

A decorative graphic on the left side of the page consists of several green circles and leaf-shaped images of plants. The largest circle is at the top left, and a smaller one is below it. Three leaf-shaped images, each containing a close-up of green plants, are arranged in a circular pattern around a central white space. The text 'Circular Economy Symposium 2019' is positioned to the right of these graphics.

# Circular Economy Symposium 2019

Shaping the Future of the Circular Economy

# Why Does the Circular Economy Matter to Youth?

Environmental Conservation – Soil, Crop, Food



# Why Does the Circular Economy Matter to Youth?

Environmental Conservation – Water



# Why Does the Circular Economy Matter to Youth?

Environmental Conservation – Energy



# Why Does the Circular Economy Matter to Youth?

Environmental Conservation – Waste Beneficiation



# Why Does the Circular Economy Matter to Youth?

Opportunity to transcend Job Scarcity Limitations





# Why Does the Circular Economy Matter to Youth?

Opportunity to transcend Job Scarcity Limitations (Ref: Goldschmeding Report)

Solar Panel Installer

Novel Technicians for Waste products used

Recycling Operative, Food Waste Re-users, Unused Food Distribution

Social Impact Analysts

Recycling Trade Regulators and Associations

Couriers

Teachers



# Partnerships and Opportunities



# Partnerships and Opportunities



WATER  
RESEARCH  
COMMISSION

# wader

WATER TECHNOLOGIES  
DEMONSTRATION PROGRAMME  
An initiative of the Department of Science and Technology  
and the Water Research Commission

# Partnerships and Opportunities



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**UNLEASH**



# Partnerships and Opportunities



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**GCIIP**

Global Cleantech  
Innovation Programme

South Africa



# Partnerships and Opportunities



**ENTREPRENEURSHIP  
PROGRAMME**



# Partnerships and Opportunities



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**Township Economy**

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**ZAR 100bn Opportunity**

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**UNTAPPED**





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**Why Is Yellow Beast  
(Pty) Ltd Here?**



