

List of candidate projects of water recycling technologies in Namibia

1. Overview

In 2017, Namibia government has list the project based on the following 4 activities, the prioritization of project was listed.

- Activity 1: Contextualization of the technology transfer;
- Activity 2: Stakeholder identification and consultation;
- Activity 3: Technology prioritization;
- Activity 4: Investment aspects

1.1 Activity 1: Contextualization of the technology transfer

The contextualization of the technology transfer forms a key pillar to the project and was carried out focussing on;

- A Policy review
- The development of a “long list” of technology actions.

1.2 Activity 2: Stakeholder identification and consultation

This Activity incorporated the preparatory and implementation of;

- Stakeholder Identification
- Workshop Preparation
- Technology Prioritization Workshop

1.3 Activity 3: Technology prioritization

- Technology description;
- Contribution to climate change;
- Contributions to development and potential benefits;
- Knowledge/capacity building requirements;
- Institutional arrangements;
- Cost of implication;
- Current status of diffusion of the technology in Namibia and potential private sector involvement; and
- Opportunities and barriers.

1.4 Activity 4: Investment Aspects

Based on the evaluation of above categories, following candidate project lists are listed. This list is just tentative list of candidate project.

2. List of project

Project Number	Project Title	Brief Description/ background	Project site(s)	Region	Technology Focus	Mitigation/ Adaptation	Additional Remarks
Nam 01	Pilot desalination plant with renewable power and membrane technology	The project aims to test a method for improving the assured supply of good quality groundwater to small towns and villages in Namibia. This will improve the resilience of such communities against the increased variability in rainfall that is expected with climate change.	Uis/ Bethanie	Karas	Desalination/ Renewable Energy	Mitigation	Concept note now developed and submitted again to the Adaptation Fund. (AFB.PPCC_18.6). Component 1 – Desalination Plant/water Distribution, Component 2 – Hybrid solar/wind power plant, Component 6 – Replication(Bethanie)
Nam 02	Rainwater Harvesting in Central-Northern Namibia	Different types of rainwater harvesting tanks were piloted in the village of Epyeshona, near Oshakati, in central-northern Namibia. Vegetable gardens with water-saving drip irrigation systems were established next to the tanks	Epyeshona, near Oshakati	Oshana	Water harvesting/ Drip irrigation	Adaptation	
Nam 03	Subsurface Storage of Oshana-Floodwater-Flood water harvesting	Subsurface water storage technology is part of the German-Namibian research project, which was aimed at establishing an Integrated Water Resources Management (IWRM) in the Cuvelai-Etoshia Basin, The central-northern region of Namibia is characterized by a system of oshanas, very shallow river streams that drain North-central Namibia from north to south during the rainy season.	Epyeshona, near Oshakati	Oshana	Flood Water harvesting	Adaptation	Cuve Waters executed pilot (http://www.cuvewaters.net) and so no Concept Note. Follow up with GIZ required to then develop Concept Note for replication. GIZ contacts now working in Botsawana on a replication project. Need to find out from MAWF/NamWater, level of local involvement.
Nam 04	Flood water Harvesting						Technology prioritised during the workshop.
Nam 05	Construction of pipelines						Technology prioritised during the workshop.
Nam 06	Reverse Osmosis(RO)						Technology prioritised during the workshop.
Nam 07	Aquifer Storage Transfer & Recovery (ASTR)	Utilisation of natural aquifers to store water during rainy season and draw down during droughts etc.	Various (3 sites discussed)	Various	Deep Borehole pumping and recharge systems	Adaptation	Technology prioritised during the workshop. Concept Note development required.
Nam 08	Aquifer Storage and Recovery(ASR)						Technology prioritised during the workshop.
Nam 09	Drilling and rehabilitation of boreholes	Rehabilitation of old boreholes and solarisation of pumping replacing diesel pumps	Various (to be determined)	various	Borehole pumping and solar water pumps	Mitigation/ Cross-cutting	Technology prioritised during the workshop. Concept Note development required. Discuss with Mr Nepale (NamWater)

Nam 10	Efficient irrigation systems (sprinkler and drip), incl. Irrigation scheduling	Sustainable water usage for livelihood development and agri-business	Various (to be determined)	various	Efficient water delivery systems – Drip / Solar water pumps	Cross-cutting	Technology prioritised during the workshop. Concept Note development required. Discuss further with Ms Maria Amakali(MAWF)
Nam 11	Multi-Stage Flash(MSF) Distillation						Technology prioritised during the workshop.
Nam 12							