

Achievements and Lessons Learned from PHASE I of Rooting out Hunger in Malawi (1st Oct 2009 – April 2014)



MALAWI GOVERNMENT



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for Phase 1: Oct 2009 to Apr 2014

5th ANNUAL TECHNICAL MEETING SPHI – SASHA, NAIROBI



Conceptual frame-work



The conceptual framework for Rooting out Hunger project was based on OFSP-led food-based approach, which has 3 linked pillars: linking agriculture, nutrition and marketing. This was developed and tested by Low *et al* (2007) in Mozambique.

At the project level: linking the 1-2-3 seed systems, Food based Nutritional programs at the national level through Agriculture Sector Wide Approach (ASWAp) and Scaling Up Nutrition (SUN) movement, and Marketing, i.e. generated income at household level, processed products, and sustained the OFSP cultivation over time.

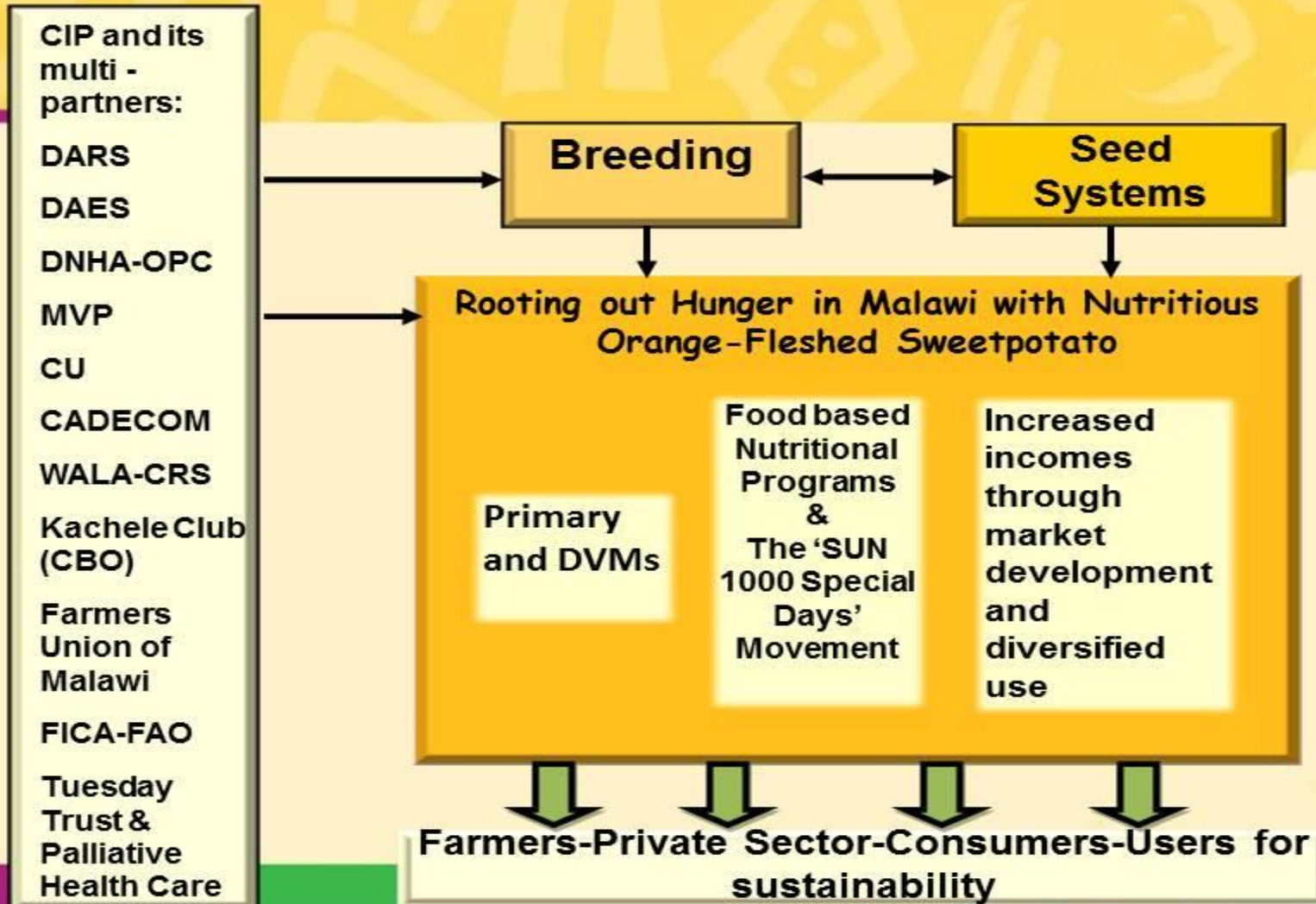
STRATEGIC OBJECTIVES



The overall objective of this 4.5-year project is to improve vitamin A and energy intake for at least 70,000 rural households with women and young children using OFSP-based approaches and to ensure that at least 20% of households growing OFSP earn at least US \$100 per year from OFSP sales and increase their average sweetpotato yields by 50%.

What strategy did we take at the project level?

Who were our partners?