# What are the Challenges?

## Big Shark Bite



## Climate Change + Water Shortages



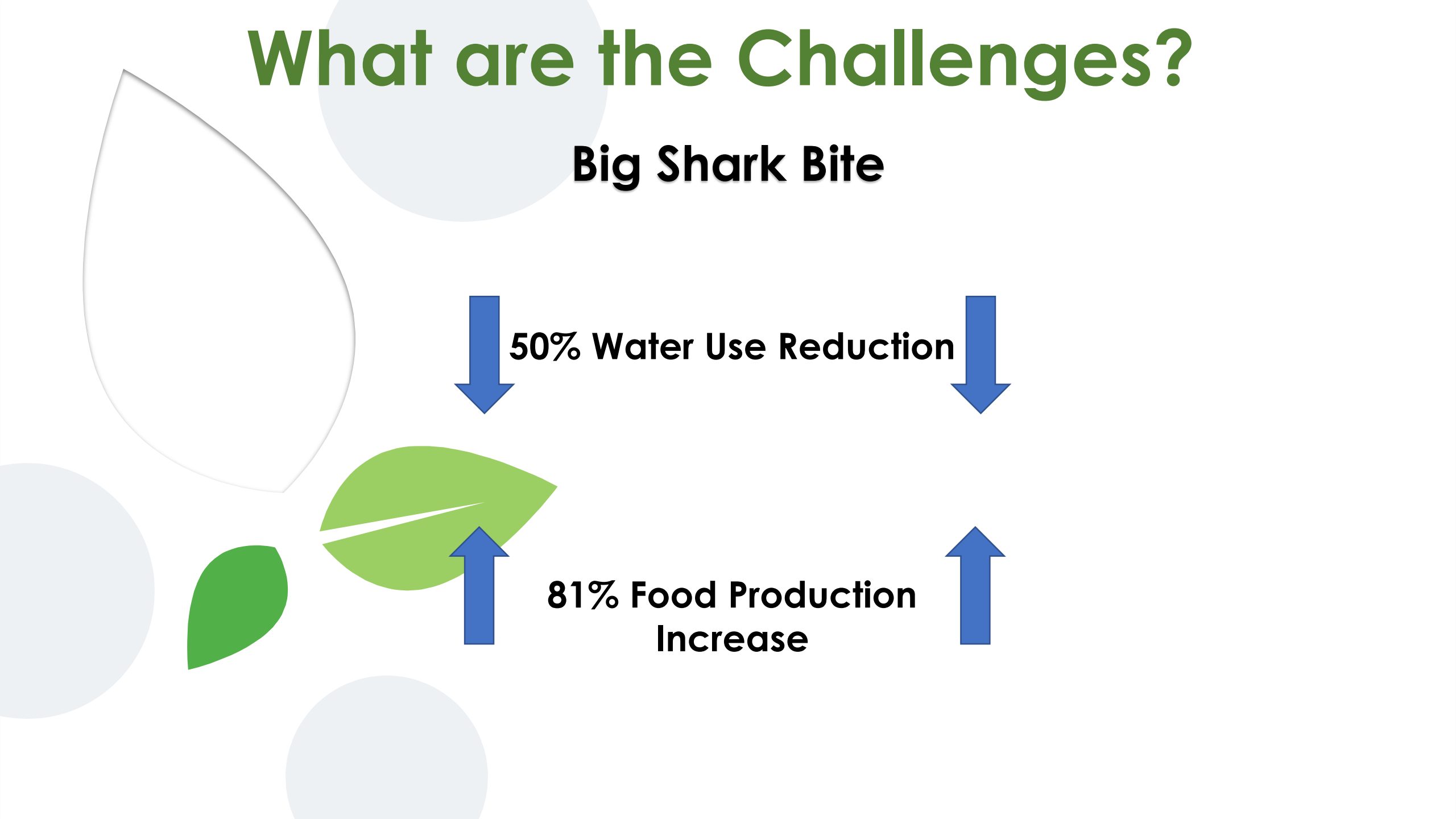
**60% Consumption**

# What are the Challenges?

## Big Shark Bite

50% Water Use Reduction

81% Food Production Increase



# What are the Challenges?

## Little Shark Bite

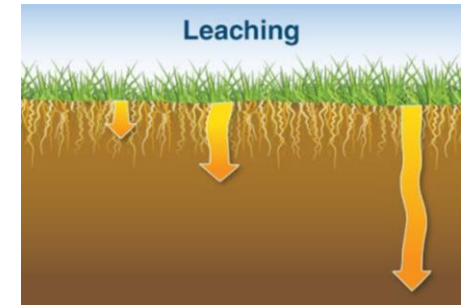


Evaporation + Transpiration =  
EvapoTranspiration (ET<sub>o</sub>)

Natural Evaporation



Imprecise Over-irrigation



Leaching Beyond  
Root-Zone

# What We Do



NOSETSA  
Controller

Soil Probe

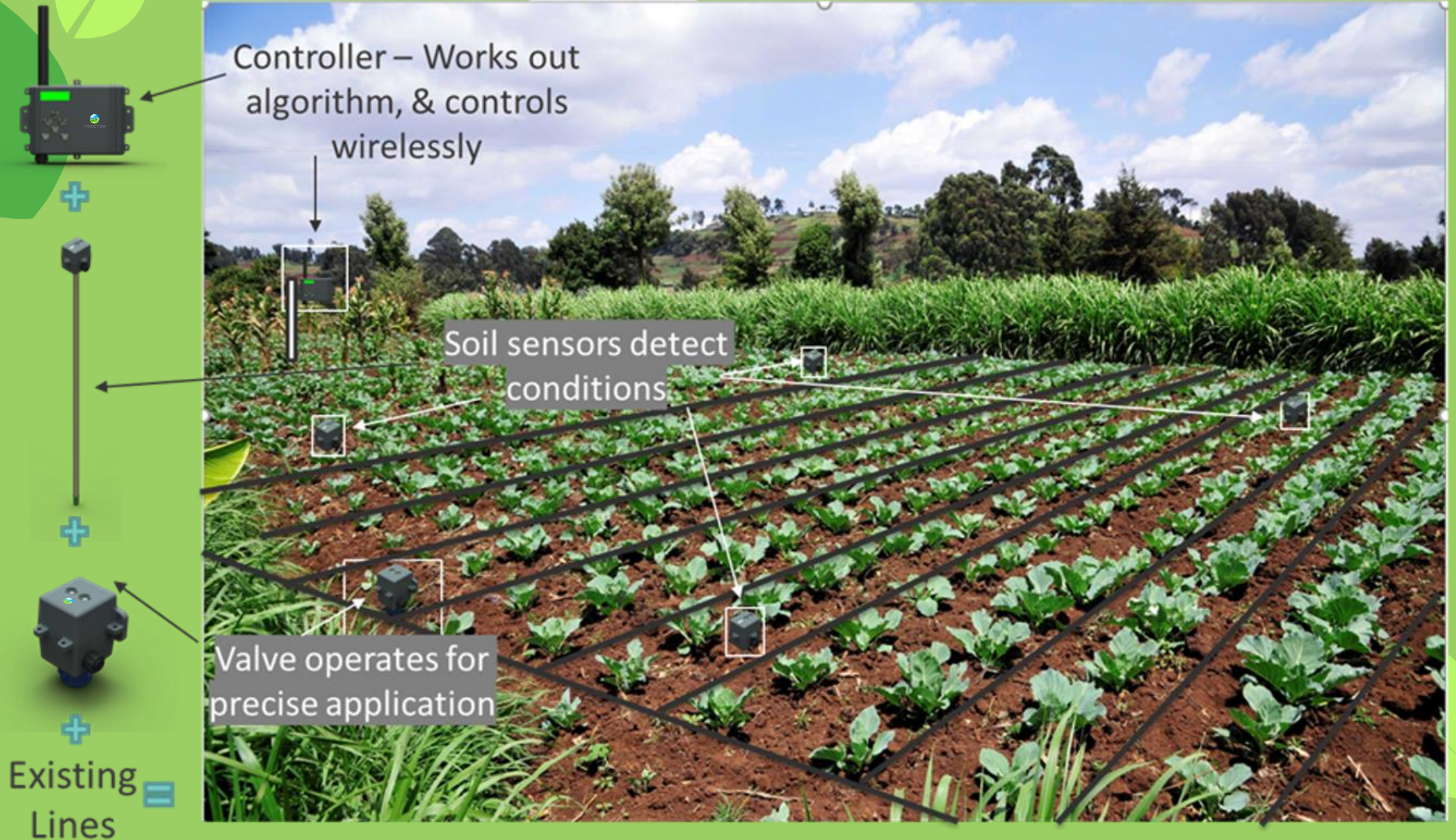


Valve Unit



Machine Learning • Autonomous Irrigation • Real Time Data •  
Avoids evaporation • Prevents over-irrigation • Ensures plant health

# How It Works





# Nosetsa in CE?

**Responsible Manufacturing**

·  
**Water Use Efficiency**

·  
**Energy Use Efficiency**

·  
**Soil Conservation and Groundwater Pollution Prevention**





# CE at System Level?

**More Impact Funding**

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**More space to take risks**

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**Influencers and Decision Makers must Encourage Activity**

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**Policy Development and Implementation**



# Changing Status Quo



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**PERCEPTION**

