

Annex 8

ROOTING OUT HUNGER IN MALAWI THROUGH NUTRITIOUS ORANGE FLESHED SWEET POTATO (OFSP) PROJECT



Figure 1. Mr. Andack Kapenuka of Mtawanga Village, Group Village Headman Bwanaisa, Traditional Authority Mkhumba in Phalombe showing his Zonden Sweet Potato nursery on 23rd September, 2011

**Final Report for Concern Universal Orange Fleshed Sweet Potato Phalombe & Mulanje
Project, October 2010-September, 2011 (Year 2)**

Prepared for: International Potato (CIP) Malawi

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1.0 Introduction

International Potato Centre (CIP) in partnership with Ministry of Agriculture, Department of Agriculture Research Services (DARS), with funding from Irish Aid is implementing an Orange Freshed Sweet Potato (OFSP) project entitled rooting out hunger in Malawi through a nutritious Orange Freshed Sweet Potato (OFSP). In order to achieve its objectives CIP and Government of Malawi are working with different non-governmental organizations namely Concern Universal in Phalombe, Mulanje and Dedza, Millennium Village Project (MVP) in Zomba, Catholic Development Commission in Malawi (CADECOM) in Chikhwawa. In the first year (2010) in Phalombe the project was implemented through the Mkhumba Boundary Communities Livelihood Improvement Project (MBCLIP) which phased out in December, 2010. Since the OFSP is a 4.5 years project is still in progress and that its impact area is within the USAID Mount Mulanje Biodiversity Increases Livelihood Security (MOBI+LISE) Project, the Project Management Committee (PMC) for MBCLIP then and now for MOBI+LISE recommended that MOBI+LISE should take over implementation of OFSP activities.

1.1. Project goal

The goal for OFSP project is to ensure the provision of high quality, disease free primary OFSP planting material, and to promote them in order to improve vitamin A and energy intake for at least 115,000 rural households with young children. To ensure that at least 20% of households growing OFSP earn at least \$100 USD per year from OFSP sales, and increase average sweet potato yields among participants by 50%.

1.2 Objectives

In order to achieve the project goal the project is being guided by four objectives namely;

- Establish in-vitro tissue culture capacity at Bvumbwe Research Station and successful production of at least 4 ha of clean primary material of Zondeni and other new OFSP varieties.
- Identify and establish at least 25 additional secondary vine multipliers 108 additional tertiary vine multipliers and use of vouchers as a distribution mechanism to reach 7,097 households by November 2010 and an additional 23,000 households by November 2011.
- Implementation of demand creation campaign
- Integrated Crop Management (ICM) and postharvest research

2.0 Key Achievements

2.1 Handovers with Mkhumba Boundary Communities Livelihood Improvement project

Noting that the Mkhumba Boundary Communities Livelihood Improvement project (MBCLIP) was phasing out by 31st December, 2011, the project did handovers between the previous MBCLIP Agriculture and Irrigation Coordinator who was responsible for implementation of CU-CIP-OFSP Phalombe activities and the current MOBI+LISE Agriculture Activities coordinator and the District Horticulture Officer to make sure that there was a good transition between the two project. This exercise was done on 17th and 18th December, 2010. Activities conducted during the exercise include handing over beneficiary registers, introducing DVMs and visiting their nurseries, sharing on successes, challenges, lessons learnt, best practices and charting way forward.

2.2 Distribution of OFSP through Coupon System in Phalombe District

The outgoing project the Mkhumba Boundary Communities Livelihood Improvement project (MBCLIP) managed to identify 620 OFSP vines beneficiaries at first hence six hundred and twenty (620) OFSP coupons were issued to them. After conducting OFSP Awareness Campaigns there was a very big demand for OFSP hence extra two hundred and thirty seven (237) beneficiaries were identified and given coupons in the beginning of December 2010 by this out-going project. This means that the total number of coupons issued to beneficiaries were eight hundred and fifty seven (857). Out of 857 beneficiaries, 778 were females while 79 were males. Table 1 in the appendix show detailed data of beneficiaries. Seven hundred and sixteen (741) beneficiary farmers (farmers who received CIP coupons) out of eight hundred fifty seven (857) have managed to access Zondeni Sweet potato vines through CIP coupons, this represents 86.5 % of the total beneficiaries. One hundred and sixteen (116) beneficiary farmers have not yet accessed OFSP vines. Results from the follow up to those that did not use their vouchers by the current MOBI+LISE Agriculture CU-Mulanje shows that there were some voucher recipients who did not know exactly what to do with vouchers, while some were not ready to let part of their field for sweet potato, while some misplaced or lost their vouchers.

