ECRP Baseline Survey Report

(zero draft – 19-09-2012)

ECRP Programme Management Unit

Sept. 2012

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Acknowledgements

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1. Introduction

1.1. Background to the Programme

ECRP is a climate change adaptation and resilience building programme implemented by a consortium made up of CARE, Action Aid with Christian Aid as managing agency. The programme aims at reducing the existing and future negative impact caused by natural hazards and climate change by strengthening capacity of vulnerable communities to cope better with these climatic risks and become more resilient.

The programme outcome objective is to enable 305,000 people (27 774 male headed and 33 226 female headed households) from seven vulnerable districts develop their capacity to increase their resilience to climatic risk by June 2016. This will contribute to the reduction of extreme poverty and hunger which will in turn contribute to the attainment of the Hyogo Framework for Action by halving disaster losses and increasing communities' resilience to climate change in Malawi.

The baseline survey was undertaken to identify benchmarks on impact, outcome and output indicators against which programme progress will be measured. It was carried out during the period June to August 2012.

1.2. The consortium and its mandate

ECRP consortium is made up of CARE, Action Aid with Christian Aid as a managing agency. It is funded by DFID, Irish Aid and the Royal Norwegian Embassy. Operational interventions are implemented in 26 Traditional Authority areas (TAs) spread across the 7 districts of Kasungu, Machinga, Mwanza, Mulanje, Thyolo, Chikwawa and Nsanje. Direct implementation is done in partnership with 14 Malawian NGO partners and they technical support from four NGO technical partners (CEPA, Tough Stuff, Agricane, ICRISAT). Experiences and lessons from direct implementation are fed into the consortium's programme level advocacy and policy strategy. This influences initiatives that aim at ensuring relevance of policies, strategic plans and programmes in the face of climate change.

ECRP works in tandem with a sister consortium DISCOVER (led by Concern Universal) which is funded by the same partners. The objective is that DISCOVER and ECRP learn from each other, share best practices and challenges to ensure that both consortia can improve through each others' learnings and experiences. The logframe was developed with guidance by LTS. ECRP's work falls on outputs 1,2,3 and 5, MVAC (Malawian Vulnerability Assessment Committee) covers output 4.

1.3. Objective of this report and its structure

1.3.1. Objectives of the report

The objectives of this report are as follows:

- To provide a focused-documentation of the benchmarks (baseline values) on impact, outcome and output indicators against which programme progress will be measured.
- To provide a basis for objectively setting realistic targets and milestones for impact, outcome and output indicators level indicators as documented in the ECRP logframe.
- Where necessary, to examine possible implications of the findings on the nature and scale of the programme interventions as currently stated in the proposal.
- Based on the overall findings, to provide recommendations for successful delivery of the programme.

1.3.2. Structure of the report

Efforts have been taken to ensure that the report is of reasonable size. It has therefore avoided details and focused more on impact, outcome and output level indicators. Detailed findings on specific interventions and activity indicators have been put in annexes. Based on the same, changes in the indicator targets and milestones have not been included in this narrative; these have been put in the logframe. Among others, our key guides in setting these targets have been: (i) the current starting point (baseline value) (ii) the time frame for the project i.e. 5 years. We take note that certain indicators are so insensitive that it would require rather a longer period for them to register any noticeable changes.

Where possible and necessary, double-styled presentation of the findings has been done: i) in table form (ii) in graphical form.

2. Scope and Methodology of the baseline survey

2.1. Coverage of the baseline

2.1.1. In terms of types of indicators

The baseline survey collected data on impact, outcome and output indicators as highlighted in the ECRP logframe. Where necessary, data on key activity indicators was also collected. ECRP work falls on outputs 1, 2, 3 and 5 of the DFID overall ECRP programme (see logframe on annex??).

2.1.2. In terms of districts covered

The baseline survey was carried out in all the 7 districts targeted by ECRP.

2.2. Methodology used for HH survey (including sample size)

Household level data was collected from a random sample of 1101 households using a structured questionnaire. Geographically, 25 Enumeration Areas (EAs) were randomly sampled. All households in an EA were then listed to come up with a household sampling frame. In each EA, 44 households were randomly selected using systematic random sampling method.

Table 1: Baseline survey sample composition by sex of household head

District		Male	Female	Total
Kasungu	(n)	148	28	176
	(%)	84	16	100
Machinga	(n)	72	14	86
	(%)	84	16	100
Mwanza	(n)	58	31	89
	(%)	65	35	100
Thyolo	(n)	120	56	176
	(%)	68	32	100
Mulanje	(n)	82	50	132
	(%)	62	38	100
Chikwawa	(n)	228	81	309
	(%)	74	26	100
Nsanje	(n)	102	31	133
	(%)	77	23	100
ECRP overall	(n)	810	291	1,101
	(%)	74	26	100

2.3. Methodology used to inform indicators not in HH survey

Data on district and community wide indicators was collected through consultations with district officials. Key district officials consulted included Directors of Planning and Development (DPDs), District Environmental Officers (DEOs) and Assistant District Disaster Risk Management Officers (ADDRMOs). This information was triangulated through carrying out focus group discussions (FGDs) in communities. Participants in FGDs comprised of members of Area Civil Protection Committees (CPCs), Village Civil Protection Committees (CPCs), Village Development

Committees and general community members. These FGDs were also used to collect information on community level indicators. One community was consulted in each district dure to time limitations.

2.4. Actual timeline for baseline data collection and analysis

Household level data was collected from 12 June to 10 July 2012 while district and community level data was collected from 31 June to 10th August 2012. Data analysis was carried out in August/ September 2012 with technical guidance from LTS.

2.5. Constraints and limitations

Carrying out this exercise met a number of constraints. Key included:

- The sudden change of baseline survey methodology to include enumeration area (EA) based household listing and sampling. This required more time and resources.
- There were frequent changes in the EA samples. This made planning for the survey difficult.
- The EA based methodology meant that the survey was carried out in villages that will not be directly targeted by ECRP. Managing expectations that come along with assessment of this nature was and may continue to be difficult for the implementing partners working in those areas.
- Field staff were involved in support and coordination of the baseline, taking away their time from the actual implementation of the interventions

There are also limitations to findings related to district and communitywide indicators. Firstly, all districts lacked proper documentation of the existence and functionality of the various disaster risk management structures. Secondly, due to time factor, it was not possible to visit more than one community (village) per district.

3. Description of baseline and proposed adjustments to milestones

3.1. Impact level

3.1.1. Baseline value found for the various impact indicators

Impact indicator 1: Percentage of population living on or less than USD1 a day in 7 ECRP targeted districts.

The survey results show that 95% of respondent households in the seven ECRP targeted districts live below USD1 per day. Within districts, the highest proportion was found in Thyolo (99% of the respondents) while the lowest were in Kasungu (93% of the respondents). Chikwawa and Nsanje districts showed more/less similar findings: 94% of the respondent households were on less than USD1 per day (see table 2 for details). At national level, ?? of Malawian live on less than USD1 a day[1].

