END OF PROJECT EVALUATION 2010 - 2013



WAKISO DISTRICT (NANGABO SUB COUNTY) PALLISA DISTRICT (AGULE AND APOPONG SUB COUNTIES)

Evaluation team

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This evaluation took place at a time of the year when families are usually busy preparing for the festive season of Christmas. We are grateful to our respective families for their forbearance.

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EXECUTIVE SUMMARY

Background

The Uganda National Association of Community and Occupational Health (UNACOH) and DIALOGOS have been working together in partnership on a Pesticides, Health and Environment project. UNACOH is a Ugandan non government organisation (NGO) whose major aim is the promotion of community and occupational health; while DIALOGOS is a Danish NGO working in the field of Intercultural Medicine' and 'Pesticides, Health and Environment.

The two partners have been working on an Integrated Pest Management (IPM) project. IPM is considered to be an effective, economically sound and environmentally sensitive approach to pest management that relies on a combination of common-sense practices that enhances, rather than destroys, natural controls. In this approach pesticides are used sparingly and selectively always using the less toxic options and promoting the use of appropriate personal protection to minimize negative health effects. This project – Pesticides, Health and Environment 2010-2013 has been running since June 2010.

The overall project objective as paraphrased has been to <u>reduce the negative health</u> <u>effects of pesticides in humans</u> and to <u>prevent pesticide pollution of the environment</u> using the Integrated Pest Management approach in the pilot districts of Pallisa and Wakiso. The three year project been implemented with a financial budget of Danish Kroner 1,839,026 equivalent to Ushs.717,220,140 at an exchange rate of 390 DKK at the time of starting the project in 2010.

The key major project activities have been the Baseline Surveys, training materials development and training of the target groups as well as Information, Education and Communication (IEC) activities.

Terms of Reference

While the project still has more than 6 months to run its course a decision was made by the partners to carry out an end of project evaluation to set the ground work for a possible second phase of the project.

The major aim of the Evaluation has been to: Asses the performance of the project and the activities defined in the project document and at the same time on the basis of the findings come up with relevant suggestions and recommendations for a second phase of the project.

Summary of Findings

- Interviews across the board have brought out the fact that this is a unique project, the
 first of its kind and addresses two major areas of health and agriculture. It is creating
 awareness on pesticide safety and usage, in a multi pronged way, involving multiple
 stakeholders, while tackling the sectors of health, agriculture and environment.
- 2. As a pilot the project has demonstrated that it is relevant. It has created awareness on a growing problem which many people have not been aware of. It has been able to bring into prominence the dangers of pesticides poisoning and the need for the health and agriculture systems to start taking up the related issues as a matter of priority. The health system for example, needs to consider antidotes as essential drugs at the health centres. Additionally, there has been a positive change in knowledge and attitude within and outside of the trained groups in the project areas as a result of the PHE interventions. All this forms an excellent foundation on which to build a second phase.

3. It is observed that excellent working relationships have been developed between UNACOH and collaborating institutions but there is need for enhanced stakeholder participation because not all have participated actively in the project as had been anticipated. For example, UNFFE was expected to participate as an organizer of the logistics around the courses for farmers, be part of the committees formed and participate in courses and as trainers of their farmers.

Objective one: Prevention, registration, diagnosis and treatment of pesticide poisonings is improved in the health clinics in 2 districts.

- Heath Care Workers (HCWs) and Health Educators (HE) have been trained and are now aware of the dangers of pesticide poisonings; and to some extent are able to diagnose and treat cases of pesticide poisonings.
- However it is noted that the Health educators have not been able to perform IEC activities about pesticides in the communities. While some of the trained healthcare workers are also unable to treat pesticide poisonings due to lack of medicines to treat cases in their health units.
- A guide for diagnostic procedures and treatment of pesticide poisoning has update not been finalised and distributed to the HCWs.

Objective two: The number of cases of pesticide poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts

- A positive change has been created in knowledge and attitude within and outside of trained groups.
- Farmers in the project area are more aware of the pesticides safety and usage and some of them have started using IPM strategies.
- Trained agro dealers and extension workers are advising farmers on the use of the less toxic pesticides and have started adapting to good practices of pesticides safety and handling.
- Six (6) booklets for teaching farmers and others on the IPM approach have been elaborated but not yet printed.
- o It is an anomaly that IEC materials were found not to be in place already. It would have been efficient to introduce participants to these materials alongside the oral trainings, demonstrations and the handing out of the booklets. This would have facilitated the trainees' ability to more easily make direct links between what they have been taught and the appropriate practices being advocated for as would be illustrated in the visuals.
- However there is need to regularly and annually update an approved and gazetted list of pesticides for use as a guide and reference point for the key actors in the project.

Objective three: The civil society, especially emphasising Uganda National Farmers Federation and district village farmers groups are aware of pesticide dangers and able to advocate for concrete actions in the 'district pesticide committees' and the National Agricultural Chemicals Board to ensure a sustainable food production

- There has been some increase in awareness among the general population on pesticide safety and usage. There exists substantial good will from the district local authorities towards UNACOH and PHE Project. This has been as a result of the general awareness on pesticide safety and use.
- o The District Pesticide Committees (DPCs) have been constituted but have not been in position to function as expected. There is also no visible evidence to support the

expectation that UNFFE and the farmer groups have developed the capacity to advocate on issues of pesticide safety and usage in the DPCs and the National Agricultural Chemicals Board.

The project staffs are very committed in carrying out their work and have actually been able to successfully implement a number of the key activities. The project, however, has suffered from the optimum use of the Project Coordinator which has affected the proper implementation of project activities, project staff management / coordination, multi-stakeholder management and engagement, PSC coordination and the proper coordination of the objective 3.

Conclusions

- Generally the project has made an impact within the project area. The PHE project activities as implemented by the UNACOH staff have contributed a great deal to the general awareness on pesticides safety and usage as well as knowledge on IPM strategies
- 2. Collected evidence confirms the impressions that the project is highly relevant and has been embraced by all the key stakeholders. This notwithstanding, gaps still exist, as some farmers are still slow in adapting to change. In addition there is need to intensify on the integration of project activities into ongoing district programmes. It is also noted that given the importance of the PHE project, the geographical coverage of the project is too small as expressed by the Chief Administrative Officer, Pallisa, "We have problems explaining why the project is only focusing on a few sub counties. In future we would like other sub counties to be included so that it has a wider multiplier effect"
- 3. The team observes that there is an enabling environment that supports the project's objectives and there is evidence that excellent working relationships have been developed between UNACOH and governments institutions as well as other collaborating agencies. There is also substantial good will from the district local government authorities towards UNACOH and PHE Project and this should be capitalized on for the sustainability of the project.

Recommendations

General Project Management

- o It is strongly recommended that the project should have a full time Project Coordinator for proper project coordination. This person should also be responsible for the implementation of objective three, which is of strategic importance for the sustainability of the PHE overall project goals over the long haul.
- o Train staff in leadership and team-building, organization development and advocacy.
- Create fora for follow up on trained groups (farmers, HCWs, Extension workers Agro input dealers, and committee members) for reflection and sharing of experiences gained from the application of the learning. In addition supervisory visits to already trained groups (farmers, HCWs, Extension workers Agro input dealers, and committee members) should continue to deepen and support their continued involvement in the project.
- MOUs between UNACOH and collaborating partners should be elaborated upon and formalized to ensure that each understands their roles and responsibilities.
- Review the budget to take into account prevailing realities and avoid under-costing which undermines effective implementation of activities.

Objective one

- Train all health care workers in the district to ensure that gaps are not created as a result of internal district transfers.
- Involve VHTs in the health aspect of the project. The VHTs are already working in the communities on health issues and can be useful agents in sensitizing communities about PHE activities. VHTs would concentrate on performing the IEC activities and all healthcare workers would concentrate on treating pesticide poisoning cases. Health educators should, in due course, be phased out.

Objective two

- Deepen and widen the project by rolling out to all the sub-counties of the Districts to increase the geographical spread of the project; and at the same time increase the number of trained farmers from 20 to 100 who can then perform as focal points for farmer to farmer training and IEC activities in the district.
- Develop a strategy for motivating more agro-dealers to participate in the project activities given that they are a key contact point for farmers in providing information on pesticides safety and usage. The training should also be expanded to include their shop attendants. UNADA should also be involved the selection and follow up of agro dealers.

Objective three

- Intensify distribution of IEC materials, and radio programmes to enhance sensitization of the communities. The option of contracting out some aspects of the project activities such as the production of IEC materials should be seriously considered. It would bring expertise on board and speed up the process.
- UNACOH should develop strategies for strengthening their collaboration with the district authorities to ensure that they start main streaming the project activities into district work plans.
- Lobby Ministries (Agriculture and Health) to involve the DPCs into their structures. DPCs currently do not have the mandate to inspect and control but can only guide on handling of pesticide but not to do inspection. In this sense they are an advisory body.
- The project document envisages the creation of cooperatives to produce and promote the production and marketing of IPM products; this is an unrealistic expectation. The non mono crop culture practiced in the project area makes this unlikely to succeed. It is recommended that an organization that seeks to keep together a team that has been trained and worked together could be formed. Such an association would then seek to develop work plans to carry forward the training and IEC campaigns would be more appropriate.

Although the project has experienced a few challenges, it has nevertheless, brought about positive out-comes. We recommend continuation into a second phase to both deepen and expand project interventions. Special consideration should be put on advocacy and sustainability issues.

ACRONYMS

APC Assistant Project Coordinator
CAO Chief Administrative Officer
DAO District Agriculture Officer
DHO District Health Officer

DPC District Pesticide Committee
DPO District Production Officer
IPM Integrated Pest Management

MAAIF Ministry of Agriculture Animal Industries and Fisheries

MAKSPH Makerere University School of Public Health

MAKCAES Makerere University College of Agricultural and Environmental

Sciences

MOH Ministry of Health

NEMA National Environmental Management Authority

NGOs Non Government Organisations

NOGAMU National Organic Agriculture Movement

PC Project Coordinator

PHE Pesticide use, Health and Environment

PPE Personal Protective Equipment

UNACOH Uganda National Community and Occupational Health

UNADA Uganda National Agro dealers Association

UNCST Uganda National Council of Science and Technology

UNFFE Uganda National Farmers Federation

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1.0 INTRODUCTION

1.1. Objective of the Evaluation

The overall objective of the evaluation is to assess the performance of the project and the activities defined in the project document and at the same time on the basis of the findings come up with relevant suggestions and recommendations for a second phase of the project. Specifically the evaluation was tasked to carry out the following:

- Evaluate project performance as regards to the preparation and implementation of plans and achievement of targets and objectives.
- Asses and recommend possibilities for future plans.
- Formulate experience gained from the project in relation to project preparation and implementation.
- Based on the above to make recommendations for the future of the project.
- Evaluate the capacity of UNACOH as an NGO according to donor criteria.

1.2. Background Information

This evaluation is focusing on the 30 months from June 2010 to November 2012. The project has been operating in the districts of Wakiso and Pallisa with a total population of around 1.500.000. These two districts have experience with different crops. In Wakiso, primarily, vegetables are grown and in Pallisa cotton. The training of farmers has been taking place in the sub counties of Nangabo, Agule and Apopong. The training of health care workers included HCWs selected from the whole district.

Pesticide intoxication of humans and pollution of the environment is a growing problem which needs to be addressed by farmers, technicians and politicians. The problem has not been concretely addressed and there is a lack of knowledge of what is happening and how to give solutions. The Integrated Pest Management approach is being proposed as an appropriate approach to address the problem. IPM is understood as an effective, economically sound and environmentally sensitive approach to pest management that relies on a combination of common-sense practices that enhances, rather than destroys, natural controls. In IPM pesticides are used sparingly and selectively, always using the less toxic options and promoting the use of appropriate personal protection to minimize negative health effects.

Uganda National Community and Occupational Health (UNACOH) has been working on environmental health issues for many years and has a good linkage to the health and agriculture systems. The Pesticides Use, Health and Environment (PHE) Uganda Project is implemented by the UNACOH and DIALOGOS in collaboration with Makerere University College of Agricultural and Environmental Sciences (CAES), Makerere University School of Public Health (MakSPH), National Organic Agriculture Movement (NOGAMU), Uganda National Agro dealers Association (UNADA), Uganda National Farmers Federation (UNFFE), National Environmental Management Authority (NEMA), Ministry of Health (MOH), Ministry of Agriculture Animal Industries and Fisheries (MAAIF), Pallisa District local government and Wakiso District local government in Agule and Apopong Sub Counties (Pallisa

district) and Nangabo Sub County (Wakiso district). The project has been running since June 2010 up to date and it aims at making the use of pesticides safer for human health, environmentally conscious, while maintaining and improving agricultural productivity.