CIP's roles related to scale of impact towards its Strategic Leadership and Research



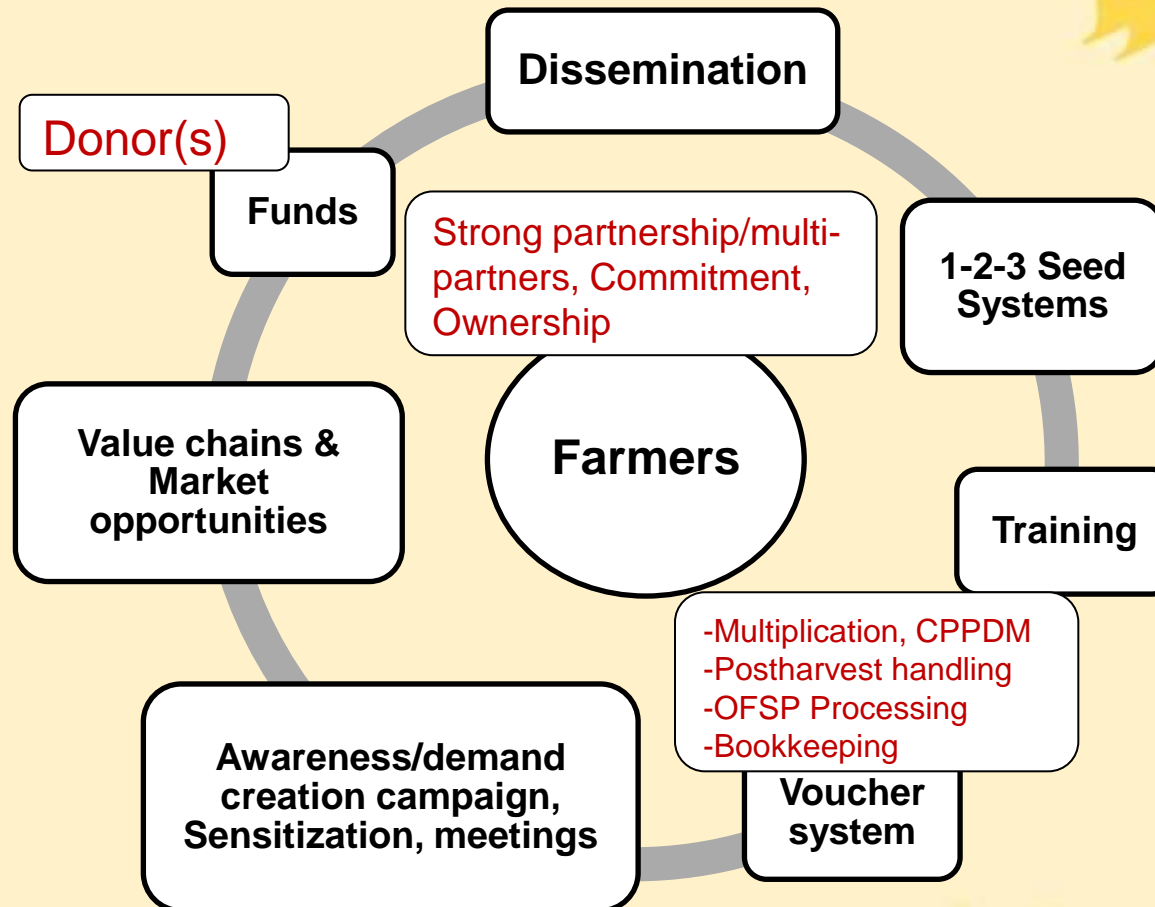
Scale of impact		Project Period: 1 st Oct 2009 - 30 th April 2014	
		Year 1 – 2 (Oct 09 – Oct 2011)	Year 3 – End of Phase I (Nov 2011 – Apr 2014)
		More than 10,000 HHs reached	More than 70,000 HHs reached
CIP's roles	Strategic Leadership	Identified demand; use of a subsidized voucher scheme; lessons learnt to design the next strategic objectives; project design to be aligned with agriculture's policies, i.e. ASWAp, focusing on food and nutrition security; and multi- partnership.	Coordinated new programs from the lessons learnt out of previous years and SSA and Global sweetpotato programs; promoted OFSP integration into national programs, investment plans and government policies both in agriculture through ASWAp and nutrition intervention through SUN 1000 Special days initiative.
	Research	Food and nutrition diversification; on-farm demonstration trials; building up 3 tiers of seed systems based on sweetpotato growing calendar, awareness demand creation campaign on OFSP; and fresh root market opportunities and value chains	Building strong evidence result base; strengthen national research programs and partnership, and diversified value chains and market opportunities as a smallholding level.