2.3 Monitoring of OFSP Beneficiary Fields and Decentralized OFSP Vine Multipliers Nurseries

The project conducted field monitoring visit to a few farmers' fields to assess whether farmers have planted OFSP vines in their fields or not, besides it was done to establish how the crop is performing in the field. This was done jointly between Concern Universal Agriculture Activities Coordinator and Phalombe District Agriculture Office, Horticultural Officer on 19th, 24th, 25th, and 26th January, 2011. It was discovered that all the 716 beneficiary farmers who accessed OFSP vines planted them and it was found out that DVM have got about three hundred and six bags of OFSP vines, this was enough for the remaining 116 farmers who did not access vines hence the project had an excess of about 162 bags of

OFSP vines. Beneficiaries who planted early in December, 2010 soon after the onset of rains had a very good crop stand in their field, see figure 2 below. Such farmers were pruning OFSP vines from their fields in order to expand their fields.



Figure 2. Mr & Mrs. Tambala of Khamula Village, Group Village Headman Bwanaisa, Traditional Authority Mkhumba in Phalombe posing in their Zondeni Field on 26th January, 2011

2.4 Payment of OFSP Vines to DVMs

The project managed to redeem coupons from 741 beneficiaries through 12 decentralized OFSP vine multipliers. Out of 741 vouchers, 713 have been exchanged with money while 28 have not yet been exchanged with money, these came a bit later. DVMs have been paid for 713 vouchers according to the number of the coupons each redeemed. These DVMs were paid MK110,515.00 (US\$727.00) for 713 vouchers. Out of the 12 DVM four of them were females while the rest were males. Refer to table 3 in the appendix for full details on how DVMs sold their vines through vouchers.

2.4 Establishment of Existing OFSP demand within and outside the Impact area

Noting that there was a surplus of OFSP vines in the nursery, the project managed to establish the demand for OFSP vines. It was discovered that there was a very big demand for OFSP vines both in and outside project impact area however there were no coupons to

distribute to farmers then. The demand then within the Concern Universal project impact area was at 973 households, of which 635 were females while 338 farmers were males. Noting that these farmers had abundant water supply and land, the project recommended that these should be supported because they could be a good source of OFSP vines in the 2011/12 rainy season in order to achieve a target of 6000 beneficiaries.

2.5 Seeking Market for the DVM Surplus Vines in the Nursery

After selling vines through a voucher system, the project sought market for the surplus vines. These vines were bought by the USAID Mount Mulanje MOBI+LISE project using direct cash from USAID therefore procured 773 bags weighing 8 Kgs or 1546 bundles weighing 4 Kgs, this was equivalent to MK239,630.00 or US\$1598.00. These vines were therefore distributed to additional households both within the CIP targeted beneficiary villages and outside villages. 559 beneficiaries, (194 Males and 365 Females) benefitted from MOBI+LISE support. All Decentralized vine multipliers were happy to see that their vines were procured by MOBI+LISE project.

2.6 Training in OFSP Processing and Utilization

The project conducted a two days trainer of trainers training in OFSP processing and utilization at Naminjiwa Residential training Centre on 21st and 22nd February, 2011, in Phalombe. The training was facilitated by a facilitator from Department of Agriculture Research Services (DARS), Makoka Research Station and co-facilitated by Department of Agriculture Extension Services (DAES), Thyolo District Agriculture Office, Nutrition Section. 18 frontline staff from District Agriculture Office, Naminjiwa and Waruma Extension Planning Area were trained, out the 18 ToT three were from MOBI+LISE Project, two from Phalombe District Agriculture Office, while ten were from Naminjiwa and Waruma Extension Planning Areas in Phalombe. 7 out of eighteen frontline staff were females while 11 were males. These trainer of trainers were equipped with knowledge and skills of OFSP processing and utilization. These were able to process OFSP into flour through peeling, cutting into small pieces, sun drying and then grinding/pounding. ToTs were able to make several products during their training, refer to figure 3 below.



Figure 3. Different Recipes Produced by Trainer of Trainers during OFSP Processing and Utilization Training

In total they made 15 different recipes namely; Bread, Sweet potato seasoned with ground nut flour (Futali), OFSP Leaves (Ntoliro), Fritters (Mandazi), Doughnuts, Cakes, Mixed Vegetables, Sweet potato porridge, Sweet beer (thobwa), sweet potato juice from tubers and leaves, sweet potato mixed with tomato, onions, green paper and meat, sweet potato crisps and chapatti. Figure 4 below shows the MOBI+LISE Project Manager and Phalombe District Horticulture Officer tasting some recipes that were produced during the OFSP Processing and Utilization training.



