



# Production of Amaranth –Zimbabwe Experience

Symposium on improving Nutrition in Dryland areas  
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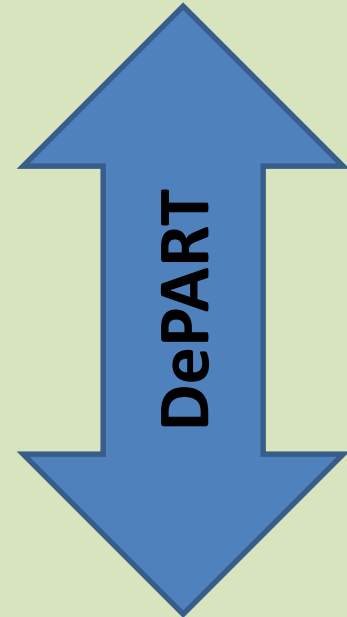
# CONTENT

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# CADS THEMATIC AREAS

1. Sustainable agricultural technology development and dissemination
2. Nutrition and Value Addition
3. Seed production and multiplication
4. Small livestock production
5. Inputs support
6. Business development and marketing
7. Gender, HIV and AIDS



# INTRODUCTION

- ▶ Cluster Agricultural Development Services partnered with Bio-Innovation Zimbabwe (BIZ) and Hilfswerk Austria International (HWA) to establish an Amaranth project
- ▶ The project was implemented in Mudzi and Mutoko districts, Mashonaland East Province, Zimbabwe
- ▶ (30) demonstration sites were established as demonstration and learning centres working with 130 farmers

# WHY AMARANTH PRODUCTION

## ❖ Production

- *Tolerates drought, high temperatures and low soil fertility*
- *Fares well in conditions similar to those for maize or worse conditions*
- *Easy to grow*

## ❖ Nutrition

- *Cheap source of plant based protein*
- *Gluten-free, high in protein against high malnutrition in the country*
- *High levels of magnesium, calcium, iron and fibre*
- *Against a background of high prevalence of malnutrition and mono-cropping systems*

## ❖ Commerce

- *Need for alternative crops and species for smallholder farmer*
- *Potential for export markets and improved revenue*

# IMPLEMENTATION APPROACHES

- ❖ Demonstration Platform for Agricultural Research and Technology
- ❖ Multi stakeholder approach: Partnership with Government structures
- ❖ Capacity building approach
- ❖ Demonstration site and Model Approach
- ❖ Lead farmer and Lead Facilitator Approach
- ❖ Value addition and nutrition mainstreaming
- ❖ Practical, Hands On and Participatory approaches
- ❖ Product and Recipe development
- ❖ Promotional activities: Food fairs and Food festivals

# DEMONSTRATION PLATFORM FOR AGRICULTURAL RESEARCH AND TECHNOLOGY (DePART)

- ❖ A multi-sectoral partnership initiative
- ❖ It provides a collaborative platform for the enhancement of agriculture
- ❖ Focus is on smallholder farmers and the markets
- ❖ Aims to equip smallholder farmers with appropriate skills, inputs and implements and access to markets.
- ❖ Partnerships include Research partners, Universities, Input and output markets, Colleges

# MULTI STAKEHOLDER APPROACH

- ❖ Stakeholder meetings with Ministries of
  - *Agriculture*
  - *Health and Child Care*
  - *Environment, Water and Climate Change*
  - *Women Affairs, Gender and Community Development*
- ❖ Focus Group Discussions with communities
- ❖ Engagement of Research Institutions and Universities
- ❖ Development of work plans, roles and responsibilities of each stakeholder



# MULTI STAKEHOLDER APPROACH

Stakeholder	Roles and responsibilities
<b>Agritex</b>	Training on Good Agronomic Practices (GAP)
<b>MoHCC</b>	Training on nutrition
<b>BIZ</b>	Amaranth marketing
<b>HWA</b>	Technical backstopping on amaranth production
<b>Afrideli</b>	Amaranth product development and marketing
<b>CIMMYT</b>	Outscalling strategies and research for lessons learnt

# CAPACITY BUILDING

- ❖ Identification and selection of lead farmers
- ❖ Training of trainers sessions on
  - *Production*
  - *Post Harvest Handling and Storage*
  - *Value Addition and Nutrition*
  - *Gender, HIV/AIDS in relation to nutrition*



# DEMONSTRATION SITE AND MODEL FARM APPROACH

- ❖ Demonstration sites were used as learning centres and showcasing best practices.
- ❖ 6 demonstration sites per ward



# LEAD FARMER AND LEAD FACILITATOR

- ❖ 1 lead farmer/ lead facilitator mentored 10 follower farmers
- ❖ Lead farmers cascaded trainings to follower farmers
- ❖ Seed pass on scheme
- ❖ Field days and farmer field schools



# VALUE ADDITION AND NUTRITION MAINSTREAMING

- ❖ To promote integration of amaranth into main diet
- ❖ Promote dietary diversity
- ❖ Hands on and practical cooking Demonstrations



# PRODUCT AND RECIPE DEVELOPMENT

- ❖ Partnership with universities on product development
- ❖ Establishing Quality Standards
- ❖ Product testing and quality control