Partnership roles across the CIP's roles

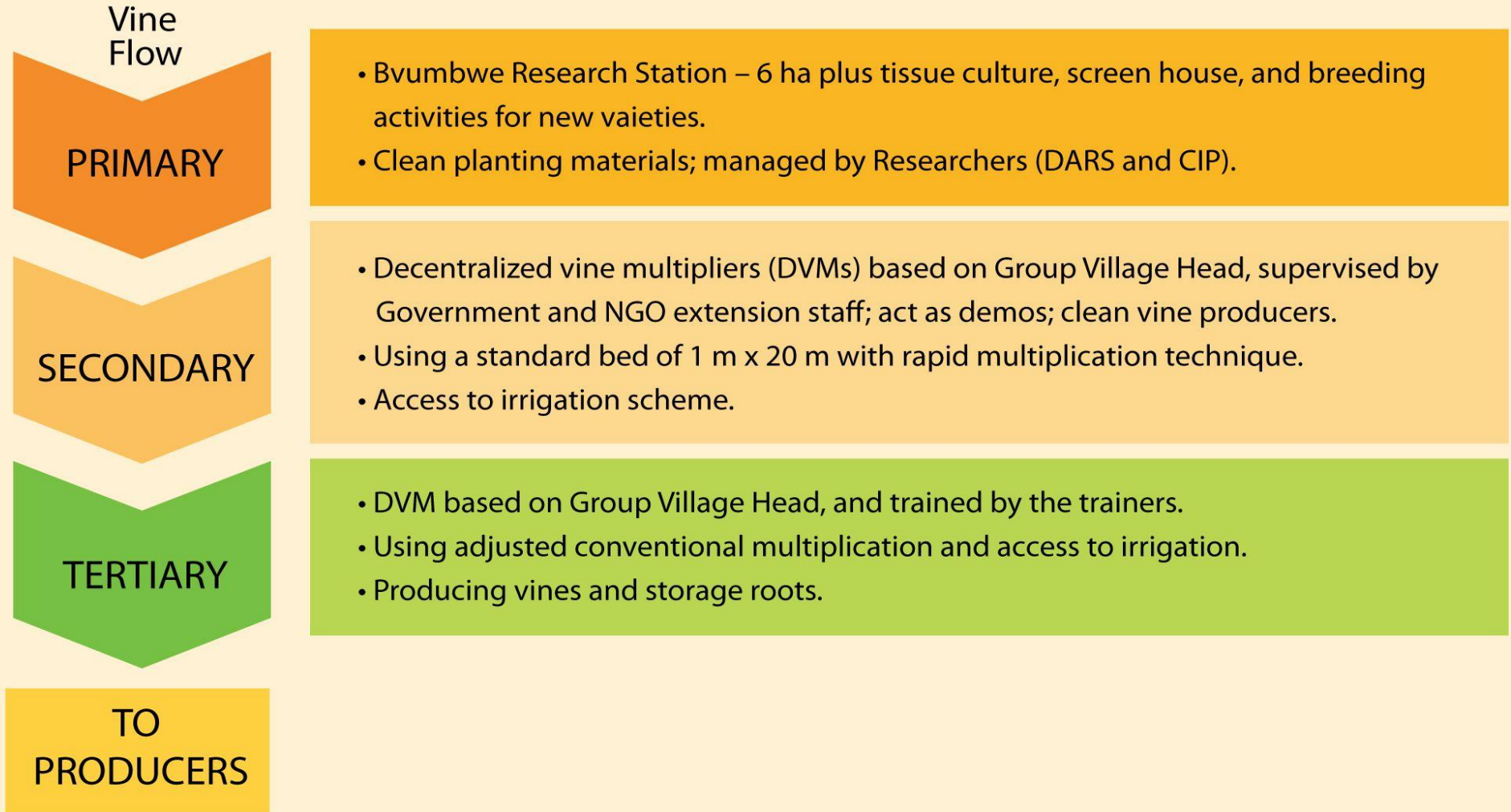


Project Period	CIP's roles	Partners' roles
Year 1 and 2 (1st Oct '09 – 31st Oct '11)	<ul style="list-style-type: none">-Elaboration-Formative research-Collecting local knowledge to be brought forward into research conceptual approach	Participation in technology development and implementing the research results at the community level; pilot interventions; organizing policy and stakeholder fora
Year 3 to End of Phase I (1st Nov '11 – 30th Apr'14)	<ul style="list-style-type: none">-Coordination-Supportive research based on local knowledge-Promoting OFSP in national and international fora-Produced scientific reports and journal reviewed articles	Dissemination and adaptation of technologies and delivery approaches; evidence building through operational research; training; advocacy

Integrated Components Strengthening the OFSP Seed Systems for Sustainability



Schematic Presentation of the 1-2-3 Vine Multiplication System Implementation in Malawi



The 1-2-3 Seed System fits the Sweetpotato Growing calendar



Current Rainy Season

