



# **Water for Food Security** Jean-Michel Arnoult

FAO Adviser to Department: Agriculture

## **IWRM Projects**

1. Water-wise Food Gardens – Doringbaai
2. Lamatzicare Food Gardens – Vanrhynsdorp
3. Vukani Makhosikhazi – Lamberstsbaai
4. Big Roof Rainwater Harvesting - Bitterfontein







# Water-wise Food Garden - Doringbaai

**Doringbaai Matzikama**

**Vision:** To improve the level of food security for the community of Doringbaai.

**Mission:**

- To secure enough **food** through integrated food security initiatives.
- **Empower** beneficiaries through capacity building & training.
- **Save water** through water-wise gardening.





**Collapse of the West Coast fishing industry resulted in large scale unemployment**



**Local schools**



**Water-wise drip irrigation**

**Soup kitchen**



## Project Objectives

- Identify **25 households** for food gardens
- Facilitate **training** of participants
- Create **water awareness**
- Deploy trainees to household food gardens
- Produce **organic vegetables**
- **Supply vegetables** to school feeding scheme, aged homes & soup kitchen
- Income through **sale** of herbs & vegetables
- Facilitate **access to land and water** for the emerging farmer group
- **Mentor and train** 15 emerging farmers







**Soil preparation**



**Deep trenching**



**Deep trenching**



**Composting**

## Long Term Goal

To create **sustainable** employment opportunities developing small businesses and, creating a welcoming and safe environment for tourism, while promoting the project and Doringbaai.

## Conclusion

Our project will **succeed** together with the assistance from stakeholders and roleplayers.





**Kitchen garden**



## Questions



**water & forestry**

Department  
Water Affairs and Forestry  
REPUBLIC OF SOUTH AFRICA

# Lamatzicare – Womens Food Gardens

Vanrhynsdorp Matzikama

## Background:

- Established in **2004** by six local women
- **Assisted** by SPP, Departments of Social Services, Agriculture, Water Affairs & Forestry (IWRM I), Matzikama Municipality, Multi-purpose Centre & local businesses
- **Capacity** built through workshops & training
- Now have access to **1ha of municipal commonage** & sufficient **water** to farm vegetables
- Fencing & water-wise drip irrigation







**Matzikama Berg & Knersvlaktes**



**Hard soil worked by hand**



**Borehole delivers large volumes of fresh water**



**Livestock pens**

**Vision:** Economic & social upliftment of women

**Mission:**

- Promote **financial sustainability** of the project & members
- Facilitate **access to & ownership of land**
- Facilitate **skills training** for members
- Facilitate the **sustainable use of land & water**
- Assist members to **market** their products
- Promote **networking** with similar groups





## Project Objectives

- Establish **1 ha vegetable** garden to provide members with fresh vegetables
- Supply surplus **vegetables** to home for the **aged**, local **orphanage** & families affected and infected by **HIV/AIDS** and **TB**
- **Improve livelihoods** of members, aged, sick & poor



## Long Term Goals

- Become **sustainable & self sufficient**
- Create **employment** opportunities
- To **access land & water** to farm commercially

**Thank you for the opportunity allowing us to prove ourselves and help our community**





## Lamatzicare Vanrhynsdorp



## Questions



# Vukani Makhosikhazi: the women stand up Lamberts Bay Cederberg

## Background:

- Collapse of the West Coast fishing industry resulted in wide scale **unemployment**
- Many people of Lamberts Bay are poor, unemployed or aged, yet surrounded by “wealthy” potato farms
- In 2000 thirty-four women decided to **Stand Up** & fight the extreme poverty and hunger in Lamberts Bay
- Assisted by the Cederberg Municipality, GARC, Departments of Agriculture, Social Services,
- Labour and Water Affairs & Forestry (IWRM I)







**Fishing industry collapses**



**Women stand-up**



**Access to 2.5ha for food gardens**



**To fight poverty & hunger**

**Vision:** Empowerment & food security for women

**Mission:**

- Ensure the **sustainability** of the project
- **Facilitate** skills **training** for members
- **Effective use** of resources such as **land & water**
- Facilitate access to & **ownership** of land
- **Improve** assurance of **water** supply





## Project objectives

- Establish **2.5ha organic vegetable garden** & provide members with fresh produce.
- Supply surplus vegetables to local home for the **aged**, those affected and infected by **HIV/AIDS** and **TB**, **schools** and **soup kitchens**.
- Create sustainable **employment** opportunities



## Long Term Goals

- **Access** additional **land & water** to farm commercially
- **Diversify** farming activities
- Ensure **financial security** for members

## Challenges

- **Expensive** municipal water
- **Limited & stressed groundwater** resources





**Come share in the success that is  
Vukani Makhosikhazi – we are standing**



**Questions**



**water & forestry**

Department  
Water Affairs and Forestry  
**REPUBLIC OF SOUTH AFRICA**

# BIG ROOF Rainwater Harvesting - Bitterfontein

## Background:

- Project initiated for **women** dependant on child support and other social grants
- Bitterfontein **unemployment** levels of 67%
- **Expensive** vegetables from Vredendal (125km away)
- **Water** – only available water is desalinated groundwater which is limited supply & expensive







**To capture rainwater off the disused Railway shed and use the water to irrigate food gardens**





**Railways houses in Bitterfontein**



**and the Big Roof**



**Rainwater harvesting**



**for food gardening**

**Vision:** Eradicate extreme **poverty** in  
Bitterfontein

## **Mission**

- Empower twenty (20) **historically disadvantaged households, women the youth and disabled** to manage sustainable food gardens
- Grow vegetables in **kitchen garden plots**  
(totaling **3ha** in extent)





## Project objectives

- Create **awareness & train** participants.
- Purchase & install **rainwater harvesting** pipes & tanks on a disused railway shed roof.
- Connect **20 households** to rainwater system.
- Install water-wise **drip irrigation** systems.
- **Cultivate** seedlings & vegetables.
- **Supply vegetables** to the aged, sick and needy.



## Long Term Goals

- **Diversify** farming activities.
- **Access** a further 4ha of land for vegetables.
- **Expand** rainwater harvesting to other towns.
- **Explore** other opportunities for income – harvesting wind energy.





## Questions



**water & forestry**

Department  
Water Affairs and Forestry  
REPUBLIC OF SOUTH AFRICA