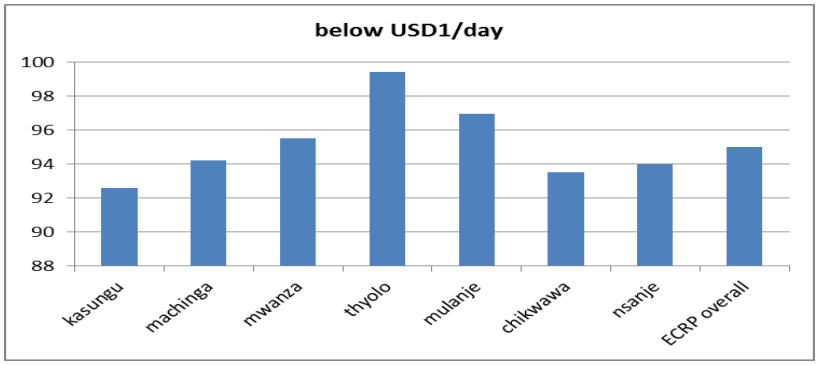
Table 2: Proportion (%) of respondent households living below USD1/day (exchange rate: MWK165 to a dollar)

District		Those on at least USD1/ day	Those below USD1/day	Total
Kasungu	(n)	13	163	176
	(%)	7	93	100
Machinga	(n)	5	81	86
	(%)	6	94	100
Mwanza	(n)	4	85	89
	(%)	4	96	100
Thyolo	(n)	1	175	176
	(%)	1	99	100
Mulanje	(n)	4	128	132
	(%)	3	97	100
Chikwawa	(n)	20	289	309
	(%)	6	94	100

[1] reference

District		Those on at least USD1/ day	Those below USD1/day	Total
Nsanje	(n)	8	125	133
	(%)	6	94	100
ECRP overall	(n)	55	1,046	1,101
	(%)	5	95	100

Graphical presentation of the proportion (%) of respondent households living on less than USD1/day



Impact indicator 2: Average number of food insecure population in 7 ECRP targeted districts.

Food security is defined as access to adequate food at all times for a health and active life[2]. Consumption year in Malawi traditionally starts in April and end in March the other year. Across the ECRP impact area, baseline survey findings show that 83% of respondent households will not have access to adequate food for the whole of 2012/2013 consumption year (April 2012 – March 2013). The highest proportion is in Thyolo (92%), followed by Mulanje (90%) with the least in Kasungu (65%) (see table 3).

[2] Reference??

Table 3: Categories of respondent households in terms of their food security status

District		Food secure (April 2012 – March 2013)	Food insecure (April 2012 – March 2013)	Total
Kasungu	(n)	60	116	176
	(%)	34	66	100
Machinga	(n)	20	66	86
	(%)	23	77	100
Mwanza	(n)	11	78	89
	(%)	12	88	100
Thyolo	(n)	14	162	176
	(%)	8	92	100
Mulanje	(n)	13	119	132
	(%)	10	90	100
Chikwawa	(n)	51	258	309
	(%)	16	84	100
Nsanje	(n)	18	115	133
	(%)	14	86	100
ECRP overall	(n)	187	914	1,101
	(%)	17	83	100

Largely, these findings are consistent with findings of MVAC assessment carried out in May 2012. The number of food insecure people (for 3-8 months) according to MVAC's assessment are as presented in the table 4.

Table 4. MVAC's Projection of food insecure population during the 2012/2013 Consumption Year[3]

No	District	Affected Population	Total District Population	Affected pop (%)	Maize Deficit (MT)
1	Chikwawa	275,653	489,030	56%	14,612.93
2	Machinga	20,556	554, 840	4%	1,495.00

[3] Kasungu is not on the list of those districts that have been identified as food security affected.

3	Mulanje	196,847	550, 721	36%	5,368.56
4	Mwanza	1,404	99, 434	1%	74.65
5	Nsanje	105,012	262, 035	40%	5,566.89
6	Thyolo	167,021	612, 676	27%	4,555.13

Source: May 2012 MVAC assessment report.

3.1.2. Preliminary analysis of drivers informing these baseline values

Prolonged dry spells come across as one of the key drivers for baseline values on food security. The assessment was also done at a time when Malawi was experiencing serious economic challenges aggravated by a bad season for agriculture.

3.1.3. Proposed LFA target and milestones revisions, if any, in light of baseline values

(to be dealt with later after internal discussions of the results)

3.2. Outcome level

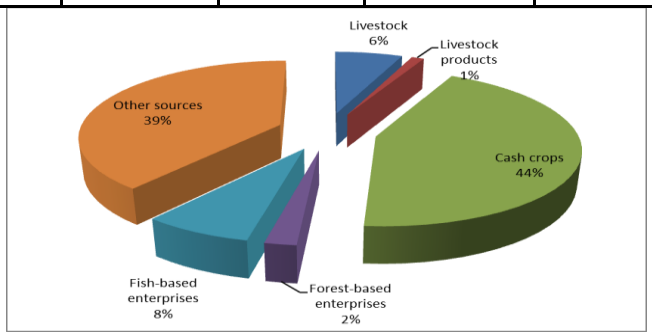
3.2.1 Baseline value found for the various outcome indicators

Outcome indicator 1.1: Level of real household income by source for targeted beneficiaries (disaggregated by household headship)

Across ECRP districts, survey results show annual average real household income to be USD513. Within districts, the highest annual average mean household income has been found in Kasungu (USD1 019) and least in Thyolo (USD237.50). In terms of contribution to annual household income, cash crops make the highest contribution (44%). The smallest contribution is made by livestock (1%).

Table 5: Annul mean income per household from various sources (USD) (exchange rate: MWK165/USD1)

District	Livestock production	Livestock products	Cash crops	Forest based enterprises	Fish based enterprises	Other sources including paid employment	Total
Kasungu	30.51	0.13	847.25	11.11	5.99	124.93	1019.92
Machinga	6.76	0.00	229.10	0.42	52.37	198.80	487.45
Mwanza	18.07	0.00	30.20	20.19	1.36	282.02	351.85
Thyolo	5.38	0.00	93.82	15.73	5.65	116.91	237.50
Mulanje	12.41	0.00	118.11	5.48	24.21	144.02	304.24
Chikwawa	34.56	0.02	118.49	10.86	38.85	261.86	464.64
Nsanje	113.14	49.49	59.61	12.07	150.90	273.67	658.88
ECRP overall	32.58	6.01	225.39	11.12	38.10	200.80	513.99
% contribution annual income	6	1	44	2	7	39	100
Graphical presentation of the contribution (%) of each cash income source to the mean annual household income							

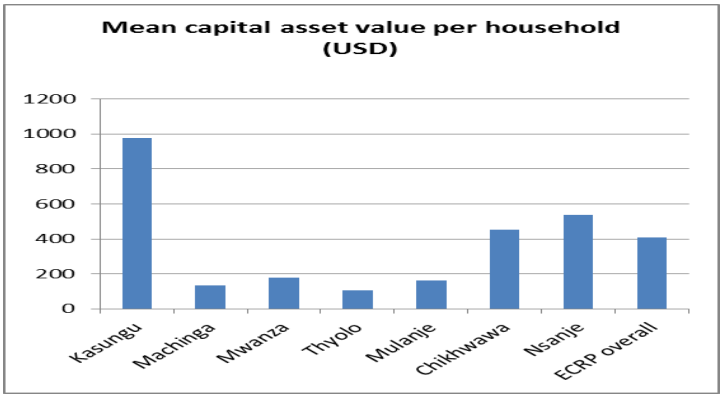
District	Livestock production	Livestock products	Cash crops	Forest based enterprises	Fish based enterprises	Other sources including paid employment	Total
							

