



USAID | SOUTH AFRICA

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GENERAL MANAGEMENT ASSISTANCE CONTRACT (GMAC)

Contract No: 674-C-00-01-00051-00

Eco-Housing Demonstration Project

Contract or Grantee number: 0005-1101-G-GA1



This report was produced for review by the USAID. It was prepared as a performance milestone under Mega-Tech, Inc.'s prime contract. The contents of this report address activities performed under USAID/South Africa's Strategic Objective No. 6: Increased Access to Shelter and Environmentally Sound Municipal Services

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Activity Summary and achievements:

The overall goal of the Eco-operative Housing Demonstration (EHD) project is to contribute towards achieving environmentally sustainable housing solutions through promoting energy and water efficiency, the use of environmentally acceptable techniques and building materials when developing all low-cost housing. This project simultaneously provided shelter to low-income households.

The area identified for the project was Amalinda suburb, which is situated on the edge of East London city. The EHD project is linked to a co-operative housing project, which is built in the same area, and also targets the same community. All the construction involved labor hired from the local community. Twelve builders were trained in eco-design construction and gained knowledge in the use of environmentally acceptable building material.

USAID made possible the construction of 20 pilot “eco” houses within a housing co-operative, to promote the concept of sustainable housing to communities, government and housing, to train builders in eco housing techniques, and to produce training material to be used in future training. Each house is equipped with water and energy efficiency features including ceilings, water harvesting, insulated walling and tiled roofs, equatorial windows and north facing alignment. The layout of the settlement is both innovative and traditional with houses built in a communal circular pattern, each with a vegetable garden, a communal play area and roads to access each home. The effect created is striking and a true demonstration of how government subsidy scheme houses can be built for healthy, economically viable and sustainable living. In addition, a multi-purpose hall was constructed for beneficiaries to have a place to convene for public functions, as well as to provide a child-care centre for mothers who have employment.

The project outcomes clearly indicate that communities, government institutions and low-cost housing development practitioners are not fully aware what can be done to achieve sustainable settlements in low-cost housing developments. More awareness needs to be imparted to these groups.

The houses built in this project are intended to demonstrate to government the practicality of providing subsidized houses that take into account climate conscious designs and consider social and economic sustainability to communities. The envisaged result is that this demonstration project would get communities and government to learn and start using this approach.

Contents of this report:

- 1) Tranche 5, Milestone 11 Report;
- 2) Grant Activity Completion Report;
- 3) Corplan Success Story;
- 4) Annual Narrative Summary (FY2004); and
- 5) USAID Site Sheet – Corplan.

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9th December 2003
Ref: CSD/mc/P250/let4068

ATT: FRED KUSAMBIZO

Corplan
9 Wynne Street
East London
5201

Also by fax: 7432200

Dear Fred

**AMALINDA ECO-COOPERATIVE HOUSING
PROGRESS**

We hereby confirm that progress on the above project is at the following stage:

- Civil services practically complete
- 17 houses at practical completion stage

Please note there are a total of 20 houses in this project.

We trust the above is in order and urge you to contact us with any queries you may have.

Yours faithfully,
HSC Consulting (Pty) Ltd

COLIN DRIVER

H & C Consulting (Pty) Ltd ♦ Registration No: 9903561-07 ♦ Member firm of SAACE B. SABTACO ♦ In association with Arup (Pty) Ltd
 Directors ♦ ET Chiro PrEng BSCC MSAICE ♦ CS Driver PrEng BSc(Eng) MSAICE ♦ AS Joliba PrEng BEng(Civl) Hons MEngSc MSAICE
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 Assisted by ♦ MM Rickard PrTech(Eng)

Milestone 11 -









Nomonde Mdhuli

From: Fred [fred@corplan.wn.apc.org]
Sent: Tuesday, December 09, 2003 11:41 AM
To: Nomonde Mdhuli
Subject: Fw: Photo's

Dear Nomonde,

I am sure by the time you receive this e-mail the documents we couriered yesterday will have arrived at your office. Please find attached five photos of the 17 houses all taken from different angles.

P1010001 photo shows only six houses from the back

P1010003 photo shows you the best perspective whereby the houses built can be counted. Please zoom in the photos to about 75% or 100% to get a clear number of the 17 completed houses. Bear in mind that some houses are hidden behind the others showing only the view of their roofs.

