Participatory Vulnerability Assessment (PVA) Consolidated Report

Enhancing Community Resilience Programme (ECRP)

A consortium of Christian Aid, CARE International and Action Aid

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Participatory Vulnerability Assessment (PVA) Consolidated Report

1.1. Introduction

This is a consolidated analysis report of the PVAs carried out by ECRP in December 2011. A total of 42 PVA exercises were carried out covering 55 villages from 40 Group Village Heads (GVHs). Eleven of these PVAs combined two villages each. The GVHs are from 25 targeted TAs and 7 districts (see annex for details). Selection of villages where PVAs were carried out was done by a purposeful sampling process. In this case, a criteria was developed that guided the selection process. The criteria included the extent to which the villages experience various hazards such as dry spells, droughts and flooding; size of the village in terms of population and existence of interventions previously related to DRR and climate change by other stakeholders. Over 1500 people participated in the PVAs across all villages that were covered. Table 1 shows distribution of villages where PVAs where carried out.

Table 1: Distribution of villages where PVAs were carried out

Geographical focus	Number of villages where PVAs were carried out
Thyolo	6
Nsanje	5
Mwanza	4
Kasungu	8
Machinga	4
Chikwawa	10
Mulanje	5
ECRP overall	42

1.2. Data analysis

Data analysis was done by a multi-stage process. Firstly, the qualitative data was analysed by content analysis. This involved reading and reading the data to come up with categories. These categories were then transcribed. Secondly, the transcribed data was entered onto an excel software for further analysis. In many cases, level of analysis was at district and ERCP overall levels.

1.3. Limitations of the analysis and findings

The tool used in the PVA exercises collected data that was more qualitative in nature. During content analysis, some parameters could, therefore, not easily be categorized to allow for quantitative analysis and comparison across geographical areas. The sample of villages per traditional authority (TA) was also not large enough to allow for generalisation of the findings. In some TAs, the PVA exercises covered 2 villages only.

In other cases, there were variations in the application of the concept of 'hazard' by some partners. For example, while as some partners regarded a drought as hazard others thought this is not. Likewise, other partners regarded hunger as hazard.

2.0. Key findings

2.1. Key hazards experienced by the villages consulted

Findings from the PVAs show that villages that were consulted have experienced a variety of hazards. These hazards fell into the categories listed below:

- dry spells and droughts.
- floods, wash aways and heavy rains.
- strong wings or hailstorms.
- outbreak of crop pests and diseases.
- outbreak of animal diseases and pests.
- Human diseases that include HIV and AIDS, cholera and Malaria.
- Wild animals such as elephants, crocodiles and hippos that either attack crops or human beings.

Table 2 below shows proportions of villages in terms of how they have experienced the various hazards

Table 2: Proportion (%) of villages experiencing a particular hazard

	% of villages that identified the hazard as having been experienced						
	Dry spells/drought	Floods / heavy rains	Strong wings / hailstorms	Crop pests / diseases	Animal diseases / pests	Human diseases (HIV/AIDS, cholera and Malaria	Wild animals (elephants, crocodiles and hippos)
ECRP overall	100	52	67	21	14	60	7
Thyolo	100	33	100	50	0	0	0
Nsanje	100	100	80	20	0	100	0
Mwanza	100	0	0	25	25	100	0
Kasungu	100	0	0	0	0	100	0
Machinga	100	100	100	0	0	25	0
Chikwawa	100	47	67	22	16	56	8
Mulanje	100	47	67	22	16	56	8

- Results show that dry spell/droughts, floods, hailstorms, and human diseases are the four key common hazards across ECRP targeted villages. Over 50% of all villages consulted identified these as key hazards.
- Dry spell and droughts is the most common hazard across ECRP geographical area. All villages (100%) identified it as a key hazard.
- Results also suggest that floods and hailstorm are not key hazards for Kasungu and Mwanza. None of the villages consulted identified it as a key hazard.
- Wild animals (elephants, crocodiles and hippos) are a key hazard for Chikwawa and Mulanje. Eight percent (8%) of the villages consulted identified it as a hazard.
- Except for Thyolo, all districts identified human diseases (HIV/AIDS, cholera and Malaria) as another key hazard.

2.2. Ranking of hazards

Villages prioritised the hazards and ranked them in order of importance. The ranking was in consideration of how the hazards affect their livelihood. Table 3 presents results of this ranking exercise across ECRP and in each district.