Outcome indicator 1.2: Average capital asset value per household (in USD) (iron sheets, livestock, oxcart, bed, table, mobile phone, radio, television, bicycle, hoe, axe, sickle, panga) {type of asset, number by type, value by asset type} disaggregated by household headship

In Malawi such assets as described in the above indicator, are among others, considered key as a household can fall back on these in the event of crisis situations. In other cases, assets such as livestock are considered a living bank. The assessment found the mean capital asset value of USD409 across ECRP impact area. Kasungu district had the highest mean capital asset value per household (USD977) with the lowest found in Thyolo (USD106 per household)

Tabel 6: Average capital asset value/hh in (USD) (exchange rate: MWK165/USD)

District	Mean (USD)	Std. Dev.	Freq.
Kasungu	977.84	6995.62	176
Machinga	135.13	194.15	86
Mwanza	176.54	422.23	89
Thyolo	106.60	142.52	176
Mulanje	161.97	490.94	132
Chikwawa	452.49	1808.57	309
Nsanje	536.48	1619.88	133
ECRP overall	409.40	3025.23	1101



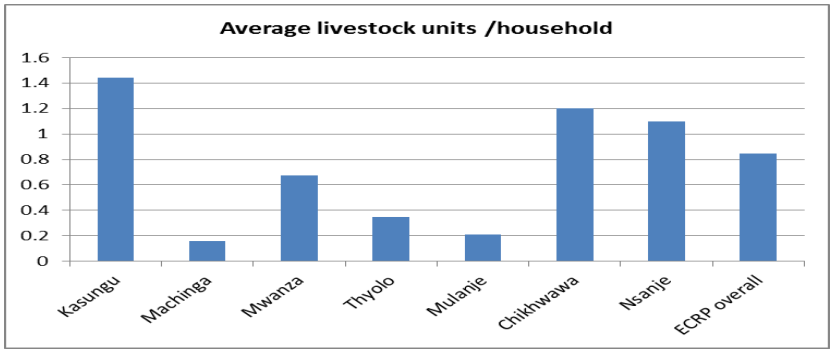
In terms of livestock units (LUs) owned, average livestock units per household was found to be 0.845 livestock units. Within districts, Kasungu has the highest average livestock unit per household (1.44 livestock units), followed by Chikwawa (1.199 livestock units) with the lowest found in Machinga (0.156). Livestock unit is a standard measure that coverts different types of livestock e.g. cattle, goats, chickens etc into one unit using standard conversion factors. In this

measure 1 livestock unit is equivalent to 1 cow aged at least 24 months; a cock is equivalent to an adult goat is equivalent to 0.2 livestock unit[4].

Table7: Mean of Livestock Units (LU) owned per household

District	Mean (Livestock units)	Std. Dev.	Freq.
Kasungu	1.44	3.36	176
Machinga	0.16	0.36	86
Mwanza	0.67	1.43	89
Thyolo	0.35	1.25	176
Mulanje	0.21	0.42	132
Chikwawa	1.20	4.10	309
Nsanje	1.10	2.86	133
ECRP overall	0.85	2.85	1101

Graphical presentation of the average livestock units (LUs) owned per household



[4] Government of Malawi (2009): Impact and output indicators for Agriculture, food security, nutrition, natural resources and fisheries/ aquaculture projects/programmes in Malawi.

Outcome indicator 1.3: Number (and percentage) of direct beneficiaries covered by protection plans, readiness plans or resilience enhancing plans

Consultations with district officials found out that only 3 districts (Nsanje, Machinga and Chikwawa) out of the 7 districts targeted by ECRP have ever had District Preparedness Plans. The plans were developed with support from UNDP. In Machinga and Nsanje, the plans were due for updating in 2011 while in Nsanje in 2009. This was not done.

Outcome indicator 1.4: Number of people (and % of households) within the targeted communities that passed through at least 9 months with adequate food

In Malawi, the consumption year (harvest year) traditionally starts in April and end in March the other year. Household food stocks are normally at their peak during April-June and at their lowest during Jan-March. Baseline survey findings show that during 2011/2012 consumption year, only 43% of respondent households had adequate food for at least 9 months of the consumption year across ECRP districts. Within districts, the highest proportion was found in Kasungu (73% of respondents) with the lowest found in Nsanje (31% of respondent households).

Table 8: Proportion (%) of respondent households in terms of when food last in the 2011/2012 consumption year

	Kasungu	**Machinga**	**Mwanza**	**Thyolo**	**Mulanje**	**Chikwawa**	**Nsanje**	**ECRP overall**
Less than 9 months (n)	48	49	46	110	86	194	92	625
(%)	27	57	52	63	65	63	69	57
At least 9 months (n)	128	37	43	66	46	115	41	476
(%)	73	43	48	38	35	37	31	43
Total	176	86	89	176	132	309	133	1,101
	100	100	100	100	100	100	100	100

Outcome indicator 1.5: % of HH using a combination of at least three types of climate change and DRR transformative strategies: conservation agriculture, irrigation, livestock, IGAs, agro-forestry, drought/flood tolerant crops, post-harvest management practices, fuel efficient stoves, solar technologies / products, afforestation, village savings and lending (VSL).

The above listed practices have been identified by ECRP as climate change and DRR transformative strategies. Baseline survey results show that only 49% of respondent households practice at least three (3) of these strategies. Within districts, the highest proportion of those practicing at least three (3) strategies are in Nsanje (61%), followed by Kasungu (59%); the least is in Machinga (30%).

Table 9: Proportion (%) of respondent households that practice at least three (3) climate change and DRR transformative strategies.

District		Less than 3 adaptation strategies	At least 3 adaptation strategies	Total
Kasungu	(n)	71	105	176
	(%)	40	60	100
Machinga	(n)	60	26	86
	(%)	70	30	100
Mwanza	(n)	49	40	89
	(%)	55	45	100
Thyolo	(n)	95	81	176
	(%)	54	46	100
Mulanje	(n)	66	66	132
	(%)	50	50	100
Chikwawa	(n)	163	146	309
		53	47	100
Nsanje	(n)	51	82	133
	(%)	38	62	100
ECRP overall	(n)	555	546	1,101
	(%)	50	50	100

Annex?? provides details on proportion of respondent households practicing each specific intervention: conservation agriculture, irrigation, livestock, IGAs, agro-forestry, drought/flood tolerant crops, post-harvest management practices, fuel efficient stoves, solar technologies / products, afforestation and VSL.