Figure 4. The MOBI+LISE Project Manager, Mr. Lansen Chikopa and Phalombe District Horticulture Officer, Mr. Blazio Mphemo tasting OFSP Recipes Produced by Trainer of Trainers

Soon after the training on 22nd February, 2011 the ToTs had one day for preparation of farmers training on 23rd February, 2011 on such day these ToTs had to practice what they had prepared during their training without facilitators in order to assess themselves. On 24th of February, 2011 these ToTs trained 26 OFSP beneficiary farmers from 26 OFSP beneficent villages in Phalombe for the following two days i.e on 24th and 25th February, 2011. 26 famers were trained in two groups of 6 and 20 at Naminjiwa Residential Training Centre (RTC) and Mpheni village hall respectively. This was done to cut short distance for travelling from farmers villages to the venue for the training. Out of these 26 farmers trained only 1 was a male participant. This was as a result of the criteria applied in identifying participants which required individuals who are zondeni sweet potato beneficiaries who are voluntarily willing

to participate in cooking exercise without being paid. With the belief or culture that cooking is for women in the project impact area, most of those interested were women.

2.7 Identification and Training of 42 Tertiary Vine Multipliers

In order to raise more vines enough for 6000 beneficiaries in 2011/12 season the project in partnership with the District Agriculture Development Office (DADO) in Phalombe and Mulanje identified 42 new vine multipliers (26 males and 16 females), 33 of them are from Mulanje while 25 are from Phalombe. These 40 new vine multipliers have been identified in new targeted beneficiary villages, from 4 new Extension Planning Areas (EPA) implying that each new EPA has 10 vine multipliers. This means that the total number for DVMs is currently at 58 (36 Males & 22 Females), 33 of them are in Mulanje while 25 in Phalombe. These new vine multipliers are strategically identified in beneficiary villages in order to reduce the distance which a vulnerable beneficiary could travel to access vines.

Soon after identifying these new DVMs, one day theory training was held in order to orient them on the CU-CIP-OFSP Project, its key stakeholders, its goal and objectives, criteria for identification of beneficiaries, voucher system of buying vines and payment for DVM and rapid orange fleshed sweet potato vine multiplication technique. The one day theory training proceeded with one day demonstration training on how to prepare beds, plant vines at a recommended spacing of 20 cm by 10 cm, apply fertilizer at a recommended rate of 42 g/m² for N:P:K +4S, mulching of the ground in order to retain soil moisture and irrigation. The training was very successful because of this practical part according to the participants. Participants were very happy with this project and challenged that they will produce more vines beyond the project target in order to realise more income.

2.8 Mainstreaming of HIV & AIDS in CU-CIP Trainings

HIV & AIDS awareness on prevention, care, anti-stigma and anti-discrimination was also incorporated in all our training programmes. Participants were urged to love their spouses and be open to them in matters related to sex. They were further urged to abstain from sexual activities for those who are not yet married, to be faithful to their spouses for those who are married and protecting themselves by properly using a condom whenever they are having sexual intercourse outside their wedlock. Information Education and Communication (IEC) materials on H.I.V & AIDS prevention, male and female condoms were distributed during the training. The participants were demonstrated on proper use a condom. These condoms and I.E.C. materials was a support from the National Aids Commission (NAC) through the Mulanje district council.

2.9 Evaluation meeting and re-training of 16 Secondary Vine Multipliers

Evaluation meeting involving 16 secondary vine multipliers (10 males and 6 females) was conducted on 16th September, 2011 at Phalombe Women Forum Hall. This was done in order to assess the progress of vine multiplication, access of seed through voucher system, payment for vines by the project in the 2010/11 season, vine multiplication in the 2011/12 season and chart way forward with secondary vine multipliers. The meeting was also organized in order

to appreciate secondary vine multipliers for the big role that they played last year in order to achieve the project targeted, and also to encourage them to take good care of their vines so that they can realise more money through sale of vines.

After doing an evaluation it was discovered that most vine multipliers were negligent to follow the recommended practices of rapid vine multiplication and some did not remember clearly what they were initially taught as such a one day theoretical training was held which was followed by on field demonstration by the agriculture extension development officers. The evaluation training also revealed some challenges faced by secondary vine multipliers.

2.10 Field Monitoring Visits on Orange Fleshed Sweet Potato Vine Nurseries

Field visits in all 16 secondary vine nursery sites were conducted in order to assess the progress of the OFSP vines. It is very encouraging to note that all secondary vine multipliers have planted vines and that some are taking a very good care of their vines. Most of vine multipliers planted as early as May, while some in June, July and August. It is worth mentioning that some secondary vine multipliers have a deficiency of vines hence they need extra seed. However there were some DVM who are negligent to follow recommended practices for rapid seed multiplication. These were advised to follow recommended practices such as fertilizer and manure application, uprooting all infected plants, planting at a recommended spacing of 20 cm by 10 cm, planting on a pure stand i.e. not mixing with other crops and planting their OFSP vines away from other varieties. Despite the challenges that have been highlighted a few secondary vine multipliers that have followed recommended practices have a very good stand of vines. Refer to figure 5 below that show Mr. Andack Kapenuka irrigating his OFSP nursery using a watering cane.



