

Empowering Women One Community at a Time

SGP The GEF
Small Grants
Programme

REDUCTION OF EMISSIONS THROUGH THE ELIMINATION OF THE UNREGULATED BURNING OF MUNICIPAL WASTE IN THE COMMUNITY OF ISLETA



Project Description

The community of Isleta Sur near Guantanamo City had an open dump site for solid waste. Annually, 160 tons of solid waste were burned without regulation. Toxic smoke, ash and vector diseases affected the local population.

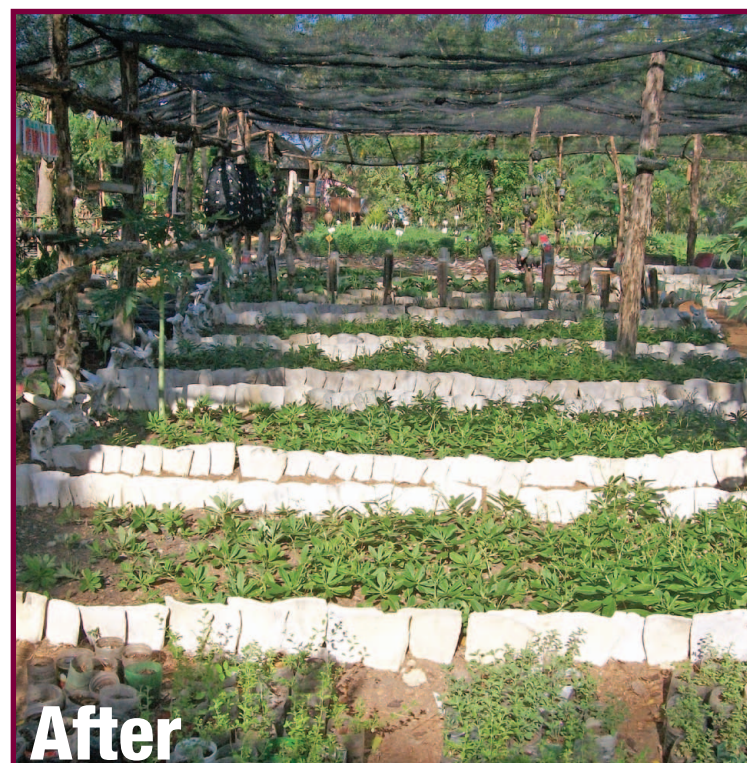
The objectives of this project were the cessation of the unregulated burning of municipal waste; the reforestation of the dump site; the raising of awareness about the issue; and the provision of environmental education in the community.

Led by Ms. Irania Martinez, the community decided to solve this problem: 15.74 hectares of the dump site were used for planting fruit trees, creating compost, and establishing a plan nursery and recycling facility for plastic and metal.

The transformation of the former dump into a garden – a major accomplishment of the community, led by the tireless Ms. Martinez – earned the National Environmental Award 2006, the top annual prize given by the Ministry for the Environment. Under the leadership of Ms. Martinez, two new waste processing centres are now working in Guantanamo province, with excellent results.

Background

An open dump site for domestic solid waste in Isleta Sur near Guantanamo City severely affected the community. Annually, 160 tons of solid waste were collected and deposited at the dump site, representing 99.8 mg TEQ (dioxin toxic equivalent) emitted into the atmosphere and 199.6 mg TEQ emitted into the soil. According the Ministry of Science, Technology and the Environment, the burning accounted for 6% of dioxin and furan emissions into the atmosphere in the province. Because of the health hazard and pollution, the community decided to change how it eliminated waste.



Implementing Organization: CEPRU, Consejo Popular Sur Isleta

Location: Isleta Sur, Guantanamo, Cuba

SGP Contribution: US\$11,800

In Cash Co-financing: CUP 120,200 or approximately US\$ 4,536

In Kind Co-financing: CUP 43,512 or approximately US\$ 1,642

Number of Beneficiaries: 142 families (566 persons)

Duration: September 2005 – 2007

Awards and Recognition:

- CNN Hero 2007 to Ms. Irania Martinez Garcia, the community leader
- UNDP Administrators Award 2006
- National Award for Environment 2006
- Nominee at the 2010 'Better City, Better Life' Expo in Shanghai, China

Implementation

Key activities during project implementation were:

- Organization of the community and the establishment of a methodology to manage the waste problem
- Transfer of technology for the creation of a compost made from domestic solid waste
- Sale of metal, plastic and compost produced from waste for agricultural use
- Cessation of the unregulated burning of solid waste
- Collection of best practice methods



Through the waste management and recycling system, the project solved the problem of the unregulated burning of waste. The project's success is attributable to the leadership and governance of women and the establishment of a waste management/processing system.

Environmental Impact

Emissions from dioxin and furan have been decreased by 6% . Other environmental benefits are:

- Reforestation of 7 hectares
- Generation of income and new jobs
- Heightened community awareness about the environment
- Improved community sanitation
- Heightened community self-confidence

To measure the impact, the community established a baseline of solid waste collected daily and of its composition (organic, metal and plastic). This information allowed the community to calculate dioxin and furan emissions generated by the unregulated burning of garbage by using a methodology from the United Nations Environment Programme (UNEP).

Socio-Economic Impact

The project has had many socio-economic benefits:

- Job creation
- Generation of additional income
- Improved sanitation and hygiene
- Creation of a community movement to beautify homes and construct family gardens, benefiting 40 households
- Improved community access to potable water, financed by the local government and with the help of the local community
- Improved community access to roads
- Improved community self-esteem

Policy Impacts

Due to its success, the project is widely recognized, especially by the government, and consequently has been replicated. The technology used for the treatment of waste has also been applied in other communities.

Gender Equality and Women's Empowerment

Women led the project from its inception to its implementation, receiving recognition for their efforts and marking their role and importance in society.

Sustainability

Three years after its completion, the project continues to demonstrate its economic and environmental sustainability. Indeed, two other communities have replicated the initiative. Key elements contributing to its sustainability are: financial support; capacity development; transfer of technology of the waste management system; community empowerment; and women's leadership and governance of the project.

Replication and Upscaling

The project is easily replicable, as it uses a universal technology. Local government subsidies or financial support are necessary to scale up the project. Two other communities have successfully replicated the project.

Sources Consulted

Project Record CUB/OP3/1/05/004, SGP Project Database, <http://www.undp.org/sgp>

SGP Questionnaire filled up by the SGP Cuba team. Email Communication, June 2010.

CNN AC 360. Online at: <http://ac360buzz.blogspot.com/2007/12/power-of-selfless-generosity.html> (June 7, 2010)

CNN archives. Online at: <http://archives.cnn.com/TRANSCRIPTS/0712/07/se.01.html> (June 7, 2010)

St. Augustine – Baracoa Friendship Association. Online at: <http://www.staugustine-baracoa.org/comm/enviro/index.htm> (June 7, 2010)



Contribution to the MDGs



- Job creation
- Income generation from the sale of recyclable metal and plastic from the solid waste collected



- Led and managed by women
- Provision of training in environmental management for women
- Transformation of women's role in the community from one based on a traditional concept to a proactive one
- Increase in women's self-confidence due to their direct involvement in the project



- Reforestation of 15.74 hectares of a former landfill with fruit-bearing trees
- Transformation of the dump/landfill site into a garden
- Establishment of a waste processing/recycling centre
- Access to clean, potable water



Lessons Learned

Community participation in environmental management is necessary to ensure the success of the project. Promotion and marketing must also have a good strategy to achieve maximum financial sustainability.



Community Action Global Impact

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