

To: Professor Tod Mijanovich

From: Sarah Bittenbender

Date: October 19, 2009

Re: Program Statement Memo: Environmental Education at NaDEET Center

The purpose of this memo is to describe Environmental Education at NaDEET Center, a program of the Namib Desert Environmental Education Trust (NaDEET). The program provides environmental education to Namibians, primarily youth, to create an opportunity for students to reflect on their environment, experience alternative ways of living, and react appropriately. Please refer to the accompanying NaDEET Center Logic Model for more details regarding the specific components and assumptions of the program.

Overview

Namibia is currently experiencing rapid growth, and with it rapid environmental degradation. Environmental education is recognized by international and local authorities as one way to reverse this trend, and is included in the Namibian school curriculum. However, most teachers are not trained in environmental issues and how to teach them. Additionally, environmental problems are intrinsically related to other domestic and international issues such as food security, health, politics, and natural resources. NaDEET was established in 2002 as a way to increase and improve environmental education in Namibia from a holistic point of view.

NaDEET Center, NaDEET's primary program, provides experiential, hands-on environmental learning in the Namib Desert to groups of 20 to 40 participants, chiefly Namibian students, who stay at the Center for three to five days. As NaDEET's website describes, "By using an innovative design, alternative technology... and living techniques, the Centre is both a model and experience in sustainable living."¹ Lessons about environmental sustainability are incorporated into structured and informal learning. The Center activities are based on and complement the Namibian school curriculum and are tailored for specific age groups.

The target population for NaDEET Center is Namibian school children, with an emphasis on children from lower-income areas as well as southern Namibia. The cost of the program is kept very low, but most participants can afford to pay only a fraction of the costs. The difference is made up through extensive local and international funding, which allows the Center's programs to reach many students who would otherwise not have participated.

Activities

"The overarching philosophy of NaDEET Centre is to engage participants in sustainable living practices by promoting and facilitating hands-on experiential learning in a desert environment."² Activities at NaDEET comprise both structured learning activities and learning through living. The structured activities include both classroom and outdoor activities for participants to learn

¹ www.nadeet.org/centre.html

² NaDEET Document: UNESCO Namibia proposal March 2008, p. 4

about the biodiversity of the Namib Desert, solar energy, and water conservation. Participants continue to learn using alternative methods to cook their meals with solar cookers and ovens, shower using a bucket shower, and turn on the light powered by solar electricity. Participants are shown and utilize alternative energy sources such as the sun and wind, and gain a heightened awareness of water and energy use. Through these activities participants are encouraged to learn about how plants and animals adapt to the desert, reflect on how humans interact with the environment, and how humans might adapt.

Outcomes, Outputs, and Goals

In terms of immediate outcomes, NaDEET Center hosts approximately 600 students, 75 teachers, and 100 other adults each year. These participants include groups from returning schools, although rarely returning participants, and new schools. Participants leave NaDEET with increased awareness of their environment after learning about the biodiversity of the Namib Desert (the namesake of Namibia, which few Namibians see) and building an awareness of how to live in better harmony with their environment. Teachers leave with an increased capacity to incorporate quality environmental education into their school curriculum.

In the short term, NaDEET aims for participants to return to their schools and communities with their new heightened awareness of the environment. They are encouraged to use their knowledge in their daily lives by taking actions such as turning off the faucet while brushing their teeth and recycling. Through providing a concrete experience in sustainable living techniques, NaDEET Center's longer term outputs includes participants sharing their knowledge with their families, schools, and communities, and spreading the information further than just those who participated in the program. Additionally, because environmental education is aligned with the school curriculum, students should have the opportunity to build upon their knowledge gained at NaDEET Center at their schools.

By providing environmental education through first-hand experience with sustainable living tools and techniques, as well as an introduction to the biodiversity of the Namib Desert, NaDEET aims to instill in their participants the awareness, understanding and knowledge to live in an environmentally sustainable manner. By increasing individuals' understanding and awareness of the environment, NaDEET's broader goal is to empower Namibians to take actions to sustain the environment and therefore create an improved environment in Namibia.

Assumptions

As seen in the Logic Model, there are many assumptions made in order to accomplish NaDEET Center's program activities and reach its goals. There are many challenges to the program including procuring ongoing funding, an issue inherent to many non-profit organizations. NaDEET Center's successful high level of participation is mostly due to word-of-mouth promotion, but this means that schools tend to come from the same areas and NaDEET aims to extend its reach more schools in southern Namibia. The location of NaDEET Center also remains a challenge in that school groups must find their own funding and transportation to the remote area. Once participants are at NaDEET Center, there are fewer outside factors to control, but how well participants receive the lessons can vary for reasons such as changes in NaDEET staffing, dedication of school teachers, and interest of students.

The assumptions regarding what happens to participants and their new knowledge after leaving NaDEET, are most tenuous. Although NaDEET utilizes two other programs to increase their environmental education reach, the NaDEET Center program itself utilizes little to no follow up with schools. Teachers are encouraged to continue the lessons learned at NaDEET. How much these lessons are carried through and continue to make an impact on the participants has a great effect on whether or not NaDEET Center's overarching goals can be reached.

The accompanying Logic Model includes the components of NaDEET's programs as outlined in this memo, with the assumptions that are necessary to make each component a reality.