Western Cape Government

SUSTAINABLE RESOURCE MANAGMENET: LANDCARE RESTORATION PROJECT

The restoration of valuable natural resources important to agriculture

Wow day R.J. RöSCHER 10 November 2020

Brief description of Innovation/Technology

Restoration of ecological infrastructure delivering a service to Agriculture

Ecological infrastructure refers to the natural or semi-natural structural elements of ecosystems and landscapes that are important in delivering ecosystem services.

- LandCare, a sub-programme within the Sustainable Resource Management (SRM) Programme, capacitates landowners to restore river ecosystems through varies invasive alien clearing projects and active restoration.
- During the 2019/2020 financial year:

- 15 290 ha of agricultural land was rehabilitated
- 1 194 green jobs created

- It was soon realized that alien clearing alone is not sufficient and that active restoration was also required. As a result the Western Cape Department of Agriculture partnered with a local NGO to start a nursery where 19 000 indigenous trees are propagated annually and replanted back into the catchment.

Why was this innovation developed?

Restoration of ecosystems delivering a service to Agriculture

Invasive Alien Clearing

- Invasive alien plants is seen a one of the priority threats by farmers that needs to be addressed in order to restore the services that a healthy ecosystem provides to the agricultural community.
- The total reduction in flows, because of invasive aliens, is estimated to be at 1 222 million m³/annum or 2,9% of the naturalised mean annual runoff (Le Maitre et al. 2016).
- Once clearing is done active restoration is required to restore the biodiversity and integrity of the ecosystem along rivers.

Why was this innovation developed?

The ECOLOGICAL INFRASTRUCTURE INVESTMENT FRAMEWORK (EIIF) for the Western Cape has 4 objectives of which this policy priority fits in each one namely:

- To improve water quality and quantity in support of people's health and livelihoods in the Province, by controlling the threat of alien invasive plants specifically and improving the ecological status of rivers, wetlands and estuaries more generally.
- To reduce the vulnerability of people, property and the environment to the threat of uncontrolled wildfires.
- To sustainably support local livelihoods and food supply provided by the Province's rangelands through improved land use practices.
- To reduce the exposure of communities, the environment, infrastructure and economic activities to the impacts of increased flooding (due to climate change, for example) within the catchment and along the coast.

Why was this innovation developed?

Active restoration

- The nursery contributes to making farmers more aware of the important role that a healthy river systems play and how they can enhance the ecosystem services delivered by these rivers through active restoration.
- Knowledge is transferred to the local community to collect cuttings and seed from the catchment to conserve the genetic integrity.
- 19 000 trees are annually propagated at the Worcester Field reserve from where it is planted back into the rivers, creating more jobs and opportunity for knowledge transfer to unemployed individuals.

Restoration of Ecological Infrastructure - through knowledge transfer

Restoration of Ecological Infrastructure – production of 19 000 trees (12 species) per annum

Restoration of Ecological Infrastructure – through raising awareness

Restoration of Ecological Infrastructure – through alien clearing and active restoration

Significant wins/impacts:
3 ha of aliens removed = 1 ha of vineyard water requirements

Thank you

Contact Us


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