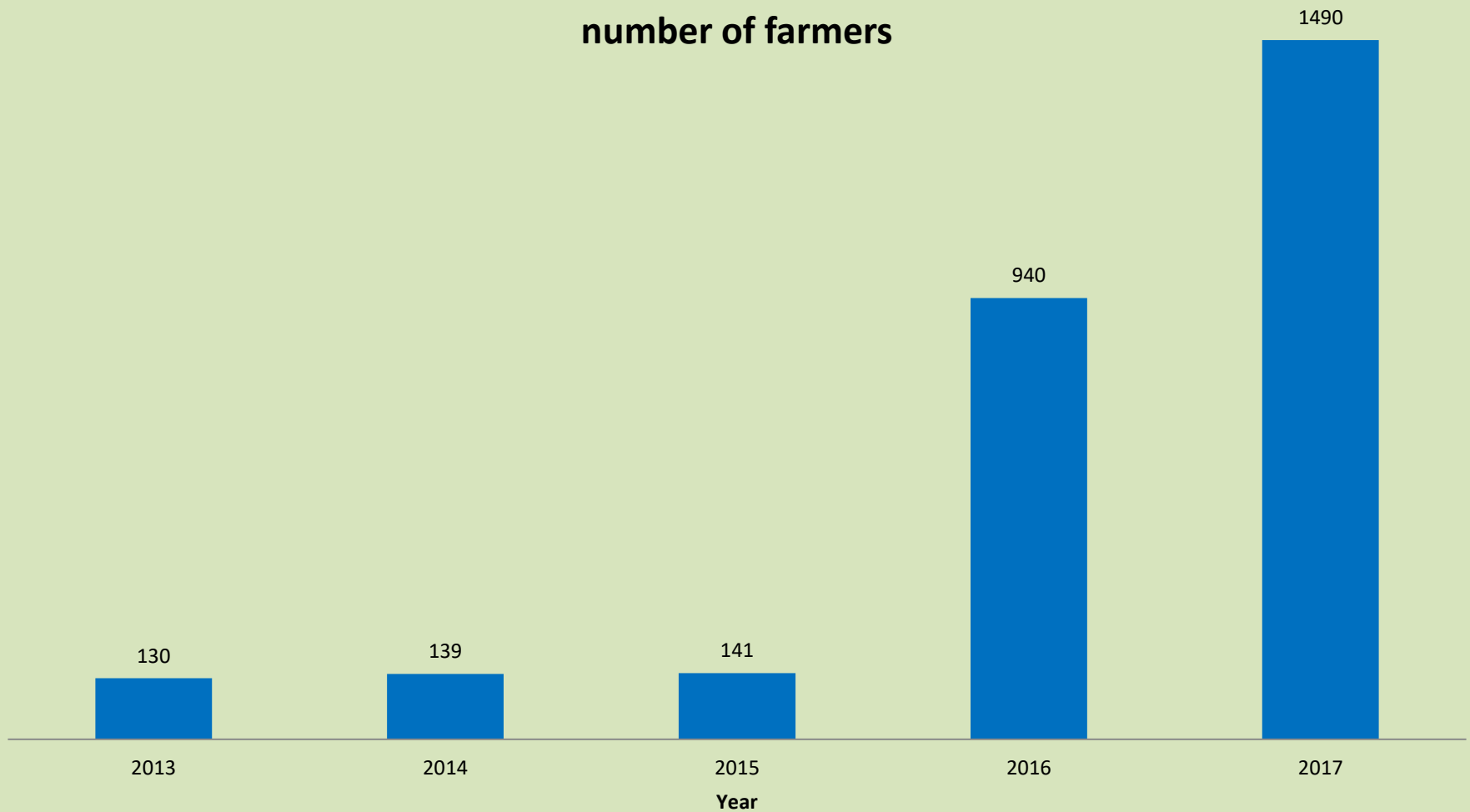


# PROMOTIONAL ACTIVITIES

- ❖ Food fairs and food festivals and exhibitions
- ❖ Awareness raising on amaranth production and consumption