At the start of the project it was expected that the awareness raising would reach the whole population of the districts and probably beyond.

1.3. Specific Objectives:

While the overall objective is to reduce negative health effects of pesticides in humans and prevent pesticide pollution of the environment, the specific objectives to be achieved at the end of the project period are:-

Project Objective1: Prevention, registration, diagnosis and treatment of pesticide poisonings is improved in the health clinics in 2 districts.

Project Objective 2: The number of cases of pesticide poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts.

Project Objective 3: The civil society, especially emphasising Uganda National Farmers Federation and district village farmers groups, are aware of pesticide dangers and able to advocate for concrete actions in the 'district pesticide committees' and the National Agricultural Chemicals Board to ensure a sustainable food production.

1.4. Scope of the Evaluation

The project mainly focused on the topic of safe use of pesticides amongst different categories of small holder farmers, health care workers, agro dealers and extension workers in Pallisa (2 Sub Counties, Agule and Apopong) and Wakiso, (1 Sub County, Nangabo).

The task of the evaluation included, but was not be limited, to assessing the project start; project implementation and performance; achievement of objectives; and project management. The tasks are elaborated upon below:-

Project start

- Assessing the process of design and planning of the project.
- Assessing the choice and possibilities of local partners and the co-operation between the institutions and sectors/departments?

Project implementation and performance

- Assessing project implementation and constraints in connection with the implementation.
- Assessing and analyse the relevance of activities and the balance between the different activities (training, supportive work and balance between work at different levels).
- Assessing whether the target groups are appropriate.

Assessing the economical aspect of the project.

Achievement of objectives

- Analysing objectives and achievement of objectives and outputs.
- Assessing and evaluating performed activities in relation to the defined activities. (Use indicators for the described objectives and activities of the project, see log-frame).
- Assessment of the relevance and effectiveness of training/workshops and supervisory activities with regard to their appropriateness and methodology (repetition of baseline-study from beginning of project).
- Assessment of the sustainability and follow up on trained groups (farmers, HCW's, committee members, extensions workers, agro-dealers).

Project management

- a. Assessing the project structure, management and administration on the project.
- b. Assessing the coordination of activities within the sectors in the area according to the defined project activities. This included the official health service, agricultural sector, local government and activities of other NGOs.
- c. Assessing the function of the steering committee and coordination at central level.
- d. Assessing the ways of communication between UNACOH and Dialogos.
- e. Assessing the reporting on and monitoring of project activities

2.0. METHODOLOGY

The evaluation included a cross sectional approach that employed a combination of qualitative and quantitative methods of data collection. For the qualitative aspect, the data was primarily sourced through interviews with key informants in the PHE project , focus group discussions guided by well structured research questions and PHE project document reviews. Questionnaires were used to obtain quantitative data. Participants in the evaluation included 16 trained farmers, 10 Health care workers, 4 Health Educators, 4 agriculture extension workers, 4 agro dealers members of the District pesticide committees, 2 sub county chiefs, 2 LC3 chairpersons, members of the project Steering Committee talked to included Ministry of Agriculture Animal Industry and Fisheries (MAAIF), Makerere University school of Public Health (MAK SPH),Makerere University College of Agriculture and Environmental sciences (MAKCAES), NEMA, UNADA, NOGAMU,UNFFE, PHE project coordinator, representative of DIALOGOS in Uganda as well as project staff and volunteers

The study was conducted in the two project areas of Wakiso and Pallisa with participants from the participating sub counties of Nangabo, Agule and Apopong. The research methodology was developed around three research themes in order to effectively address the purpose of the evaluation:

- o Have the objectives been delivered as planned?
- What difference has happened as a result of the project?

o UNACOHs technical and organizational capacity to coordinator the project.

Tools used in the evaluation have been attached to this report. A review and analysis of the data was conducted, this was followed by presenting findings to various stakeholders in the PHE project and preparation of a draft report. The final report was prepared based on feedback from the draft presentation

2.1. LIMITATIONS TO THE EVALUATION

- O Unavailability of some major stakeholders to interview, the team failed to interview a representative of the ministry of Health this was because the focal person to the project had left office and the Wakiso District health officer, although he was contacted earlier by the PHE staff on the scheduled day of the meeting the DHO was so busy and did not have time for the interview.
- Limited time especially time for data analysis and writing the report. The evaluation period was 21 working days
- Unavailability of some project documents. Specified TORs for the PSC and DPCs, MOUs with the collaborating stakeholders were some of the documents that were unavailable. The UNACOH strategic plan is still in draft and a work in progress.

3.0. EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

3.1. ASSESSING PROJECT START

The project was conceived by Dr. Erik Joers and Dr. Deo Ssekimpi. The two, along the way, involved and consulted other stakeholders whose input influenced the final design of the project proposal, planning and development. The project design and planning was good and satisfactory and incorporated a consolidated project work plan from which annual and quarterly work plans were elaborated. Despite this the project started on a slow pace. This was brought about initially, by the delay in approving the baseline survey by the Uganda National Council of Science and Technology (UNCST). Project staff turnover in the early phases, coupled with the fact of a non-full time project coordinator, further aggravated the slow start. This however could have been addressed with an optimal use of the allocated project coordination time.

The choice of partners was appropriate considering that the project fused together health and agricultural issues. And in so doing brought together a wide range of stakeholders from both government and nongovernment actors. These included the Ministry of Health, Ministry of Agriculture, Animal Industry and Fisheries, Makerere University School of Public Health and the College of Agriculture and Environment Studies, District Local Authorities, National Environment Management Authority, Uganda National Farmers Federation, Uganda National Agro-inputs Dealers Association and NOGAMU.

It is observed that excellent working relationships have been developed between UNACOH and collaborating institutions but there is need for enhanced stakeholder

participation because not all have participated actively in the project as had been anticipated. For example, UNFFE was expected to participate as an organizer of the logistics around the courses for farmers, be part of the committees formed and participate in courses and as trainers of their farmers. While the key strength of the project has been the involvement of multiple stakeholders which is critical and necessary it nevertheless, requires a high level of stakeholder management and coordination to be effective.

Secondly, there is substantial good will from the district local authorities towards UNACOH and PHE Project and this should be capitalized on in the future. Other collaborating NGOs like UNFFE, UNADA and NOGAMU are part of the project steering committee that has mainly played an advisory role. However, some NGOs have not participated in the project activities as had been expected.

3.2. Assessing Project relevance (appropriateness)

Interviews from across the board have brought out the fact that this is a unique project, the first of its kind and addresses two major areas of health and agriculture. It is creating awareness on pesticide safety and usage, in a multi pronged way, involving multiple stakeholders, while tackling the sectors of health, agriculture and environment. It is therefore observed that the PHE project is very relevant

The population of Uganda is growing at a very fast rate and the need to feed the people is simultaneously growing. In order to meet the increased demand for food there is a likelihood of greater use of pesticides by farmers to control pest infestations. The increased use of pesticides could potentially lead to a growing problem of Pesticide intoxication of humans and pollution of the environment. This is a problem that needs to be addressed by farmers, government, and civil society. The PHE Project's intervention of creating awareness on pesticide safety and usage as well as promoting the use of Integrated Pest Management (IPM) strategies is timely. IPM is increasingly being applied as an effective, economically sound and environmentally sensitive approach to pest management relying on a combination of common-sense practices that enhances, rather than destroying, natural controls. Pesticides are used sparingly and selectively always using the less toxic options and promoting the use of appropriate personal protection to minimize negative health effects.

Collected evidence confirms the impressions that the project is highly relevant and has been embraced by all the key stakeholders. This notwithstanding, gaps still exist, as some farmers are still slow in adapting to change. In addition there is need to intensify on the integration of project activities into ongoing district programmes. It is also noted that given the importance of the PHE project, the geographical coverage of the project is too small as expressed by the Chief Administrative Officer, Pallisa.

"We have problems explaining why the project is only focusing on a few sub counties. In future we would like other sub counties to be included so that it has a wider multiplier effect"

3.2.1. Recommendation

o Expand the geographical coverage of the project to include all the subcounties in the districts of the project area and correspondingly increase on the number of the trained farmers from 20 to 100 for effective multiplier effect; which farmers can then perform as focal points for farmer to farmer training and IEC activities in their district.

3.3. ASSESSING PROJECT EFFECTIVENESS

3.3.1. ACHIEVEMENT OF OBJECTIVES¹

The Project Effectiveness was assessed in reference to what extent the project has achieved the stated objectives and planned outputs; the extent to which target groups have been reached and what factors affected the achievement or failure of the project objectives.

To a great extent the project set itself realistic objectives considering it was dealing with a ground breaking intervention that had not been tried out before in Uganda. As a pilot it required a limited timeframe and a small geographical spread to ensure manageability in terms of testing out approaches, learning from the experiences and coming up with best practices for continuity of the project in Uganda.

More specifically the following have been achieved:

Objective one: Prevention, registration, diagnosis and treatment of pesticide poisonings is improved in the health clinics in 2 districts.

- o Health care workers and educators are now aware of the dangers of pesticide poisonings and to some extent are able to diagnose and treat cases of pesticide poisonings.
- Registration forms are starting to be used by the trained health care workers in the two districts.
- A logarithm is being used by the health care workers.
- o Training manuals have been developed and used by the Trainees.
- Brochures and 2012 calendars distributed.
- A baseline survey report that gives an overview of the number and reasons for pesticide poisonings exists.

Observations

- o Health educators have not been able to perform IEC activities about pesticides in the communities.
- o Some trained health care workers are also unable to treat pesticide poisonings due to lack of medicines to treat cases.
- Some participating health care workers are health assistants, and therefore

¹ Detailed Data Analysis on achievements in appendix 6.7 page 53

- ineligible to treat patients.
- A guide for diagnostic procedures and treatment of pesticide poisoning has up to date not been finalised and distributed.

Objective two: The number of cases of pesticide poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts.

- There has been a positive change in knowledge, attitude within and outside of trained groups.
- Farmers in the project area are more aware of the pesticides safety and usage and some of them have started using IPM strategies.
- Trained agro dealers are advising farmers on the use of the less toxic pesticides and have started adapting to good practices of pesticides safety and handling.
- Agro Extension workers have welcomed the project and positively responded to the project activities like trainings, although there is little evidence to show that they are passing on the knowledge to the farmers.
- o Training manuals have been developed and used by the Trainees
- o Brochures and 2012 calendars distributed.
- A baseline survey report that gives an overview of the classes and amounts of pesticide used and the way they are used by small scale farmers in the project areas.
- Six (6) booklets for teaching farmers and others on the IPM approach have been elaborated but not yet printed.

Observations

- The list of most toxic pesticides is not available to the project for use as a guide and reference point for the key actors in the project.
- Agro dealers in Wakiso are less enthusiastic about the project (2 out of 10 selected are actually participating)
- It is however noted that Agro-dealers are in more contact with a larger number of farmers and have the potential to spread the awareness on safe pesticide handling.
- The fact that people are experiencing direct advantages from applying IPM practices has provided an incentive for the farmers to continue applying the acquired knowledge.

Objective three: The civil society, especially emphasising Uganda National Farmers Federation and district village farmers groups, are aware of pesticide dangers and able to advocate for concrete actions in the 'district pesticide committees' and the National Agricultural Chemicals Board to ensure a sustainable food production.

- o District Pesticide Committees have been set up.
- The district local authorities are aware of the dangers of pesticide safety and usage
- There has been some increase in awareness among the general population on pesticide safety and usage.

- Excellent working relationships have been developed between UNACOH and collaborating institutions.
- There is substantial good will from the district local authorities towards UNACOH and PHE Project.

Observations

- There is no evidence to support the expectation that UNFFE and farmers groups have developed the capacity for advocacy on issues of pesticide safety and usage both in the DPCs and the National Agricultural Chemicals Board.
- o DPCs have not met regularly (met only once).
- There is no visible evidence of control in the storage and sale of pesticides in the project districts. This is ideally should not be a function of the DPC as it is not a formally mandated local government body. MAAIF is responsible for matters of regulation in regard to adherence to standard requirements for pesticide dealers.

