

SEMI-ANNUAL MONITORING AND EVALUATION REPORT

1.0 INTRODUCTION

The CHANGE project seeks to address the urgent need of women and men smallholder farmers in Northern Ghana to understand the causes and effects of climate variability and climate change to embrace innovative adaptive measures to ensure sustainable, household food security and livelihoods. It aims to build strong capacity for project actors to support climate change adaptive initiatives at the grassroots level and to promote the integration of a climate change approach into agriculture and livelihoods development programming. The project is implemented in the three northern regions of Ghana, and operating in 17 communities. The project works in five communities in the Northern and upper west regions and 7 communities in upper east regions.

A Midterm review was carried out to assess the progress towards meeting the outputs and early milestone of the project. The result of the midterm is aimed at providing good practices, including the relevance and performance of implementation strategies, approaches and methods utilized, as well as early achievements and lessons learned in implementation that can guide future years and lessons learned to inform future activities of the project. The report includes all activities that have been implemented on the project.

1.1 OBJECTIVES OF THE PROJECT

The main objectives of the projects are:

- Smallholder women and men farmers in 17 communities in three regions of northern Ghana have increased access to information about climate change and its effects, and strengthened capacity to implement adaptive measures
- Smallholder women and men farmers in 17 communities in three regions of northern Ghana have enhanced climate-smart agricultural productivity and increase farm income
- Smallholder women farmers in 17 communities in three regions of northern Ghana have reduced risk of climate change impact on household livelihood

2.0 METHODOLOGY

CFTC CHANGE project team led by the M&E officer including a gender consultant undertook the midterm evaluation. Ten communities out of the seventeen beneficiary communities in the three northern regions were randomly selected for the midterm evaluation. Three communities were chosen in northern and upper west region and 4 communities in the upper east regions. The communities included Yilikpeni, Zosali and Tindan, Sakai, Walembele and Dangi, Zaare, Gowrie, Yikeni and Nyariga respectively for the three regions. The team started the evaluation in the Northern region and ended in the

upper west region. In each of the ten communities, simple random sampling was used to select 20 beneficiaries for the interviews making a total of 200 respondents. This included 50% women and men beneficiaries. Two focus group discussions were held in each community for both male and female beneficiary groups. Semi structured questionnaire, focus group interview guides, direct observation were some of the tools used for data collection. Other activity data were compiled by the partner organisations through designed reporting template from CFTC. The data was analysed with SPSS DATA Software.

3.0 ACTIVITIES IMPLEMENTED

All activities planned for this quarter have been implemented successfully. Below in the table shows the output of the activities carried out.

Table 1

Activity	Output	Narrative
SARI Module One- module five	A total number of 64 participants, 19 females and 45 men. Representing 70% for male and 30% for female	These training were done in each of the regions from module one to five. The same number of participants attended the training per each module. This was done to ensure that the same participants are well equipped to transfer the knowledge gained to the farmers in their various communities.
Community Vulnerability and Capacity Assessment	A total number of 47 participants , 16 females and 31 males Representing 66% males and 34% females	The training was held in Tamale and participants came from all other regions representing the beneficiary communities, organisations and coalition partners on the CHANGE project. An evaluation was carried out and 74% of the participants rated the trainings as being practical oriented.
Gmet Training	A total number of 64 participants, 19 females and 45 men. Representing 70% for male and 30% for female	The GMet training was done once in each region and participants represented community beneficiaries from those regions. 59% of the participants said the training content met their expectation

4.0 MIDTERM FINDINGS

4.1 SOCIODEMOGRAPHICS CHARACTERISTICS OF BENEFICIARIES

Farming is the major occupation for the CHANGE Project beneficiaries in all the 17 communities in the three northern regions. 92.5% of the women and men beneficiaries are farmers and 7.5% are involved in other income generating activities such as petty trading sheabutter processing, sheanut picking, basket weaving and pito brewing. Both men and women farmers are into crop production and animal rearing.

Figure one



89.7% of the men in these communities have access to their own land and such they have the opportunity to produce on large scale averagely ranging from 15-20acres. 98.4% of women on the other hand acquire land from their husbands and produce on small scale, and due to their heavy household responsibilities women produces averagely 2-4 acres. Most farmers travel 1-2km representing 38.5% from the community to their farm lands. Farmers (52.5%) in these communities have an opportunity to choose any land from the community for farming purposes.