Figure 5. Andack Kapenuka of Mtwanga village, GVH Bwanaisa, TA Mkhumba in Phalombe is irrigating his orange fleshed sweet potato on 23rd September, 2011

3.0 Major Challenges and Recommendations

3.1 Pests

It was noted that the major pest that was causing reduction of plant population was ground worms. These were cutting sweet potato roots hence causing death of a plant. This was noted by most of the vine multipliers. As solution farmers were advised to apply tamalon or liquid actellic to get rid of underground worms or rotate a nursery site.

3.2 Diseases

The major disease that poses a big threat to quality vine multiplication was sweet potato viral disease which affects the growth of the plant. As a solution to this farmers were being encouraged to uproot any infected plant and rotate nursery site in order to reduce spreading out of this disease.

3.3 Cold weather Conditions

It was also noted that some vines were wilting due to cold weather in some soils; this might be caused due to icing of plant water. There is a need to delay a little bit to plant vines in such soil conditions till early summer season.

3.4 Water logged soils

Some soils are water logged hence planting vines in such soils makes vines either to die due to too much water or to be stunted. In addition well established vines dry out with too much water conditions that start as early as December; this situation therefore requires that all vines should be transferred before the soils become flooded with water.

3.5 Chemical Fertilizers

Some vine multipliers were unable to procure fertilizer for application in their vines as such their vine nursery is poorly established. There is a need to start a fertilizer revolving scheme, or start a fertilizer loan for vine multipliers so that deductions should be made during payment of their vines. Vine multipliers are looking for a fertilizer loan for their vines and other crops and are requesting that this project should be a guarantee for loan repayment.

3.6 Water Lifting & Pumping Devices

Some vine multipliers are on upstream fields hence heavily rely on irrigation for their vines to grow. Such vine multipliers are requesting the project to support them with water lifting devices such as canes while some are requesting for water pumping devices such as treadle pumps and motorised pumps on a loan so that they could pay back their loan through deductions from their vine sales.

3.7 Allowance syndrome by beneficiaries

This delays the training process especially on the first day when you are discussing on expectations from farmers. Farmers were expecting that the project is going to give them food allowance or sitting allowance which is against the policies of the organization. As the project, we are required to buy or cook food for participants in order to enhance farmer's participation and desist from building the culture of the dependency. The project challenged participants for the training that the training is going to benefit them and not the project and that it was them who are supposed to pay the project for organizing the training. However after thorough discussion with famers, they conceded to the projects decision.

3.8 Livestock grazing OFSP nurseries

In some cases livestock such as goats are left on free range during summer, these goats tend to graze on OFSP vine nurseries reducing growth rate of vines. Fencing of nursery site is the best solution for reducing this problem. Sometimes vine multipliers tend to watch over their nurseries the whole day in order to be scaring away or chasing goats from their nursery sites; however this is laborious and reduce the productivity of a vine multiplier.

4.0 Lessons Learnt

A lot of people wanted the OFSP vines through CIP OFSP coupons but they were very limited in number. The OFSP vines are needed like hot cakes within the project area even outside the project area. Irrigation facilities helped DVM quite a lot to raise OFSP vines which enabled them to meet the local demand and have a surplus. Despite the fact that OFSP

vines are available farmers are failing to buy using their money because of their tradition of giving one another seed freely.

From the training of both front line staff and farmers it was discovered that training of male frontline staff had a very passive contribution to training of beneficiary farmers in OFSP processing and utilization. It was observed that most male frontline staff were passive during both trainings while female frontline staff were very active. This probably explains the reason why most of beneficiary farmers who were trained in OFSP processing and utilization were females.

5.0 Best Practices

5.1 Mulching of OFSP Vine Fields

Some vine multipliers are mulching their OFSP fields deliberately in order to reduce the frequency of irrigation in areas with water scarcity. This has indeed reduced the amount of labour for irrigation besides it has helped to add organic fertilizers in OFSP fields.

5.2 Planting OFSP Vines in Ridges

Deliberate planting of OFSP vines in ridges for those who have abundant land in order to kill two birds with one stone. This has helped some vine multipliers to realise more cash from storage roots on top of selling vines. The cost of selling storage roots is usually high because it is sold at a time when sweet potatoes are scarce.

