



BEST PRACTICES IN CROP PRODUCTION



3rd GLOBAL CONFERENCE ON AGRICULTURE, FOOD AND NUTRITION SECURITY AND CLIMATE CHANGE

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SCOPE

- Introduction
- Overview of Crop Production Sector in S.A
- Challenges Facing the Sector
- Proposed Solutions
- Conclusions



INTRODUCTION

- Climate change poses one of the most serious challenges to the agricultural sector.
 - Agriculture on the other hand is blamed for contributing towards climate change due to high energy use, fertilisers, pesticides, change in land use, etc.
 - Climate change manifest itself in form of drought, change in rainfall patterns, extreme weather events, shifts in production areas, etc.
 - All these factors ultimately result in reduced production and productivity.
 - There is now a growing realisation that if climate change is not addressed, the food security of the 7 billion world population is at risk.
 - This is particularly serious in Africa where close to 70% of the people depend on agriculture for their livelihoods.
 - This is also the case for most poor developing countries in other continents across the globe.
 - It is imperative for all governments across the globe to take a leading role in terms of developing and implementation of adaptation and mitigation mechanisms against climate change.
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OVERVIEW OF SA'S CROP PRODUCTION SECTOR

- South Africa has a total land mass of 123 million hectare
- About 14% of South Africa is arable
- Only 1.35 million hectares is under irrigation.
- Plant production sector is the cornerstone of economic development and people's livelihoods.
- Major roles of the plant production sector:
 - ❑ Food production to ensure both national and household food security
 - ❑ Raw materials for the manufacturing sector
 - ❑ Fibre
 - ❑ Animal feeds
 - ❑ Earner of foreign exchange
 - ❑ Biggest employer
 - ❑ Major economic activity in rural areas
- Major commodities
 - ❑ Grains
 - ❑ Fruits
 - ❑ Vegetables
 - ❑ Industrial crops
 - ❑ Flowers and Ornamental plants
 - ❑ Indigenous crops

CHALLENGES FACING THE CROP PRODUCTION SECTOR

ENVIRONMENTAL CHALLENGES	ECONOMIC CHALLENGES	SOCIAL CHALLENGES
Frequent drought spells	High production costs	High population growth rates
Limited arable land	Unsustainable production practices	Increased food safety concerns
High levels of soil erosion	Infrastructure problems	Negative impact of HIV / Aids on workforce
Relatively low rainfall	Market access problems	High illiteracy rates
Limited biodiversity	Unfair competition on local and export markets	Increased risks due exposure of farm workers to agro-chemicals
	Information problems	High unemployment levels
	Sanitary and phytosanitary barriers	
	Increased incidences of outbreaks of pests and diseases	

SOLUTION 1: PROMOTION OF THE ADOPTION OF GOOD PRODUCTION PRACTICES

- **Use of high quality cultivars in line with the climate of each production area.**
- **Crop calendars**
- **Appropriate land preparation practices**
- **Best cultivation practices**
- **Crop rotation systems**
- **Integrated pest and disease management practices.**
- **Water harvesting technologies**



SOLUTION 2: PROMOTE AND SUPPORT THE ADOPTION OF SUSTAINABLE PRODUCTION SYSTEMS

ORGANIC FARMING

- No Chemicals
- Environmental Sustainability
- Certification

AGRO-ECOLOGY

- Integrated Production Practices
- Farming in Harmony With Nature
- Socio-economic Development

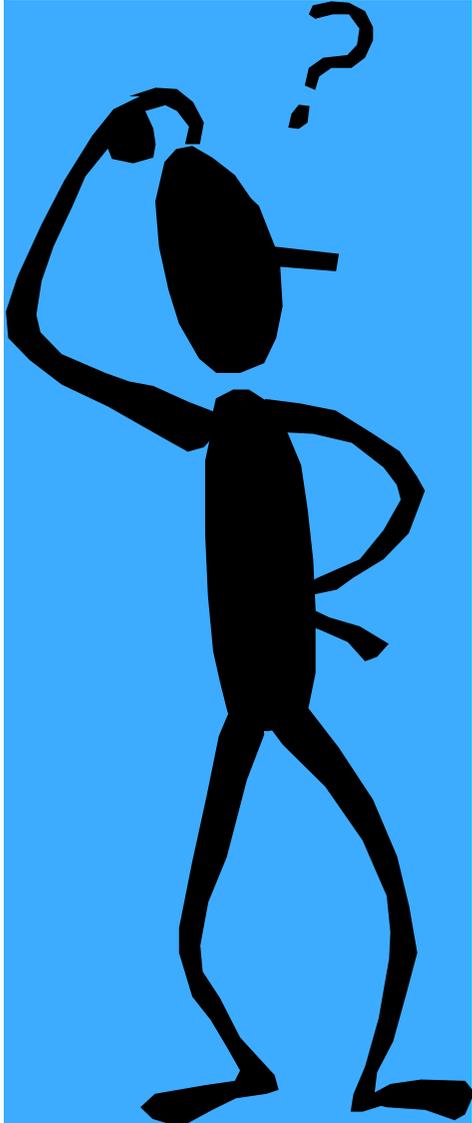
CONSERVATION AGRICULTURE

- Soil Cover
- Minimum Tillage
- Minimum Use of Chemicals

PRECISION FARMING

- Site Specific
- Application of Chemicals Determined by Needs of Specific Areas on Farm

CONCLUSION



- ✚ Climate change is a reality
- ✚ The global community basically have three scenarios going forward:
 - We do nothing, and nothing happens.
 - We do something, and nothing happens
 - We do something, and something happens.

END

