AFRIlogic Sustainable Agriculture

Sustainable Agriculture is vital to ensure food security for an ever expanding population

X	X	X	X	X	
X	X	X	X	X	
X	X	X	X	X	
X	X	X	X	ж	
X	X	X	X	ж	

THE GLOBAL PROBLEM

The existence of the human race is dependent on earth's soils for food – but our soils are rapidly degrading

Three Major Impacts

10% of earth's farmland has died 30% of Europe's farmland is under stress

Overuse of fertilisers are degrading fresh water supplies

Desertification is increasing rapidly

The Global Result



THE PROBLEM IS THREE FOLD

The cause of the degradation is unsustainable farming methods



The overuse of fertilisers causes a vicious circle

- Synthetic fertilisers hinder the soil from decomposing organic matter and retaining excess nutrients.
- Stressed soils have become completely dependent on synthetic fertilisers.
- This cause further reduction in the soil health and a vicious cycle of the farmers needing to keep using fertilisers and increasing the dosage.



Poor biodiversity leads to an increase of soil-borne diseases

- Large commercial farming has led to monocropping and consolidated biodiversity, which in turn cause more plant diseases.
- Huge multinational companies dominate the market for agricultural seeds and inputs, limiting biodiversity.



Many short-term solutions further degrade the soil

 Commercial farmers heavily fumigate their farmland to kill off bacteria,

nematodes and other harmful organisms.

- This is a short-term solution because while it takes care of unwanted organisms, it also removes organisms that contribute towards a healthy soil.
- The detrimental organisms come back quicker, leading to a negative cycle that reduce beneficial organisms in the soil.

THE SOLUTION

Sustainable Agricultural Development can solve the problem but it requires four key actions by roleplayers to be successful



THE SOLUTION

Implementing the components of Sustainable Agricultural Intensification can ensure we produce more food from existing farmland while lowering the pressure on the environment

Components of Sustainable Agricultural Development



Increase production on existing land



Reduce the impact on resources & use of inputs

×	Х	Х	X	X	
×	Х	Х	X	X	
X	Х	Х	X	X	
X	Х	X	X	X	
×	Х	Х	X	X	

Interest Rearrant Inter



Pieter de Jager CA (SA) Director