The results from the documentation, interviews and observations show that the majority of the activities planned have to a great extent been implemented; this, regardless of the fact that there has been a multitude of delays arising out of the following factors:

- Delayed permission to perform a baseline study.
- High personnel turnovers and minimal staff.
- The current Project Coordinator has vast experience in occupational health and is very knowledgeable in pesticides poisoning; however he has not been able to sufficiently prioritise PHE project activities. This is due to the fact that he has many other competing responsibilities which make serious demands on his time. Consequently this has negatively impacted on his ability to coordinate meetings within the project group, PSC, supervise project activities and stakeholder management with the required effectiveness and efficiency.
- Lack of sufficient and timely feedback from project management and stakeholders which has undermined the development of a strong working team.
- Difficulty in producing the IEC materials.
- Project procurement processes.
- Under costing of some activities during budgeting constrained the effective implementation of some activities, e.g. publication of articles, choice of radio stations, District Pesticides Committees
- Turn up of the health workers for trainings in Wakiso was unexpectedly low at the start and middle of the project.
- Internal district transfers of Health Care Workers have impacted negatively on the health aspect of the PHE project.
- Existence of competing programmes and activities within the project districts causing conflicts in prioritization by the health care workers.
- Inadequate facilitation to support activities relating to the implementation of project activities.
- Declining holding of regular staff, project steering committee affected the implementation of activities.
- o Inadequate stakeholder management has also affected the participation of

some of the stakeholders leading to their not participating in the project as envisaged.

It should be noted that many elements of this project require change of attitudes and practices on the part of the farmers. Such a project whose success depends on change of practices, to a large measure, requires long term duration. Attitude change can only be gradual and cannot happen overnight.

If a no cost extension of up to end of September 2013 is allowed, we believe that the project would be able to implement the remaining activities within the extended period.

Table.1. Key Project Targeted Achievements.

Table.1. Key Projec				
ITEM	PROJECT TARGET	ACHIEVED	VARIANCE	COMMENT
Objective one (HEAL	TH)			
Surveys	3	2	1	A decision was made to cancel the mid-term survey due to budget limitations
Registration Form (one per health unit)	30	27	3	Fully achieved. HCWs from 3 units had not been trained
IEC Materials				
Booklet	1	0	1	Draft
Pamphlets	5	0	5	Draft
Posters	5	0	5	Draft
Flip chart	1	0	1	Draft
Health Workers				
Curative	30	27	3	Fully achieved
Educative	10	7	3	Not fully achieved
Objective two (AGRI	CULTURE)			
Surveys	3	2	1	A decision was made to cancel the mid-term survey due to budget limitations
IEC Materials				
Booklet	5	0	6	Draft
Pamphlets	5	0	5	Draft
Posters	5	0	5	Draft
Flip chart	1	0	1	Draft
Farmers	40	38	2	Fully achieved
Agro Extension workers	20	14	6	Not fully achieved
Agro Input Dealers	20	10	10	Not fully achieved
Village Meetings (40 per year)	120	29	91	Not fully achieved.
Radio Programmes	30	23	7	Not fully achieved.
Committee Meetings	·			
District Pesticides Committee	12	2	10	Not fully achieved. Change in approach required
Project Steering Committee	12	4	8	Not fully achieved. 3 more meetings can be held
Project team meetings	36	37	+1	Initially project staff met on a weekly basis, but from mid 2011 the meetings have been irregular and far in between

Table 2: Project Performance Matrix

<u>Specific Objective 1.</u> Prevention, registration, diagnosis and treatment of pesticide poisonings is improved in the health clinics in 2 districts.

EXPECTED OUTPUT	ACTIVITIES	FINDINGS AND RECOMMENDATIONS
1) The health system has an overview of the number and reasons for pesticide poisonings in the project areas.	Baseline survey and report	 The baseline survey was delayed and the report came out in the 5th Quarter. The Mid-term survey was not carried out owing to an over expenditure on the baseline survey. A final survey has been done in November 2012
project areas.	A register of the number of pesticide poisonings in the two health districts is in use 2 years after the project start.	 The Pesticide registration forms were distributed in September and October 2012, to 13 HCWs in Wakiso and 14 in Pallisa. 3 Health care workers in Wakiso were not given registration forms because they not been trained as they were new in the project
		 participating health centres. Some pesticide poisoning cases are not captured in the registration forms owing to the long and detailed form and other cases are referred to big hospitals
		Recommendations
		 A simplified form for referrals should be developed. Continuous information on health units that handle pesticide poisoning cases should be provided over the radio or through IEC materials.
2) Educational		Findings
materials and consultative materials about	Existing education / information materials gathered and analysed.	 Training manuals have been developed and distributed to the trainees.

prevention,
diagnosis and
treatment of
pesticide
poisonings are in
use in the project
area and promoted
in other regions.

and New materials produced, evaluated and distributed (1 booklet about pesticide intoxication, diagnosis and treatment for the use of health persons exists.)

(5 pamphlets, 5 posters and one flip-chart about prevention, diagnosis and treatment of pesticide poisonings exists.)

- The IEC materials still in draft form.
- A 2012 year calendar and a brochure distributed to various stakeholders.

Recommendations

 Relevant stakeholders should make input into the IEC materials development process.

are performing IEC (information, education and communication) about pesticides in the villages.

Health persons (health educators and curative health personnel) selected to participate in seminars about prevention, diagnosis, treatment and registration of pesticide poisonings. (10 health educators perform IEC activities on pesticides at least once a year in the villages of their district)

(The project will train 40 health workers, 30 curative health care workers in the hospitals and health posts and 10 health education workers) in prevention, diagnosis and treatment of acute and chronic pesticide poisonings. Expected femalemale ratio is 2-1)

(A guide for diagnostic procedures and treatment of pesticide poisonings is used by

Findings

- 5 Health educators selected per district.
- 15 Health care workers selected per district
- Health educators have not yet effectively sensitised the communities owing to the lack of IEC materials. A few taken advantage of other platforms to create some awareness
- A guide for diagnostic procedures and treatment of pesticide poisonings has been developed but not printed.
- A logarithm is being used by the curative healthcare workers.

Recommendations

- Involve Village Health Teams (VHTs) as key actors in the performance of IEC activities
- Two potential possibilities exist. Facilitate the health educators to enable them effectively create awareness in the communities or as proposed above incorporate VHTs to carry out the IEC activities and phase out the Health Educators component of the project.

	30 health care workers in the two health districts 2 years after the project start.)	
4) Health personnel in the districts are able to properly diagnose and treat acute pesticide poisonings.	Five theoretical and practical seminars are conducted in each of the project areas. (30 health personnel have improved their ability to diagnose and treat pesticide poisonings by 50%.)	 Findings 5 health educators and 14 health care workers trained in Pallisa. 2 health educators and 13 health care workers trained in Wakiso. There were variances in attendance and some absenteeism. Initially there was poor turn up in Wakiso of health care workers(3 out of 15) and educators (2 out of 5) while in Pallisa the turn was 100 %. Poor turn up in Wakiso was attributed to several factors including:

		0	Mhereas HCW /HE found the training relevant they expressed the need to be acquainted with the listed pesticides being used and their respective packaging's to enable them carry out their work more effectively. Intensive and residential training of longer duration (5 to 7) days would be preferred and the venue should be easily accessible by all participants.
5) An improvement		Findin	
of the education on diagnosis, treatment and prevention of poisonings is discussed.	Curricula evaluated and proposals for revision. (3 proposals for revised curricula exists)	0	The project has been working closely with the two schools and is involved in the development of training materials, PHE project trainings, participate in studies and surveys and also provide volunteers plus playing an advisory role to the project. The schools are using experiences from this project in their teachings, but the process of discussing and evaluating curricula has not been undertaken; and therefore no proposals exist.
6) Two studies have		Findin	qs
been published in International Scientific papers, presented on conferences and for advocacy purposes towards decision makers in Uganda during the 3 rd project year	Two studies conducted within the field of human health and pesticides through collaboration between Universities in Uganda and Denmark	0	No studies at Masters and PhD levels took place. This was never the intention as a budget for such studies is outside the scope of the NGO funds from Denmark An SMS study has been conducted between the students of Copenhagen, Denmark and Makerere University School of Public Health about the effects of pesticides on the reproductive health. This involved 3 public health students from Copenhagen university and 3 from Makerere university A study has been done for a master thesis in DK and 5 bachelor thesis on public health. All these are attached to Copenhagen University. Two articles have been published in the African Newsletter on Occupational safety and health. Dr. Ssekimpi has made presentations on the project in international conferences; Accra in 2011 and Cancun in 2012.

Recommendations Collaborating Universities in Demark should be lobbied to support PHE post graduate studies. Engage more as it is already being done, graduate trainees as interns and volunteers to undertake under graduate studies for minor thesis where the project support students to take part in data gathering and write thesis on matters of interest to the project. Collaboration between universities in Denmark and Uganda should be strengthened as it creates synergies and learning from different cultures and approaches. It also promotes international cooperation. Extracts of Thesis presented in Denmark should be shared with
the PHE project in Uganda.

<u>Specific Objective 2.</u> The number of cases of pesticide poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts.

EXPECTED OUTPUT	ACTIVITIES	FINDINGS AND RECOMMENDATIONS
1) A report giving an		Findings
overview of the	A baseline survey and follow up	 The baseline survey delayed and the report only came out in the
classes and	surveys are conducted among 300	5 th Quarter.
amounts of	small-scale farmers in the districts	
pesticides used and	about their use of pesticides,	 The Mid-term survey was not carried out owing to an over
the way they are	knowledge and practice in pesticide	expenditure on the baseline survey.
used by small scale	handling, symptoms of intoxication.	·
farmers in the two	(Report published)	 A final survey has been done in November 2012
districts exists by	,	•
end of the 1 st year.		
2) Five booklets,		Findings
pamphlets and	Educational and informative materials	 Training manuals have been developed and distributed to the
posters and one flip	about IPM are gathered and	trainees.

chart about IPM exists at end of 2 nd project year	analysed. New materials are produced, evaluated and distributed (5 educational booklets, 5 pamphlets, 5 posters and a flip- chart about IPM are exists.)	 Drafts of the IEC materials have been developed and are not yet printed. A 2012 year calendar and a brochure distributed to various stakeholders. Recommendations Relevant stakeholders should make final input into the IEC materials development and ensure that printing is done as a matter of urgency. Use communication experts in developing IEC materials where necessary to expedite the process of completion of the materials To support the effective transfer of knowledge and skills it is crucial that some of the IEC materials translated in the local languages especially the posters and flip charts.
3) Forty farmers IPM farmers have through training got knowledge of and are using IPM strategies at the end of the project period	The villages and farmers-groups are visited and farmers have been selected by their fellow farmers to participate in IPM training seminars. 10-15 theoretical and practical courses on IPM are conducted.	Findings 40 farmers were selected in both districts. 88 farmers were trained and are participating in the project (9 male & 11 female) in Pallisa and (12 male & 6 female) in Wakiso. All 16 interviewed indicated that they have started using the knowledge acquired. This notwithstanding inability for most farmers to understand basic English was identified as a challenge The practical sessions provided the farmers with the opportunity to try out the new knowledge and skills gained and helped them to gain the confidence to practice what they have learned in their own farms. Since the beginning of the PHE project in both districts, only one of the farmers admitted having experienced pesticide poisoning and reporting the case at the health unit 1 in Namalere (Wakiso). The majority had no pesticide poisoning and one was not sure. However, at least 4 out of the total 16 farmers in both districts had seen someone with pesticide poisoning.

