



## Green Innovation Center (GIC) Ghana



A project from the *One World – No Hunger* Initiative  
of the German Ministry for International Cooperation and Development (BMZ)  
with the Ghanaian Ministry for Food and Agriculture (MoFA) as political partner

Joint MOAP / GIC Steering Committee Meeting 21 February 2017

Mike Bartels

GIC Project Team Leader



## Programme Objective (Global programme goal and on Ghana country level)





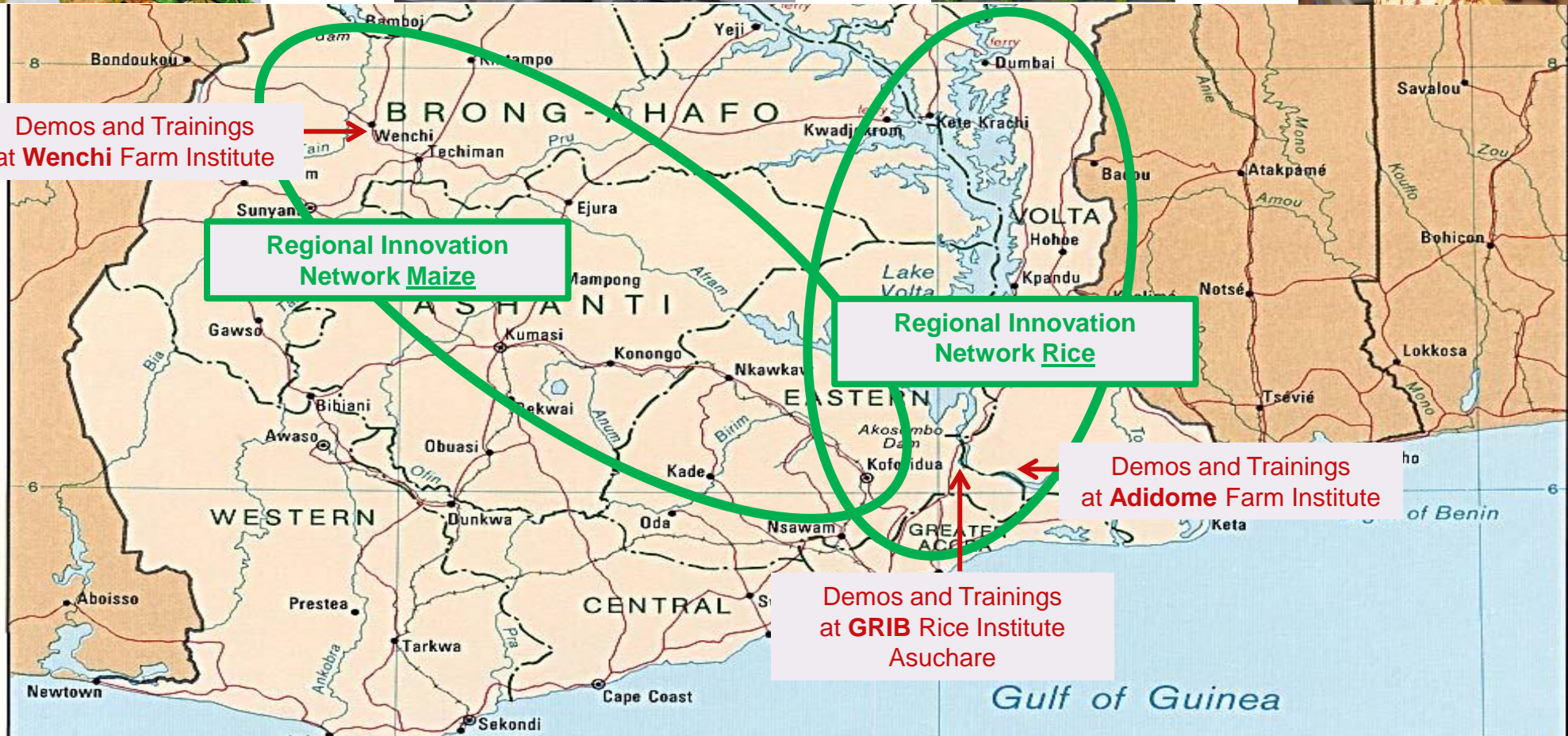
## Our indicators to be achieved (until 2021) – logical sequence