Outcome indicator 2: Average length of time households' livelihood take to recover fully (back to where they were before) after a climate related shock (e.g drought/dry spells, floods/hailstorms, etc)

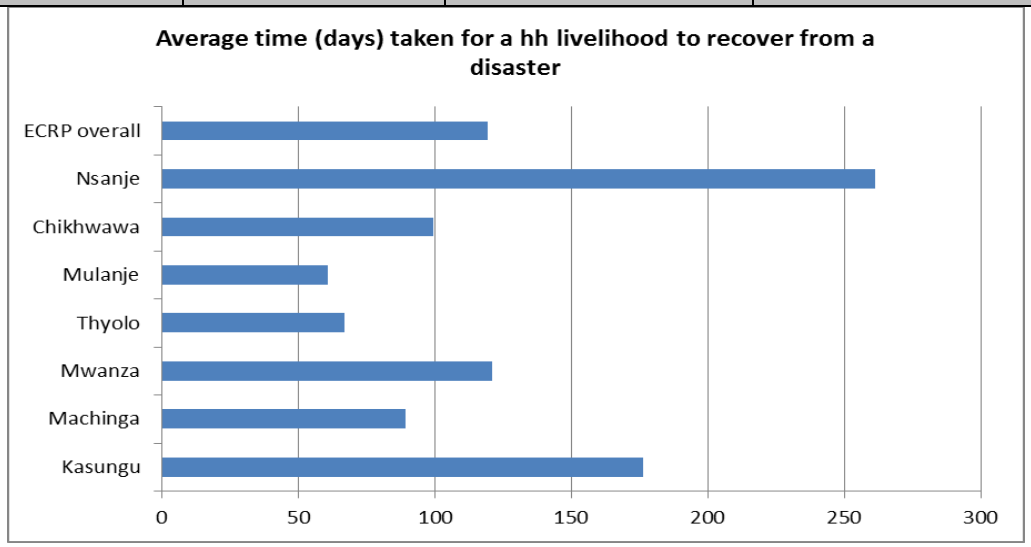
Across ECRP districts, 89% of respondent households indicated they experienced a climate related shock of some sort during the 12 month period preceding the survey i.e. May 2011/June 2012. The highest proportion of shock endured households were in Thyolo (95%) followed by Nsanje (90%) with the least being in Kasungu (52%) (see annex??). Key disasters experienced include floods, drought/dry spells, hail storms, earthquakes, crop pests including elegant grasshoppers, human disease outbreaks, wild bush fires, animal pests & diseases (see annex ??). These findings are consistent with findings of a PVA exercise carried out across ECRP districts in the year 2011 (see annex xxx).

Across ECRP districts, average recovery period from the time a disaster happened to when a household livelihood recovered fully has been found to be 120 days. Within districts, the results show longest average recovery period in Nsanje (261 days), followed by Kasungu (176 days), with the shortest recovery period found in Mulanje (60 days).

Table 10: Average length of time (days) taken from when the disaster happened to when a household livelihood recovered fully

District	Average (days)	Std. Dev.	Freq.
Kasungu	176	329.14	92
Machinga	89	138.06	73
Mwanza	121	158.37	79
Thyolo	67	100.58	168
Mulanje	61	57.86	112
Chikwawa	99	174.84	243
Nsanje	262	366.08	121
ECRP overall	120	218.84	888
Graphical presentation of the household full recovery period after a disaster happened			

District	Average (days)	Std. Dev.	Freq.



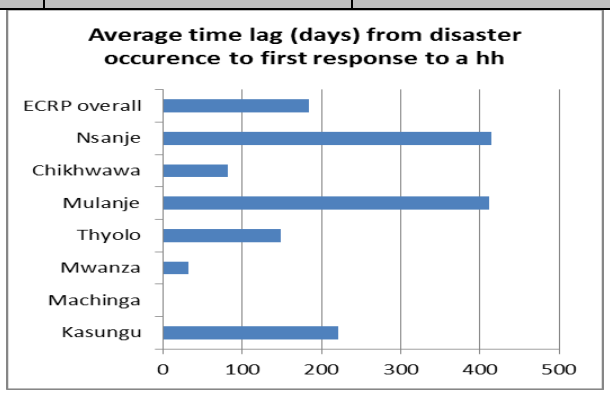
Across ECRP districts, findings also show an average time lag of 184 days between disaster occurrence to the first response to a household. Within districts, the longest average time lag has been reported in Nsanje (414 days i.e. 1 year and2 months), followed by Mulanje (412 days) with the shortest found in Machinga (1 day).

Table 11: Average time lag between disaster occurrences to when a household received first response

District	**Average (days)**	**Std. Dev.**	**Freq.**
Kasungu	221	411.96	92
Machinga	1	5.17	73
Mwanza	31	157.84	79
Thyolo	149	355.94	168
Mulanje	412	491.90	112
Chikwawa	82	267.80	243
Nsanje	414	492.02	121
ECRP overall	185	384.55	888

Graphical presentation of the average time lag (days) between disaster occurrence to when a household received first response

District	Average (days)	Std. Dev.	Freq.



Outcome indicator 3: % of beneficiaries using one or more of the following unsustainable (destructive / undesirable) coping mechanisms: Distress sales of household assets (e.g livestock, food, radio, bicycle), School drop out due to food shortages, Unsustainable charcoal burning, Skipping normal meal intake frequency, Ganyu (casual work) when one is supposed to work in their own field.

A coping strategy is considered unsustainable or destructive if it undermines a household's long term capacity or potential to earn a living[5]. Across ECRP districts, baseline survey results show that 62% of respondent households used at least one or more of these destructive coping strategies. The highest proportion has been recorded in Machinga (69%) and Chikwawa (68%), followed by Mwanza (62%) with the lowest in Thyolo (56%). A small proportion of respondent households (less than 1%) in Kasungu, Thyolo and Nsanje reported having exchanged sex for food or money as a coping mechanism (see annex ?? for details).

Table 12: Whether a household used at least one or more of the destructive coping strategies

District		Yes	No	Total
Kasungu	(n)	102	74	176
	(%)	58	42	100
Machinga	(n)	60	26	86
	(%)	70	30	100

[5] Scoones I. (1998) Sustainable Rural Livelihoods: A Framework for Analysis. IDS Working Paper 72.

District		Yes	No	Total
Mwanza	(n)	56	33	89
	(%)	63	37	100
Thyolo	(n)	99	77	176
	(%)	56	44	100
Mulanje	(n)	78	54	132
	(%)	59	41	100
Chikwawa	(n)	212	97	309
	(%)	69	31	100
Nsanje	(n)	79	54	133
	(%)	59	41	100
ECRP overall	(n)	686	415	1,101
	(%)	62	38	100

3.2.2. Preliminary analysis of drivers informing these baseline values

3.2.3 Proposed LFA target and milestones revisions, if any, in light of baseline values

3.3. Output level indicators

3.3.1. Baseline value found for the various output indicators

Output Indicator 1.1: number of communities (No. of HHs) that are aware of the causes and impacts of climate change and of the solutions for enhanced individual and community resilience to climate change (especially in relation to natural resources management, adaptation, livelihoods and disaster risk management)

ECRP considers that an increased awareness on causes and impacts of climate change as one of the key factors for communities to start taking action on climate change adaptation measures. Across ECRP districts, 87% of respondents indicated they had ever head of issues of climate change. The highest proportions were in Mulanje (98%) and Thyolo (98%) followed by Machinga (89%) with the lowest proportion found in Kasungu (81%).

In terms of effects/impacts of climate change, the highest proportion of respondents (73%) identified unfavorable rainfall conditions. This was followed by 54% of respondents that mentioned reduced crop yields (see table 13).

On solutions to address climate change, majority (46% of respondents) indicated planting/ conserving trees as a solution. The second highest proportion (31%) identified irrigation (see table 14).