Table 3: Ranking of hazards

% of villages ranking it:	drought	floods	Strong winds / hailstorms	Crop pests/ diseases	Animal diseases	Human diseases	Wild animals
				ECRP overall			
No. 1	67	12	10	0	2	5	2
No. 2	22	22	29	0	0	27	0
No. 3	13	10	15	10	3	13	3
No. 4	0	5	10	3	0	13	0
No. 5	0	0	3	8	3	5	3
No. 6	0	0	0	0	5	0	0
				Thyolo			
No. 1	100	0	0	0	0	0	0
No. 2	0	0	100	0	0	0	0
No. 3	0	33	0	33	0	0	0
No. 4	0	0	0	17	0	0	0
No. 5	0	0	0	0	0	0	0
No. 6	0	0	0	0	0	0	0
				Nsanje			
No. 1	60	40	0	0	0	0	0
No. 2	40	40	0	0	0	20	0
No. 3	0	20	20	0	0	40	0
No. 4	0	0	60	0	0	20	0
No. 5	0	0	0	20	0	0	0
No. 6	0	0	0	0	0	0	0
				Mwanza			
No. 1	50	0	0	0	0	50	0
No. 2	50	0	0	0	0	50	0
No. 3	0	0	0	25	25	0	0
No. 4	0	0	0	0	0	0	0
No. 5	0	0	0	0	0	0	0
No. 6	0	0	0	0	0	0	0
				Kasungu			
No. 1	88	0	0	0	0	0	0
No. 2	0	0	0	0	0	100	0
No. 3	13	0	0	0	0	0	0
No. 4	0	0	0	0	0	0	0
No. 5	0	0	0	0	0	0	0
No. 6	0	0	0	0	0	0	0
				Machinga			
No. 1	0	0	100	0	0	0	0
No. 2	50	50	0	0	0	0	0
No. 3	50	50	0	0	0	0	0
No. 4	0	0	0	0	0	25	0

% of villages ranking it:	drought	floods	Strong winds / hailstorms	Crop pests/ diseases	Animal diseases	Human diseases	Wild animals
No. 5	0	0	0	0	0	0	0
No. 6	0	0	0	0	0	0	0
				Chikwawa			
No. 1	70	10	0	0	10	0	10
No. 2	30	50	20	0	0	0	0
No. 3	0	0	50	10	0	30	10
No. 4	0	20	10	10	0	30	0
No. 5	0	0	10	20	10	20	10
No. 6	0	0	0	0	20	0	0
				Mulanje			
No. 1	60	40	0	0	0	0	0
No. 2	0	0	100	0	0	0	0
No. 3	40	0	0	0	0	0	0
No. 4	0	0	0	0	0	0	0
No. 5	0	0	0	0	0	0	0
No. 6	0	0	0	0	0	0	0

Overall, majority (67%) of all villages consulted ranked dry spells and droughts as number 1 hazard across ECRP.

2.3. Trend analysis of the hazards

Villages consulted assessed the various hazards in terms of whether a particular has increased, decreased or remained the same over the past years. Table 4 present results of this assessment.

Table 4: Proportion (%) of villages in terms of trend of hazards

% of villages indicating has:	drought	Floods	Strong winds / hailstorms	Crop pests/ diseases	Animal diseases	Human diseases	Wild animals
				ECRP overall			
Increased	98	38	50	10	5	38	5
Remained the same	0	7	17	10	7	12	2
decreased	2	5	0	2	0	12	0
				Thyolo			
Increased	100	33	100	50	0	0	0
Remained the same	0	0	0	0	0	0	0
Decreased	0	0	0	0	0	0	0
				Nsanje			
Increased	100	100	40	0	0	80	0
Remained the same	0	0	40	20	0	0	0
Decreased	0	0	0	0	0	20	0
				Mwanza			
Increased	100	0	0	25	25	100	0

% of villages indicating has:	drought	Floods	Strong winds / hailstorms	Crop pests/ diseases	Animal diseases	Human diseases	Wild animals
Remained the same	0	0	0	0	0	0	0
Decreased	0	0	0	0	0	0	0
				Kasungu			
Increased	88	0	0	0	0	75	0
Remained the same	0	0	0	0	0	0	0
Decreased	13	0	0	0	0	25	0
				Machinga			
Increased	100	100	100	0	0	25	0
Remained the same	0	0	0	0	0	0	0
Decreased	0	0	0	0	0	0	0
				Chikwawa			
Increased	100	30	40	0	10	10	20
Remained the same	0	30	50	30	30	50	10
Decreased	0	20	0	10	0	20	0
				Mulanje			
Increased	100	40	100	0	0	0	0
Remained the same	0	0	0	0	0	0	0
Decreased	0	0	0	0	0	0	0