- 1** Productivity of smallholder farm businesses in the selected two VCs has increased by 30% (maize) and by 25% (rice)
- 2** Income in 75,000 smallholder farm businesses supported (2/3 maize, 1/3 rice) has increased by an average of 30% (maize) and 25% (rice) from the sale of produces from the maize and rice VCs
- 3** The portion of the supported smallholder households that have a moderate or high risk of malnutrition has decreased by 15% (according to the *Food Insecurity Experience Scale (FIIES)* of the *Food and Agriculture Organization (FAO)*)
- 4** Annual revenue from the sale of products in the supported upstream and downstream businesses in both VCs has increased by 25%
- 5** 1,000 new jobs in upstream and downstream businesses in the two VCs, at least 20% of these jobs going to young people and 35% to women





## Value Chains Maize and Rice





## Implementation Network

### GoG / MoFA

- MoFA HQ Directorates
- MoFA Regional and District Offices
- Farmer Training Centers
- Research institutes of the CSIR
- Others as necessary

### GIZ

- MOAP
- Competitive African Rice Initiative (CARI)
- Sustainable Smallholder Agribusiness Project (SSAB)
- Renewable Energy Project
- Innovation Centers in other countries

### Ghanaian NGOs

- The Hunger Project
- GRIB
- GGC
- GLDB

### International Organizations

- IFPRI
- AfricaRice
- IITA

### Foreign Organizations

- German Rural Women Ass.
- Physical Technical Agency
- Israel Development Service





## Ongoing Activities

- Training of farmers to raise productivity and improve quality
- Improve input provision and market linkages
- Upgrading Adidome and Wenchi FTCs
- Conducting soil tests and giving fertilizer recommendations
- Organizing exposure visits to seminars and fairs abroad
- Distributing, testing, stimulating and organizing innovations
- Promoting smallholder mechanization (training, organization, business...)
  
- .... preparation for a number of planned activities...







# Good Agricultural Practice training

**Doing good business  
with quality irrigated  
dry season lowland rice**



**Producer's reference**




**Doing good business  
with quality rainfed  
lowland rice**



**Producer's reference**

Federal Ministry for Economic Cooperation and Development | **FMARD** | ONE WORLD - No Hunger Initiative | Green Innovation Centre for the Agriculture and Food Sector - Nigeria




**Doing good business  
with quality maize**



**Producer's Reference**  
Northern Nigeria

Federal Ministry for Economic Cooperation and Development | **FMARD** | ONE WORLD - No Hunger Initiative | Green Innovation Centre for the Agriculture and Food Sector - Nigeria

**Doing good business  
with quality cassava**



**Producer's Reference**  
Southern Nigeria





## Business models and financial analysis for mechanization

**SINGLE TWO-WHEEL POWER TILLER of 14.5 HP**  
Land preparation

Year of calculation 2015  
Cells containing formula



Cost of Service		Withown capital	With loan
Effective cost (ownership + operating costs)	NGN/hectare	3.853	4.915
Profit margin	% of effective cost	52%	39%
Cost of service to clients	NGN/hectare	8.000	8.000
Profit	NGN/hectare	4.148	3.085
	NGN/year	829.500	617.000

**2-WHEEL TRACTOR 14.5HP+ SELF UNLOADING TRAILER OF 1.5 TONS**  
Transport

Year of calculation 2015  
Cells containing formula



Cost of Service		Financing with own capital	Financing with loan
Effective cost (without profit)	NGN/hour	943	1.443
Expected profit margin	% of effective cost	69%	52%
Cost of Service to clients	NGN/hour	3.000	3.000
Profit	NGN/hour	2.058	1.558
	NGN/ year	823.000	623.000





## Figures

<b>Project Budget 2015-2021:</b>	<b>EUR 10.5 Mio</b>
<b><u>Planned extension 2022</u></b>	<b>EUR 2.5 Mo</b>
<b>Total 2015 – 2022</b>	<b><u>EUR 13.0 Mio.</u></b>

<b>Training participants in 2016</b>	<b><u>Total</u></b>	<b>14,472</b>
	<b>Women</b>	<b>5,348</b>
	<b>Men</b>	<b>9,124</b>
	<b>Maize</b>	<b>12,241</b>
	<b>Rice</b>	<b>3,339</b>
<b>Demonstration plots installed</b>	<b>Maize</b>	<b>40</b>
	<b>Rice</b>	<b>20</b>





## Planning

- **Implementation of GAP and SRI training through 90 District AEAs**
- **Conducting trainings for students, farmers and entrepreneurs in FTCs and Colleges**
- **Implementation of community storage systems through GGC and Rotary Club**
- **Testing mechanisation service through GRIB business center**
- **Refurbishing cold story facilities for seeds of GLDB**
- **Farmer Business Schools: enhancing business-mindedness**
- **SME Loop: Support existing up- and downstream enterprises**
- **Business incubation for start-up service provider**
- **Designing warehouse receipt system around emerging maize market center**
- **Parboiling testing and demonstrating with WIAD– market awareness campaign by GRIB**
- **Nutrition education through the German Rural Women Association**
- **International experience exchange and exposure program**
- **PPPs with Ghanaian and foreign firms**



## Implementation of GAP and SRI training through 90 District AEAs

Each AEA will train 6 different groups of 25 participants each during the year 2017.

