"A key challenge for the future, is to integrate social development more fully with the program's environmental goals. Although this echoes the many criticisms leveled at the community based conservation approaches of the past, where the mere inclusion of people in such initiatives was regarded as a proxy for poverty reduction, empowerment and social development, the context of WfW is rather different. The participation of people in WfW's conservation activities is fundamentally essential; without the active eradication of alien invasive species South Africa's biodiversity and water resources will be degraded."

- Andrea Buch and Alan B. Dixon, Universities of Otago and Worcester

Sponsors

The Program

Alien invasive plants (AIP) pose a significant water availability threat in South Africa. They tend to consume unsustainable levels of water, leading to a reduction in stream flow and excess biomass in some biomes; this increases both fire hazards and soil erosion. Invasive species in the region include trees, shrubs and weeds in the general Acacia, Hakea, and Pinus families. The greatest number of these AIP species are found in the Western Cape of the Fynbos biome. However, the Grassland and Savanna biomes are also impacted by AIP species.

The Working for Water (WfW) program was initiated in 1995 by former minister of Water Affairs Kader Asmal and a group of natural resource managers and scientists. This government program administers over three hundred projects in all of South Africa's nine provinces. The aim of the program is to eradicate invasive plants that pose a direct threat not only to South Africa's biological diversity but also to its water security.

The program addresses both ecosystem service delivery and poverty alleviation in the country. This multi-pronged approach is a result of the pro-poor focus of the Expanded Public Works Program (EPWP). The buyer of the ecosystem services are water user associations, but the Department of Water Affairs and Forestry (DWAF) administers the water sector. The removal of invasive plants is expected to increase water flow. For a country that is as water stressed as South Africa, this creates positive future prospects.

Program Structure

The program is administered by the Expanded Public Works Program (EPWP) as part of their poverty relief initiative in rural areas. The government pays local contractors through EPWP to oversee invasive species removal activities.

The payment structure of the program depends on land tenure. In private lands, the transaction between landowners and EPWP occurs through a stewardship agreement. In public lands, a directive under the Conservation of Agricultural Resources Act (CARA) is issued along with a term concession to the local contractor or community trust.

Local contractors and community trusts are created with support provided by the Department of Environmental Affairs and Tourism (DEAT) and the Natural Resource Management Program (NRM) in the Department of Water Affairs (DWAF).

Social Benefits

- Annually the program provides jobs to approximately 18,000 previously unemployed and underprivileged individuals.

- Most of the workforce is women and the remaining majority is the youth, the disabled and those living with HIV/AIDS.

- The unemployed do not only get jobs but skills such as how to tender for a project, which promotes entrepreneurship.

- The government supports WfW by providing employees with education and training opportunities, health, reproductive care, rehabilitation for former convicted criminals, childcare services, HIV/AIDS awareness programs, counseling and financial savings programs.

- Waste from extracted AIPs is used to promote value added industries such as furniture, wooden toys, firewood and fuel chips.

Challenges

There have been a number of challenges especially relating to the a lack of planned follow-up in areas that have been cleared. In some instances AIPs have regrown to levels greater than existed before the disturbance caused by the initial clearing.

The main goal of the program is to provide short-term employment to marginalized communities while simultaneously addressing water losses due to invasive species. However there is a problem created by raising the expectations of community contractors without creating a strategy for long term employment. Lack of employee training and the lack of long term funding for the WfW project contribute to this problem.

Finally, the biggest challenge is to ensure that projects like WfW are integrated with other efforts to eradicate invasive species. Much of the work is done on a piece-meal basis. Attempts must be made to cooperate with other national, regional an local efforts.

Addressing these issues will be integral to maintaining long term benefits from the program.

Looking Forward

More research is needed in all areas affected by invasive species in the country. The issue of ecosystem repair after clearing requires attention as some ecosystems can recover without further management intervention and others cannot.

Also, environmental education has to be provided to the contractors and their employees. This will not only yield good benefits for the program, but will also sustain employment opportunities and economic independence. Education will promote a more in-depth understanding and stewardship of the country's ecological resources among the programs participants.

WORKING FOR WATER

The program will have to integrate social development more fully with the program's environmental goals by facilitating opportunities for information exchange among communities.

The long-term viability of the program depends entirely on government funding. The cost of invasive plant management in high-yield catchments and rivers alone will be more than R$300 million (US$28 million) per year for 25 years. This cost is currently borne completely by the government through EPWP. In the future, there may be opportunities for private entities to enter ecological markets for water, carbon and biodiversity in the region.