2.4. Early Warning Information on the hazards

The communities discussed and assessed types of early warning information received on various hazards. Table 5 present results from this assessment

Table 5: Proportion (%) of villages in terms of access to early warning information on hazards

% of villages with access to:	**Drought**	**floods**	**Strong winds / hailstorms**	**Crop pests/ diseases**	**Animal diseases**	**Human diseases**	**Wild animals**
				ECRP overall			
Weather forecast / information	64	14	0	0	0	24	0
Indigenous information	7	10	7	0	0	0	0
Both weather forecast / information and indigenous information	14	5	2	0	0	0	0
No access to any information	14	71	90	100	100	76	100
				Thyolo			
Weather forecast / information	100	0	0	0	0	0	0
Indigenous information	0	0	0	0	0	0	0
Both weather forecast / information and indigenous information	0	0	0	0	0	0	0

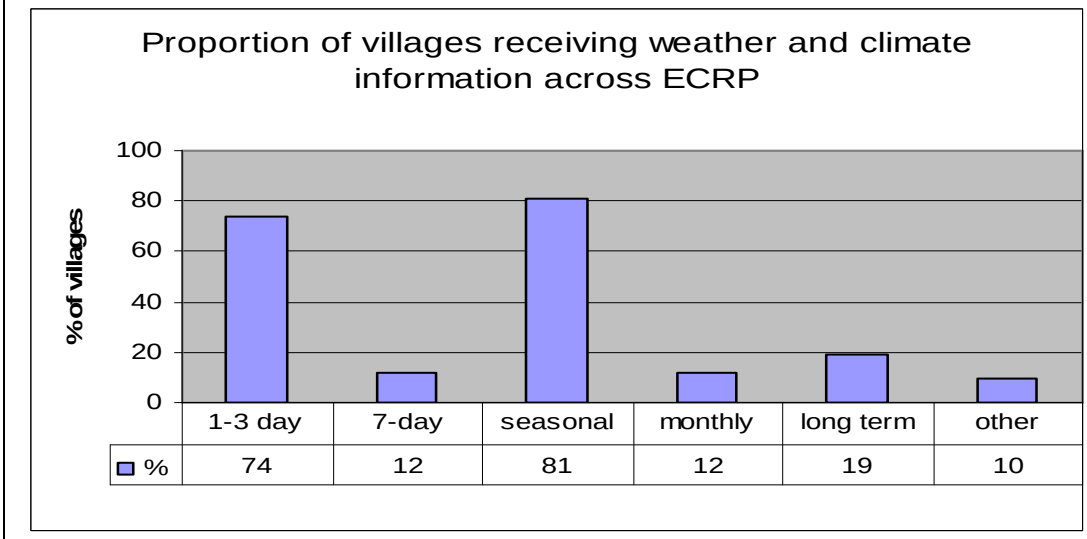
% of villages with access to:	Drought	floods	Strong winds / hailstorms	Crop pests/ diseases	Animal diseases	Human diseases	Wild animals
No access to any information	0	100	100	100	100	100	100
				Nsanje			
Weather forecast / information	80	40	0	0	0	20	0
Indigenous information	0	20	0	0	0	0	0
Both weather forecast / information and indigenous information	20	20	0	0	0	0	0
No access to any information	0	0	0	0	0	0	0
				Mwanza			
Weather forecast / information	100	0	0	0	0	75	0
Indigenous information	0	0	0	0	0	0	0
Both weather forecast / information and indigenous information	0	0	0	0	0	0	0
No access to any information	0	100	100	100	100	25	100
				Kasungu			
Weather forecast / information	50	0	0	0	0	38	0
Indigenous information	13	0	0	0	0	0	0
Both weather forecast / information and indigenous information	38	0	0	0	0	0	0
No access to any information	0	100	100	100	100	63	100
				Machinga			
Weather forecast / information	0	25	0	0	0	0	0
Indigenous information	0	50	33	0	0	0	0
Both weather forecast / information and indigenous information	0	0	0	0	0	0	0
No access to any information	100	25	67	100	100	100	100
				Chikwawa			
Weather forecast / information	70	30	0	0	0	30	0
Indigenous information	0	10	10	0	0	0	0
Both weather forecast / information and indigenous information	20	10	10	0	0	0	0
No access to any information	10	50	80	100	100	70	100
				Mulanje			
Weather forecast / information	40	0	0	0	0	0	0
Indigenous information	40	0	20	0	0	0	0

