



Regenerating land by producing biofuels : Ghana

Turning degraded community lands into fertile biofuel production sites

Project description

The Tema Cooperative Sunflowers Association (TCSA) is a multi-integrated model for rehabilitation of degraded community lands through the cultivation and processing of sunflower into oil and biodiesel. The biodiesel is used to power tractors, machines and lanterns and the cake from the sunflower oil is used for feeding and fertilizing.



Business model

The initiative is based on clear and tested strategies that will help the indigenous farmers' cooperative to metamorphose into a medium-size enterprise that will be the sole controller of the sunflower industry in the country with many players involved at different production levels. A detailed business and financial plan is in place.

Scaling up activities

- Meeting 40 per cent of the biodiesel needs of the Volta River Authority.
- Supplying 20 per cent of the sunflower oil needs of the fish canning companies in Tema annually for the next five years.
- Satisfaction of the demands of the members of the cooperative as well as households that use sunflower oil for domestic consumption.

Immediate needs

- Improving the efficiency of production technologies for biodiesel with the aim of reducing costs and also raising quality.
- Promoting effective public private partnership to mobilize financial support and facilitate scale up of the initiative.
- Developing a nucleus out-grower farming concept to ensure sustainable supply of the feedstock.
- Developing an effective collaboration with policy makers to recognise sunflower production as foreign exchange earner.





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Partnership

- ❶ **Global Environment Facility / Small Grant Programme** provides technical and financial support.
- ❷ **KNUST Chemical Engineering** provides research into the production of the biodiesel and quality control.
- ❸ **University of Ghana Crop Science Department** provides expertise to the farmers on the cultivation of sunflowers.
- ❹ **Council for Scientific & Industrial Research (CSIR)** provides R&D support for the entire project.



Social, environmental and economic impacts

Social impact: The initiative will significantly contribute to rural community development. The farmers receive training measures and thus acquire skills and learn new production methods.

Environmental impact: Greenhouse gas emissions are reduced through the use of biofuels. By re-using the sunflower cake, less chemical fertiliser is necessary. The initiative promotes a sustainable lifecycle approach.

Economic impact: Tema Cooperative Sunflowers Association has a positive economic impact by creating income and jobs for producers. It creates value of primary agricultural produce. Furthermore, the import costs bill of the nation is reduced.

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SEED Partners

SEED is hosted by the United Nations Environment Programme (UNEP). Other current partners are the United Nations Development Programme (UNDP); IUCN (International Union for Conservation of Nature); and the governments of Germany, India, the Netherlands, Norway, South Africa, Spain, the United Kingdom and the United States of America.



About the SEED Initiative

The SEED Initiative identifies and supports promising small scale social and environmental entrepreneurs around the globe, entrepreneurs that while working towards a greener economy also tackle poverty, marginalisation and social exclusion.

SEED provides these social entrepreneurs with know how and networks, taking the lessons learnt at local level up to decision-makers to promote evidence-based policy making.

More information: www.seedinit.org

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