Table 13: Whether respondents had ever heard of climate change prior to the survey

District		Yes	No	Total
Kasungu	(n)	143	33	176
	(%)	81	19	100
Machinga	(n)	77	9	86
	(%)	90	10	100
Mwanza	(n)	73	16	89
	(%)	82	18	100
Thyolo	(n)	172	4	176
	(%)	98	2	100
Mulanje	(n)	129	3	132
	(%)	98	2	100

District	Yes	No	Total
Chikwawa (n)	259	50	309
(%)	84	16	100
Nsanje (n)	113	20	133
(%)	85	15	100
ECRP overall (n)	966	135	1,101
(%)	88	12	100

Table 14: Proportion of (%) respondents in terms of their knowledge on effects of climate change

Knows about:	Kasungu	Machinga	Mwanza	Thyolo	Mulanje	Chikwawa	Nsanje	ECRP overall
rising temperature (n)	65	26	15	74	56	109	41	386
(%)	45	34	21	43	43	42	36	40
delayed/less rainfall (n)	107	62	61	106	84	217	70	707
(%)	75	81	84	62	65	84	62	73
more floods (n)	20	5	5	33	21	52	44	180
(%)	14	7	7	19	16	20	39	18
less yields (n)	54	36	40	107	82	154	55	528
(%)	38	47	55	62	64	59	49	55
more human disease & pets (n)	16	3	4	29	12	10	7	81
(%)	11	4	6	17	9	4	6	8
more livestock / crop diseases and pests (n)	6	2	1	31	7	3	4	54
(%)	4	3	1	18	5	1	4	6
poor soils (n)	29	7	7	39	34	19	6	141
(%)	20	9	10	23	26	7	5	15
high food prices (n)	8	7	7	37	24	9	6	98
(%)	6	9	10	22	17	4	5	10
Don't know about anything (n)	2	0	1	5	2	4	4	18
(%)	1	0	1	3	2	2	4	2
other effects (n)	6	4	3	6	3	5	2	29

Knows about:	Kasungu	Machinga	Mwanza	Thyolo	Mulanje	Chikwawa	Nsanje	ECRP overall
(%)	4	5	4	4	2	2	2	3

Table 15: What are the solutions to climate change?

	Kasungu	**Machinga**	**Mwanza**	**Thyolo**	**Mulanje**	**Chikwawa**	**Nsanje**	**ECRP overall**
diversify income sources (n)	15	4	2	40	33	17	8	119
(%)	10	5	3	23	26	7	7	12
diversify food sources and types (n)	14	3	1	47	35	14	1	115
(%)	10	4	1	27	27	5	1	12
diversify crops grown (n)	21	8	5	28	26	36	9	133
(%)	15	10	7	16	20	14	8	14
adopt irrigation (n)	39	23	17	65	55	59	46	304
(%)	27	30	23	38	43	23	41	32
save money (n)	4	1	0	4	7	0	1	17
(%)	3	1	0	2	5	0	1	2
have more assets (n)	1	1	0	6	6	2	0	16
(%)	1	1	0	4	5	1	0	2
use manure (n)	29	10	11	69	43	17	5	184
(%)	20	13	15	40	33	7	4	19
use conservation agriculture (n)	35	10	4	32	27	38	10	156
(%)	25	13	6	19	21	15	9	16
have more livestock (n)	3	1	0	2	3	4	3	16

	Kasungu	Machinga	Mwanza	Thyolo	Mulanje	Chikwawa	Nsanje	ECRP overall
(%)	2	1	0	1	2	2	3	2
plant / conserve trees (n)	77	36	30	71	58	132	44	448
(%)	54	47	41	41	45	51	39	46
do not burn charcoal (n)	14	8	1	7	10	12	3	55
(%)	10	10	1	4	8	5	3	6
adopt agro – forestry (n)	21	4	4	15	17	14	6	81
(%)	15	5	6	9	13	5	5	8
grow drought/flood tolerant crops/livestock (n)	13	16	2	38	17	26	14	126
(%)	9	21	3	22	13	10	12	13
good post-harvest management of crops (n)	1	3	1	14	5	0	0	24
(%)	1	4	1	8	4	0	0	3
use improved cook stoves (n)	0	0	0	0	0	1	0	1
(%)	0	0	0	0	0	0.4	0	0.10
harvest and store rainwater (n)	7	0	0	1	0	3	0	11
(%)	5	0	0	1	0	1	0	1
not aware of any action (n)	11	17	15	20	15	42	24	144
(%)	8	22	21	12	12	16	21	15
other ways (n)	13	2	15	21	9	9	5	74
(%)	9	3	21	12	7	4	4	8

	Kasungu	Machinga	Mwanza	Thyolo	Mulanje	Chikwawa	Nsanje	ECRP overall
Total (n)	318	147	108	480	366	426	179	2024
(%)	222	191	148	279	284	165	158	210
Cases	143	77	73	172	129	259	113	966

Output Indicator 1.2: Number of districts and GVHs with: preparedness plans; climate change adaptation plans; and functional EWS: (involving satellite mapping, mobile phone technology, river gauges

District level:

Consultations with district officials found out that only 3 districts (Nsanje, Machinga and Chikwawa??) out of the 7 districts targeted by ECRP have ever had District Preparedness Plans. The plans were developed with support from UNDP and expired in 2011. Kasungu was considering to develop a District Preparedness plan but was looking for support from her development partners. The consultations also found in absence of a coordinated system at the district level that is used as early warning.

Village level:

Consultations with communities found out that villages do not have any structured preparedness plans that guide work on disaster management. On early warning, there are some villages in Machinga, Chikwawa, Nsanje and Mwanza that use river gauges and mobile phones for early warning. However, district councils did not have a clear record of the number of villages that use this early warning system.

Output Indicator 1.3 (a): Number of districts with functional Civil Protection Committees (meet as per requirement, and have a costed contingency plan that is revised regularly)

Consultations with district officials found out that only 3 districts (Machinga, Chikwawa and Nsanje) out of the 7 targeted districts have District Civil Protection Committees (CPCs). However, these are not fully functional: they do not meet as per the requirements; sometimes they only meet when there is a disaster to deal with.

Output Indicator 1.3 (b): Number of GVH with functional Civil Protection Committees (meet as per requirement, and have a costed contingency plan that is revised regularly)

Existence of Village Civil Protection Committees (in some villages) was noted in Mulanje, Machinga, Thyolo, Chikwawa, Nsanje and Mwaza. Many of them were just being established and had not yet been trained on their roles. However, there were no clear records at district level on specific villages where CPCs are existing.

Finding of the survey show that across ECRP districts, only 10% of respondents reported knowing that there is a disaster preparedness plan in their respective districts.

Table 16: Is there a disaster preparedness plan in your village?