A) E ((!D) (Te	Pro pr
4) Forty farmers IPM farmers are passing their acquired IPM knowledge on to 500 fellow farmers in their villages from 2 nd project year	visited by the project to supervise	Findings 19 Village meetings (10 in Pallisa and 9 in Wakiso), have taken place in the project areas to create awareness on IPM and pesticide usage. However it is difficult to track and document village meetings.
have been distributed to 500 farmer homes in the 2 project districts from 2 nd project year		Findings o IPM materials distribution has not taken place in the 500 homes because IEC materials are not ready.
6) Twenty agric extension workers (NAADS) and pesticide dealers have improved knowledge of IPM and are using it for training or guidance of farmers from 2 nd project year		Findings 20 agricultural extension workers and 20 agro dealers were selected in both districts In Pallisa 7 agro extension workers and 8 agro dealers were trained In Wakiso 7 agro extension workers and 4 agro dealers were trained. But only 2 agro dealers are presently participating in the programme activities. The trained agro input dealers confirmed passing on advice to farmers on proper usage of pesticides. Agro extension workers stated that they lack IEC materials as well as protective gear to carry out effective training in the communities. Recommendations Develop a strategy for active involvement of agro inputs dealers in the project activities as they are a key source of information to farmers. Involve UNADA in the selection and follow up of agro dealers. Expand the chain to include shop attendants in the trainings IEC materials especially posters and flipcharts should be

	translated into local languages.
7) A model for training of farmers and technicians (NAADS) in IPM for use all over Uganda exists at the end of the project period.	This model is yet not formalised
8) The studies have been published in international scientific papers, presented on conferences and for advocacy purposes towards decision makers in Uganda during the third project year.	 An agronomist has written about the project in a thesis presented to Copenhagen University. Recommendations (reference to recommendations under output 6 in objective 1)

<u>Specific Objective 3.</u> The civil society, especially emphasising Uganda National Farmers Federation and district village farmers groups, are aware of pesticide dangers and able to advocate for concrete actions in the 'district pesticide committees' and the National Agricultural Chemicals Board to ensure a sustainable food production

EXPECTED	ACTIVITIES	FINDINGS AND RECOMMENDATIONS
OUTPUT		
1) A pesticide	-Meetings are celebrated to	Findings
committee is	organize local pesticide	 The District Pesticide Committees were initially constituted in the 1st
formed in each	committees in the two districts	and 2 nd Quarter but they have not functioned as expected.
district by the end	with participants from the	 Both districts have held one meeting each and agreed on some
of year one.	authorities and local farmer	resolutions, which have not been followed up.
2) Farmers groups	organisations.	 DPC meetings have not been regular due to the following reasons:-
are advocating for		- Local Government elections resulted in changes in the district

at sustainable agricultural production in the committee. 3) 5 concrete actions have been promoted by the pesticide committees to improve control of use and sale of pesticides in the districts at the end of the project.	-Members of the committees are trained on four seminars. -Quarterly Meetings are celebrated in the committees. -Organisation of a pesticide conference at district level.	authority offices whereby some members left office. - There is no designated responsibility centre for coordinating the meetings of the DPCs. - There is lack of coordination and follow up by project staff to ensure that meetings happen regularly. O Due to budget limitations District seminars and conferences were run alongside each other. Indeed District conferences to inform about pesticide, health and environment were in held in Pallisa in the 8 th Quarter and in 9 th Quarter in Wakiso district. There has been a general improvement in pesticide knowledge among the district pesticide committee members as a result of the district conferences and farmer / health care trainings. There has been little or no advocacy for concrete actions in the District Pesticide Committees mainly because they have been dormant. Neither have the farmers and UNFFE started advocating for concrete actions. Recommendations UNACOH should develop strategies for strengthening their collaboration with the district authorities to ensure that they start main streaming the project activities into district work plans. Lobby Ministries (agriculture and Health) to involve the DPCs into their structures. DPCs currently do not have the mandate to inspect and control but can only quide on handling of pesticide but not to do
		collaboration with the district authorities to ensure that they start main streaming the project activities into district work plans. o Lobby Ministries (agriculture and Health) to involve the DPCs into their
		 UNACOH should make follow up to ensure that the DPCs are meeting regularly and carrying out their planned activities and secure that a specified organ at the district level takes lead in calling for and coordinating the DPCs meetings UNACOH should develop an advocacy strategy to guide its advocacy work and activities.
4) Experiences		Findings
from the project has	Project collaborates with National	 Collaboration with the National Agricultural Chemicals Control Board

dia a conservation (la c	D		Department the partition on at Delegan Information Court
discussed in the	Board		Board on the setting up of Poisons Information Centre, while MAAIF
Agricultural			was consulted on pesticide use in the flower sector.
Chemicals Board by			
the project and its		0	The PHE project has requested for a list of approved pesticides by the
partners from year			Ministry of Agriculture. However, they have never received this list.
two.			One of the reasons given was that the list could be abused by people
5) Farmers through			who are not technical enough to use it.
UNFFE are			
advocating for at			
sustainable			
agricultural			
production in the			
board.			
6) 10 articles have		Findir	ngs
been printed in	-Articles (10) about pesticides are	0	6 articles have been published in various publications
newspapers about	produced and printed in the news	0	23 Radio programmes have been aired so far, 10 in Pallisa and 13 in
pesticide dangers	papers.		Wakiso.
and prevention	-Radio programs (30) are	0	The publication for school children was never executed as the
evenly distributed	produced and transmitted in the		coordinator of the danida NAADs program was changed; funds for this
during the projects	districts.		was not granted as originally foreseen.
lifetime.	-Materials for schoolchildren are		3 3
7) 30 radio spots	produced, evaluated and	Obser	rvations
about pesticide	distributed. (one publication)	0	Radio programmes are an important way of creating awareness to the
dangers and	(wider population. According to the health workers in Pallisa
prevention exist			communities are very interested in listening to the programmes if they
and have been			are informed about them in advance.
transmitted evenly		0	Much as farmers have been trained there are other members of the
distributed during			family who also need to be aware on the dangers of pesticide use.
the projects			issuing into all a local to be affaire of the daily of a positione door
lifetime.		Recor	nmendations
8) One publication		0	Use various channels to inform the communities in advance about the
'Farm Talk' for			radio programmes such as announcing in schools, churches, sub
school-children			counties, VHT, posters and dramas.
about pesticide		0	Strategies involving school children should be designed and used as
about pesticide		U	onategies involving school children should be designed and used as

dangers and prevention exists by the end of year two.		relevant transmitters of information to their family members. i. e school talks, posters, leaflets.
9) Cooperatives producing IPM produced food exists in the two districts from year three. 10) A strategy on how to promote IPM products at the market is tried out and exists at the end of the project. 11) Interest groups in IPM and sustainable farming are getting to know each other and collaboration takes place possibly also including regional partners in year three.	-Every year a conference is held by UNACOH including pesticides, health and environment, where	

3.4. Assessing Project Management

The project has structures in place which include UNACOH NEC, PSC, PC, APCs and Volunteers all of whom have played critical roles in the implementation of the project. The PSC is well placed to play its advisory role but it has not been fully utilized because it has not met regularly as was planned. When members are not regularly meeting and meetings are far in between, there develops a tendency to lose track and interest in what is happening. It is noted, however, that those members of the committee whose professional expertise directly feeds into the project activities are closely participating in some activities.

The project staffs are very committed in carrying out their work and have actually been able to successfully implement a number of the key activities. They have been making regular monitoring visits to the project areas and reports on activities that have taken place have been made. Trimester and year reports have been submitted timely to Dialogos. Good channels of communication do exist between UNACOH and Dialogos and are mainly through internet, telephone calls and regular visits from Dialogos.

The Project Coordinator has vast experience in occupational health and is very knowledgeable in pesticides poisoning. It is observed that the PC has diverse responsibilities which make it difficult for him to concentrate on the PHE project as a priority and this has had negative consequences for the effective and efficient running of the project. Consequently this has negatively impacted on his ability to coordinate meetings within the project group, PSC, supervise project activities and stakeholder management. Meetings are an essential element in building working teams, and a means to provide feedback; know whether the staff are performing or not; know the challenges and develop strategies for overcoming them and make effective plans in order to achieve set goals.

There is a need to have a Project Coordinator who would be in a position to prioritise PHE activities and be able to steer the project in the direction that best leads to the most effective and efficient way of attaining the set objectives. It is our proposal that this individual should also be charged with the implementation objective 3 related activities.

3.5. Assessing Project Efficiency

Project efficiency was assessed in reference to project achievements against the Project outputs as shown in the log frame

The key questions on project efficiency include:

- 1. Is the project delivered in a timely and cost-effective manner?
- 2. Have the resources been used effectively?
- 3. Do the results –quantity and quality justify the resources expended

The approach adopted in evaluating project efficiency was two-pronged:

- a) One aspect looked at how the project inputs have been converted into project outputs as shown in the Project log frame. This aspect evaluated <u>performance of the project against all outputs planned in each of the three objectives</u>
- b) The second aspect has looked at the overall Project Management efficiency of the

project with respect to performance against the project cost and work plans, as planned at project inception.

3.5.1. Project Efficiency with respect to delivery of activities to the beneficiaries

Besides the selection process of farmers (primary target group), HCWs, Agro Dealers, Health Educators and other stakeholders, who participated in the PHE project, the projects main activities were concentrated in trainings, meetings and formation of cooperative societies.

Due to the numerous delays, the project had initially got an extension to June 2013 from the initial projected end of project in March 2013. There is a further possibility of a no cost extension of July, August, September, giving the project ample time to compete the remaining activities.

Trainings and village meetings were conducted in the areas of pesticides poisoning and treatment and in IPM farming strategies for the primary and secondary targets. The attendance was as expected in Pallisa project area and fairly attended in Wakiso project area. Radio spots/talk shows were conducted to create awareness in the project areas.

What was taught was highly relevant and changes could easily be observed and noticed in the project areas on both the farmers as the primary target and Agro dealers, HCWs and Health Educators as the secondary target groups.

UNACOH has had limited staff in relation the planned project activities. Fortunately the gaps had been filled by the willing and big number of volunteers who have backed up the project staff since its inception.

The project coordinator was operating on part-time basis which has posed a number of challenges in the timeliness of the project's activities implementation. This was a factor to reckon with in terms delays in coordinating project meetings, steering committee meetings and implementation of activities.

It is an anomaly that IEC materials were found not to be in place already. It would have been efficient to introduce participants to these materials alongside the oral trainings, demonstrations and the handing out of the booklets. This would have facilitated the trainees' ability to more easily make direct links between what they have been taught and the appropriate practices being advocated for as would be illustrated in the visuals.

Funds from the funder were remitted on time except where on a few occasions there were delays as a result of late submissions of accountabilities and audited accounts.

3.5.2. Project Efficiency with respect to Project Schedule (Work plans) and Cost (Budget) Management

Project Schedule: There has been consistency in submission of work plans to the funder, as these have always followed the quarterly donor reports. However, a number of activities have not been implemented on schedule due to lack of close supervision and coordination. Additionally high staff turnover has also affected the health sector.

The project now has a full-time assistant project coordinator for the health component and has

been allowed a no cost extension of up to end of September 2013. This should allow the implementation of the remaining activities.

Project (Budget) Cost: Based on the project budgets and the funds utilization reports of 2008 - 2012, there were some major cost variances due to non-implementation of activities especially in the project's health component. During the project time, there has not been any significant budget revision or adjustment and the administrator/accountant has had a tight budget control in all aspects. Again due to delay in activities implementation the budget has always indicated a positive variance with a constant fear of not being able to utilize all the funds.

At the time of this evaluation, the project had utilised Ugshs 500,545,298/- out of the budgeted Ug.shs 717,220,140/-, a utilisation of 70% leaving 30% for the remaining project period.

With close support from Dialogos, the situation with under spending was controlled and the financial management has been enhanced with the needed skills to manage the budget better. The staff together with Dialogos will be working on a new budget revision to accommodate the no-cost-extension to cover the three months the project has been extended with.

3.5.3. Project Efficiency with respect to Project economic performance

Overall financial management of the project has been excellent with a tight control of the budget lines and in time remittances from the donor except in situations where donor reports have been delayed due to delays in finalizing programme reports.

The project's economic performance has been marred with delays right from the inception of the project, when the permission to conduct a baseline took many months and the actual implementation of the activities started late.

Some budget lines have been overspent, due to an initial under budgeting and some have actually been under spent or lagged behind due to the numerous delays like the production of IEC materials and steering committee meetings that have failed to be convened.

Table.3. shows the summarised budget performance for the 9th Quarter as by the time of the evaluation.

Summary of Budget and budget utilization.	Budget	Actual Expenditure	Balance.
Health			2,588,718
	5,215,118	2,626,400	
Agriculture			3,538,620
	9,923,120	6,384,500	
Organisation IEC cost			4,588,987
	15,800,687	11,211,700	
Activities in common.			- 633,344
	6,605,356	7,238,700	
Investment			310,000
	1,000,000	690,000	
Local Staff			-
	20,002,500	20,002,500	

Local Administration.			2,858,308
	8,792,108	5,933,800	
Total		- 4 co- coc	40.054.000
	67,338,889	54,087,600	13,251,289
Summary of Budget and budget utilization.	Budget	Actual Expenditure	Balance.
Health			
	13,372	6,734	6,638
Agriculture			
	25,444	16,371	9,073
Organisation IEC cost	10 = 1 =	22.742	44.707
	40,515	28,748	11,767
Activities in common.	16.027	10 561	1 604
las sa atao a at	16,937	18,561	1,624
Investment	2,564	1,769	795
Local Staff	_,55	.,. 00	
	51,288	51,288	-
Local Administration.	,		
	22,544	15,215	7,329
Total			
	172,664	138,686	33,977

Table.4. shows Budget performance per Quarter up the evaluation period (Quarter 9)

Initial project budget at start	<u>717,220,140/-</u>
Utilisation Q1	84,659,002/-
Utilisation Q2	44,683,446/-
Utilisation Q3	36,908,500/-
Utilisation Q4	27,045,350/-
Utilisation Q5	68,836,850/-
Utilisation Q6	51,597,250/-
Utilisation Q7	72,943,000/-
Utilisation Q8	59,784,300/-
Utilisation Q9	54,087,600/-
Test Q1+Q2+Q3+Q4+Q5+Q6+Q7+Q8+Q9	500,545,298/-

According to the accounts that leaves a positive balance of (717,220,140 – 500,545,298) = 216,674,842/= This amount is to cover expenses from October to May 2013 and to include a no cost extension of 4 months.