P1010005 photo is almost the same as photo "0003" but closer

P1010007 photo shows only seven houses from the front

The glazing and hanging of doors of the houses is happening now. 15 of the 17 houses will be occupied by beneficiaries before the Christmas break.

Regards,
Fred.

12/9/2003

Grant Activity Completion Report

1. Name of Organisation	Afesis-Corplan
2. Grant Activity	
3. Briefly describe the grant objectives achievements and impact as a result of the grant activities implemented during the grant period. Answering the “so what” question is of great importance for USAID’s reporting purposes	
<p>Build 20 eco houses within the housing co-operative 20 eco – energy efficient houses were constructed with the full beneficiary involvement and 20 households formerly living in informal settlements were provided with a secure house and land. This enabled the 20 households to start leading a healthy decent live. The beneficiaries also learnt the benefits of living in an eco house.</p> <p>Produced an eco-operative guideline document and training material for future communities A guideline document was produced that informs housing practitioners and government institutions how to develop energy efficient and environmentally sustainable low cost housing. The material is continuously shared with beneficiaries so that they practice healthy ways of living.</p> <p>Train builders in eco- design construction 12 people were trained in eco-design construction, of which the training provided knowledge in the use environmentally acceptable building material. The use of such building material and eco design contributes to the bigger picture of “climate change”.</p> <p>Built one multi purpose hall A multi purpose hall was constructed in a form of a shelter. This has provided the beneficiaries with a place to convene public functions like mass meetings, hawkers’ place and in future it will provide a child care centre for mothers who have employment.</p> <p>It is hoped that all the above will show case to and influence government institutions, all housing practitioners and stakeholders in conforming to acceptable practices that would lead to environmentally sustainable housing development while creating and providing decent settlements for low income communities.</p> <p>Therefore the overall objective is to practice best housing by achieving energy efficiency, water efficiency, best sanitation methods and less production of hazardous gasses in households and the construction industry.</p>	

Grant Activity Completion Report

the construction stage, which involved coordinating builders, materials' procurement and management, quality control, monitoring and technical support. The last stage was the handing over of the completed project to the beneficiaries.

Lessons and Recommendations

All physical development should be planned and pursued in an integrated manner to achieve sustainable settlements. Not any one part of developmental concept should be carried out in isolation. The involvement of communities is crucial as it is one part that mainly forms social sustainability in any one development. For that matter, in most cases development is seen to take longer than usually anticipated.

Success Story; Afesis-Corplan's Eco-operative Housing Demonstration (EHD) project

Headline- Eco-operative Housing Demonstration project

Subhead- Achieving environmentally sustainable housing solutions through promoting energy and water efficiency.

Photograph- None

Permission to use photograph- N/A

Photographer's Name- N/A

Photographer's Organization- N/A

Photograph's Caption- N/A

Story Lead- The Eco-operative Housing Demonstration (EHD) project provided affordable shelter for 20 households within an environmentally sustainable settlement. Each house is equipped with water and energy efficiency features including ceilings, water harvesting, insulated walling and tiled roofs, equatorial windows and north facing alignment. The layout of the settlement is once both innovative and traditional with houses built in a communal circular pattern, each with a vegetable garden, a communal play area and roads to access each home. The effect created is striking and a true demonstration of how government subsidy scheme houses can be built for healthy, economically viable and sustainable living.

Main Body-

The area identified for the project was Amalinda suburb, which is situated on the edge of East London city. The EHD project is linked to a co-operative housing project, which is built in the same area, and also targets the same community. All the construction involved labor hired from the local community.

USAID made possible the construction of 20 pilot "eco" houses within a housing co-operative, to promote the concept of sustainable housing to communities, government and housing, to train builders in eco housing techniques, and to produce training material to be used in future training.

The project did not proceed without challenges. There were tensions between the need to train community members in new sustainable building techniques prior to the onset of construction and their eagerness to begin earning wages as soon as possible. Then the

progress of training was in fact slower than anticipated due to the generally low level of understanding of construction techniques.

The project outcomes clearly indicate that communities, government institutions and low-cost housing development practitioners are not fully aware what can be done to achieve sustainable settlements in low-cost housing developments. More awareness needs to be imparted to these groups.

