ECO- CLUB PROGRAMME

Developing Environmental Education Material

OVERVIEW

This project is an adoption of an existing DUCT programme (Eco-clubs) which initially started in 2009, having worked with over 40+ schools in Pietermaritzburg. Due to the COVID-19 pandemic the project this year will not be focused on educating learners through school visits as in previous years but will focus on updating and developing new environmental education material.

Doing this will ensure that all environmental education material is documented properly thus making it easier for the Eco- Club programme to run smoothly in the future for both members and facilitators. The material developed will then be shared electronically to teachers and some will be posted on DUCT social media platforms

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The Key Objectives:

To enhance environmental education by updating traditional methods of how to teach into the more modern methods.

To equipping environmental educators with facilitation skills in order to communicate the message of the importance of healthy rivers to learners and community members.

To build the capacity of learners by exposing them to Citizen Science tools in order for them to have a clear understanding of the current health of our river.

FAST FACTS

Location: Greater Edendale & CBD

Duration: 2021-2021

Client: All Schools in uMgungundluvo District

Project Value: R92 400

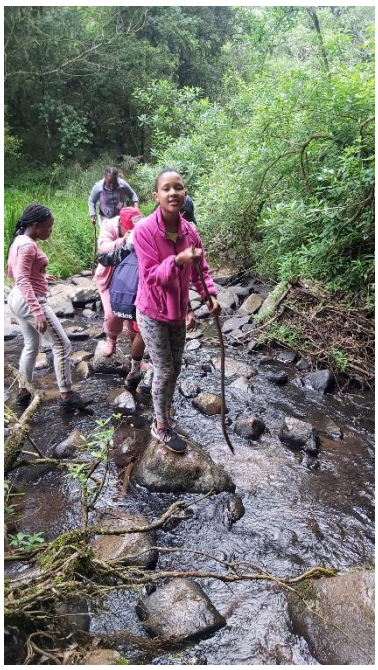
Project Team: Asande, Chikatizhyo, Luyanda, Nompumelelo

SCOPE

1- Developing environmental education material for Eco- Club programme; 2- Facilitation training for Eco- club facilitators; and 3- Creating partnership with various organisations that are willing to be part of improving DUCT Eco-Club programme in any way possible be it marketing, donations, free vouchers, transportation etc for the following year.

OUR ROLE

One-year project to develop environmental awareness teaching material in the form of booklets, posters, images, video clips, new games and river walk trails for schools in the region of uMgungundlovu district specifically schools that are close to a river/stream.



Left Photo: Eco- Club members at DUCT Leadership Camp

Right Photo: River walk/hike activity

ECO-FARMING PILOT PROJECT

A Groen Sebenza Change Project

OVERVIEW

The Duzi uMngeni Conservation Trust (DUCT) is a non-profit organization that is committed to improving the environmental health of the uMsunduzi and uMngeni Rivers. In 2017 DUCT led a 1 year Situated Learnership Project, consisting of 12 Enviro-Champs of Imbali and Ashdown.

The main objectives were to champion river health in respected areas and to develop a vocational pathway for livelihood generation.

After the project ended, in 2018, many of the enviro-champs were left either unemployed or working in a different sector, which was not a good thing for the environment.

Key Objectives

The Eco-Farming Pilot Project aims not only to promote river and environmental health but also to build Enviro-Agripreneurs as a mitigation strategy/ approach to support livelihood generation post-project funding.

Achievements

Securing a 5-year land use agreement.

FAST FACTS

Location: Zamazulu Secondary School Imbali Unit 2, PMB, KZN-SA
Duration: 1 year
Client: DEA NRM
Partners: Liberty NPO, University of KwaZulu Natal, and Zamazulu S.S
Project Value: R60 000.00
DUCT Budget: R23 000.00
Project Manager: Nomfundo

SCOPE

The project aims to pilot a sustainable 0.25 Acre eco-farm in Zamazulu Secondary School in Imbali Pietermaritzburg KwaZulu Natal. Led by DUCT working together with Liberty NPO and UKZN, the project aims to apply agroecology principals of improving efficiency in the use of resources, protecting, conserving, enhancing the natural ecosystem, and promoting climate action and resilience. Capacity Building and engagement with the local community and schools through information sharing events to raise awareness on river health and environmental challenges faced. Develop the idea into a green business model to support a livelihood generation system.

OUR ROLE

- Raise river health awareness with the neighboring community and schools through engagement events and research case study.
- Improving efficiency in the use of natural resources.
- Conserving, protecting, and enhancing natural ecosystems.
- Developing a green business model for livelihood support generation.