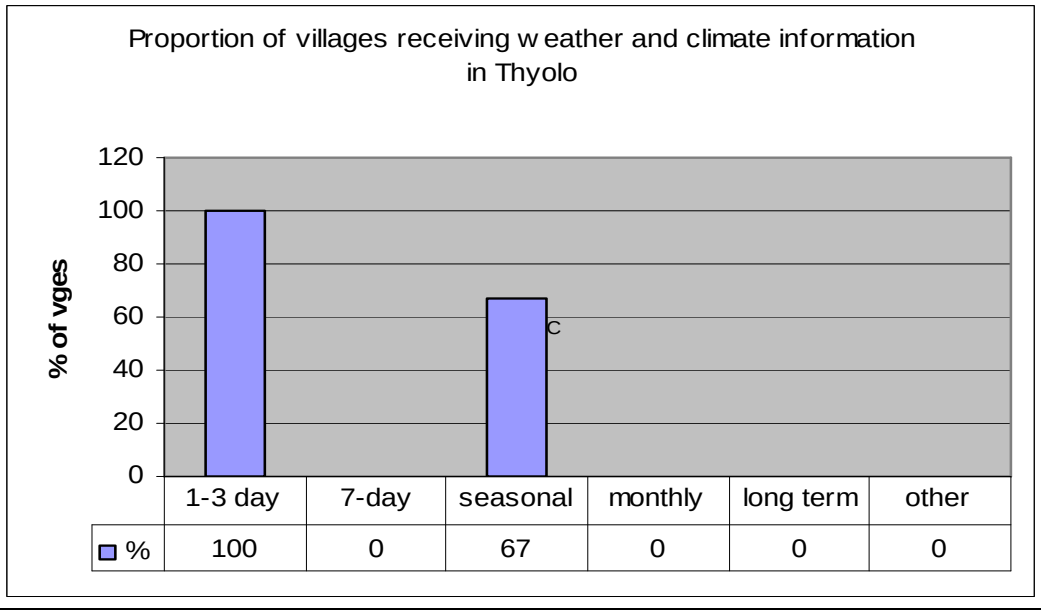
% of villages with access to:	Drought	floods	Strong winds / hailstorms	Crop pests/ diseases	Animal diseases	Human diseases	Wild animals
Both weather forecast / information and indigenous information	0	0	0	0	0	0	0
No access to any information	20	100	80	100	100	100	100

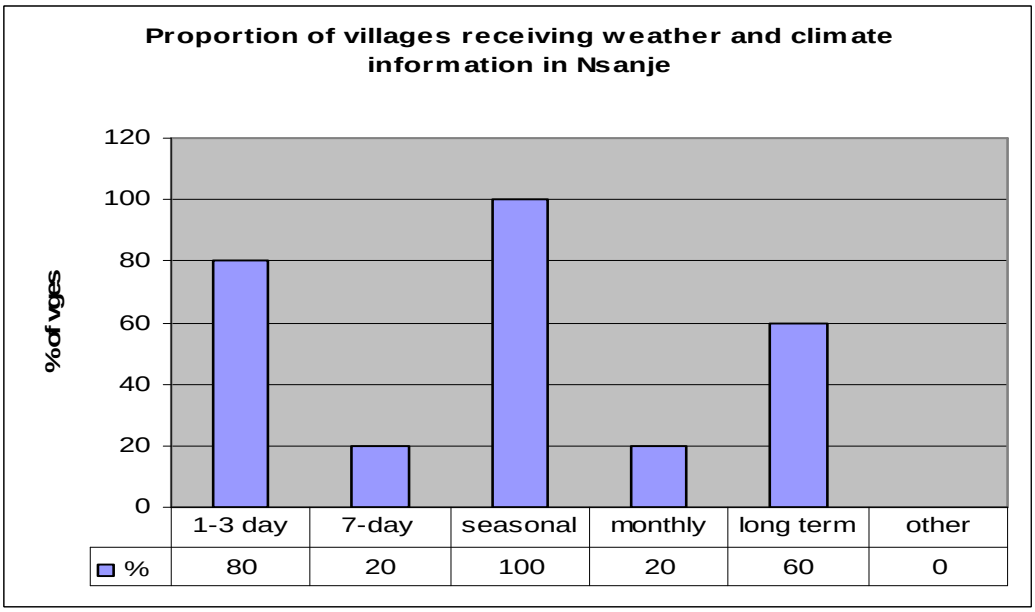
2.5. Weather and climate information received on hazards