Winter/dry

Dry/hot season

Last Year

Present Year

Nov Dec Jan Feb March Apr May Jun Jul Aug Sep Oct Nov

Primary Multiplication at Research Station: 3 nodes, 10 x 20 cm

Dambo (Lowland) – sweetpotato production

Upland - planting distance 30 x 75 cm,
Vine cutting 's length 30 cm

Sweetpotato production

3 nodes,
10 x 20 cm

Secondary
DVM

30 cm , 15 x 75 cm

Tertiary DVM

KNOWLEDGE TRANSFER

THROUGH TRAININGS, FIELD DAYS, SENSITIZATION, VISITS, ETC.



Sweetpotato Project

3 types of training modules written to support → Training

-NGOs : CU-Dedza & Phalombe, CADECOM-

Chikwawa, MVPs-Zomba

4,131 change-agents trained

-Extension-DAES : Dedza, Phalombe & Chikwawa

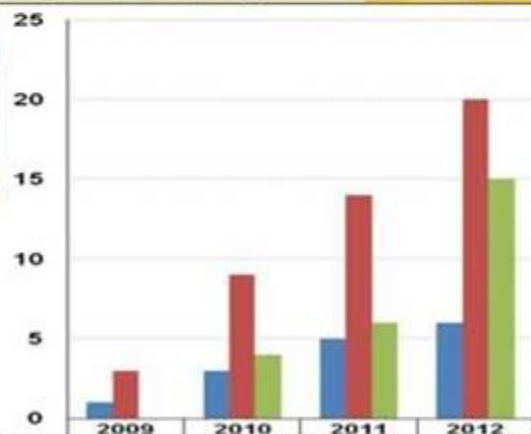
45% women

-DARS

Training

Training of Trainers: 4075 were trained*

"Multiplication (1), Production (2), pest and disease management (3), postharvest handling (4), processing (5) & drip irrigation installment (6)"



■ types of training
■ no of organization incl lead farmers
■ no of districts

*NGOs, government extension staff and lead farmers, 47% females and 53% males

Farmers/groups

(secondary multipliers)