Figure 1: ***Project site view of Zamazulu area.***

APPLICATION OF GIS AND REMOTE SENSING IN EVALUATION OF CLEARING TECHNIQUES FOR ALIEN INVASIVE SPECIES

Overview

The increase in alien invasive plants has become a cause for concern that requires an immediate call of action as these species challenge the indigenous species for water, negatively affects the river systems, cause extinction of native plant species and upsets the balance of the established ecosystems.

The South African government has formulated the National Environmental Management Biodiversity Act (NEMBA) with the categories list of alien invasive plants used to guide the environmental sector to monitor and clear these species.

DUCT falls under the actors that seeks to ensure that alien invasive plants along the DUZI-uMngeni river are cleared. Hence, this project aims at assessing the current methods used to ensure that DUCT uses the best methods to clear the alien invasive plants and ensure the eradication of these plants. The battle is to fight the reoccurrence of these plants and hopefully this project can offer such information.

The application of GIS and remote sensing is a vital tool that can offer a mapping and monitoring system. Hence, the its application will ensure that alien invasive plants are recorded and mapped; showing their spatial distribution along the Duzi-Umgeni river.

FAST FACTS

Location: Duzi/uMngeni Catchment
Duration: 1 years (1 May 2020 to 31 April 2021)
Client: DUCT Projects
DUCT Budget: R23 000
Project Manager: Samuel T Kumbula

SCOPE

The project aims to evaluate the current approaches used for clearing alien invasive plants and recommend the best alternatives techniques for site clearance. The application of GIS and remote sensing will be used to map and predict the spatial distribution of the alien invasive plants and their reoccurrence phase.

OUR ROLE

Research and Data collection on methods and chemicals used
Mapping and prediction of alien invasive plants
Project management and reporting
Financial management

TEAM MEMBERS

Project Roles	Team member
Project Manager	Samuel T Kumbula
Project Manager	Tembeka Dambuza
Project Mentor	Sithembiso Sangweni
Payroll	Nomathemba Ntshangase
Finance manager	Gill Graaf

ECO-FURNITURE PROGRAMME

Value added industry utilising AIP cleared mass

Overview

This project is new to the company, it was formed or established to help the company needs in terms of furniture renovations.

Duct team's fieldworkers always cut down decent alien trees that we plan to turn into good furniture or any wooden craft requested. Not only are we going to be using alien plants but wooden pallets as well from various stores.

The Key Objectives:

To upcycle alien invasive plants collected by Duct fieldworkers and pallets from different companies into furniture.

And also to teach anyone who is interested in learning about wood work more so in the community of Ashdown.

FAST FACTS

Location: DUCT office & Ashdown

Duration: 2020-2021

Client: DUCT and public

Project Value: R28 258

Project Manager: Mongezi

SCOPE

1- Upcycling wood into furniture primarily for DUCT; 2- Through advertising, other companies might be interested in our furniture and we will gladly make and sell it to them; 3- Teach those who are interested in wood work in the community of Ashdown.

OUR ROLE

One-year project to produce best alien plant and pallet furniture for DUCT and those who are in need to get the best customized woodwork furniture of their own style.

Photo: DUCT members making use of the canteen table we made

VULINDLELA CAPACITY BUILDING PROJECT

Groen Sebenza change project

OUR ACHIEVEMENTS

We do not have any achievements yet, as we have not yet any of our deliverables yet.

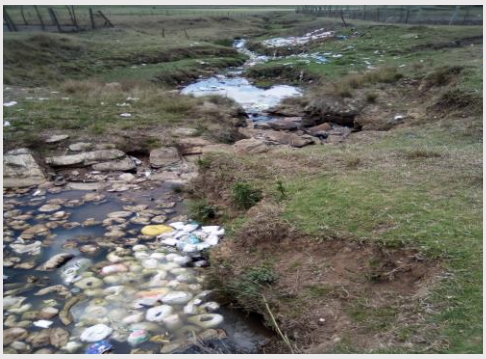


Figure 1: Nappy pollution in a stream at Vulindlela

FAST FACTS

Location: Vulindlela area
Duration: 1 April 2020 - 31 March 2021
Client: DEA, DUCT
Partners: DEA Groen Sebenza, DUCT
Project Value: R46 000
DUCT Budget: R46 000

SCOPE

To capacitate out of school youth with the the necessary training and skills to monitor and improve water quality at the source of the Msunduzi River. These activities will involve conducting various environmental education trainings that will equip the volunteers to educate and engage with the community and raise environmental awareness, particularly on waste management and water quality.

OUR ROLE

- DUCT will provide administrative, accounting, and management services for the project, through it's assigned project managers.
- DUCT will also provide the necessary skills and development training and tools for the volunteers and in order to equip them with the skills they need to steward their water sources well and raise awareness on the illegal dumping occurring in the river.
- The project will also allow volunteers to network and knowledge share with youth part of the of the greater URP project, Mpophomeni enviro-champs and Liberty NPO to name a few.