Table 5. Shows the Staff Project Budget for the no cost extension.

	HE PROJECT SUMMARY EXTENSION SET JUNE - SEPTEMBER, 2013	Exchange rate	450
Code	Activity	DKK	UGX
1	Health	8,889	4,000,000
2	Agriculture	8,889	4,000,000
3	Organizational IEC	13,333	6,000,000
40.1	Transport (Activity in Common)	8,889	4,000,000
4.3.1- 4.3.5	Local Staff	59,267	26,670,000
5	Local Administration	35,556	16,000,000
	Total	134,822	60,670,000

3.5.4. Conclusions on Project Efficiency

The project has performed relatively well across all performance areas, especially the activities regardless of the challenges it experienced. It should be noted that performance was further helped by the close surveillance of the project by Dialogos project group who through visits and mails helped with very important advice in order to keep the project on track.

The staffs have managed well in delivering the knowledge and intended message to the beneficiaries, regardless of numerous staff changes in the health component of the project. The beneficiaries were very appreciative of the teaching methodologies and enhanced understanding on the part of the messages.

The Project administrative secretary has meticulously managed to control the budget and given the project a recommendable financial management and good economic performance.

Thus, the overall Project Management efficiency was relatively good.

3.5.5. Recommendations on Project Efficiency

- It is recommended that the project coordination is streamlined by recruiting a full-time coordinator who would give un divided attention to overseeing the project processes. This will go a long way in addressing some of the current challenges.
- The production of IEC materials should be completed well before the start of the next phase of the project.
- It is recommended that the function of IEC materials production be outsourced to a competent contractor, who would be closely supervised by the project coordinator and work closely with the project staff.
- The track record of clean financial audit must be maintained.

3.6. Assessing Project Outputs Sustainability

Project sustainability was assessed in reference to whether there is an enabling environment that supports ongoing positive impacts of the project, and on whether the outcomes can be sustained beyond the life of the project and the impacts will continue to be realized.

The team observes that there is an enabling environment that supports the projects objectives and there is evidence that excellent working relationships have been developed between UNACOH and governments institutions as well as other collaborating agencies. There is substantial good will from the district local government authorities towards UNACOH and PHE Project and this should be capitalized on for the sustainability of the project.

The sustainability of the project efforts will, however, depend on a number of factors, namely:

- Ability of the project to attract, train and retain competent project staff.
- o Ability of the project to interest and train enough HCWs in the project areas.
- Farmers' ability to make a link between health and economic advantages gained from practicing IPM strategies.
- UNACOH's technical and organizational capacity to coordinate the PHE project as well as resource mobilisation
- The ability of the local government authorities to mainstream PHE project activities into their annual work plans and budgets

Although local district authorities are keen on mainstreaming project activities and have the desire to allocate resources to sustain the project activities they are constrained by budget provisions. It would, under the circumstances, be difficult to say with certainty that they would fund the continuation of project activities. It is, therefore, important that donor funding should continue for a while to enable sufficient documentation of experiences and impact which can be used to lobby and convince government to mainstream the project activities into government annual allocations.

UNACOH should explore forging partnerships with other agencies whose budgets can support some of the project related activities i.e. NEMA, UNADA, NOGAMU etc. Additionally, UNACOH should make a deliberate effort to reach out to other potential donors to supplement Dialogos funding.

3.7. Assessing Project Effects

Project effects were assessed in relation to both expressed and observable changes that have occurred as a result of the project.

- Generally the project has made an impact within the project area Over all the PHE project activities as implemented by the UNACOH staff have contributed a great deal to the general awareness on pesticides safety and usage as well as knowledge on IPM strategies
- Findings have revealed increased awareness among farmers in terms of alternatives to pesticides use and proper pesticides storage.
- As a result of farmers practicing IPM strategies expenditure on pesticides has reduced.
 One orange farmer in Pallisa said that "I used to use pesticides, now I am using natural alternatives and I am seeing a reduction in my farm related expenditure."

- Most untrained farmers especially from the intervention area expressed the view that they owed their improvement to fellow farmers who had put an effort to share the knowledge acquired from the PHE trainings.
- Trained agro dealers practices have changed their practices. "I used to share a room with pesticides, keep my food, water etc in the shop but after the training I now have separated the rooms, I keep the pesticides in a different room", said a woman agro dealer.
- Health care workers have positively used the knowledge and skills. "I have used the knowledge and skills for saving lives and training fellow staff," 'said a health care worker from Pallisa.
- There is enhanced knowledge of the effects of pesticides among health care workers as a result of the PHE project.
- Agricultural extension workers (AEW) are also realising the benefits from the project. "I have been working as AEW since 1975 but we have not been bothered about protective measures and UNACOH has really saved the lives of agricultural extension workers and the communities because usage of pesticides has been very poor even by the agro extension workers" Agricultural extension worker from Pallisa.
- Wakiso district authorities are considering creation of a budget line for supporting awareness creation on safe pesticides use and handling.

3.7.1. Recommendation on Enhancing project effects and sustainability

- District authorities should take advantage of the conditional grant available through the Pests and Disease Control budget line of the Plan for Modernisation of Agriculture in the Ministry of Agriculture to address issues of pesticide safety and usage.
- Strategies should be developed to sustain the interest generated by the intervention in the project area.

4.0. GENERAL CONCLUSIONS:

As a pilot the project has demonstrated that it is relevant. It is creating awareness on a growing problem but which many people are not aware of. The project has been able to bring into prominence the dangers of pesticides poisoning and the need for the health and agriculture systems to start taking up the related issues as a matter of priority. The health system needs to consider antidotes as essential drugs at the health centres.

There has been a positive knowledge and attitude change within and outside of the trained groups in the project areas as a result of the PHE interventions. All this forms a firm foundation on which to build a second phase.

The excellent working relationships which have been developed between UNACOH and collaborating institutions should further be strengthened because they bring on board expertise and experiences which would enrich the work of the PHE project. The existing good will of the local authorities should be capitalized on to ensure the mainstreaming of project activities into the district work plans and sustainability of the project activities over the long haul.

5.0. OVERALL PROJECT RECOMMENDATIONS:

- As a matter of urgency the issue of effective project coordination should be addressed, because is of strategic importance for the sustainability of the PHE overall project goals.
- Staff should be trained in leadership and team-building, organization development and advocacy.
- Geographical spread of the project should be expanded by rolling out to all the sub-counties of the project Districts and the number of trained farmers should be increased from 20 to 100.
- All health care workers in the project district should be trained to ensure that gaps are not created as a result of internal district transfers.
- Village Health Teams (VHTs) should be involved in the health aspect of the project. The VHTs are already working in the communities on health issues and can be useful agents in sensitizing communities about PHE activities.
- If VHTs are brought on board we recommend that VHTs could concentrate on performing the IEC activities while healthcare workers concentrate on treating pesticide poisoning cases.
- A strategy for motivating more agro-dealers to participate in the project activities should be developed. They are a key contact point for farmers in providing information on pesticides safety and usage.
- The training for agro-dealers should be expanded to include their shop attendants.
- UNADA should also be involved in the selection and follow up of agro dealers.
- More stakeholders that target farmers' economic productivity e.g. UNBS for regulation of marketing of chemicals should be involved.
- The production and distribution of IEC materials, and radio programmes to enhance sensitization of the communities should be expedited.
- Fora to follow up on trained groups (farmers, HCWs, Extension workers Agro input dealers, and committee members) should be created for reflection and sharing of experiences gained from the application of the learning.
- Supervisory visits to already trained groups (farmers, HCWs, Extension workers Agro input dealers, and committee members) should continue to deepen and support their continued involvement in the project.

- The option of contracting out some aspects of the project activities such as the production of IEC materials should be seriously considered to bring expertise on board.
- UNACOH should develop strategies for strengthening their collaboration with the district authorities to ensure that they start main streaming the project activities into district work plans.
- MOUs between UNACOH and collaborating partners should be elaborated upon and formalized to ensure that each understands their roles and responsibilities.
- The budget should be reviewed to take into account prevailing realities and avoid under-costing which undermines effective implementation of activities.
- It is recommended that an organization that seeks to keep together a team that has been trained and worked together should be promoted. Such an organisation would seek to develop work plans to carry forward the training and create platform for advocacy work. (Although the project document envisages the creation of cooperatives to produce and promote the production and marketing of IPM products, this is an unrealistic expectation. The non mono crop culture practiced in the project area makes this unlikely to succeed.)
- UNACOH as a priority should explore forging partnerships with other agencies whose budgets can support some of the project related activities i.e. NEMA, UNADA, NOGAMU etc. Additionally, UNACOH should make a deliberate effort to reach out to other potential donors to supplement Dialogos funding.

Although the project has experienced a few challenges, it has nevertheless, brought about positive out-comes and we recommend continuation into a second phase to both deepen and expand project interventions. Special consideration should be put on **organisation development**, **advocacy and sustainability issues**.

6.0. APPENDICES

6.1. COMPOSITION OF THE TEAM OF EVALUATORS:

The Evaluation team was composed of 4 members as follows:-

Japhes Mukiibi Biimbwa Bsc. (Economics), Diploma (Upper Second), Makerere University and Project Planning and Management (DPPM) at Uganda Management Institute, Kampala, is a Consulting Partner of JCRR Consult Limited and he is a projects development expert providing advice on developing personal business and development projects as well as in community organising and governance. He has worked for MS – UGANDA (Danish Association for International Co-operation) as a Senior Programme Officer and deputising for the Country Director with responsibility for programme development and Team leader/thematic head for the Building Local Democracy programme. He has vast experience in Financial and Human resources policy development and training organisations' staff in the use of and adherence to organisations' policy documents. He is a former Executive Secretary / Chief Executive Officer of the Uganda Small Scale industries Association (USSIA), responsible for the day to day management of USSIA. He brings on board a wealth of experience in Project Management and team leadership and has expertise in Organisational Development and in Tools and Materials Development. He has conducted capacity building work in Kenya, Uganda and Tanzania.

Rehema Nalugwa Oliver: BA (Social Sciences) Makerere University, MBA University of Northern Virginia, London Campus, Diploma in Development Studies- University of London, Birbeck College, and Professional Diploma in Project Management is a Consulting Partner of JCRR Consult Limited. She has over 5 years of private and public experience work both local and international in development, project planning, management, monitoring and evaluation. Rehema Nalugwa Oliver has worked as a Research Assistant, Project Support Officer, and Community Support Officer in the United Kingdom. She also has extensive experience as a Development practitioner conducting research and training in Uganda.

Rosette Semwogerere, BA Hons- Upper Second (Political Science) Makerere University, Kampala, Uganda, M. Soc. Sci. Local Government and Administration, University of Birmingham, UK is a Consulting Partner of JCRR Consult Limited and she has expertise in development training especially in the area of Policy Advocacy. She is an Associate Trainer, MS-Actionaid Training Centre for Development Cooperation (a regional resource Centre for development organisations in East and Southern Africa) based in Arusha, Tanzania. She teaches Policy Analysis and Advocacy, BA Development Studies Course, which draws participants from Eastern, Southern and West Africa. She has experience in working with Pilot Development Programmes and has worked with MS- Action Aid as Coordinator of the Inspirator programme – a South to South exchange programme. She worked as Technical Advisor/Lobby and Advocacy, Department of Social Welfare, Ministry of Health and Social Welfare (MoHSW), Government of the Kingdom of Lesotho.

Anne Helene Meldgaard Pedersen: Attached to Dialogos, Denmark. MSc (Anthropology) Aarhus University, Denmark. She has conducted fieldwork and specialty investigation in townships in Cape Town, South Africa. Professional Diploma in Project Management (Project Management Institute PMI). She is a Research Assistant in Department of Occupational Medicine, Herning, Denmark, investigating work conditions and patient safety in the Danish health service. She has experience as project manager- and coordinator in World Music Centre, Aarhus School of Music, where she worked with intercultural integration projects. She has earlier worked for Mellemfolkeligt Samvirke as project assistant in Copenhagen and on a shorter trip to Tanzania.

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JCRR provides top quality training, research and consultancy services aimed at bridging the knowledge gap between different practitioners of development planning which include the central government sectors, local government Authorities, community based Organisations, Nongovernmental Organisations and the private sector.