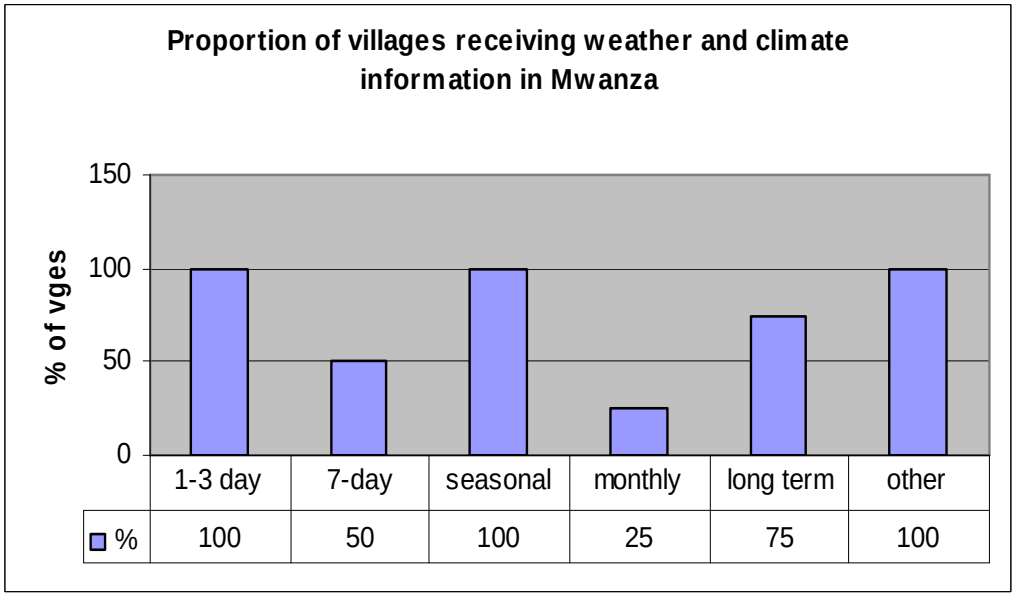
Results from the PVAs show that 1-3 day forecast, 7 days forecast and seasonal forecasts are the types of information by various villages. Information is received through radio, TV or agriculture extension staff. Figure 1 presents these findings.

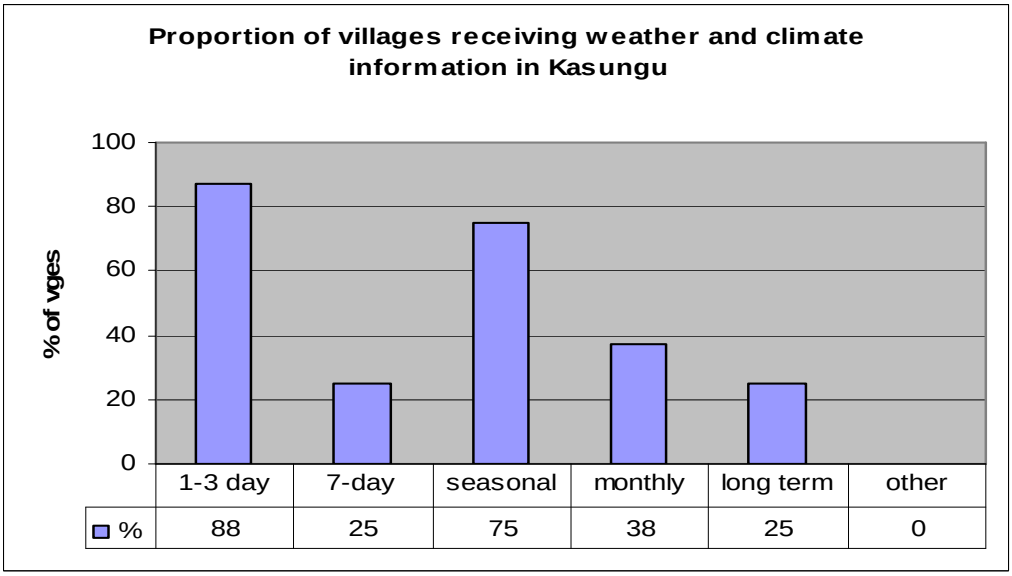
Figure 1: Weather and climate information received across ECRP and districts