5.3 Use of Organic Manure in OFSP Vine Nurseries

Despite the fact that most vine multipliers apply fertilizer in their OFSP vine fields, most of them add both compost and khola manure to supplement chemical fertilizers. That has boosted both the growth of vines as well as storage roots

6.0 Success Stories

6.1 Mr. Winesi Menard, who is a Decentralized Vine Multiplier (DVM) Kills Money through Orange Fleshed Sweet Potato in Phalombe



Figure 6. Winesi Menard posing in his orange fleshed sweet potato nursery on 23rd September, 2011

Winesi Menard of Bwanaisa village, GVH Bwanaisa, Traditional Authority Mkhumba in Phalombe is a vine multiplier under the Concern Universal & International Potato Centre Orange Fleshed Sweet Potato project in Phalombe. He is aged 41 years, married and has six children.

In 2010 he grew orange-fleshed sweet potato vines on an area of 0.25 Ha through a rapid sweet potato vine multiplication technique. He sold his vines to CU & CIP OFSP project beneficiaries through vouchers and realised MK26, 970.00 (US\$179.80), and sold the remaining vines to USAID Mount Mulanje MOBI+LISE Project where he realised MK112, 840.00 (US\$752.27) from sales of 364 bags of vines, and realised MK2,400.00 (US\$16) from District Agriculture office through sale of 6 bags of vines, and realised MK 3, 500.00 (US\$23.33) from individual community members through sale of 10 bags of vines. Apart from vine sales Winesi Menard also realised MK35, 000.00 (US\$233.33) through sale of 10 bags of storage roots from a nursery site. In total he realised MK180, 710.00 (US\$1, 204.73). Without hiding the reality, he indicated that this was his first time to catch MK112, 840.00 at once.

From vine sales and storage roots he bought the following items; a thirty five thousand kwacha (MK35,000.00) home theatre system, a fifteen thousand kwacha (MK15,000.00)

brand new car battery for electricity. He used MK9,500.00 to pay labourers, buy 4 bags of fertilizer, buy 10 bags of rice for home consumption, moulded 6, 000 bricks which he is intending to burn very soon. He has currently MK75,000.00 in his bank account which he wants to use for extending his current house and buy 20 iron sheets of 10 feet each for roofing, and plough back the remaining money into farming so that he can realise more money for buying a motorcycle and buying a residential plot at Phalombe boma by next year. He plans to buy a motorised pump on a loan from lending institutions so that he can boost his vine multiplication so that his vision of buying a motorcycle and a plot at Phalombe could be achieved. Currently Winesi Menard has planted OFSP vines in 32 ridges of 25 m long spaced at 90 cm and he has 13 beds of 19 m long by 1 m which he has already planted and he has 4 beds each 19 m long by 1m which he has not planted and he is expecting for clean vines from Bvumbwe Research station.

He is very grateful for the CU-CIP-OFSP project because he has benefited a lot and he is pleading that the project should continue. His advice to his fellow vine multipliers is that they should work hard, take good care for their crops by following advice from agriculture extension workers and adopting modern techniques for agriculture production.

6.2 Zondeni Leaves Makes Good Relish for Mr. & Mrs. Tambala Family

Zondeni sweet potato leaves make a very good relish, it is not like our ordinary potato vines that we normally grew, zondeni leaves is very delicious, Mr. Tambala narrated. My three year boy child likes it quite a lot; he likes to ask for zondeni cooked leaves at least thrice a week, if you do not prepare it for him then you will be in hot soup, Mrs. Tambala concurred with her husband.

Mrs. Tambala was cutting vines from her field in order to expand the area for sweet potato. She indicated that she does not want to lose the seed.

6.3 Stera Captain Makes Money through Sales of OFSP Flitters (Mandazi)

Stera Captain is married to Mr. Symon Namanya, she and his husband lives in Khamula village in Fort Lister commonly known as Mpata in Phalombe just because the village is on a gap between Mulanje Mountain and Michesi hills. Stera's husband, Mr. Symon Namanya is a decentralized vine multiplier, he makes money through sale of vines and leaves from zondeni but he also grows OFSP for storage root production. In 2010/11 agriculture season, they grew one acre of OFSP sweet potato. Stera's business was to run a tea room at her house and bake ordinary wheat scones and flitters for sale in her tea room. However when she heard of OFSP processing and utilization training, she did not want to miss the opportunity. She attended a two day training organized by Concern Universal with funding from CIP at Naminjiwa Residential Training Centre. Stera Captain masterminded production of different products from zondeni during the training. When she came back from the training she did not want to end there, she thought it wise to start producing flitters and scones. When I went there one day she served me and the district horticulture officer for Phalombe with flitters and told us that she managed to produce flitters from zondeni. When we wanted to know whether people

at Mpata liked flitters, another boy came and asked whether flitters were available, she responded yes they are. The women pointed out that people liked zondeni flitters a lot and that they cannot stay for a day without running out. Stera Captain sells each flitter at Mk20.00 but she indicated that in a day she could sale 100 flitters making MK2,000.00. She indicated that she uses the money from zondeni flitter sales to buy clothes and relish for her family. She is just worried that now zondeni storage roots are scarce hence expensive.