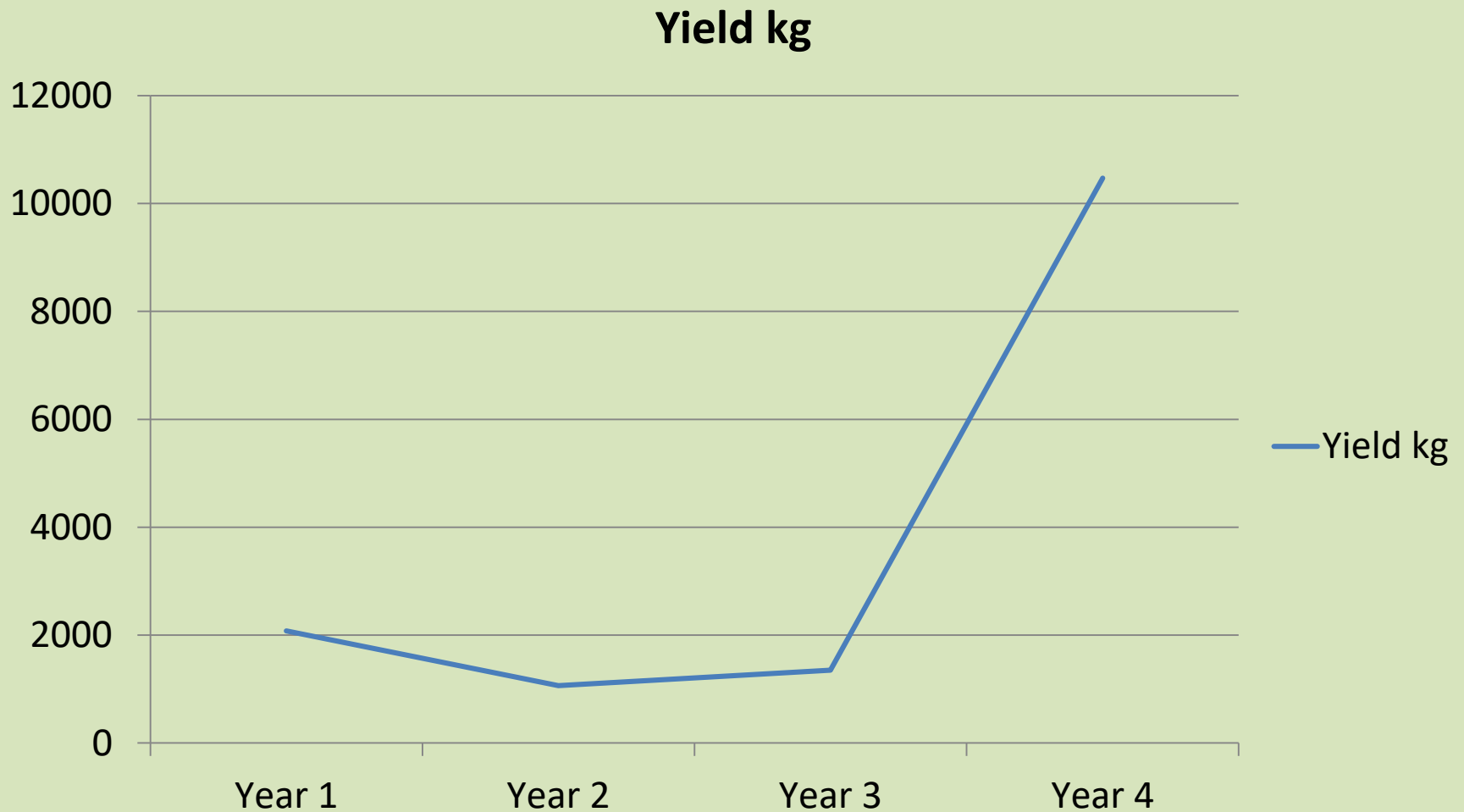
# REACH AND RESULTS



# PRODUCTION LEVELS

District	Production year 1	Production year 2	Production year 3	Production year 4
Mutoko	940	508	617	1,300
Mudzi	1,140	557	733	1,542
Murehwa	0	0	0	1,151
Goromonzi	0	0	0	1,031
Hwedza	0	0	0	989
Makoni	0	0	0	1,109
Mutasa	0	0	0	940
Zaka	0	0	0	1,200
Chiredzi	0	0	0	1,210
Kwekwe	0	0	0	0
Mutare	0	0	0	0
Nyanga	0	0	0	0
Bikita	0	0	0	0
<b>Total</b>	<b>2,080</b>	<b>1,065</b>	<b>1,350</b>	<b>10,472</b>

# PRODUCTION LEVELS



## LESSONS LEARNT

- ❖ Seed pass on key to increase amaranth production scale up
- ❖ Link amaranth production to nutrition for increased production
- ❖ Commercialize amaranth to increase production
- ❖ Need for certified amaranth seed
- ❖ Leverage on relationship and partnerships with other stakeholders for scaling out production

# AMARANTH PRODUCTION SUCCESS STORY

## Amaranth Production and Processing Story, Mutoko

Agnes Mbofana, a widow is the head of the Mbofana family comprising of 11 members. The family members include 4 children and 6 grand children. The family lives Mutoko district.. The Mbofana family has a land holding of 4 hectares.

“We planted 0.2Ha of amaranth, 1.5Ha of maize, 0.5Ha of groundnuts and 0.3 Ha of cowpeas. We managed to harvest 200kg of amaranth grain . Extension officers provided support by constantly monitoring and encouraging us and supported us in any challenges we faced. From the 200kg we harvested, managed to sell 100kg of amaranth grain and the rest is for consumption as a family”. We used composts and none of the inorganic fertilizers whose cost are beyond the reach of most farmers in the area”.

“We were trained on processing, value addition and on the different recipes which can be made out of amaranth and it has helped increase our food choice as a family. We now prepare different products from amaranth and a combination of other crops such as scones and porridge blends, and my grandchildren love these.

# AMARANTH PRODUCTION SUCCESS STORY



# THANK YOU