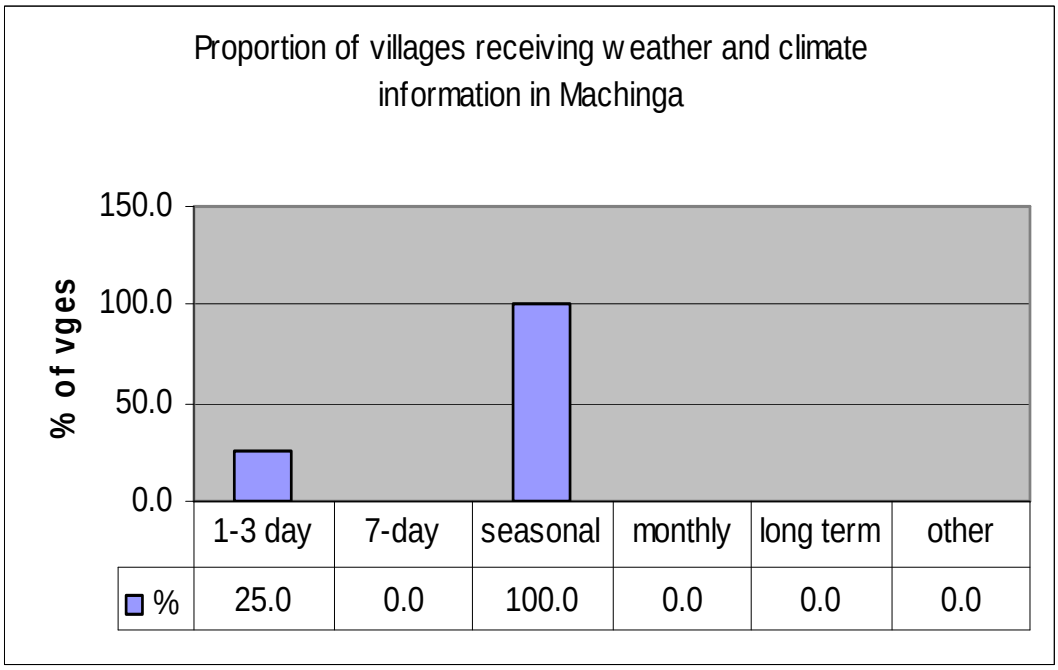


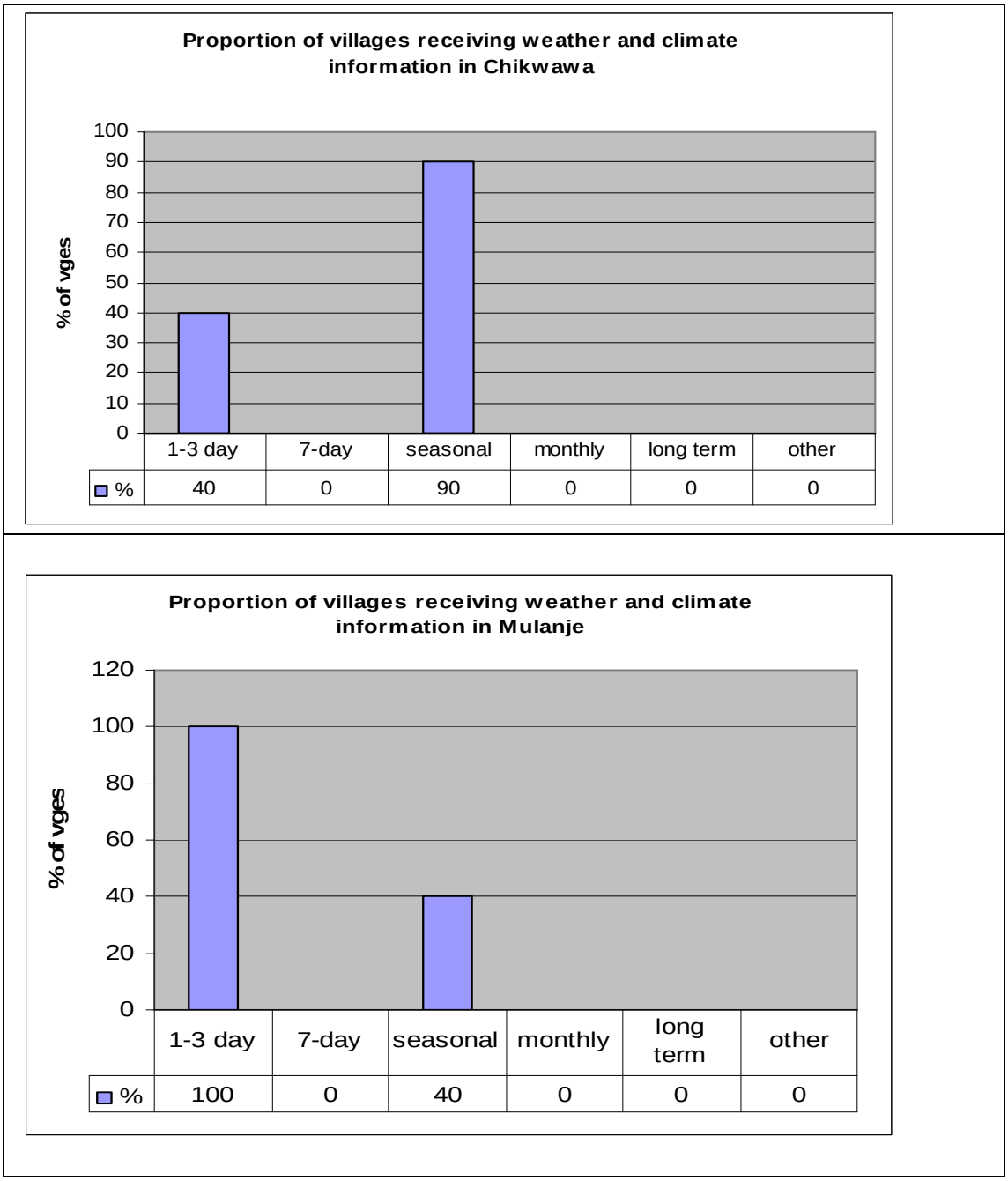



Proportion of villages receiving weather and climate information in Nsanje
% of vges
120
100
80
60
40
20
0
1-3 day
7-day
seasonal
monthly
long term
other
%
80
20
100
20
60
0


Proportion of villages receiving weather and climate information in Mwanza
% of vges
150
100
50
0
1-3 day
7-day
seasonal
monthly
long term
other
%
100
50
100
25
75
100


Proportion of villages receiving weather and climate information in Kasungu
% of vges
100
80
60
40
20
0
1-3 day
7-day
seasonal
monthly
long term
other
%
88
25
75
38
25
0


Proportion of villages receiving weather and climate information in Machinga
% of vges
150.0
100.0
50.0
0.0
1-3 day
7-day
seasonal
monthly
long term
other
%
25.0
0.0
100.0
0.0
0.0
0.0



2.6. Livelihood strategies for the different categories of people

The key livelihood strategies identified by communities included farming / irrigation, IGAs / businesses, remittances or support from relatives, casual work or food for work (FFW), sale of assets including livestock, begging, relief assistance and employment. Table 6 below present results of an assessment of these livelihood strategies employed by different categories of people.

Table 6: Livelihood strategies employed by different categories of people

	Transforming poor (better off) (√=yes; x=no)						
	Thyolo	Nsanje	Mwanza	Kasungu	Machinga	Chikwawa	Mulanje
farming/ irrigation	√	√	√	√	√	√	√
IGAs/ businesses (farm produce	√	√	√	√	√	√	√