7.0 Conclusion

The Orange fleshed Sweet Potato (OFSP) project implemented by Concern Universal in partnership with International Potato Centre (CIP) is very important as it helps both vine multipliers and beneficiaries to have access to both nutritious and fast maturing sweet potatoes. This has a very big potential of reducing food security as well as malnutrition to both vine multipliers and orange fleshed sweet potato beneficiaries. It is worth mentioning that the sale of vines has a very big positive impact on the lives of the decentralised vine multipliers as it brings them direct cash which they use to procure other basic necessities as well as expanding their agriculture enterprise by buying fertilizer and paying labourers. All the stakeholders in both districts are very happy with the project and are looking forward to work hand in hand with CU & CIP in order to scale up the project and achieve its goal.

8.0 Plans for the Year 3

- Monitor DVM vine nurseries (2)
- Identify 2011/12 OFSP beneficiaries (1)
- Identify 2012/13 OFSP beneficiaries (1)
- Monitor OFSP beneficiary fields (2)
- Monitor utilization of vouchers (1)
- Source market for surplus OFSP vines (1)
- Identify and train OFSP lead farmers in OFSP production (1)
- Train government staff and lead farmers in processing and utilisation (2)
- Conduct field learning tour (2)
- Conduct demand creation awareness campaigns (2)
- Conduct open/field days to appreciate quality OFSP vine and sweet potato production (2)

Appendix

Table 1. Details of Orange Fleshed Sweet Potato (OFSP) Beneficiaries in 2010/11 Agriculture Season

EPA	TA	GVH	VILLAGE	SEX OF A BENEFICIARY		SEX OF A HOUSE HOLD HEAD		TOTAL HOUSE HOLDS PER VILLAGE	CHILD <5 YRS	HIV AFFECTED	ORPHANE D CHILD PRESENT	CHILD HEADED HOUSE HOLD	PREGNANT WOMAN PRESENT
				M	F	M	F						
Waruma	Mkhumba	Nyambalo	Milambo	0	18	14	4	18	18	0	2	0	1
Waruma			Matanya	0	15	5	10	15	15	3	0	0	0
Waruma			Nachamba	0	15	9	6	15	15	6	1	0	0
Waruma			Makwete	1	19	9	11	20	20	1	3	0	3
Naminjiwa	Mkhumba	Bwanaisa	Kadewere	2	18	12	8	20	20	3	7	4	0
Waruma			Mangoza	2	28	19	11	30	30	11	11	2	2
Waruma			Daundi	1	19	11	9	20	20	5	1	0	4
Waruma			Chibwana	12	58	35	35	70	50	12	15	0	3
Waruma			Makolera	0	20	15	5	20	20	4	4	0	2
Naminjiwa			Bokosi	2	18	10	10	20	20	2	8	0	0
Waruma	Mkhumba	Bwanaisa	Muronya	0	20	12	8	20	20	6	2	0	0
Waruma			Sakhome	1	29	9	21	30	30	7	5	0	2
Waruma			Chole	5	25	25	5	30	30	2	13	0	1
Naminjiwa			Nalingula 2	11	30	25	16	41	41	2	6	0	2
Waruma	Mkhumba	Bwanaisa	Bwanaisa	5	49	40	14	54	47	9	13	0	1
Waruma			Phunduma	7	29	27	9	36	36	5	4	1	1
Naminjiwa	Mkhumba	Bwanaisa	Karama	0	20	14	6	20	20	1	3	0	1

Waruma	Mkhumba	Nyambalo	Lomoliwa	21	127	88	60	148	144	24	32	0	8
Waruma	Mkhumba	Bwanaisa	Tawanga	0	20	11	9	20	20	1	5	0	1
Naminjiwa	Mkhumba	Bwanaisa	Khamula	0	20	16	4	20	20	5	4	0	0
Naminjiwa			Nalingula 1	1	29	8	22	30	29	7	4	0	3
Waruma			Chanasa	0	30	16	14	30	30	7	13	0	4
Waruma			Kambenje	0	30	10	20	30	29	3	5	0	1
Waruma	Mkhumba	Nyambalo	Mtengo	2	54	40	16	56	56	6	6	0	3
Waruma	Mkhumba	Bwanaisa	Chingwalu	0	20	13	7	20	20	1	3	0	1
Waruma	Mkhumba	Bwanaisa	Mpheni	6	18	15	9	24	22	2	6	0	0
Totals				79	778	508	349	857	822	135	176	7	44