Table 1

Major occupation					
Community	farming	trading	salary worker	artisan	Total

zoosali	14	6	0	0	20
tindan	20	0	0	0	20
yelikpeni	20	0	0	0	20
gowrie	18	1	0	1	20
nyariga	19	1	0	0	20
zaare	20	0	0	0	20
yikene	20	0	0	0	20
walembele	20	0	0	0	20
sakai	20	0	0	0	20
Dangi	14	5	1	0	20
Total	185	13	1	1	200

4.2 OUTPUT INDICATOR FINDINGS

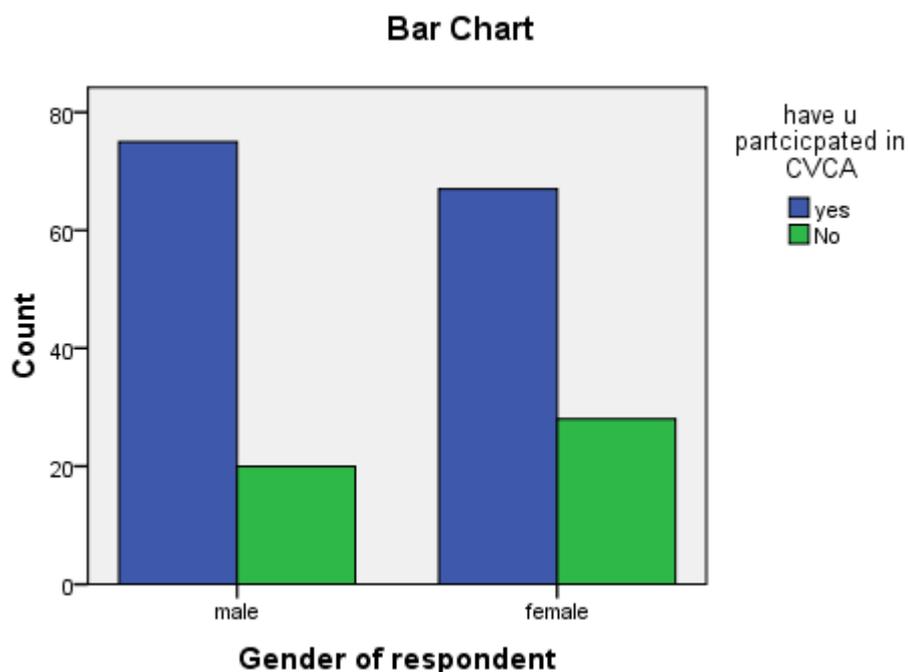
Output	Indicator	Findings	Target
<p>1111A Trainers from MoFA and implementing partners are able to train others on appropriate use of weather predictions for agricultural purposes</p> <p>1111B Leaders from Farmer-Based Organizations (FBOs) are able to use weather/seasonal forecast information</p>	<p># of AEAs (W/M) trained</p> <p># of FBO leaders (W/M) trained</p> <p># MoFA AEAs and FBOs who have specific knowledge of weather forecasting</p> <p># of community-based extension agents (CEA) who have specific knowledge of weather forecasting</p>	<p>9 AEA's Trained, 2 females and 7 men</p> <p>22 FBO leaders trained, 7 females and 15 men</p> <p>A total number of 31 MoFA AEA's and FBOs have specific knowledge of weather forecasting.</p> <p>17 CEA have specific knowledge on weather forecasting</p>	<p>80% of trainees using new knowledge</p> <p>50% of trainees are women</p>
<p>100% of community Extension Agent trainees are using new knowledge, and 20% of the trainees are women. 80% of the community extension Officers transfer this new knowledge to farmers through organised community discussions and 20% of them transferred the knowledge through meeting famers one on one at their various farm levels. This has improved the knowledge base of the farmers and hence the improvement in this year's crop growth.</p>			