24,815 farmers

52% women

Training

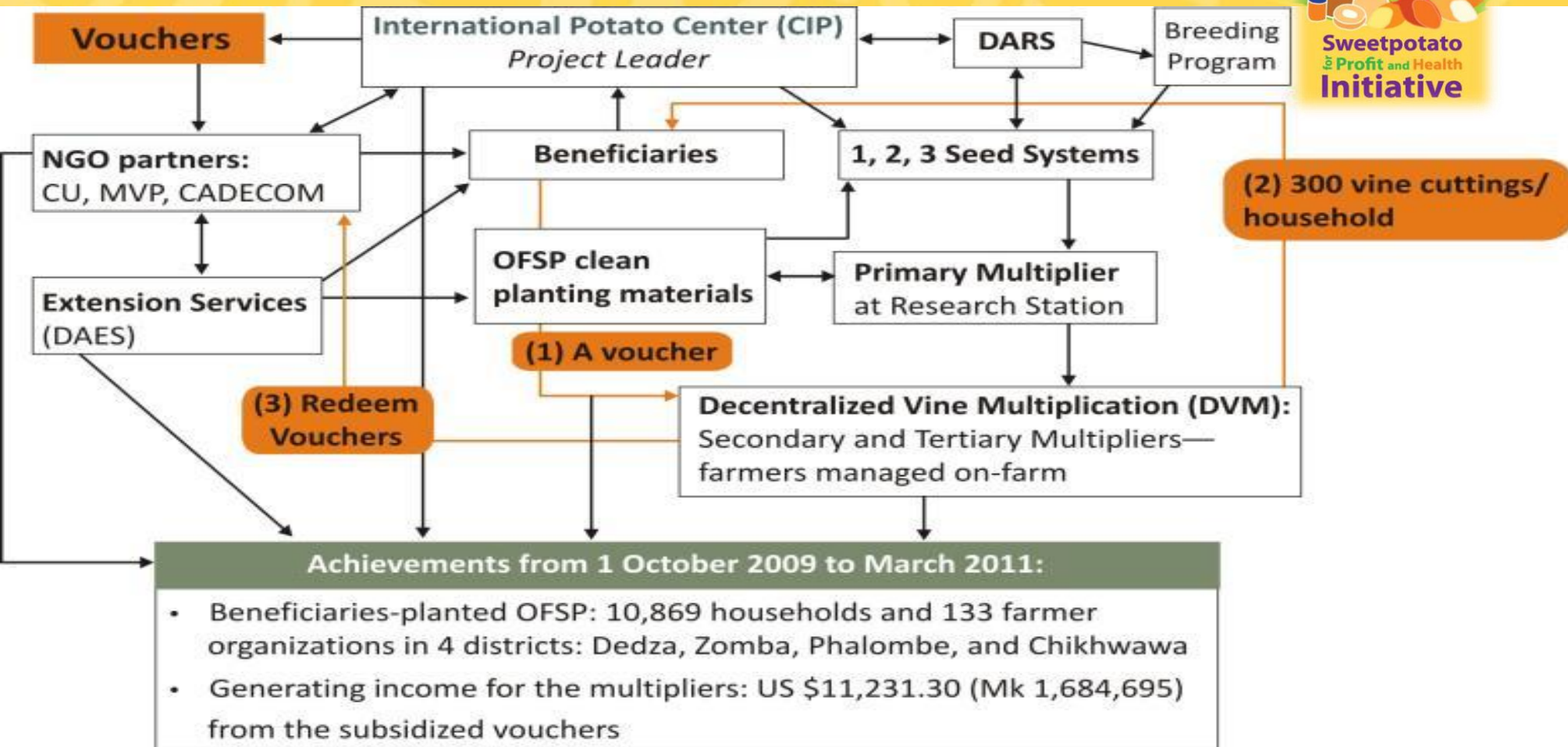
Farmers/groups

(Tertiary multipliers or Beneficiaries)

More Malawians have skills and knowledge on OFSP and its importance as a source of Vitamin A

