PROGRESS REPORT

Project Title: Hartbeespoort & De Hoop dams integrated biological remediation program training material

Target Country or Region: South Africa

Budget code: 513-SAF-2001

Contract numbers:

Funding sources: Flemish Funds in Trust, FUST

Total Budget approved: 56,160 USD

Reporting Period: May 2011 – June 2012

Executing Agency: UNESCO Addis

Implementing partners: Dr. Johan Wentzel

Project starting date: 1 April 2010

Project completion date: 31 March 2013

Responsible Sector: SC/HYD

Name of Person completing Report: Mr. Alexandros Makarigakis

1. Summary and Background

The Hartbeespoort Dam was constructed in 1925 with a capacity of 205 million cubic metres and a shoreline of about 56 km. The dam and its immediate surroundings are major tourist attractions and they offer magnificent opportunities for water activities, mountain sports and a variety of other activities such as hiking, angling, yachting, ballooning hang-gliding, parasailing and abseiling. Due to the human impact (wastewater, agriculture) along the lake and its main tributaries, the lake has become eutrophicated over the years, leading to a deteriorated water quality with algal blooms and loss of the aquatic vegetations and wetlands surrounding the lake. The aim of this programme is to address the imbalances and unhealthy biological conditions in the Hartbeespoort Dam. Training material for national use based on the many studies, research and existing strategies developed for the Hartbeespoort Dam were developed in the form of three manuals, namely:

* Biological remediation of impacted infrastructure sites based on sustainable development principles
* Establishment of wetlands around the perimeter of artificial impoundments
* Rehabilitation of the riparian zone

The De Hoop dam is currently under construction in the Steelpoort river and is situated between Roossenekal and Steelpoort in Limpopo Province. Completion date for the construction of the dam wall is set for April 2012 and withdrawal of the construction team December 2012. The area is considered a region of plant endemism with many rare plants occurring in the region. It is known as the Sekhukhune Region of Plant endemism.

The manuals produced for the Hartbeespoort Dam will be used for the first time for the rehabilitation after construction of the newly built De Hoop dam, since this is the first major dam to be built after rehabiltation has become a legal requirement in South Africa. as a UNESCO report.

FETWater is a project that was created to address the lack of adequately qualified individuals with appropriate experience to implement provisions of the National Water Act (NWA) in order to ensure the achievement of Integrated Water Resources Management (IWRM) in South Africa. A DWAF/UNESCO/WMO mission in 1998 conducted an assessment of the existing research education, training and capacity in the water sector in South Africa and compared it with the research education, training and capacity needs for water resource management in South Africa. The mission recommended the establishment of a framework programme for research education and training in the water sector (FETWater). Thanks to the financial means provided by the Flanders UNESCO Science Trust Fund (FUST), FETWater was established in 2002. FETWater is currently in Phase II after concluding its first Phase in 2006

The proposed activities herein have been prepared in cooperation with members of some of the Networks of FETWATER project with the view that in the future a new Network that will deal with water quality issues will surface within the project’s framework. The Department of Water Affairs will be responsible for providing 50% of the budget required.

1. Description of project activities undertaken during the reporting period

During the implementation period three manuals were developed:

* Biological remediation of impacted infrastructure sites based on sustainable development principles
* Establishment of wetlands around the perimeter of artificial impoundments
* Rehabilitation of the riparian zone

During this phase of the project the manuals developed will be combined and a framework for implementation plan at De Hoop dam based on the combined manual will be developed.

The implementation of this project will be drafted as a case study to be included in the combined manual containing a list describing all the plants that were used in the rehabilitation process.

A contract to that extend has been signed with the consultant.

1. Difficulties and Problems encountered and measures taken, any changes in implementation.

The project was to commence in February 2010 but came to a standstill due to administrative arrangements within the Department of Water Affairs (DWA) of South Africa. In particular, UNESCO was requested to sign a contract with RandWater, Johannesburg, which implements the part of the project that the DWA finances. Finally, after intense consultations and in order to progress with the implementation of the project, it was decided that a consultant could be hired in lieu of RandWater.

Further to that, the consultant had to be hospitalized and operated upon, which was the cause of further delays.

Due to the two aforementioned delays, UNESCO Addis amended the contract to reflect a later date of delivery of the outputs and extended the life of the project, with the approval of the donor, at no cost until 31 December 2011.

The work for the De Hoop dam dam was also delayed due to the hospitalization of the consultant. Work has recommenced in May 2012.

1. Project Results achieved during the reporting period

The manual “Biological remediation of disturbed areas after construction of dams” was developed

1. Lessons learned and Sustainability

The sustainability of the project relies on the involvement of DWA, which will be financing the costlier elements of this exercise and will be responsible for their maintenance, owning thus the process.

1. Evaluation recommendations when applicable
2. Visibility: describe any visibility action implemented during the reporting period
3. Work plan for the following period (please complete the attached table and when applicable add an eventual budget revision)

IX. Annexes (publications , reports and other project outputs, when applicable)

The manuals were provided in the previous report