Figure two



Output	Indicator	Findings	Target
1121A Project partners and District Planning Officers (DPOs) are able to conduct community-level climate change vulnerability assessments and support appropriate adaptation measures	# of trainers (W/M) trained	47 trainers trained. 16 females and 31 males.	100% of trainees participate in training in 17 communities;
	# of people (W/M) participating in community-based vulnerability and capacity	31 trainers participated in the community vulnerability and capacity assessment and 9 were female.	
<p>66% of the trainees participated in training the 17 communities of which 19% were female. 74% of the beneficiaries benefitted from the Community vulnerability and capacity assessment in all the project communities (53% Male and 47% female). Women and men were empowered to diversify their livelihoods (Agriculture, livestock,) and maintain the environment through tree planting, bullock ploughing, and compost or manure application to crops to improve their adaptive capacity and increase their resilience to the impact of climate change. Women were empowered at the community level through commitment and success in new activities (economic trees, Basket weaving and reviving indigenous seeds). Most significant is the awareness raised on the impacts of climate change on their livelihoods. This includes inadequate rainfall amount and distribution, low yield and pest and diseases infestation among others.</p>			

Figure three



Output	Indicator	Findings	Target
<p>1121B Project communities have launched participatory assessments of climate change risk and vulnerabilities and have begun the process of identifying, documenting, planning and implementing climate adaptive measures</p>	<p># of vulnerabilities and adaptation response measures identified</p>	<p>Trainees in all the project communities have launched the assessment of CVCA and have begun the process of documenting the data to finalize the climate adaptive measures. 17 analysis yet to be completed</p>	<p>40% of community participants are women; 17 analyses completed</p>
<p>53% of community participants were men and 47% were women. Community participants have begun the process of adapting the measures to reduce the impacts of climate change by planting trees and minimising bush burning activities. Communities in the upper west region known of charcoal burning now use trees that have falling down to burn charcoal for fuel instead of cutting down high economic healthy trees. The community hazard maps</p>			

developed by the CVCA participants proved effective in educating illiterate community members about the Importance of climate change to their livelihoods and the demerits of deforestation and other adaptation-related measures.

Output	Indicator	Findings	Target
1211A Smallholder farmers in project communities are able to use agricultural practices that are gender-sensitive, climate-smart	# of farmers (W/M) trained in the use of agricultural practices that are gender-sensitive, climate-smart	173 farmers trained on site selection and land preparation, 170 farmers trained on planting and planting material, 168 farmers trained on cultural practices and 149 farmers trained on diseases and pest	200 farmers trained; 40% are women farmers Lessons 10 climate-smart techniques shared
<p>Averagely 165 farmers have been trained on agricultural and climate smart practices and 45% of women were involved. 35% of the farmers were trained by the community extension officers. Farmers are responding positively to the climate smart practices since 96% of the beneficiary farmers have notice changes in crop growth this year. Generally farmers have responded to these climate smart practices by using short varieties, ploughing across slopes, weeding regularly, and applying compost manure among others.</p>			