Supporting: 1 PhD and 1 MSc candidates

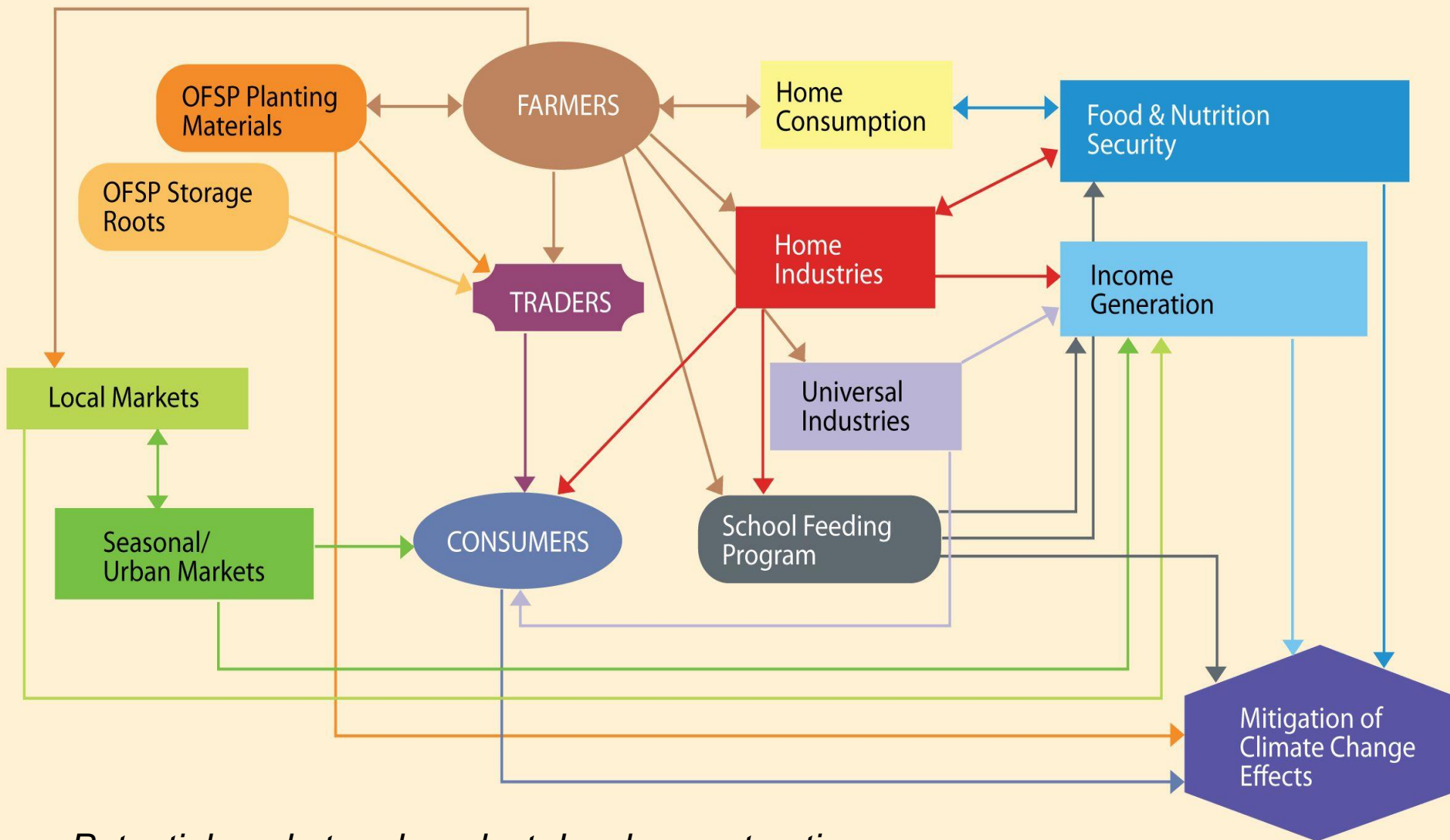
A voucher scheme



DVMs earned USD 128,732 through March 2014, 40% coming from NGOs, USAID, local government (Agriculture Development Division) and a few individual farmers; The average income/DVM: USD 158 (Mk 66,360) through the subsidized voucher.