### ***Training modules Maize***

1. Farming as a business
2. Climate Smart Agriculture/Conservation Agriculture
3. GAPs under maize production
  - 3.1. Variety selection, land preparation and seeding
  - 3.2. Weed control and fertilizer management
  - 3.3. Disease and pest control
4. Harvesting post-harvest handling and marketing
  - Module 4.1. Harvesting and drying
  - Module 4.2. Storing and marketing

### ***Training modules Rice***

1. Farming as a business
2. SRI and principles of SRI / GAPs
3. Seed selection and land preparation
4. Nursery preparation and transplanting/ direct seeding
5. Weed control and fertilizer management
6. Disease and pest control
- Module 7. Harvesting, post-harvest handling and marketing





# Farmer Business School

One World - No Hunger Initiative Green Innovation Centres for the Agriculture and Food Sector, Nigeria

**Farmer Business School**

**Training notebook & workbook**  
 Production system  
 Rice, Cow pea Egusi

**Nigeria**  
 December 2015

Name

Implemented by **giz**

One World - No Hunger Initiative Green Innovation Centres for the Agriculture and Food Sector, Nigeria

**Farmer Business School**

**Training notebook & workbook**  
 Production system  
 Irish potato, Maize, Soy bean

**Nigeria**  
 April 2016

Name

Implemented by **giz**

One World - No Hunger Initiative Green Innovation Centres for the Agriculture and Food Sector, Nigeria

**ILIMIN NOMAN ZAMANI TA FUSKAR SANA'A**

Hanyar Noman Masara cike da fa'ida  
 mai dorewa  
 Manhajar koyar da ilmiya takalce a  
 Nijerya

**Masara, Wake da Tumahir**  
 June 2016

Name

Implemented by **giz**

One World - No Hunger Initiative Green Innovation Centres for the Agriculture and Food Sector, Nigeria