Figure five

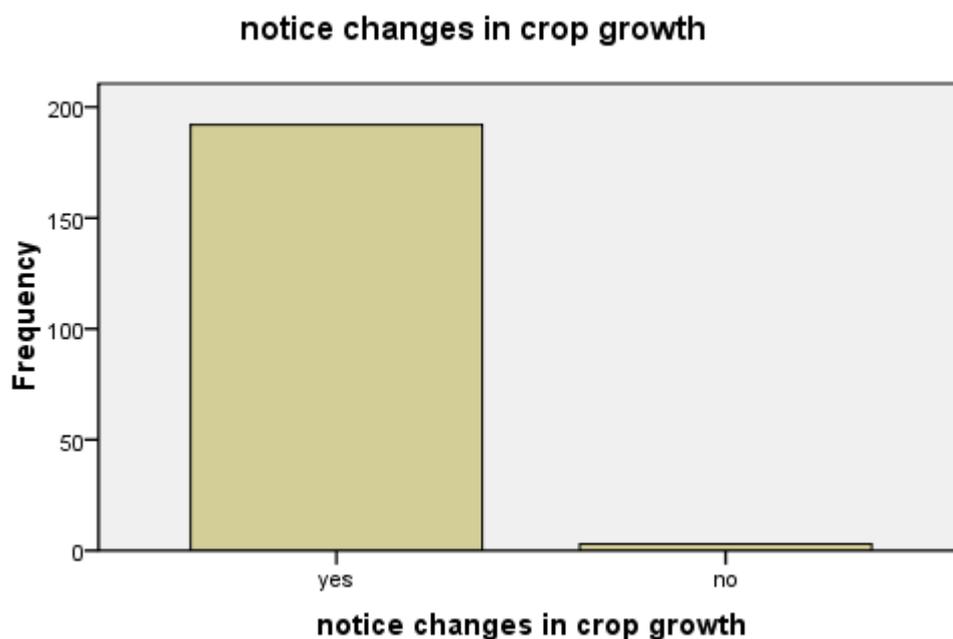


Figure six

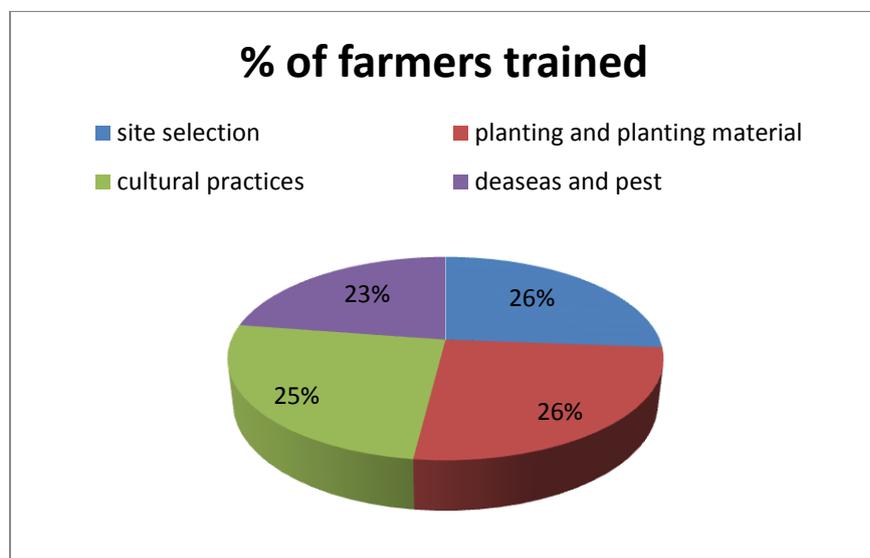
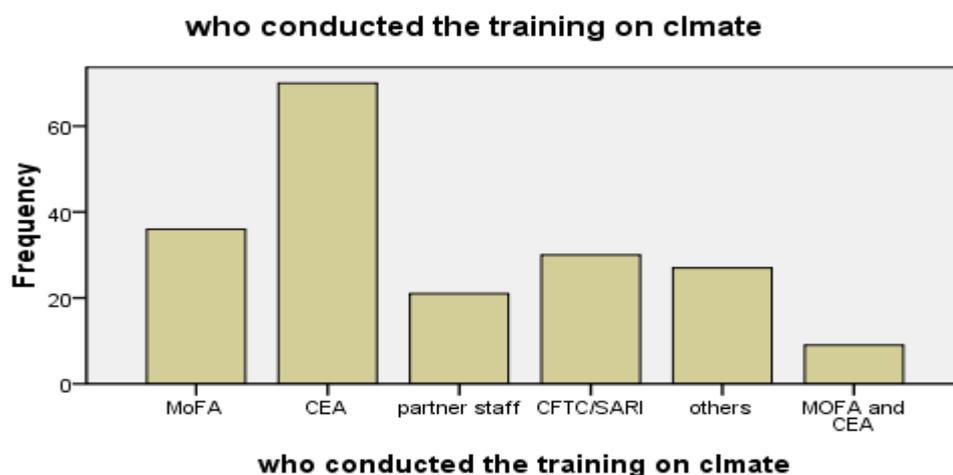


Figure seven



Output	Indicator	Findings
1212 Smallholder farmers in project communities have learned about and tested one climate-smart agricultural technology or practice as a result of hearing a radio broadcast or receiving direct agricultural extension	# of women and men smallholder farmers supported by AEAs in target communities # of women and men smallholder farmers supported by AEAs testing 1	92 men and 85 women representing 94.8% and 88.4% respectively benefits from the radio programme broadcast on weather forecast

support.	or more new adaptation measures	
	# of farmers claiming increased knowledge of adaptation measures	