Awareness Campaign/Sensitization on Food diversification from OFSP





Potential market and product development options



VALUE CHAINS AND MARKET OPPORTUNITIES



Total beneficiaries reached by April 2014: 191,092 HHs (15 districts)



Indication of Adoption of OFSP:

- expansion of the areas
- having more IPs

Implementing Partners and project area since Oct 2009

1. Chikhwawa under Cadecom
2. Phalombe under CU
3. Zomba under MVP
4. Dedza under CU

Implementing Partner and project area since Jan 2011

- ## 5. Mulanje under CU

Implementing Partner and project area since Sep 2011

- #### 6. Salima under Kachele Club (farmers club)

Implementing Partners and project area since Nov 2011

7. Balaka under WALA
8. Machinga under WALA
9. Zomba under WALA
10. Chiradzulu under WALA
11. Thyolo under WALA
12. Chikhwawa under WALA
13. Nsanje under WALA

Implementing Partners and project area since Jan 2012 and Dec 2013

14. Dedza under FUM
15. Lilongwe under FUM
16. Dowa under FUM
17. Kasungu under FICA-FAO, CRS-Mzuzu CADECOM
18. Mzimba under FICA-FAO, CRS-Mzuzu CADECOM

HH Beneficiaries receiving OFSP planting materials through subsidized vouchers during the 2010/11, 2011/12, 2012/13 and 2013/14 rainy seasons through the 3 core IPs



IP	District	Target 2010	2010/11 Rainy Season (Y1)			2011/12 Rainy Season (Y2)			
		Target of HH	No. of HH	Area (ha)	Yield (MT/ha)	Target of HH	No. of HH	Area (ha)	Yield (MT/ha)
CU	Dedza	2,000	4,733	32.0	16	3000	3,000	20.3	15
CU	Phalombe	620	859	5.8	20	3000	3,235	21.8	18
CU	Mulanje	NA	NA	NA	NA	3000	3,492	23.6	18
CU	Balaka	NA	NA	NA	NA	NA	80	9.3	12
MVP	Zomba	2,450	3,250	21.9	18	8000	8,000	54	18
CADECOM	Chikhwawa	2,027	2,126	13.7	18	6000	6,208	41.9	13
Total	6 districts	7,097	10,968 ¹	73.4	18	23,000	24,015 ²	170.9	16

¹In 2010/11 rainy season: women 51% and men 49%; ²In 2011/12 rainy season: women 63% and men 37%.

HH Beneficiaries receiving OFSP planting materials Continued



IP	District	Target of HH	2012/13 Rainy Season (Y3)			2013/14 Rainy Season (Y4)			
			No. of HH	Area (ha)	Yield (MT/ha)	Target of HH	No. of HH	Area (ha)	Yield (MT/ha)
CU	Dedza	3000	3,693	24.9	No data	1500	3,991	26.9	13
CU	Phalombe	3000	7,053	47.6	23	1500	21,700	146.5	21
CU	Mulanje	3000			22	1500			
CU	Balaka	NA	1,000	6.8	No data	NA	500	3.4	No data
MVP	Zomba	3000	8,058	54.4	18	3000	10,000	67.5	18
CADECOM	Chikhwawa	3000	7,500	50.6	11.7*	1500	8,000	54	15
Total	6 districts	15,000	27,304 ³	184.3	15	9,000	44,191 ⁴	298.3	17

³In 2012/13 rainy season: women 46% and men 54%. ⁴In 2013/14 rainy season: women 49% and men 51%.

*during winter production, meanwhile the summer production was 2.5 MT/ha.