6.2 TERMS OF REFERENCE

PESTICIDES, HEALTH AND ENVIRONMENT

2010-13

Evaluation of the project December 2012

The overall objective of the evaluation

The overall objective of the evaluation October 2009 is to assess the performance of the project and the activities defined in the project document and at the same time on the basis of the findings come up with relevant suggestions and recommendations for a second phase of the project.

- Evaluate project performance as regards to the preparation and implementation of plans and achievement of targets and objectives.
- Asses and recommend possibilities for future plans.
- Formulate experience gained from the project in relation to project preparation and implementation.
- Based on the above to make recommendations for the future of the project.
- Evaluate the capacity of UNACOH as an NGO according to donor criteria.

Scope of work

The task of the evaluation will include, but not be limited, to:

Project start

- Asses the process of design and planning of the project.
- Assess the choice and possibilities of local partners and the co-operation between the institutions and sectors/departments?

Project implementation and performance

- Assess project implementation and constraints in connection with the implementation.
- Assess and analyse the relevance of activities and the balance between the different activities (training><supportive work and balance between work at different levels).
- Assess whether the target groups are appropriate.
- Assess the economical aspect of the project.

Achievement of objectives

- Analyse objectives and achievement of objectives and outputs.
- Assess and evaluate performed activities in relation to the defined activities. (use indicators for the
 described objectives and activities of the project, see log-frame).
- Assessment of the relevance and effectiveness of training/workshops and supervisory activities with regard to their appropriateness and methodology (repetition of baseline-study from beginning of project).
- Assess the sustainability and follow up on trained groups (farmers, HCW's, committee members, extensions workers, agro-dealers).

Project management

- f. Assess the project structure, management and administration on the project.
- g. Assess coordination of activities within the sectors in the area according to the defined project activities. This including the official health service, agricultural sector, local government and activities of other NGOs.
- h. Assess the function of the steering committee and coordination at central level.
- i. Assess the ways of communication between UNACOH and Dialogos.
- j. Assess the reporting on and monitoring of project activities.

Methods of the evaluation

To perform the evaluation it is necessary to collect relevant data and statistics from the existing archives. As there has been an initial baseline-study a new one will have to be carried out in accordance with the evaluation to assess possible changes.

The evaluation team is to meet with stakeholders and beneficiaries to the project at multiple levels: Danish Embassy, district authorities, and communities. Meetings will also be held with various representatives of other partners. Data will be collected with documents review, key informant interviews, focus groups, community meetings, and observations. During some meetings PRA methods will be used for greater participation. The main topics of discussion will include:

- Context of project: past, current, anticipated
- History of UNACOH including management
- Project outcomes, including indicators
- Recommendations, for current phase and future

Future operation of the project

- Provide recommendations on changes in the project design and strategies.
- Provide recommendations on objectives and indicators for a second phase of the project.
- Recommend elements to be included in the evaluation and monitoring plan for a second phase of the project.

Evaluation report

During the evaluation a report will be produced and finished not later than end December 2012 for Dialogos and UNACOH to be able to use the recommendations in the report for an application for a second phase of the project.

Composition of the team to perform the evaluation

The evaluation is to be carried out by an external team of evaluators.

6.3 LISTS OF THE INTERVIEWED PARTICIPANTS

Primary and Secondary Target Groups

- 16 Trained farmers
- 14 Untrained farmers
- 10 Health Care workers
- 4 Health Educators
- 4 Agricultural Extension workers
- 4 Agricultural Input Dealers

Project Steering Committee

- Makerere University school of public health
- Makerere college of Agricultural and environmental sciences
- NEMA
- UNADA
- NOGAMU
- MAAIF
- UNFFE
- Project coordinator

DIALOGOS Representative in Uganda / Denmark

Project staff

- Project coordinator
- A.P.C Health
- A.P.C Agriculture
- Administrator
- Volunteers

PALLISA District

- CAO
- DHO
- DAO
- LC3 Agule chair person
- Agule sub county chief
- Pallisa hospital medical superintendent

WAKISO DISTRICT

- Deputy CAO
- DAO
- District production officer
- Nangabo sub county chief
- LC3 Nangabo chairperson

6.4 LIST OF UNACOH PROJECT DOCUMENTS REVIEWED

- UNACOH Baseline studies
- UNACOH Project Document PHE and IPM training documents
- Project Annual Narrative Reports and Financial Reports
- UNACOH Project Annual Work Plans
- UNACOH Strategic Plan
- Reports and Financial Statements for all project years
- ToRs and Minutes for the steering committee
- ToRs and Minutes for the pesticide committee
- The project log-frame
- Project contract agreements
- o Activity reports from the Health component of the project
- Activity reports from the Agricultural component of the project
- o Project generated publications and training materials

6.5 PROJECT LOGICAL FRAMEWORK:

Project on Pesticides, Health and Environment Uganda

General Objective: To reduce negative health effects of pesticides in humans and prevent pesticide pollution of environment.

OBJECTIVE 1	OUTPUTS	ACTIVITIES	1 INDICATORS
Prevention, registration, diagnosis and treatment of pesticide poisonings is improved in the health clinics in 2 districts	- After the baseline is conducted and analysed during the first year of the project the health system has an overview of the number and reasons for pesticide poisonings in the project areas. - After two years a registration form is printed, distributed and in use. - A book about pesticide intoxication, diagnosis and treatment for the use of health care workers is printed and ready for distribution at the end of year two. - Five pamphlets, posters and one flip-chart about prevention, diagnosis and treatment of pesticide poisonings for IEC activities are printed and ready for distribution at the end of year two. - 10 Health education workers are performing IEC about pesticides in the villages of their districts in the third year of the project period. - 30 Health care workers are able to proper registration, diagnosis and treatment of acute pesticide poisonings in the third year of the project period. - A model for training health care workers in prevention, diagnosis and treatment of acute pesticide poisonings for use all over Uganda exists at the end of the project period. - The studies have been published in international scientific papers, presented on conferences and for advocacy purposes towards decision makers in Uganda during the third project year.	1.1 A baseline study and later follow up surveys are conducted to get an overview of the number and reasons for acute pesticide poisonings. 1.2 A registration system for pesticide intoxications is elaborated and tried out. 1.3 Existing educational and informational materials are gathered and analysed. 1.4 New materials are produced, evaluated and distributed. 1.5 Health persons (health educators and curative health personnel) are selected by the health system in the districts to participate in seminars about prevention, diagnosis, treatment and registration of pesticide poisonings. 1.6 Five theoretical and practical seminars are conducted in each of the project areas. 1.7 Two studies are conducted within the field of human health and pesticides through collaboration between universities in Uganda and Denmark.	number of pesticide poisonings in the two health districts is in use 2 years after the project start. • A guide for diagnostic procedures and treatment of pesticide poisonings is used by 30 health care workers in the two health districts, 2 years after the project start. • IEC (information, education and communication) materials about prevention of pesticide poisonings are used by 10 health promoters in the villages in the two health districts, 2 years after the project start.
OBJECTIVE 2	OUTPUTS	ACTIVITIES	2 INDICATORS

The number of cases of pesticide poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts.

- A report giving an overview of the classes and amounts of pesticides used and the way they are used by small scale farmers in the two districts exists by the end of the first year.
- Five booklets, pamphlets and posters and one flip-chart 2.2 Educational and about IPM exists at the end of informative materials about the second project year.
- Forty IPM farmers have analysed. through training got knowledge 2.3 New materials are and are using strategies at the end of the distributed. project period.
- Forty IPM farmers are passing their acquired IPM knowledge on to 500 fellow farmers in their villages from the second project year.
- IPM-materials have been distributed to 500 farmer homes in the two project districts from the second project year.
- Twenty agricultural extension (NAADS) workers and pesticides dealers have improved their knowledge of IPM and are using it for 2.6 10-15 theoretical and training or guidance of farmers from the second project year.
- A model for training of farmers and technicians (NAADS) in IPM for use all 2.7 5 theoretical and practical over Uganda exists at the end of the project period.
- The studies have been published in international scientific papers, presented on conferences and for advocacy purposes towards decision makers in Uganda during the third project year.

- 2.1 A baseline survey and later follow up surveys are conducted among smallscale farmers about their use of pesticides, knowledge and practice in pesticide handling and symptoms of intoxication.
- IPM are gathered and
- IPM produced, evaluated and
 - 2.4 The villages and farmers-groups are visited and farmers have been selected by their fellow farmers to participate in IPM training seminars.
 - 2.5 Agricultural extension workers (NAADS) and pesticides dealers have been selected by the District Agricultural Officer (DAO) to participate in the IPM training courses.
 - practical courses on IPM are conducted in each of the two districts for farmers.
 - courses on IPM are conducted in each of the two districts for technicians.
 - 2.8 Farmers groups and villages are visited by the project to supervise trained farmers on how to pass their acquired knowledge on to fellow farmers.
 - 2.9 Agricultural extension workers (NAADS) and pesticides dealers are visited by the project to supervise them on how to pass their acquired knowledge on to farmers.
 - 2.10Two studies are conducted within the field of agriculture, environment and pesticides through collaboration between universities in Uganda and Denmark.

- The farmers in 20 villages in the two districts report fever symptoms of pesticide intoxication after spraying procedures at the end of the project period.
- Fever of the toxic pesticides WHO class 1a and 1b are used by the farmers in 20 villages at the end of the project period.
- The farmers in 20 villages are using IPM methods at the end of the project period.
- The NAADS Extensionists are including IPM in their advices and courses for farmers 2 years after the project start.
- The pesticide dealers are giving advice on the use of less toxic pesticides and promoting the use of personal protective equipment for handling pesticides.

OBJECTIVE	OUTPUTS	ACTIVITIES	3 INDICATORS
OBJECTIVE 3 The civil society, especially emphasising Uganda National Farmers Federation and district village farmers groups, are aware of	OUTPUTS - A pesticide committee is formed in each district by the end of year one Farmers groups are advocating for at sustainable agricultural production in the committee 5 concrete actions have been promoted by the pesticide committees to improve control of use and sale of pesticides in the districts at the end of the project.	ACTIVITIES 3.1 Meetings are celebrated to organize local pesticide committees in the two districts with participants from the authorities and local farmer organisations. 3.2 Members of the committees are trained on four seminars. 3.3 Meetings are celebrated in the committees. 3.4 Organisation of a	INDICATORS Farmers and UNFFE have improved their capacity for advocacy and are doing this in the district pesticide committees and National Chemicals Board. Pesticide committees are set up and celebrating
pesticide dangers and able to advocate for concrete actions in the 'district pesticide committees' and the National Agricultural Chemicals	- A conference at district level has been conducted during the third year of the project Experiences from the project has been presented and discussed in the Agricultural Chemicals Board by the project and its partners from year two Farmers through UNFFE are advocating for at sustainable agricultural production in the board 10 articles have been printed	pesticide conference at district level. 3.5 Collaboration with National Agricultural Chemicals Control Board is established and sustained. 3.6 Articles about IPM and pesticide, health and environment are produced for printing in the news papers. 3.7 Radio programs are	meetings quarterly in the 2 Districts from the beginning of the second year of the project. • Control of storage and sale of pesticides in the two Districts has improved within the second year of the project.
Board to ensure a sustainable food production.	in newspapers about pesticide dangers and prevention evenly distributed during the projects lifetime. - 30 radio spots about pesticide dangers and prevention exist and have been transmitted evenly distributed during the projects lifetime. - One publication 'Farm Talk' for school-children about pesticide dangers and prevention exists by the end of year two. - Cooperatives producing IPM produced food exists in the two districts from year three.	produced for transmission in the districts. 3.8 Village meetings are conducted to inform the population about the project, IPM and 'pesticides, health and environment'. 3.9 Farmers cooperatives are created in the districts to promote production and marketing of IPM products 3.10 Study to promote IPM grown products on the market is undertaken	 A positive list of pesticides for use in IPM-farming in the 2 districts is elaborated within the second year of the project. The population in the two districts has increased their knowledge about the potential dangers of pesticide use and some preventive measures at the end of the project period. IPM products
	- A strategy on how to promote IPM products at the market is tried out and exists at the end of the project Interest groups in IPM and sustainable farming are getting to know each other and collaboration takes place possibly also including regional partners in year three.	through collaboration between universities in Uganda and Denmark. 3.11 Every year a conference is held by UNACOH including pesticides, health and environment, where experiences can be shared with other partners and entities to advocate for sustainable solutions.	are been promoted from the third year of the project period.

6.6 PROPOSAL FOR PHASE 2 UNACOH

General Objective: Improving the health of the population by a reduction of the negative health and environmental effects of pesticides.