Summary- The overall goal of the Eco-operative Housing Demonstration (EHD) project is to contribute towards achieving environmentally sustainable housing solutions through promoting energy and water efficiency, the use of environmentally acceptable techniques and building materials when developing all low-cost housing. This project simultaneously provided shelter to low-income households.

The houses built in this project are intended to demonstrate to government the practicality of providing subsidized houses that take into account climate conscious designs and consider social and economic sustainability to communities. The envisaged result is that this demonstration project would get communities and government to learn and start using this approach.

Pullout Quote- The houses built in this project are intended to demonstrate to government the practicality of providing subsidized houses that take into account climate conscious designs and consider social and economic sustainability to communities

Background Information-

Date- Story written in October 2004

Country of Story- South Africa

City or Region of Story- Amalinda, East London

USAID program- SO6 Urban and Environmental Development

Presidential Initiative-Clean Energy

Contractor- Mega-Tech, Inc.

Other-

Submitter

Name- Trish Heimann

Organization- Mega-Tech

NARRATIVE REPORT

Project description

The Eco-operative Housing Demonstration (EHD) project was to provide 20 households within an environmentally sustainable settlement. The area identified for the project was Amalinda suburb, which is situated on the edge of East London city. The EHD project is linked to a co-operative housing project, which is built in the same area, and also target the same community. All the construction was to happen using the local community as labour.

Project goal

The overall goal of the project is to contribute towards achieving environmentally sustainable housing solutions through promoting energy and water efficiency, and the use of environmentally acceptable techniques and building materials while developing all low-cost housing. On the other hand this would also provide shelter to low-income households.

Therefore the houses are intended to demonstrate to government the practicality of providing subsidized houses that take into account climate conscious designs and consider social and economic sustainability to communities. The envisaged result is that this demonstration project would get communities and government to learn and start using this approach.

Project objectives

- a) To build 20 eco houses within a housing co-operative
- b) To promote the concept of eco housing to communities, government and housing development institutions.
- c) To train builders in eco housing techniques
- d) To produce training material to be used in future training
- e)

Project achievements against objectives

All the above objectives were achieved however, not within the scheduled period. The training of builders started a month later than envisaged due to community people not enrolling for training of this programme. The main reason for this is that builders did not

want to go through training despite the fact that the reason was explained, they wanted to start working so that they could earn immediately. The level of their understanding was low so the lesson had to be pitched lower than the prepared material resulting in a slow progress.

By the time the project got to the construction stage, most trainees had left for other jobs. So this disrupted the start of the construction phase. During the construction more builders left the site (resigned work) due to the payment rates budgeted in the project. These rates could not be increased to match the market related rates, as this was a low-cost housing project.

Identifying beneficiaries to occupy the houses also delayed, as no beneficiary were willing to sign up and live in this eco block. The eco block was taken to be a “guinea pig”. Eventually all the 20 beneficiaries were identified and listed to occupy the houses.

Lessons learnt

Communities, government institutions and low-cost housing development practitioners do not know what can be done to achieve sustainable settlements in low-cost housing developments. More awareness needs to be imparted to these groups. Comparative evaluation of such projects like the EHD need to be done by comparing them to other low-cost housing developments looking at, specifically, the quality of environment created.

Although government has indicated its intentions to emphasize the quality of housing, it is still not prioritising quality to be achieved in housing but the number of housing to be produced. More needs to be done for bureaucrats to understand the concept.



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South Africa

FINAL DRAFT (November 2004)

Project Name: Eco-operative Housing Demonstration Project Site Sheet: Eastern Cape

Table with 2 columns and 4 rows containing project details: Activity Purpose, Location, Partners, Project Duration, Meeting Date, Grant Amount, USAID Strategic Mission Objective, and Activity Officer.

Key Site Contact: Fred Kusambiza, (082) 927 2056 (cell); (043) 743-3830 (office)

SUMMARY
Afesis-Corplan has worked in partnership with USAID on urban housing and services issues for over 10 years...
WHAT IS USAID/SOUTH AFRICA'S ROLE?
USAID/South Africa, through its contract with Mega-Tech, Inc., has provided grant funding for operating and some capital costs of the program.
WHAT SITE VISIT MIGHT ENTAIL?
A visit would entail driving into the project area, which consists of the twenty project-supported houses in the midst of a larger, traditional RDP housing project of 198 units.
WHO WOULD MEET THE DELEGATION?
Mr. Fred Kusambiza, Settlements Manager