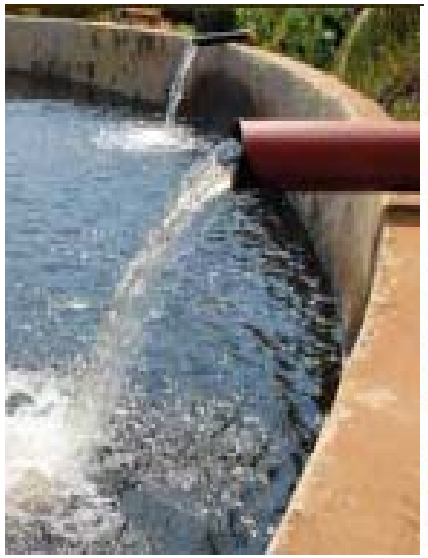

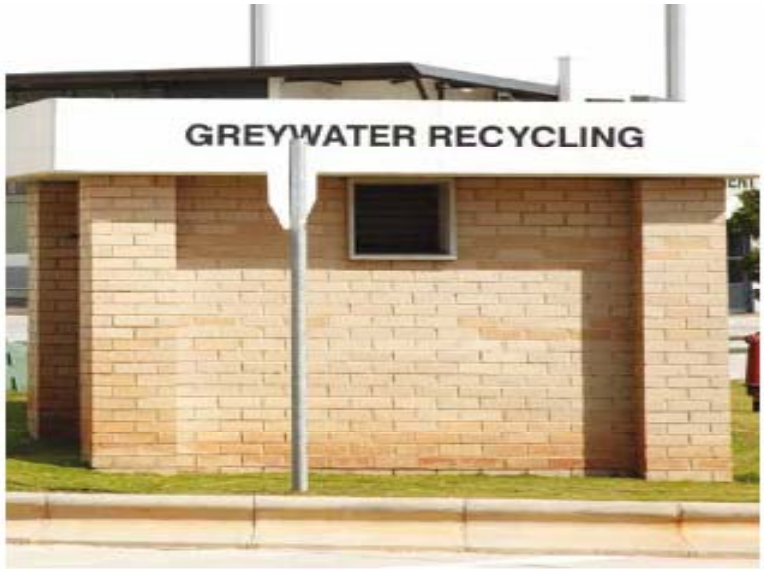

Woolworths: Water and Sustainable Agriculture

Justin Smith

Good business journey manager

November 2010

- founded 1931
- Woolworths…….. Over 400 stores largely in South Africa
- 335 stores offer food
  - 15% market share in clothing and home
  - 10% market share in foods
  - 35% market share in fresh produce
- Country Road, Australia…. 80 stores,
  80 concessions in Australia and South Africa
  - $300m Revenue
- link with Marks & Spencer

Good business journey
4 priorities

1. Accelerate transformation
2. Drive social development
3. Enhance environmental focus
4. Address climate change

Water in South Africa

- Below world average rainfall
- Scarce underground water resources
- Service delivery
- Failure to enforce pollution control
- Institutional capacity
- Climate change impacts
- Tariffs increases
- Predominant usage in Agriculture

History

- Water and wastewater identified as core issue in 2000
- Water risk assessment on fresh produce in 2005
- Targets set for **30 %** reduction by 2012 in 2007
- Joined WWF water neutrality programme in 2008
- Wastewater focus with GTZ in 2009
- Farming for the Future in 2010
- CEO Water Mandate and Water disclosure project 2010

Why is water important to Woolworths?

180 litres per 100 grams of kernels

Ref Woolworths

Why is water important to Woolworths?

700 to 2900 litres per 100 grams of cotton

Ref WWF

Why is it important to Woolworths?

- Increased cost of water and wastewater treatment
- Cost of quality (food safety)
- Cost of interrupted supply
- Pressure is on us to start taking responsibility
- Right thing to do (especially crucial in SA)

What are we doing?

- Design property to enable the use of water and water waste more efficiently. This includes:
  • Storage and use of recycled and grey water systems, retaining as much water on site as possible for re-use.
  • Use of indigenous shrubs and ground covers, minimising irrigation needs.
  • Storm water management

- Pulse meters in place to improve water measurement and monitoring

- Head office facilities have shown a **24 %** decrease in water usage from our 2008 benchmark, and we have also achieved a **27%** reduction in relative usage in stores (2008 benchmark: 122 kl/m2).

Water Neutrality

- Invasive trees use some 3,300 million kiloliters of water each year, or some 7% of our mean annual runoff
- WWF/DWA partnership, Working for Water programme, SAN Parks
- Environmental imperative – water security and eco-system services, biodiversity and soil health
- Social imperatives of job creation and water availability for rural and disadvantaged communities
- Woolworths project in the Tankwa Karoo National Park, will release enough water into South Africa's water system to offset the water used by Woolworths operations each year,
- The project is a 20-year commitment.

What are we doing?

we're **Farming** for the **future**

less water
fewer pesticides
and less chemical fertiliser

Farming for the Future

- Technical consultancy – Enviroscientific
- WWF
- GTZ
- Suppliers
- Customers

Water and waste water	92%
Chemical use	85%
Animal welfare	82%
Waste management	82%
Energy use	81%
Biodiversity	78%

The potential risks of conventional farming

- **Soil fertility will decline further**
  - Overuse of fertilisers increases salinity of soil and decreases fertility
  - Irresponsible use of agro-chemicals disturb the balance of the micro-organisms that feed produce
  - Over-cultivation disturbs micro-organism and organic matter balance

- **Water resources will be at a greater risk**
  - Water cannot be retained in compact, hard, lifeless soil
  - Chemical run-off into underground water tables, rivers and dams will continue to increase
  - Demand for freshwater will exceed availability by 2025

The potential risks of conventional farming

- **Biodiversity is at risk**
  - Chemical over-use threatens farming-friendly insects, birds and other animal life and threatens endangered plant species (directly and indirectly)
  - Additional land will need to be used for agricultural purposes, further harming biodiversity due to declining yields and greater demand for food

- **Input costs rise**
  - Agro-chemical input costs fluctuate with increases recorded as high as 320% over the last two years

Farming for the Future

- Soil Mineral Management:
- Soil Microbe Management:
- Pest Management:
- Plant Management
- Water Management:
- Biodiversity Management:
- Waste water management:

Farming for the Future

- All non-organic produce suppliers part of the programme by 2012
- the WW compliance target for this year based on turnover was **57%, while 68.4%** was achieved.
- 23 horticulture suppliers are being introduced to the programme, and specific guidelines being developed for them, as well as for hydroponics and mushroom production.
- A food safety risk management protocol is also being incorporated into the programme.
- Recent FFF customer research showed that a surprisingly high percentage of customers understand the programme fully (54%)
- The audit results showed that the highest compliance percentages were in the biodiversity category.
- The lowest results were in waste water management

WOOLWORTHS

Why Farming for the future is better for the environment:

- It improves soil health through decreased use of herbicides, pesticides and fertilisers
- It conserves water resources
- It reduces chemical run-off into water tables, river systems and dams
- It protects and promotes biodiversity
- It allows the earth to more efficiently bind carbon, so mitigating against climate change

The key to this approach is ongoing measurement and encouraging farmers to constantly improve.

Challenges

- Understanding embedded water
- Identifying products most likely to be impacted
- Communication with our customers
- Rating supplier water performance
- Understanding the important differences between green, blue, grey and black water in the supply chain

Thank you

International Responsible retailer of the year 2010