Specific objectives:

- 1. Increase the awareness about pesticide toxicity in humans and the environment to make civil society organisations advocate for agricultural environmental and health measures to control the negative pesticide effects.
- 2. Mainstream the use of the educational and information materials on IPM and health developed in phase 1 by the interest organisations in agriculture, health and environment at various levels.
- 3. To strengthen UNACOH in its mandate as a civil society organisation advocating for and organising activities in occupational, environmental and public health to improve the health of the general population.

population.	
Indicators	Means of Verification
Objective 1	
• Farmers have through national and district farmer organisation improved their capacity for advocacy and are represented and active in the district pesticide committees and project steering committee.	 Inspection of news material
 Pesticide information is disseminated to the civil society by farmer organisations, UNACOH, NOGAMO, UNADA, district authorities and other relevant stakeholders through conferences, meetings, radio, newspapers, television and other forums. 	
 Concrete actions have been undertaken in the districts to improve control with pesticide sale, use and disposal of pesticide containers and obsolete pesticides under the guidance of the pesticide committee. 	
UNACOH is engaged on a continuous basis in discussions on pesticide safety issues with the National Agricultural Chemical Control Board.	
• Studies has been realised to document pesticide related problems and findings are used for advocacy towards decision takers in Uganda (e.g. pesticide residues in food, pesticide suicides and reasons for these, SMS health campaign impact, registration of pesticide intoxications, baseline study in flower farming etc.)	

Objective 2

- Booklets for education of farmers on IPM exist in their second edition and are in use by relevant organisations teaching farmers good agricultural practices (NFFE, UNADA, NAADS, Farmer Schools, NGO's and other relevant institutions).
- A guide booklet with checklist of good agricultural guidance and shop keeping for agro-dealers is in use by local district agricultural authorities, UNADA and agro-dealers organisations in Uganda.
- The guide book for diagnostic and treatment of pesticide poisonings and the IEC materials from phase 1 exists in a second edition and is widespread in use in the two project districts and promoted by the health care system in at least four other districts neighbouring the project districts.
- A guide book for occupational health and safety measures for spraymen in public health programmes is developed and in use in Uganda.
- Health promoters in the villages (VHT's) in the two health districts are monitoring the pesticide intoxication incidents in their villages and the health system is registering intoxications in the district health information system.
- The materials produced are accessible world-wide through the internet on the UNACOH web-side.

- Inspection of materials produced
- · Revision of health statistics
- Interviews with key informants

Objective 3

- UNACOH has increased the number of active members among approximate thousand registered members.
- UNACOH has increased the number of 'memoranda of understanding' with other key OHS stakeholders at district level, national and international level.
- UNACOH has streamlined its democratic governance, accounting and administrative procedures to become a UN green category organisation and conforming to the CUAM system promoted by Uganda National NGO Forum.
- UNACOH has increased its number of longer term financed projects in the field of Occupational, Environmental and Public Health.
- UNACOH is recognized by the government of Uganda and the WHO as a national and regional OHS resource centre.

Inspection of members list Inspection of agreements

- Revision of administrative procedures
- Revision of activities

Activities Expected Outputs

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Objective 1

- Farmers from the farmer organisations are trained in organisation and advocacy matters on 5 training seminars for each.
- Meetings to plan and conduct activities to disseminate information about pesticides are celebrated with the participation of farmer organisations, UNACOH, NOGAMO, UNADA, district authorities • Every year at least 5 radio and other relevant stakeholders
- Meetings to plan and conduct control measures are held every quarter.
- UNACOH is continuously lobbying for project objectives among members of the National Agricultural Chemical Control Board.

Studies are planned and conducted with involvement of students from Danish and Ugandan universities

- Twenty farmers are advocating for a healthier food production and clean environment through their farmers organisations
- One conference is celebrated in each district every year.
- programs about pesticides are broadcasted.
- 5-10 stories about pesticides are published in the newspapers every year.
- Local television is telling about project activities at least once a year.
- Every year an inspection is made in the pesticide dealer shops to see if it applies to national standards and certificates are given.
- A system for disposal of pesticide containers and obsolete pesticides exists.
- Members of the National Agricultural Chemical Control Board are participating in project steering committee and pesticide safety issues are discussed.
- At least six studies has been conducted and actively used for advocacy towards decision takers to improve pesticide safety and alternatives to pesticides.

Activities

Objective 2

- Existing IPM booklets for farmers training are revised and updated together with stakeholders like UNFFE, UNADA, NAADS, Farmer Schools, Ministry of Agriculture and Makerere University.
- Sixty farmers are trained in IPM methods on 10 training sessions Farmers are using and promoting per farmers group used as inspiration for revision of materials from phase 1, and production of public information and awareness rising.
- Six courses for agro-dealers are conducted where they are trained in good shop keeping and how to guide farmers on pest matters.
- A guide booklet for agro-dealers is produced.
- Existing book for diagnostic and treatment of pesticide poisonings and the IEC materials from phase 1 are revised and updated in a second edition together with stakeholders from Ministry of Health | • A booklet for agro-dealers exists and School of Public Health Makerere University.
- 3 courses for 30 spray-men from public health programs on pesticide safety are conducted in collaboration with Ministry of • Health.
- A guide book for occupational health and safety measures for spraymen in public health programmes is produced with relevant stakeholders from Ministry of Health and School of Public Health Makerere University.
- Sixty VHT's are trained on two seminars in monitoring pesticide intoxications and other pesticide related problems in their villages.
- All above mentioned activities are evaluated by a pre and post test of involved persons and a description of the pre and post conditions.
- UNACOH is making quarterly follow up on intoxication registration forms produced and distributed in the district health system in the first phase.
- The materials produced are up-loaded on different internet portals.

Expected Outputs

- · At least five booklets exist and are used in the project and by relevant stakeholders.
- IPM farming methods in their farmers groups.
- Agro-dealers are complying with existing laws for pesticide storage and selling and are able to guide farmers on methods and products to use.
- and is used in the project and by relevant stakeholders.
- Existing book for diagnostic and treatment of pesticide intoxication exist and in use.
- Existing IEC materials on prevention of pesticide intoxication exists and in use by health care system.
- Spray men from public health vector control programmes are performing relevant safety measures when handling pesticides.
- VHT's are monitoring and reporting about pesticide intoxications and other pesticide related problems in their villages two the health care system.
- Evaluations have shown which of the above mentioned outputs have given relevant results and thus can be recommended at a larger scale.
- A clear picture of the number and causes of the intoxications in the districts exists.
- Materials produced are uploaded on the internet and accessible world-wide through the internet on the UNACOH web-side and linked to other partner institutions websides nationally and internationally.

Activities

Objective 1

- Farmers from the farmer organisations are trained in organisation | Twenty farmers are advocating for and advocacy matters on 5 training seminars for each.
- Meetings to plan and conduct activities to disseminate information about pesticides are celebrated with the participation of farmer organisations, UNACOH, NOGAMO, UNADA, district authorities • One conference is celebrated in and other relevant stakeholders
- Meetings to plan and conduct control measures are held every Every year at least 5 radio quarter.
- UNACOH is continuously lobbying for project objectives among members of the National Agricultural Chemical Control Board.
- Studies are planned and conducted with involvement of students from Danish and Ugandan universities

Expected Outputs

- a healthier food production and clean environment through their farmers organisations
- each district every year.
- programs about pesticides are broadcasted.
- 5-10 stories about pesticides are published in the newspapers every year.
- Local television is telling about project activities at least once a vear.
- Every year an inspection is made in the pesticide dealer shops to see if it applies to national standards and certificates are given.
- A system for disposal of pesticide containers and obsolete pesticides exists.
- Members of the National Agricultural Chemical Control Board are participating in project steering committee and pesticide safety issues are discussed.
- At least six studies has been conducted and actively used for advocacy towards decision takers to improve pesticide safety and alternatives to pesticides.

Activities **Expected outputs** Objective 3 UNACOH has celebrated activities to increase the number of active • UNACOH has more than 1000 members of whom at least 10% members. are active in the districts. • UNACOH has realised meetings to elaborate 'memoranda of understanding' with other key OHS stakeholders at district level, • At least 10 memorandums of understandings elaborated and in national and international level. function. UNACOH has celebrated 10 seminars to streamline its democratic governance, accounting and administrative procedures to be able to • UNACOH has been classified as a become a UN green category organisation and conforming to the UN green category organisation CUAM system promoted by Uganda National NGO Forum. and is conforming to the CUAM system promoted by Uganda • UNACOH has produced 5 project pamphlets in the field of National NGO Forum. Occupational, Environmental and Public Health. • At least two more projects are UNACOH has conducted meetings and lobbyism to become running and financed by external recognized by the government of Uganda and the WHO as a national and regional OHS resource centre. • UNACOH is recognized or steps have been taken to be recognized as a national and regional OHS resource centre by the government of Uganda and the WHO.

6.7 DETAILED FINDINGS ON ACHIEVEMENTS BASED ON TARGET GROUP INTERVIEWEES

Trained and Untrained Farmers

End of Project Evaluation Findings revealed increased awareness amongst **farmers** in terms of alternatives to pesticide use, proper pesticide storage, unblocking the nozzle, observing weather conditions before spraying, personal protection equipment use. Trained farmers exhibited high knowledge levels and a huge transformation from the baseline findings. Most untrained farmers (especially from the intervention area) were equally impressive and owed their improvement to fellow trained farmers who had put an effort to share what they acquire from PHE project trainings.

Trained Farmers

16 trained farmers (8 from Wakiso and 8 from Pallisa Districts) participated in the evaluation exercise by answering the questions from the evaluator both in a questionnaire format using an interactive approach.

There were 6 women and 10 men and their ages ranged from 23 to 65 years old. They all came from 13 different farmers groups (8 in Wakiso and 5 in Pallisa Districts) and covered 15 villages (8 in Wakiso and 7 in Pallisa).

All the participants had been selected by their group members to participate in the project trainings. Participants in Wakiso have received some IEC materials on the project, while their counterparts in Pallisa had received none. Those who had received the IEC materials think that the materials were easy to read and understand.

15 out of the 16 had attended UNACOH organised trainings on pesticide use, health and environment and all agreed to having discussed the following topics during the trainings;

- Knowledge sharing/ communication skills
- World of pesticides
- Proper pesticide handling
- Agricultural plagues
- Pesticide impact on health and environment
- Integrated management of pests
- Agricultural marketing

They all received some training materials which they either read themselves or found someone who read for them in order to understand the contents. The all agreed finding the training useful and relevant in terms of knowledge and skills. The following are areas where the farmers said benefited most from the trainings;

- Learnt how to handle, protection under spraying and store pesticides
- Pesticide on health and environment, proper handling of pesticide
- Protection of environment, destroying empty containers
- Improvement in the farming practices

And the acquired skills were applied by the farmers in a following ways;

- When going to spray crops wear protective gears such as gumboots, rain coats
- Trained other farmers in the community
- Sharing with friends & family
- Acquired protective gears, proper collaboration
- Stored pesticides separately and wearing gumboots
- Reading labels on pesticide
- Teach/advice others, determining correct doses

- Training communities through radio talks
- Taught other people about pesticides and washing the used clothes separately

50% of the interviewee claimed to have informed 50-100 other people (farmers) about the IPM project, while 37.5% gave the same information to more than 100 people (farmers) and the last 12.5% managed to inform less that 50 people about the IPM project. This has worked well to spread the messages as it also appears to be the case with the control group of untrained farmers.

All participants agreed that village meetings to inform the community members of the farmer's groups and about the PHE project, IPM approach and pesticides were conducted. Attendances for such meeting ranged from being very good to being fair and the Community participants were very enthusiastic according to the interviewees. However all admitted that they faced challenges in conducting such meeting among which were;

- Farmers were asking for transport refund, boots, spray pumps, protective gear and raincoats
- Lack of enough training material
- People were coming late
- Sprayers are limited
- Farmers not being able to come or the seminars
- Time management, few protective gears for demonstration purposes
- There was need for visual materials.