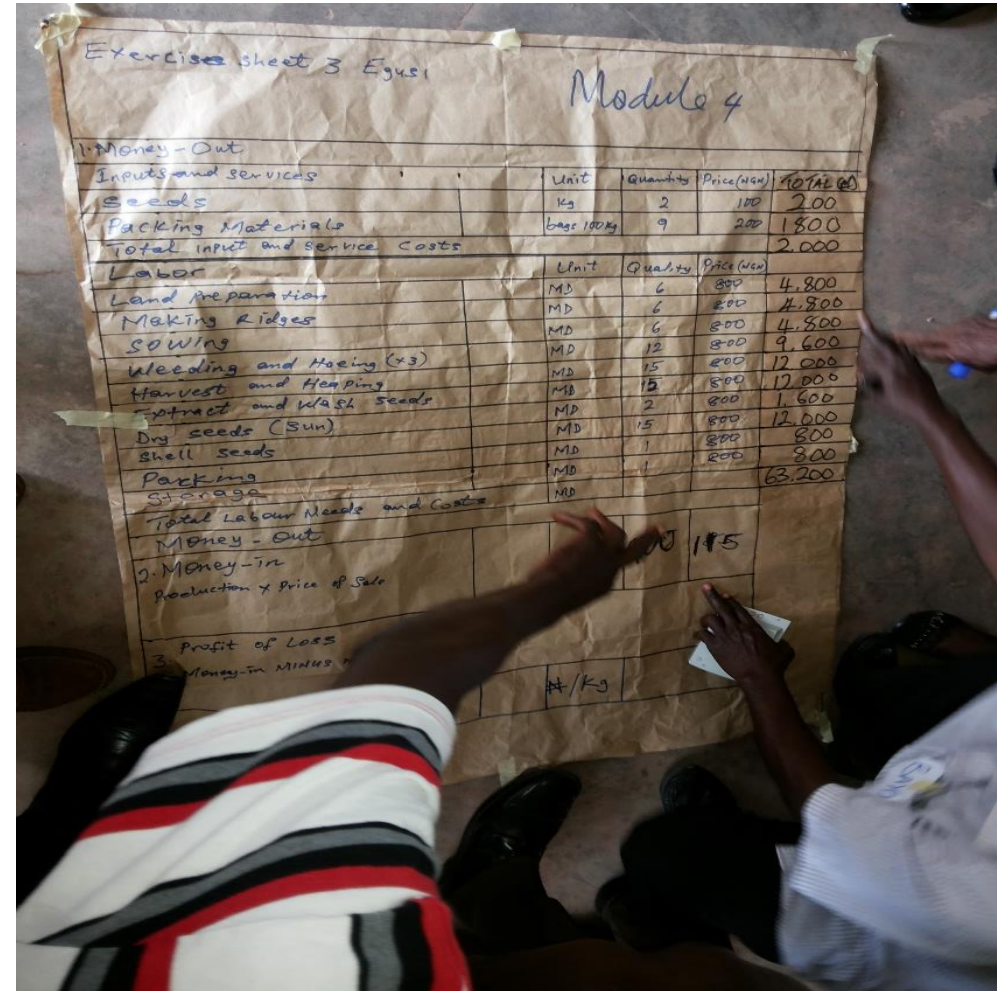
**Farmer Business School**

**Training notebook & workbook**  
 Production system  
 Cassava, Maize, Egusi

**Nigeria**  
 June 2016

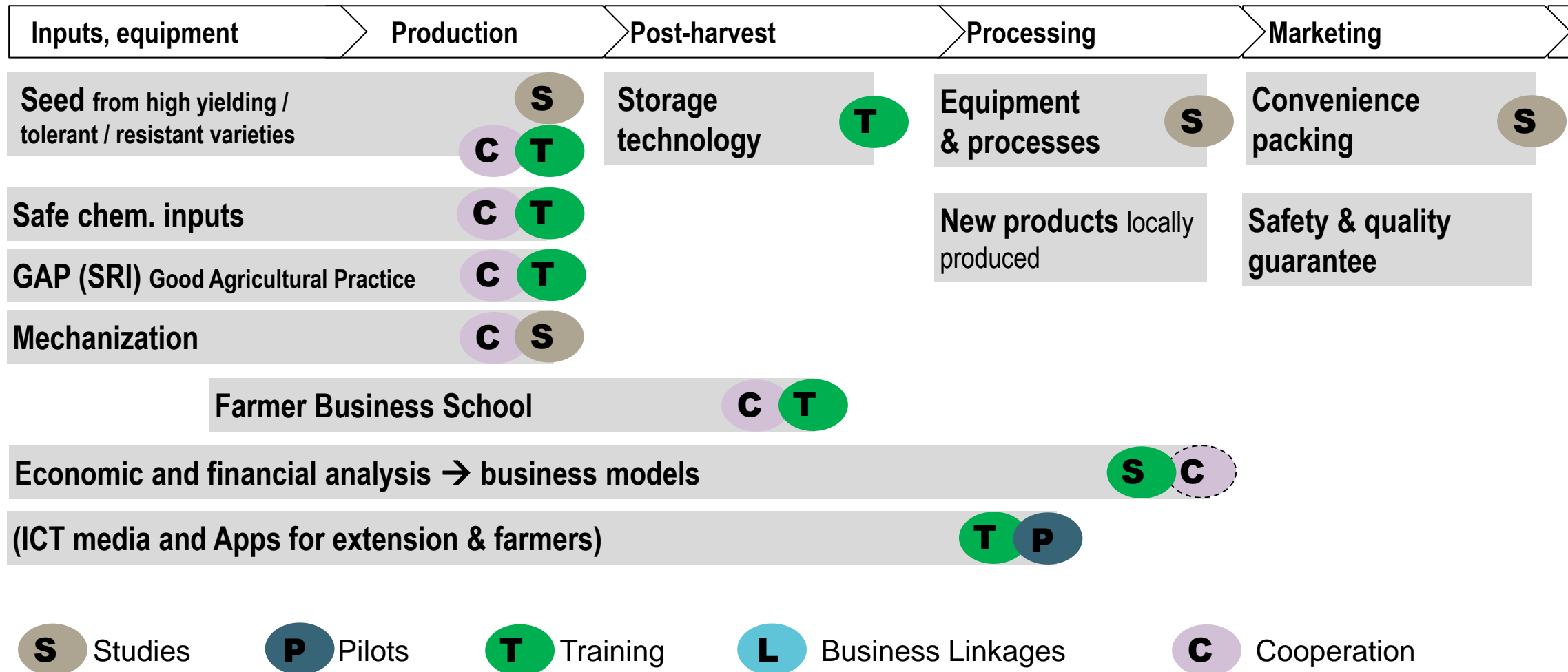
Name

Implemented by **giz**





## Innovation Intervention Points





## Green Innovation Center (GIC) Ghana

**Thank you for your attention**



A project from the *One World – No Hunger* Initiative  
of the German Ministry for International Cooperation and Development (BMZ)

with the Ghanaian Ministry for Food and Agriculture (MoFA) as political partner

Joint MOAP / GIC Steering Committee Meeting 21 February 2017

Mike Bartels

GIC Project Team Leader