trading, running small to medium grocery shops)							
Remittances/ support from relatives	√	X	x	X	x	x	x
Casual work/FFW	√	X	x	X	x	x	√
Sale of assets/ livestock	√	√	√	√	√	√	√
Begging	x	X	x	X	x	x	x
Relief food/assistance	x	X	x	X	x	x	x
Employment	x	√	√	X	x	x	x
	Coping poor (√=yes; x=no)						
	Thyolo	Nsanje	Mwanza	Kasungu	Machinga	Chikwawa	Mulanje
farming/ irrigation	x	√	√	√	√	√	x
IGAs/ businesses (knitting, selling fish, selling charcoal and firewood, breaking and selling quarry, selling flitters, selling tomatoes etc)	√	√	√	√	√	√	√
Remittances/ support from relatives	x	X	x	X	x	x	x
Casual work/FFW	√	√	√	√	x	√	√
Sale of assets / livestock	√	√	√	√	√	√	√
Begging	x	X	x	X	x	x	x
Relief food/assistance	x	X	x	X	x	x	x
Employment	x	√	x	X	x	x	x
	chronic poor (√=yes; x=no)						
	Thyolo	Nsanje	Mwanza	Kasungu	Machinga	Chikwawa	Mulanje
farming/ irrigation	x	x	√	√	√	√	x
IGAs/ businesses (selling charcoal and firewood, breaking and selling quarry, selling flitters, selling tomatoes etc)	√	√	√	√	√	√	x
Remittances/ support from relatives	√	x	x	x	x	x	√
Casual work/FFW	√	√	√	√	√	√	√
Sale of assets / livestock	x	x	x	x	x	√	√
Begging	√	√	x	√	x	√	√
Relief food/assistance	√	√	x	√	x	x	√
Employment	x	x	x	x	x	x	x

Largely the different categories of people (transforming poor, coping poor and chronic poor) were analysed and described by communities in terms of their food security status, levels of assets owned, participation in the labour market, health status and other characteristics. Based on these characteristics, the transforming poor have enough food throughout the year or for the better part of the year (6 months or more; have assets such as livestock and large pieces of land on which to

fall back in the event of a shock such as drought or floods; some have paid employment; have adequate labour and are in good health.

The coping poor have enough labour but lack the resources to use that labour productively; have food for some part of the year, in many cases for less than 6 months of the year; have good health; hire out their labour to other people as a livelihood strategy; they are involved in unsustainable livelihood strategies such as selling charcoal or firewood.

Chronic poor have high constraints on labour; lack resources; rely on support from other people; may be of poor health due to sickness; do not have assets (such as livestock) to fall back on in the event of a crisis and therefore are hit the hardest by impact of hazards; they do not have a steady supply of food for almost the whole year. This group largely comprises of the chronically sick, orphans, the elderly, resource poor female headed households and people with physical disabilities.

3.0. Conclusions

PVA findings show that common hazards in ECRP target districts include dry spells /droughts, floods, strong wings/ hailstorms, outbreak of crop pests and diseases, outbreak of animal diseases and pests, human diseases (HIV and AIDS, cholera and Malaria) and wild animals (elephants, crocodiles and hippos that either attack crops or human beings). Dry spell and droughts comes out to be the most common hazard across ECRP geographical area. All villages (100%) identified it as a key hazard that affect their livelihood.

Annex 1: List of villages where PVAs were carried out

Village (s)	District
Nthandana/Mwandama	Thyolo
Mitera / Sandama	Thyolo
Ndongo/Fort	Thyolo
Gombe/Chisatha	Thyolo
Luka/Chalonda	Thyolo
Davis/Kamba	Thyolo
Ndadzerakufa/Manyowa	Nsanje
Bilitishu	Nsanje
Chingwe	Nsanje
Chaperekeza	Nsanje
Felo / Mwanabvumbe	Nsanje
Khamula/Chilungulo	Mulanje
Chipoka/Makaula	Mulanje
Nandolo/Namaija	Mulanje
Wasi/Matipwiri	Mulanje
Chimwala/Unyolo	Mulanje
Moses	Chikwawa
Tombondera	Chikwawa
Nkadyamwano	Chikwawa
Sande I	Chikwawa
Mchacha	Chikwawa
Mlenga	Chikwawa
Mwalija	Chikwawa
Moses	Chikwawa
Lameki	Chikwawa
Chipwaira 1	Chikwawa
Kapheni	Kasungu
Yosefe	Kasungu
Kagona	Kasungu
Manjondo	Kasungu
Nthambwe	Kasungu
Kapelula	Kasungu
Kachinda	Kasungu
Ng'onomo Sambo	Kasungu
Justine	Machinga
Njuzi	Machninga
Mlaluwere	Machinga
Makuku	Machinga
Njolomola	Mwanza
Mtasa	Mwanza
Donkeni	Mwanza
Chimulango	Mwanza