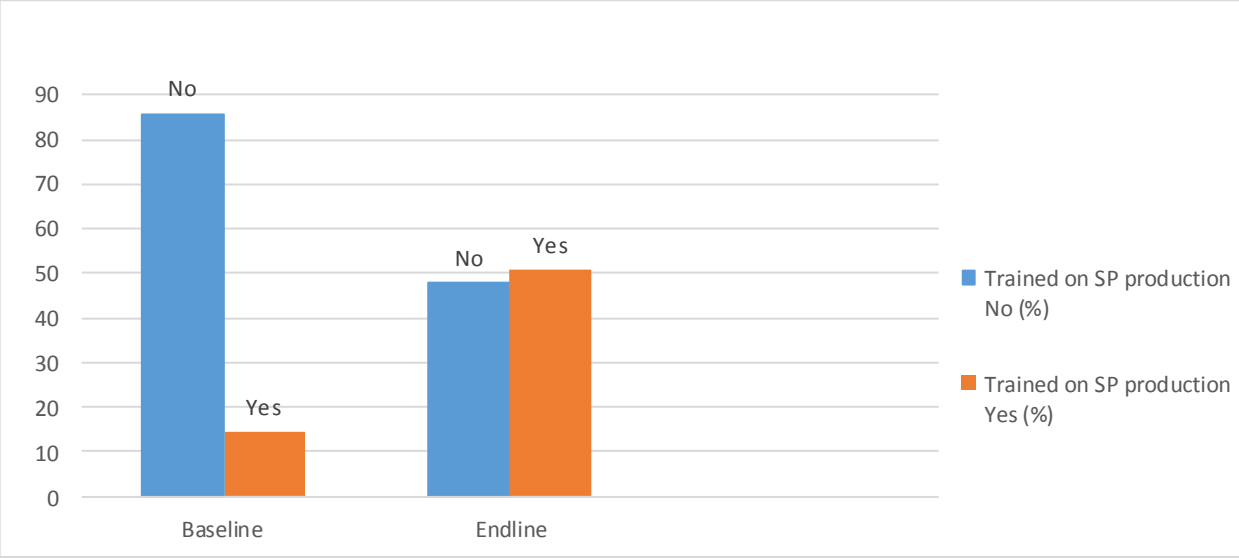
Baseline survey (published) and Endline Survey (report in preparation)



District	Baseline Sweetpotato	Endline Sweetpotato	Baseline OFSP	Endline OFSP
Dedza	10.2	19.6	3.5	13.3
Zomba	9.8	17.4	4.9	13.4
Chikwawa	8.3	18.3	2.1	15.6
Phalombe	8	15.7	1.2	13.6
Mulanje	-	21.4	-	18.4
Overall	9.1	18.4		

Proportion of total landholding size allocated to sweet potato production (%)

Percent Households trained on Sweet Potato Production



Promotion of Intercropping OFSP + maize & OFSP + soybeans



- ❖ It strongly supports crop diversification as the core of Malawi's agriculture policy
- ❖ It uses the land in an effective way where cultivated land is scarce due to the dense population in Malawi. For instances, $LER_{OFSP+Maize} = 1.79$ and $LER_{OFSP+Soybean} = 1.22$.
- ❖ It potentially gives opportunities to farmers for food security, nutrition and household income generation.

→ Intercropping OFSP+Maize (2014, in-press for CABI).

MODIFIED “TRIPLE S” → “DOUBLE S”
– **S**TORAGE IN **S**AND (BUT DRY SAND)



CONCLUSION

The successes that being achieved by Rooting out Hunger in Malawi Phase 1 to address food and nutrition security recognized by Irish Aid



1. Reaching more 190,000 direct hh beneficiaries or 950,000 indirect beneficiaries received clean and improved OFSP
2. Gender was consciously considered: training and beneficiaries
3. Strong partnership with relevant government agencies and NGO IPs
4. Capacity building: training of lead farmers, the poor rural areas, and extension staff; produced 3 training syllabi.
5. Action Research on intercropping contributed to efficiency of using the land, increase of income, food and nutrition security and mitigating to the effect of climate change (indirectly).
 - OFSP + maize in-press and OFSP + onion MSc thesis in July 2014



CONCLUSION - continued SPHI



6. Advocacy at international and national level in Malawi (high level conference in Dublin in April 2013 and food policy conference, IFPRI in Lilongwe in Sep 2011- key-note presentations); policy-makers, UN-FAO, farmers' Union/organizations.

Evidence:

- 1). High demand on OFSP, many NGOs wanted to join the programs, it means increase of number of donors
- 2). Bio-fortified OFSP in the draft of National Nutrition of Malawi
- 3). Bio-fortified OFSP is among the 6 food groups in Malawi → SUN movement.
- 4). Bio-fortified OFSP is in the Counseling Cards, the material supporting the Nutrition Education and Communication Strategy in Malawi
- 5). Bio-fortified OFSP is in the draft of FAO as of important crops

Acknowledgement



- IRISH AID,
- Government of Malawi,
- NGO Implementing Partners,
- Farmers



Fig: “visit of Irish Aid team from Dublin, Paris, Ethiopia and Malawi on 13-14 May’14 to learn from the experiences in Malawi – photo taken at Mwandama Millennium Villages Project (MVP) in Zomba”