Table 2. Summary for Decentralised Vine Multipliers

District	EPA	M	F	Total	Category
Phalombe	Naminjiwa EPA	3	5	8	Secondary Vine Multipliers
Phalombe	Waruma EPA	7	3	10	Secondary Vine Multipliers
Phalombe	Nkhulambe EPA	7	2	9	Tertiary Vine Multipliers
Mulanje	Chambe TDC Hall	7	5	12	Tertiary Vine Multipliers
Mulanje	Boma EPA	4	6	10	Tertiary Vine Multipliers
Mulanje	Milonde EPA	8	3	11	Tertiary Vine Multipliers
Total		36	24	60	

Table 3. Summary of 2010/11 Agriculture Season DVMs and total Number of OFSP Vouchers they redeemed

I.D.	Name of a Multiplier	Sex	Village	Traditional Authority	District	Extension Planning Area (EPA)	Number of Coupons Redeemed	Money Value
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1	Winesi Menard	M	Bwanaisa	Mkhumba	Phalombe	Waruma	151	MK23,405
2	Papiasi Simbota	M	Murhonya	Mkhumba	Phalombe	Waruma	103	MK15,965
3	Andack Kapenuka	M	Mtawanga	Mkhumba	Phalombe	Waruma	76	MK11,780
4	Elizabeth Chimkango	F	Chingwalu	Mkhumba	Phalombe	Waruma	61	MK9,455
5	Mary Magaleta	F	Bokosi	Mkhumba	Phalombe	Naminjiwa	10	MK1,550
6	Goodson Semani	M		Mkhumba	Phalombe	Waruma	24	MK3,720
7	Lingison M'wanga	M	Phunduma	Mkhumba	Phalombe	Waruma	22	MK3,410
8	John Mahere	M	Phunduma	Mkhumba	Phalombe	Waruma	29	MK4,495
9	Symon Namanya	M	Khamula	Mkhumba	Phalombe	Naminjiwa	122	MK18,910
10	John Witikani	M	Phunduma	Mkhumba	Phalombe	Waruma	66	MK10,230
11	Edwin Chinangwa	M		Mkhumba	Phalombe	Waruma	4	MK620
12	Benrnadeta. Mwatapito	F	Phunduma	Mkhumba	Phalombe	Waruma	45	MK6,975
Grand -Total			7	1	1	2	713	MK110,515

Table 4. Details for Orange-Fleshed Sweet Potato (OFSP) Decentralized Vine Multipliers for 2011/12 Agriculture Season

I.D	Name of Person	Traditional Authority	Village	Sex	District	EPA	Category of Vine Multiplication
1	Malita Grey	Mkhumba	kadewere	F	Phalombe	Naminjiwa	Secondary
2	Michael Lucious Khamula	Mkhumba	kadewere	M	Phalombe	Naminjiwa	Secondary
3	Misoya Ngalande	Mkhumba	Khamula	M	Phalombe	Naminjiwa	Secondary
4	Symon Namanya	Mkhumba	Khamula	M	Phalombe	Naminjiwa	Secondary
5	Stella Captain	Mkhumba	Khamula	F	Phalombe	Naminjiwa	Secondary
6	Agness Tomasi	Mkhumba	Khamula	F	Phalombe	Naminjiwa	Secondary
7	Mary Mageleta	Mkhumba	Bokosi	F	Phalombe	Naminjiwa	Secondary
8	Jaline Namanja	Mkhumba	Khamula	F	Phalombe	Naminjiwa	Secondary
9	Lingison Mwanga	Mkhumba	Phunduma	M	Phalombe	Waruma	Secondary
10	Benadetta Matapwito	Mkhumba	Phunduma	F	Phalombe	Waruma	Secondary
11	Andack Kapenuka	Mkhumba	Mtawanga	M	Phalombe	Waruma	Secondary
12	Papiyasi Simbota	Mkhumba	Murhonya	M	Phalombe	Waruma	Secondary
13	Essime Whitkani	Mkhumba	Phunduma	F	Phalombe	Waruma	Secondary