67% and 28% of the farmers in the northern region listen to Zaar and Might Radio respectively, 59% of the farmers in upper east listen to Radio Gurene and 68% of the farmers in upper west listen to radio Radford for their weather updates, agricultural and climate smart practices. Meanwhile, 52% of the farmers benefited from both radio and Gmet training. Weather consciousness and monitoring capacity by farmers at the local level to these radio stations has proven the effectiveness of the radio broadcast to the beneficiaries. Daily weather updates are broadcasted in the northern and upper east region which makes the dissemination and the timing of the programme convenient for farmers around these areas. However, the radio Radford is still to incorporate the daily weather updates into their programming to give equal opportunity for farmers in the upper west region to benefit. Even though weather information is broadcasted it is not convenient for farmers in the upper west region. The weather updates according to the farmers has given them the opportunity to prepare in advance for their farming activities/preparations. In addition they benefit from experience agriculturist from these radio stations who educates farmers on best farming practices related to climate change. The farmers have reported the benefit of the weather information to other income generated activities like sheanut picking and processing, drying of farm produce and rice parboiling, pito brewing.

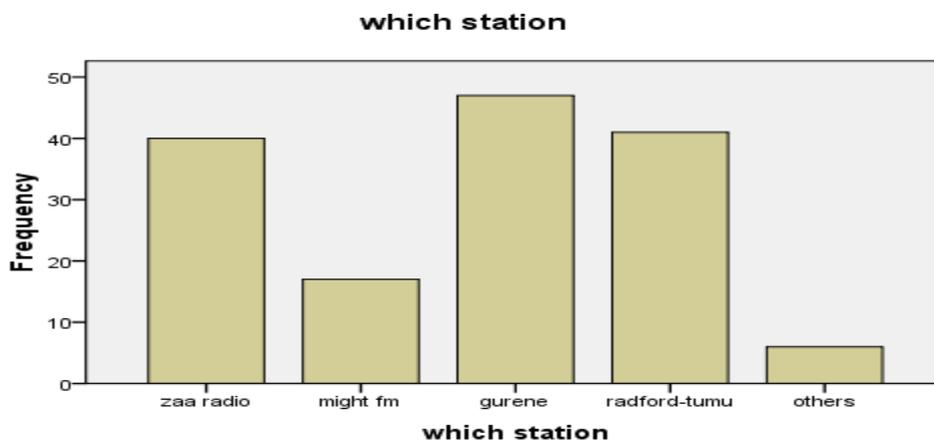


Figure eight

Table 2

Stations heard by communities			
Radio Station	Frequency	Percent	Valid Percent
zaa radio	40	20	26
might fm	17	9	11
gurene	47	24	31
radford-tumu	41	21	27

others	6	3	4.0
Total	151	76	100
Missing	49	25	
Total	200	100	

Output	Indicator	Findings
Participating FBOs are better able to organize themselves, develop gender-sensitive, climate smart programs, represent themselves, and make effective group purchases and sales	# of FBOs that have formed cooperatives (with the assistance of partners) Training that FBOS have had facilitated by partners	83% of men and women beneficiary farmers belong to an FBO. 17% of the farmers are beneficiaries and yet do not belong to any FBO.
<p>Most of the small scale men and women farmers in these communities have received group dynamics training. 88% of them have received various group dynamics training on governance and leadership, leadership role, financial literacy and credit management. Most of these FBO's have regular meetings at least twice every month. The most important reason for these farmers in forming the FBO's is to benefit from government and non-governmental institutions in terms of resources and capacity building to improve their farming and other livelihoods. Even though these FBO's do not make effective group purchases and sales, they benefit from group ploughing, weeding, planting and harvesting. 73% of members have been assisted to access seeds, 17% access machinery such as tractors and 32% of the members benefited from free bullock ploughing services.</p>		
1211B (RAINS) Indigenous seed varieties are revived and promoted and participating farmers gain skills in indigenous seed storage	# of acres cultivated using indigenous seeds by W/M # of indigenous seed varieties revived & promoted (RAINS only) # of W/M having access to indigenous seed varieties for planting (RAINS only)	173acres are under cultivation 36 acres for men and 137 acres for women Four indigenous seed revived and promoted 200farmers were supported to access seeds.160 women farmers and 40men farmers
<p>Members on the CSK project have ploughed, planted and preparing to go for first weeding. Each of the beneficiaries cultivated indigenous crops between 1-2acres. Ploughing was done using bullock and tractor services, averagely 55% of the beneficiaries used tractor services and 45% used bullock. This was as a result of the initial drought that hit the northern region as such the grounds were quite hard for the bullock ploughing. Bambara beans, Zangi, local beans and yellow maize were some of the indigenous varieties revived in these communities. These indigenous seeds were owned by some of the farmers, others got from friends and local market. The beneficiaries believed that the indigenous crops are high in nutrients and very good for their own consumption. As a result of its short maturity duration, low pest and diseases infestation coupled with drought resistance, indigenous seeds are preferred to other exotic/certified seeds as these qualities of the seeds lessens the impact of climate change to the crops. Members also benefit from free seeds and ploughing services and are trained on best agricultural practices to improve yields. These trainings were done by RAINS.</p>		