District	Yes	No	Do not know	Missing	Total
Kasungu (n)	9	76	7	84	176
(%)	5	43	4	48	100
Machinga (n)	2	69	2	13	86
(%)	2	80	2	15	100
Mwanza (n)	16	62	1	10	89
(%)	18	70	1	11	100
Thyolo (n)	21	131	16	8	176
(%)	12	74	9	5	100
Mulanje (n)	26	80	6	20	132
(%)	20	61	5	15	100
Chikwawa (n)	28	200	15	66	309
(%)	9	65	5	21	100
Nsanje (n)	11	105	6	11	133
(%)	8	79	5	8	100
Total (n)	113	723	53	212	1,101
(%)	10	66	5	19	100

Output indicator 1.4: Number of communities (GVHs) and % of households with access to seasonal and short term climate forecasts

Improved access to short term and seasonal weather forecasts would help households properly plan their agricultural activities and livelihoods options. Baseline survey results show that the highest proportion of respondents (64%) received food security early warning from MVAC followed by 59% of the respondents that received daily weather forecast (see table 17).

Table 17: Proportion (%) of respondents that received climate information during the 12 month period preceding the baseline survey (June 2011 – May 2012)

	Kasungu	Machinga	Mwanza	Thyolo	Mulanje	Chikwawa	Nsanje	ECRP overall
received daily weather forecast (n)	96	42	26	98	69	168	78	577
(%)	67	55	36	57	54	65	69	60
received a 5-day weather forecast (n)	61	18	14	66	51	65	34	309
(%)	43	23	19	38	40	25	30	32
received 10-day agro-meteorological bulletin (n)	57	18	15	60	49	63	31	293
(%)	40	23	21	35	38	24	27	30
received a seasonal weather forecast (n)	67	26	23	97	74	106	42	435
(%)	47	34	32	56	57	41	37	45
received a mwera winds	77	33	33	118	88	114	57	520

	Kasungu	Machinga	Mwanza	Thyolo	Mulanje	Chikwawa	Nsanje	ECRP overall
forecast for lakeshore areas (n)								
(%)	54	43	45	69	68	44	50	54
received a tropical cyclone warning (n)	82	38	31	124	88	118	55	536
(%)	57	49	42	72	68	46	49	56
received a food insecurity warning issued by MVAC (n)	84	41	49	145	95	139	66	619
(%)	59	53	67	84	74	54	58	64
received other information (n)	16	0	7	4	6	3	2	38
(%)	11	0	10	2	5	1	2	4
Total (n)	540	216	198	712	520	776	365	3327
(%)	377	280	271	413	403	300	323	344
Cases	143	77	73	172	129	259	113	966

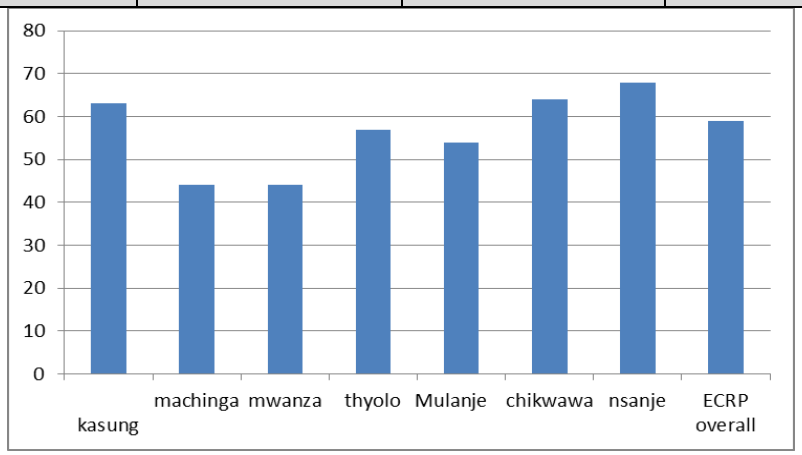
Output Indicator 2.1: number of HHs (No. of people) using a combination of at least two climate smart agriculture techniques per growing season: Conservation agriculture techniques, Irrigation, agro-forestry, drought tolerant crop variety and type of crops, post harvest management practice, watershed management, water harvesting

Across ECRP districts, survey findings show 58% of respondent households use at least two of the above listed climate smart agriculture techniques. Within districts, the highest proportion was found in Nsanje district (67% of respondent households) with the least being in Mwanza (43%).

Table 18: whether a household uses at least two climate smart agriculture techniques

	Yes	No	Total
Kasungu (n)	111	65	176
(%)	63	37	100
Machinga (n)	38	48	86
(%)	44	56	100
Mwanza (n)	39	50	89
(%)	44	56	100
Thyolo (n)	100	76	176
(%)	57	43	100
Mulanje (n)	71	61	132
(%)	54	46	100
Chikwawa (n)	196	113	309
(%)	64	37	100
Nsanje (n)	90	43	133
(%)	68	32	100
ECRP overall (n)	645	456	1,101
(%)	59	41	100
Graphical presentation of the proportion (%) of households that use at least two climate smart agriculture techniques			

	Yes	No	Total



Output Indicator 2.2: Number of HHs (Number of people) adopting low carbon energy techniques including: solar, cook stoves and afforestation

Across ECRP districts, less than 1% of respondent households reported using improved charcoal burner or Chitetezo mbaula; 2% reported using solar powered products for lighting; 12% use own woodlots as a source of energy for cooking.

Table 19: Main type of stove used for cooking

District	Parafin	Chitetezo mbaula	Mud stove	Tradition three-stone	Stove (tripod)	Charcoal burner (mbaula)	Improved charcoal burner	Other	ECRP overall
Kasungu (n)	3	5	8	153	1	4	0	2	176
(%)	2	3	5	87	1	2	0	1	101
Machinga (n)	0	0	0	85	1	0	0	0	86
(%)	0	0	0	99	1	0	0	0	100
Mwanza (n)	0	0	0	87	0	2	0	0	89
(%)	0	0	0	98	0	2	0	0	100

District	Parafin	Chitetezo mbaula	Mud stove	Tradition three-stone	Stove (tripod)	Charcoal burner (mbaula)	Improved charcoal burner	Other	ECRP overall
Thyolo (n)	0	0	5	171	0	0	0	0	176
(%)	0	0	3	97	0	0	0	0	100
Mulanje (n)	1	0	0	130	0	0	1	0	132
(%)	1	0	0	98	0	0	1	0	100
Chikwawa (n)	0	0	0	296	0	13	0	0	309
(%)	0	0	0	96	0	4	0	0	100
Nsanje (n)	0	0	1	129	0	3	0	0	133
(%)	0	0	1	97	0	2	0	0	100
Total (n)	4	5	14	1,051	2	22	1	2	1,101
(%)	0.4	1	1	96	0.2	2	0.1	0.2	100

Table 20: Main source of energy used for lighting

District	**Parafin**	**Solar**	**Torch**	**Tsekela (grass)**	**Candles**	**Electricity**	**Other**	**Total**
Kasungu (n)	17	11	119	21	6	0	2	176
(%)	10	6	68	12	3	0	1	100
Machinga (n)	5	0	62	15	0	1	3	86
(%)	6	0	72	17	0	1	4	100
Mwanza (n)	14	0	59	6	1	0	9	89
	16	0	66	7	1	0	10	100
Thyolo (n)	53	1	87	32	0	0	3	176
(%)	30	1	49	18	0	0	2	100
Mulanje (n)	87	2	37	3	0	0	3	132

District	Parafin	Solar	Torch	Tsekela (grass)	Candles	Electricity	Other	Total
(%)	66	2	28	2	0	0	2	100
Chikwawa (n)	25	10	218	33	11	1	11	309
(%)	8	3	71	11	4	0.3	4	100
Nsanje (n)	25	0	82	20	4	1	1	133
(%)	19	0	62	15	3	1	1	100
ECRP overall (n)	226	24	664	130	22	3	32	1,101
(%)	21	2	60	12	2	0.3	3	100

Table 21: What is your main source of firewood if you use firewood for cooking?