14	Winesi Menard	Mkhumba	Bwanaisa	M	Phalombe	Waruma	Secondary
15	Elizabeth Chimkango	Mkhumba	Chingwalu	F	Phalombe	Waruma	Secondary
16	John Mahere	Mkhumba	Phunduma	M	Phalombe	Waruma	Secondary
17	Goodson Semani	Mkhumba		M	Phalombe	Waruma	Secondary
18	Edwin Chinangwa	Mkhumba		M	Phalombe	Waruma	Secondary
19	John Makamba	Nkhulambe	Ntalava	M	Phalombe	Nkhulambe	Tertiary
20	Annie Nyalugwe	Nkhulambe	Nkhulambe	F	Phalombe	Nkhulambe	Tertiary
21	Elube Maliyango	Nkhulambe	Ntalava	F	Phalombe	Nkhulambe	Tertiary
22	Raphael Ndalama	Nkhulambe	Misomali	M	Phalombe	Nkhulambe	Tertiary
23	Yonasi Pondeponde	Nkhulambe	Opehiwa	M	Phalombe	Nkhulambe	Tertiary
24	John Mukoko	Nkhulambe	Thomu	M	Phalombe	Nkhulambe	Tertiary
25	Sydney Mlaliki	Nkhulambe	Chiduba	M	Phalombe	Nkhulambe	Tertiary
26	Foster Nachuma	Nkhulambe	Nthita	M	Phalombe	Nkhulambe	Tertiary
27	Amos Daelo	Nkhulambe	Ntita	M	Phalombe	Nkhulambe	Tertiary
28	Jubeki Eliya	Nkanda	Mphwanye	M	Mulanje	Thuchila	Tertiary
29	Steven Douglas	Nkanda	Maliro	M	Mulanje	Thuchila	Tertiary
30	Emily Kaipa	Nkanda	Mphwanye	F	Mulanje	Thuchila	Tertiary
31	John Midule	Nkanda	Chole	M	Mulanje	Thuchila	Tertiary
32	Stanford Lazaro	Nkanda	Chole	M	Mulanje	Thuchila	Tertiary
33	Filipo Kanjinga	Nkanda	Mpuphira	M	Mulanje	Thuchila	Tertiary
34	Flora Timosi	Nkanda	Nakhonyo	F	Mulanje	Thuchila	Tertiary
35	Yohane Yona	Nkanda	Maliro	M	Mulanje	Thuchila	Tertiary
36	Flossy Maiden	Nkanda	Kukada	F	Mulanje	Thuchila	Tertiary
37	Chikondi Mphepo	Nkanda	Nkanda	F	Mulanje	Thuchila	Tertiary
38	Joseph Elaton	Nkanda	Kukada	M	Mulanje	Thuchila	Tertiary
39	Enelesi Kumbanyiwa	Nkanda	Nakhonyo	F	Mulanje	Thuchila	Tertiary
40	Tsabola Faison	Mabuka	Mikundi	M	Mulanje	Mulanje Boma	Tertiary

41	Vailet Bisani	Mabuka	Tchete	F	Mulanje	Mulanje Boma	Tertiary
42	Flora Kadewere	Mabuka	Chipoka	F	Mulanje	Mulanje Boma	Tertiary
43	Mary Paul	Mabuka	Chilenga	F	Mulanje	Mulanje Boma	Tertiary
44	Wema Mvoso	Mabuka	Mbewa	F	Mulanje	Mulanje Boma	Tertiary
45	Line Matope	Mabuka	Mbewa	F	Mulanje	Mulanje Boma	Tertiary
46	Wilson Macheta	Mabuka	Chipoka	M	Mulanje	Mulanje Boma	Tertiary
47	Charles Kalemule	Mabuka	Chilenga	M	Mulanje	Mulanje Boma	Tertiary
48	Fibe James	Mabuka	Chilenga	F	Mulanje	Mulanje Boma	Tertiary
49	Paul David	Mabuka	Mwanamvula	M	Mulanje	Mulanje Boma	Tertiary
50	Friday Magalasi	Njema	Mujiwa	M	Mulanje	Milonde	Tertiary
51	Rhoda Byson	Njema	Mujiwa	F	Mulanje	Milonde	Tertiary
52	Usufu Phatama	Njema	Makokola	M	Mulanje	Milonde	Tertiary
53	Charles Kenani	Njema	Makokola	M	Mulanje	Milonde	Tertiary
54	Mission Pias	Njema	Mujiwa	M	Mulanje	Milonde	Tertiary
55	Wiziram Likwiti	Njema	Malunda	M	Mulanje	Milonde	Tertiary
56	Mary Mujiwa	Njema	Mujiwa	F	Mulanje	Milonde	Tertiary
57	Estere Muheriwa	Njema	Mujiwa	F	Mulanje	Milonde	Tertiary
58	Salimu Nkhoma	Njema	Makokola	M	Mulanje	Milonde	Tertiary
59	Alick Mwatiha	Njema	Mujiwa	M	Mulanje	Milonde	Tertiary
60	Million Sekani	Njema	Maliyera	M	Mulanje	Milonde	Tertiary