Output	Indicator	Findings	Target
Women smallholder farmers in project communities plant and harvest vetiver grass to support basket weaving activities	<p># acres of fields planted with vetiver grass in 2013</p> <p># of acres with Kumasi grass variety and assessment of health of grass</p> <p># of basket weavers growing grass in the community</p> <p># acres with Bolga variety and assessment of health of grass</p>	<p>28 acres have been planted with vertivar grass</p> <p>Kumasi grass yet to be Planted.</p> <p>300 basket weavers in 4 communities have started growing the Bolga grass.</p> <p>All the 28 acres are Bolga variety</p> <p>28 acres of Bolga variety planted.</p>	85% of 50 acres planted; 85% women farmers engaged
<p>56% of the 50 acres are under cultivation with Bolga vertiver grass. There are 75 members of the basket weaver groups in each of the 4 communities, making a total of 525 basket women beneficiaries. 57% of the women are engaged in growing the local grass in the 4 communities. The rest of the 3 communities are yet to start with the cultivation of the vertiver grass. Women basket weavers in the upper east region use Kumasi vertivar grass for weaving their basket and the local grass for hat weaving. The Kumasi grass is accessible and it is obtained from the local market in Bolgatanga. These straws are brought to the market by middle men from Kumasi. Kumasi vertivar grass is mostly preferred to local grass because it is more flexible and produces a quality basket. All the communities visited except Zaare had ploughed and transplanted their local vertiver grass with the hope that the Kumasi variety will come in the future to augment the local grass, and once this is achieved there will be a regular supply of straw to the industry which will reduce their overall cost of weaving. However, the local vertiver grasses were in good condition and were fenced to protect them from animal destruction. The women basket weavers come collectively to sell their basket either to the local market or an order from the trade fair buyers. The trade fair buyers provide more attractive prices than the local market. Hence trade fair orders are mostly preferred.</p>			
<p>1313A Women leaders have acquired basic skills in nursery techniques</p> <p>1313B (TUDRIDEP only) Women in project communities have begun the process of implementing and managing new tree nurseries</p>	<p># of seedlings produced</p> <p># of women who have germinated mango seedlings and transplanted to poly bags</p> <p># of women who have planted nursery species: i) moringa; ii)</p>	<p>Mango – 3000 and acacia - 1223</p> <p>89 women have germinated mango seedlings and transplanted to poly bags</p> <p>89 women have nursed Moringa and acacia seedlings</p>	80% of 100 women trained; 80% of seedlings produced

	cashew; iii) <i>Acacia</i>		
<p>The nursery growers in the upper west region are mostly women except in Walembelle where a man is included in their nursery group. These groups of nursery women have been trained on good nursery practices and management by TUDRIDEP such as how to prepare poly plots and also transplant seeds, analyse poly plots so as not to waste water when watering them. These women have nursed 2 varieties, that is Mango and Acacia and have begun the process of transplanting them into polybags. The healthy condition of these seedlings observed were as a result of the good management by these women groups. All the communities had fenced their nursery farms to protect animals from destroying the nursed seedlings, and also they were provided with Poly tanks to store water during Rainy season and used it during the dry season when water becomes scarce. The women believed that once the seedlings are matured, they will sell them to boost their incomes and improve livelihood. The trees will also serve to reduce the impact of climate change in these communities.</p>			

5.0 KEY GAPS/ LIMITATIONS

CHANGE Project has already created a basic foundation for achieving its purpose and its key objectives. However, there are other key limitations that should be improved to ensure smooth implementation and sustainability of the project.