District	Own woodlot	Community woodlot	Village/communal natural forest area	Uncontrolled communal forest	Garden	Govt. Forest	Buying	Others	Total
Kasungu (n)	29	5	100	23	12	3	2	0	174
(%)	17	3	58	13	7	2	1	0	100
Machinga (n)	11	1	39	30	1	2	1	0	85
(%)	13	1	46	35	1	2	1	0	100
Mwanza (n)	2	0	69	12	1	1	1	0	86
(%)	2	0	80	14	1	1	1	0	100
Thyolo (n)	29	10	66	29	16	22	2	2	176
(%)	17	6	38	16	9	13	1	1	100
Mulanje (n)	52	9	18	10	19	1	12	11	132
(%)	39	7	14	8	14	1	9	8	100
Chikwawa (n)	13	1	135	114	16	4	15	1	299
(%)	4	0.3	45	38	5	1	5	0.3	100
Nsanje (n)	3	1	75	42	0	0	8	0	129

District	Own woodlot	Community woodlot	Village/communal natural forest area	Uncontrolled communal forest	Garden	Govt. Forest	Buying	Others	Total
	2	1	58	33	0	0	6	0	100
ECRP overall (n)	139	27	502	260	65	33	41	14	1,081
(%)	13	3	46	24	6	3	4	1	100

Output Indicator 2.3: Number of participants (disaggregated by gender) and number of groups) covered by Village Savings and Loan Schemes

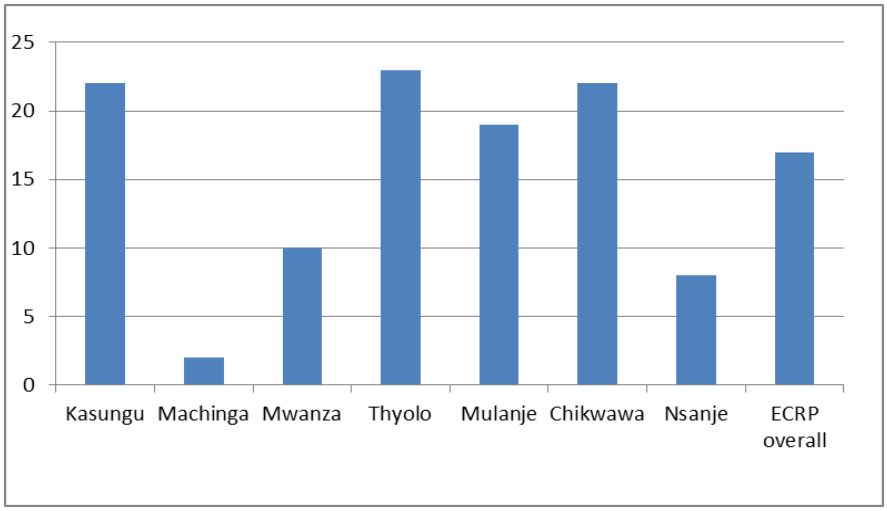
VSL is a community-managed microfinance initiative where communities mobilise savings from amongst themselves and lend to each other at an agreed interest rate. Across ECRP districts, survey findings show that 17% of the respondent households reported having at least one of the household members being a member of a VSL group in their community. Within districts, the highest proportion of respondents with household members as members of VSL groups was reported in Thyolo (22% of respondents), Kasungu (21%) and Chikwawa (21%). The lowest proportion was reported in Machinga (2% of respondent households) (see table 22).

Table 22: Is there any member of the hh that belongs to a VSL?

District	Yes	no	Do not know	Total
Kasungu (n)	38	132	6	176
(%)	22	75	3	100
Machinga (n)	2	83	1	86
(%)	2	97	1	100
Mwanza (n)	9	80	0	89
(%)	10	90	0	100
Thyolo (n)	40	127	9	176
(%)	23	72	5	100
Mulanje (n)	25	103	4	132
(%)	19	78	3	100
Chikwawa (n)	67	238	4	309
(%)	22	77	1	100

District	Yes	no	Do not know	Total
Nsanje (n)	11	122	0	133
(%)	8	92	0	100
ECRP overall (n)	192	885	24	1,101
(%)	17	80	2	89

Graphical presentation of proportion (%) of respondents with members in VSL groups



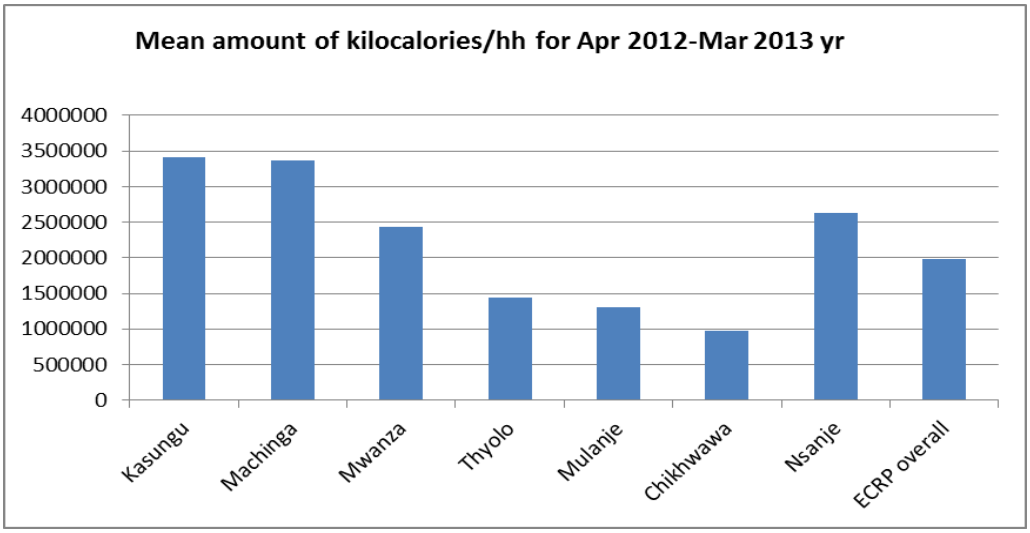
Output Indicator 2.4: Percentage increase in total annual energy/staple food crop production by targeted households

The baseline exercise assessed the amount of energy/staple foods produced by respondent households. Among other foods, the assessment focused on maize, sorghum, millet, rice, cassava, sweet potatoes, rish potatoes, bananas. Across ECRP districts, survey results show that average amount of kilocalories produced by a household for the April 2012/March 2013 consumption year was 1 983 171 kilocalories. Kasungu had the highest average amount of kilocalories/household/year (3415 085 kilocalories), followed by Machinga (336 6419 kilocalories). Mulanje had the lowest average amount of kilocalories per household per year (131, 0531 kilocalories). An average adult person requires 2100kilocaries/day for a health and active life.

