricity generation and organic manure production is high rate mesophilic anaerobic digestion followed by dewatering and drying. The cattle dung collected in tractor trolleys from various holding areas will be delivered to a feed preparation tank in the proposed plant. The recycled water from the dewatering section will be added to prepare feed solution at desired concentration.

The organic content of the cattle dung undergoes biological degradation and the same is converted into biogas and organic manure slurry. The biogas will be stored in gasholder and to be used as fuel in dual fuel engine alternator set to generate electricity. The organic slurry will be concentrated and dried so that it can be used or sold as manure.

**FINANCIALS:** Based on current projections, the project will be commercially viable and will have a return on investment of 26% over the first 10 years. We are building and seeking funds for the project in two phases, the first of which includes the construction and some cattle, and the second of which involves purchasing the cattle needed to get to capacity.

Capital Costs		
	Phase 1	Phase 2
Generator	\$15,750	
BioGas Plant	28,350	
Civil Work	4,200	
Cattle	10,500	67,200
Total	58,800	67,200

Completed Project Operating Costs/Profits per Year	
Power Generation	\$230
LPG Savings	2,300
Manure Sales	840
Milk Profits	36,324
O&M Costs	(525)
	\$39,169



## **Background - Survivors at Rescue Foundation**

Survivors rescued by Rescue Foundation have generally been trafficked into prostitution in their pre-teens or teens. Many come from Nepal or Bangladesh, from border areas, or from remote farming villages. Large family size, child marriage, death of a parent, and extreme poverty are high risk factors. The first few years are nightmarish – girls often spend all their time in tiny, locked rooms, or in filthy cubicles, forced to service 15 or more men each night.

The highest value is placed on the younger girls and virgins, as it is believed by many that these young girls could not possibly have an STD. In fact, the opposite is true, because their bodies are not ready for sexual intercourse, and the resulting abrasion makes them most vulnerable to STDs. Girls are usually gang raped and severely beaten to 'break them in' to their life of servitude.

These rescued girls come from agricultural communities and most of them will be reintegrated into their community. These girls, who were once kidnapped or sold - viewed as valueless in their homes, will return to their communities

## **The Emancipation Network's Economic Empowerment Programs**

The Emancipation Network is an international organization dedicated to fighting human trafficking and slavery. We help survivors of slavery rebuild their lives after rescue, with sustainable income, education and help reintegrating into society. We work to prevent slavery in high risk communities such as red light and refugee communities, by creating jobs for adults and offering education to children.

We work with partner shelters in Nepal, India, Cambodia, Thailand, Bangladesh, Ukraine, Uganda and the USA, which rescue, shelter and care for the emotional and physical needs of rescued victims of slavery. We also operate our own production center for survivors from 4 shelter partners in India, the Destiny Center.

After rescue and aftercare, the final step is to help survivors reintegrate into society. For older teens and adults, we offer job training, fairly paid employment, and non formal education. When possible, we assist survivors in finding housing or paying for a wedding if they so desire. For children, we support education as the best means of reintegration - we currently pay the school and shelter expenses of 100 children - including former slaves or born into brothels kids, who now can expect a bright future free from exploitation.

Poverty and lack of economic opportunity is consistently cited as a primary cause of slavery and trafficking in almost every published research study (UN, UNODC, ILO, ECPAT, CARE, Free The Slaves) We believe that addressing poverty and lack of skills and opportunity among survivors and high risk groups is a key element to ending slavery.

We witness every day the transformation in survivors' identity and behavior which result from self-sufficiency. At first they are timid and silent, not daring to look anyone in the eye. But after a few months, they are laughing, speaking out, and problem-solving, challenging us to match their energy and commitment.

Survivors are involved in designing TEN products and solving production problems, and they approach this challenge with tremendous entrepreneurship. We are deeply impressed by their hard work, courage, commitment, and hope. They are literally sewing and beading for their lives, **propelling their entire communities toward positive change.**

### **HELP US HELP SURVIVORS:**

We need everyone's help to maintain our life-changing programs for survivors and to launch new initiatives such as the Biodiesel Plant. The Emancipation Network is a 501 c 3 tax-exempt organization and all donations are tax-deductible

Donate online at [www.MadeBySurvivors.com](http://www.MadeBySurvivors.com)

Donations can also be mailed to:

**The Emancipation Network**

**PO Box 267, Sagamore, MA 02561**

**Contact: [info@madebysurvivors.com](mailto:info@madebysurvivors.com) 800-831-6089**