- There is some evidence that Basket weavers do not use the local straw in weaving their baskets. Mostly the local straw is used by men to weave hat, and once the project has its beneficiaries as the basket weaving groups the Kumasi grass will be more beneficial to them. This will ensure ownership and sustainability of the project.
- There is no bottom –up approach to incorporate the grass root ideas into project implementation.
- The partners are not taking the opportunity of the weather consciousness of the people to follow up with the district assemblies to incorporate climate change issues into their district planning to ensure sustainability.
- CHANGE project is not prioritising the work of the community extension officers, as it is evident in the field that they are the main implementers of the step down activities for both partners' organisations and CFTC-CHANGE.
- MoFA staffs are not being monitored to take up the responsibility as agents to effectively step down the trainings.
- There are no listener groups form by Farm Radio International in the communities which is a big shortfall in ensuring all groups can have access to information from the radio stations.
- Farm Radio International partner radio station in Tumu is not providing the same daily weather updates to their farmers as it is in the northern and upper east regions.

5.1 RECOMMENDATIONS

To reinforce CHANGE objective of enhancing the flow and support of activities and strategies the recommendations are

- Kumasi vertivar grass should be the priority on the acres left for cultivation, and the trial of the Kumasi grass should be done in the communities for the women to have the opportunity to see its success or failures.
- Grass root approach should be used to ensure that the rural people's ideas are incorporated into the activities we roll out to ensure community ownership.
- Partner staffs should make follow ups to the district assemblies to ensure climate change adaptation measures are budgeted for and incorporated into their activities.
- CHANGE project staffs should prioritise the Community Extension agents work as it is evident that they implement the step down activities for both CFTC and partner organisations
- MoFA staffs should be monitored both by staffs of Partner organisations and CFTC to ensure the delivery of the activities.
- FRI should form listener groups in all the beneficiary communities to ensure that farmers benefit from their programmes. They should also do effective monitoring to ensure that the beneficiary farmers in all the 17 communities have equal benefit to their programmes.

5.2 CONCLUSION

The CHANGE project has made substantial progress towards its milestone targets, and has in principle created the groundwork needed to move forward towards achieving its purpose. Having made the above pieces of the foundation, there are still some few gaps to quicken the accomplishment of targets to reach the purpose level results. The recommendations are aimed at assisting to address these limitations.

Appendix

Site selection and land preparation				
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
yes	173	86.5	90.1	90.1
no	19	9.5	9.9	100
Total	192	96	100	
Missing	8	4		
Total	200	100		
planting and planting material				
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
yes	170	85	89.5	89.5
no	20	10	10.5	100
Total	190	95	100	
Missing	10	5		
Total	200	100		
Cultural Practices				
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
yes	168	84	89.36170213	
no	20	10	10.63829787	
Total	188	94	100	
Missing	12	6		
Total	200	100		
diseases and pest control				
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
yes	149	74.5	86.1	86.1
no	24	12	13.9	100
Total	173	86.5	100	
Missing	27	13.5		
Total	200	100		
any other				
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
yes	1	0.5	50	50
no	1	0.5	50	100
Total	2	1	100	
Missing	198	99		
Total	200	100		

receiveweather information/trainng

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	177	88.5	91.7	91.7
no	16	8.0	8.3	100.0
Total	193	96.5	100.0	
Missing	7	3.5		
Total	200	100.0		

from which source

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid radio	52	26.0	28.0	28.0
training	30	15.0	16.1	44.1
both radio and training	104	52.0	55.9	100.0
Total	186	93.0	100.0	
Missing	14	7.0		
Total	200	100.0		

have u partcipated in CVCA

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	143	71.5	74.9	74.9
No	48	24.0	25.1	100.0
Total	191	95.5	100.0	
Missing	9	4.5		
Total	200	100.0		