Table 23: Average amount of kilocalories per household per year produced for the April 2012/March 2013 consumption year

District	Average kilocalories/hh/year	Std. Dev.	Freq.
Kasungu	3, 415, 086	10, 447, 664	176
Machinga	3, 366, 419	10, 349, 996	86
Mwanza	2, 427, 679	7, 928, 301	89
Thyolo	1, 434, 051	5, 742, 817	176
Mulanje	1, 310, 531	5, 925, 051	132
Chikwawa	976, 427	2, 844, 731	309
Nsanje	2, 629, 641	8, 730, 773	133
ECRP overall	1, 983, 171	7, 241, 807	1101

Graphical presentation of the average amount of kilocalories produced by a household for the April 2012/Mar 2013 consumption year



Output Indicator 3.1: Number and type of information products produced by ECRP through CEPA (on DRM and CC) at national, district and community level as part of the advocacy strategy

Production of materials (coordinated by CEPA) for purposes of advocacy, information sharing, awareness raising on climate change form one of the core interventions for ECRP and DISCOVER. At the time of the assessment (July/August 2012), drafts of the first policy brief on climate change was in circulation for commenting. Apart from this, no other material had been fully produced by ECRP and DISCOVER.

Output Indicator 3.2: Number and type of multi-stakeholder platforms on DRM, DRR and CC at national and district level that ECRP engages with at national and district level

ECRP commits to engaging with multi-stakeholder platforms on DRM, DRR and CC at both national and district level for purposes of policy influencing and sharing best practice. National level engagements will largely be coordinated by CEPA while district level engagements will be coordinated by ECRP implementing partners with technical support from CEPA. At the time of the assessment, noticeable engagements were only at national level through CEPA's participation in CISONECC forums. Coordinated district level engagements had not yet started.

Output Indicator 5.1 (a): Number of National level climate change adaptation related policies, strategic plans and programmes that have been influenced or contributed to by the programme and its innovations.

It is the intention of both ECRP and DISCOVER to ensure that benefits from the various climate change adaptation measures promoted by these two consortia is felt beyond the current targeted districts and life of the project. Using the lessons, experiences and best practice from these projects, both ECRP and DISCOVER (through and with CEPA) will undertake various advocacy initiatives aimed at ensuring relevance of national policies, strategic plans and programmes in the face of climate change. At the time of the baseline assessment, ECRP and DISCOVER (through CEPA) had been engaging in the national level processes on developing a National Climate Change Policy.

Output Indicator 5.1 (b): Number of Districts with DDPs that take into account priorities from District Contingency Plans

District Development Plans (DDPs) are the medium term instruments that guide overall planning and budget allocation for development work at district level. Consultations with district officials carried out in August 2012 found out the following:

a) no single district targeted by ECRP has a DDP that has taken into account priorities from District Contingency Plans.
b) all of the 7 districts do not have updated or current District Contingency Plans.

c) Machinga and Nsanje had district contingency plans that expired in 2011; in Chikwawa, it expired in 2009.
d) Kasungu had plans to develop a District Preparedness Plan in 2012 but was looking for financial and technical support from its development partners.

Output Indicator 5.2 (a): % of national budgetary resources allocated for CC and DRM sectors (including NCCP)

ECRP aims to see increased allocation of national budgetary resources on climate change and disaster risk management sectors to at least 2%. A national budget analysis exercise (of the 2012/2013 national budget) carried out by CEPA in June 2012 established that less than 1% of the national budgetary resources had been allocated to climate change and DRM sectors.

Output Indicator 5.2 (b): % of district budgetary resources allocated for CC and DRM projects / activities in ECRP targeted districts

Consultations with district council officials carried out in August 2012 established that:

- Only Kasungu district had separate allocation of resources for disaster risk management in the 2012/2013 budget year. However, the level of this allocation in comparison to the annual district budget was not shared. This was the first time for Kasungu to have a separate allocation for disaster risk management.

- All districts had some activities related to climate change funded from the district budget. However, this is not consciously done as a climate change or DRM allocation but rather as a normal environmental management issue. Common activities across the districts were afforestation projects.

Output Indicator 5.3: Number of ECRP targeted districts with Assistant District Disaster Risk Management Officers (ADDRMOs)

Consultations with district council officials carried out in August 2012 established that:

- Only three districts (Machinga, Chikwawa and Nsanje) have ADDRMOs.

- In other 5 districts (Kasungu, Mwanza, Mulanje and Thyolo); climate change and DRM issues are coordinated by District Environmental Officers (DEOs) in addition to their normal responsibilities.

3.3.2. Preliminary analysis of drivers informing these baseline values

3.3.3. Proposed LFA target and milestones revisions, if any, in light of baseline values

4. Unexpected findings

4.1. Discussion of surprising findings from the baseline exercise

The following findings emerged very surprising to the programme:

Description of the finding	Remarks
Proportion of households living on less than USD1/day.	Survey results show 95% of households with 99% in Thyolo. These statistics are higher than expected.
Proportion of food insecure households	Survey results show 83% of households with the highest found in Mulanje (92%). These are higher than expected.
Existence of elegant grasshoppers in Thyolo, Chikwawa, Nsanje and Mwanza that seriously attack crops (cassava and other legumes)	Discussions with communities in all these districts found out that the problem of elegant grasshoppers is increasing from time to time; communities have given up any hope for a solution. This problem also came out during PVA exercise, however, it was not given the emphasis that it deserves in coming out with priorities for ECRP.
Average livestock units owned by households	Results show Kasungu having the highest average livestock unit per household (1.44). We expected Chikwawa and Nsanje to be on the higher side.
Functionality of disaster risk management structures (DCPCs, CPCs etc)	Whilst elements of these structures do exist in some districts such as Mulanje, Thyolo, Chikwawa and Nsanje, there is no sufficient documentation and knowledge in district councils to ascertain existence of these structures.
Access to weather forecast information	Proportion of respondents accessing some weather forecasts is higher than expected. However, discussion with communities revealed that despite them receiving this information, largely through the radio, they do not really use the information.

4.2. The potential implications of these findings (in substantive and/or methodological terms)

(this section awaits internal discussion of the findings)

5. Discussion of potential avenues for adjustment to IP workplan in light of findings from baseline in order to help ensure effective programme delivery and result achievement

(this section awaits internal discussion of the findings)

6. Preliminary Lessons learned

6.1. Preliminary lessons learned for future IP work planning under ECRP

6.2. Preliminary lessons learned on the M&E practice

6.2.1. With respect to the baseline exercise (both HH and non HH survey indicators)

- Where there are more than one parties involved in carrying out assessments, there is need to have a shared understanding of the whole methodology to be used in assessments. This would help objective allocation of resources both financial and time. A key element of the current survey (use of enumeration areas) lacked this shared knowledge.

6.2.2. To inform future M&E activities

- Where possible, there is need to avoid composite indicators in the logframe as they are not easy to analyze.

7. Draft recommendations for potential further analysis of baseline data to help better guide future programming, if any.

Our level of analysis and structure of the survey has not allowed detailed examination of the drivers of the baseline values. It is recommended to LTS to do further analysis of the data to fill this gap.

Annexes:

(some of these will be provided in next drafts)

a. Revised LFA including all baseline values, and updated milestones and target
b. List of all villages and TAs sampled for HH survey
c. Other annexes, as relevant