15 out of the 16 interviewees agreed that the PHE Project staff conducted supervisory visits for during village meetings. They however all agreed having gotten support and advice from UNACOH trained agro extension workers and agro dealers in the IPM approach. The supports were in the form of;

- Training on IPM and natural pesticides and Advice on the use of pesticides
- Farmers were trained on organic method of making pesticides from cow dung, urine, neem-tree and pepper
- How to make compost manure, pests and disease management on crops
- Knowledge on pesticides at community level and dosage application
- Farmers were trained in organic methods of making pesticides
- Advice on how to buy pesticides, visit farmers to encourage the farmers to use their shops
- Training on green bananas
- Practical demonstrations done in the gardens

Trained farmers both in Pallisa and Wakiso had heard the Radio programmes with PHE messages, on Continental FM (Pallisa) and Voice of Africa (in Wakiso). However 50% of these farmers especially in Pallisa were not satisfied with the timing, content, duration, and choice of station. They gave the following reasons of their being unsatisfied;

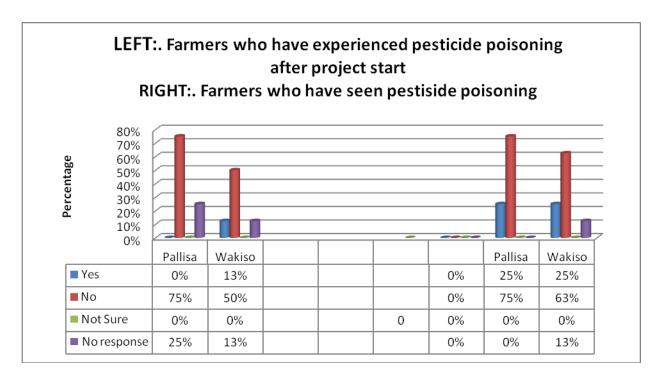
- The waves are not clear, (Pallisa)
- Limited coverage to other regions (Pallisa)
- Would have preferred CBS/ Simba FM (Wakiso)
- Duration is small and need for more stations such as CBS (Wakiso)
- Most farmers do not use that station (Wakiso)

Almost all the farmers had not received any training or IEC materials from the health educators in their areas. However, all the trained farmers think that their knowledge and those of their village mates has greatly improved as a result of the project. The indicators for this improvement were named as follows;

- Farmers know that pesticides kill and now days they have bought and wear protective gears while applying pesticides,
- Farmers have improved on pesticide handling, storage and how to use organic methods.

- Farmers now read labels on the pesticide and there has not been any poisoning for the last two years
- Integrated pesticide management knowledge and proper handling of pesticides in their daily farm management
- Yes it has improved as evidenced by bumper harvests
- No more storage of pesticides under the bed and eating while spraying

Since the beginning of the PHE project in both districts, only one of the farmers admitted having experienced pesticide poisoning and reporting the case at the health unit 1 in Namalere (Wakiso). The majority had no pesticide poisoning and one was not sure. However, at least 4 out of the total 16 farmers in both districts had seen someone with pesticide poisoning. The graph below gives the details per district on the experienced pesticide poisoning after the beginning of the project.



On recognizing the poisoning the victims were sent to hospital and advised to always report early any poisoning incident. In Wakiso the effected child was rushed to the nearest health centre after which they were referred to Mulago hospital.

Farmers agreed that among the benefits they have realised as a result of their involvement in the PHE project are;

- Knowledge on how to make natural pesticide, protecting myself while spraying and increased yields
- Knowledge on IPM, Farmers spend less money on pesticides, environmental protection and soil fertility
- Knowledge on how to make natural pesticide, protecting myself while spraying, Farmers spend less money on pesticides
- Right way of spraying crops, crops grow well and give better yields, storage and disposal of containers
- Communication skills, made more friends

The farmers admitted that there were also challenges, some of which were given as;-

- Time consuming to complete the process of making the natural pesticide
- There is still a gap in knowledge acquired
- Time consuming to complete the process of making the natural pesticide

- Difficult to make organic manure during dry season
- Difficult to make organic manure during dry season
- Time consuming to complete the process of making the natural pesticide
- Difficult to make organic manure during dry season, Time consuming to complete the process of making the natural pesticide
- Skilled knowledge needed, Time consuming to complete the process of making the natural pesticide
- Sometimes cost of application is high and people get discouraged
- It requires a lot of IPM when you have a large garden
- Some pesticides are expensive to new entrants to farming

88% of the farmers in the two districts claimed that IPM Strategies are now more visible in your village as a result of the PHE project. The following are some of the indicators that can be seen in the fields;-

- Farmers are practicing use of natural pesticides; farmers also scout their fields to identify damages
- Use of protective gears when spraying pests
- 80% are now practicing safe pesticide handling
- Farmers are getting high yields at less costs, Farmers calibrate their plots before mixing pesticides
- Farmers are interested in IPM to boost their farming activities
- Farmers do not leave the mixed pesticide in the sprayer and do not keep pesticides in their bedrooms

94% of the farmers in the two districts claimed that their communities are adopting to the IPM strategies as a result of the PHE project. The following are some of the indicators that can be seen in the communities;-

- Protection of bodies during the pesticide application and knowing how to use pesticides
- No longer contaminating food with pesticides, not sharing the house with pesticides, keeping pesticides away from pregnant and breast feeding mothers
- Not sharing the house with pesticides, storage, using protective gears while spraying
- Farmers read the pesticide levels before using it, No more wastage of pesticides because of calibration
- Community wants to keep its health good, very beneficial
- Farmers practicing what they studied and passing it on to neighbors and others

Again 94% of the farmers say that they are happy with the way UNACOH is implementing the PHE project in their communities, including the training in the formation of IPM farmers' cooperative societies. On the other hand there were 31% of the farmers who think that there are a few things that UNACOH was not doing well and listed then as follows;

- Not giving farmers populates
- Yes in terms of transport and booklets
- Yes in terms of transport and booklets
- Not been able to support trained farmer groups financially
- Still need more radio programmes including TV programmes
- Need more support in kind

Likewise the same percentage (>90%) claim that the project is succeeding in the communities/villages from their perspective and think that this was due to the following aspects

- Farmers using protective gears and how they store pesticides
- Farmers comply with the instructions on labels after trainings
- People use of protective gears and store the pesticides
- No more food poisoning because of the labels on pesticides
- Farmers using protective gears and how they store pesticides

- Proper use of pesticides is in place
- Community is very interested with UNACOH is doing
- Farmers have changed the way they have been handling pesticides

To check the impact and changes in mindset of the trained farmers, the interviewers had two questions in the questionnaire, one on the protective gadgets use by the farmers and the second on the precautions the farmers take before and after spraying with pesticides. The tables below give the results as answered by the farmers which are compared to the baseline study results at the beginning of the project.

Although the evaluations results are disaggregated by districts, the comparisons can still be made with the aggregated results of the baseline study.

Protection and Safety measures

Protective gear used during pesticide spraying	Pall	isa (n=8)	Wakis	o (n=8)	Baseline results (overall for both districts)
	Number	Percentage	Number	Percentage	Percentage
Ordinary clothes	7	88%	4	50%	73.6%
Gloves	2	25%	5	63%	12.2%
Overalls	4	50%	6	75%	8.4%
Boots	6	75%	7	88%	51.4%
Masks	3	38%	4	50%	12.5%
Hat	4	50%	5	63%	8.4%
Long sleeved shirt	7	88%	7	88%	24.4%
Other	0	0%	Polystyrenes Long trousers and socks	25%	3.5%

There is a general trend of improvement across the board in the use of the different protective gadgets by the farmers when they are actively engaging in pesticide spraying. For example the use of Gumboots has markedly risen from 51.4% (before the project start) to 88% at the time of evaluation.

Precaution measures taken during handling of pesticides

Precaution measures taken when handling pesticides	Pallisa (n=	8)	Wakiso (n=8)		Baseline results (overall for both districts)	
	Number	Percentage	Percentage	Percentage	Percentage	
Wash hands immediately after mixing	4	50%	8	100%	26.5%	
Wash hands immediately after spraying	7	88%	7	88%	62.2%	
Washing hands before eating in the field when spraying	2	25%	5	63%	11.3%	
Washing hands before smoking when spraying	1	12.5%	5	63%	3.6%	
Washing whole body after spraying	8	100%	7	88%	79.5%	
Change clothes after spraying	8	100%	7	88%	71.2%	
Other precautions	0	0%	0	0%	2.6%	

Likewise, precautionary measures are being practiced by all the trained farmers, like washing hands immediately after mixing the pesticides, washing the whole body and changing the clothes after spraying.

The following tables contain the trained farmers' comments that supported the answers they gave on both the Protective gadgets and precautionary measures taken by themselves and the challenges that follow their use.

Ordinary	1	2	1	1	1	1	1	1
clothes								
Comment	90%	They cannot afford	90%	95% are in use	90%	Not all of them over 90%	They cover to protect 50% from contaminatio n	Because farmers cannot afford it
Gloves	2	2	1	1	2	2	2	2
Comment	They cannot afford 10%	They do not have	cannot afford 10%	12% are in use	0	Not all 10%	Cannot afford	Expensive for ordinary farmer
Overalls	2	2	1	1	2	1	1	2
Comment	They cannot afford 50%	They do not have	cannot afford 10%	10% are in use	0	Not all 10%	Only group members	Long sleeved shirts
Boots	1	2	1	1	1	1	2	1
Comment	Not all of them	They do not have	35%	35% are in use	85%	Not all 95%	Only group members	Locally bought
Masks	2	2	1	1	2	2	1	2
Comment	They cannot afford them	They do not have	10%	5% are in use	0	They cannot afford	50% cover mouth and nose while spraying	Very expensive for farmers
Hat	1	2	1	1	2	2	2	1
Comment	Not all of them 20%	They do not have money to buy 20%	20%	20%	0	90%	some have	Improvise
Long sleeved shirt	1	1	1	1	1	2	1	1
Comment	That is what most of them are using 90%	The buy locally 10%	99%	99%	75%	90%	All wear for protection	Locally go
Other	0	0	0	0	0	0	0	0

The trained farmers in Pallisa are aware of the dangers of not using protective gadgets and are trying their best to use them however; the challenge is the cost of the gadgets. They say that it is because of lack of funds to buy these gadgets that some farmers do not use them.

	and safety measures? Yes=1 No=2 (Wakiso)											
Ordinary clothes	1	1	2	0	0	1	1	2				
Comment	Few use them	70%	0	0	0	Few people still use	Few people still use them					
Gloves	1	1	2	1	2	1	1	2				
Comment	Few use them	2%	0	0	do not have	Few people still use	Few people still use them					
Overalls	1	1	2	1	2	1	1	1				

Comment	0	50%	0	0	0	Few people still use	Few people still use them	some who have them
Boots	1	1	2	1	1	1	1	1
Comment	0	100%	0	0	0	Few people still use	Few people still use them	Easy to buy
Masks	1	0	2	1	2	1	1	2
Comment		0%	0	0	0	Few people still use them	0	some use their hanker- chiefs
Hat	1	0	2	1	2	1	1	1
Comment	0	0%	0	0	Need to train all the farmers in the villages	Few people still use them	0	To prevent sunshine
Long sleeved	1	0	1	1	1	1	1	1
Comment	0	0%	0	0	0	Few people still use	0	To protect the body
Other	0	0	0	0	0	0	Polystyrenes	Long trousers, socks

Likewise, the trained farmers in Wakiso are also aware of the dangers of not using protective gadgets and are trying their best to use them however; the challenge is again the cost of the gadgets. They say that it is because of lack of funds to buy these gadgets that some farmers do not use them or choose to use long trousers and Polystyrenes bags as substitutes.

Wash hands immediately after mixing	1	1	2	2	1	2	1	2
Comment	0%	90%	One goes to spray 10%	One goes to spray	75%	One goes to spray 10%	Most wash hands	50%
Wash hands immediately after spraying	1	1	1	1	1	2	1	1
Comment	90%	80%	95%	70%	50%	The knapsack	80/100 wash hands	30%
Washing hands before eating in the field when spraying	2	1	2	2	1	2	2	2
Comment	0	70%	10%	5%	65%	It should not be done	0	10%
Washing hands before smoking when spraying	2	1	2	2	0	2	2	2
Comment	0%	40%	10%	5%	0	Not right way of	Not some	10%
Washing whole body after spraying	1	1	1	1	1	1	1	1

Comment	95%	80%	95%	80%	78%	Normal 90%	80/100 wash hands	40%
Change clothes after spraying	1	1	1	1	1	1	1	1
Comment	95%	70%	95%	80%	95%	Normal 95%	Most change	30%

When it comes to precautionary measures when dealing with pesticides, the trained farmers in Pallisa have grasped the importance and changing of being extra carefully because of the dangers of pesticide poisoning and the improvement is across the board, ranging from washing hands after mixing pesticides to washing the whole body and changing clothes after spraying.

The same is the case with the trained farmers in Wakiso, who have also greatly improved in taking the necessary precautions when dealing with pesticides.

	Precautions taken after handling pesticides Yes=1 No=2 (Wakiso)											
Wash hands immediately	1	1	1	1	0	1	1	1				
Comment	To avoid poisoning	0	0	To avoid pesticides from entering the body	0	To avoid diseases	To avoid poisoning	To avoid poisoning				
Wash hands immediately after	1	1	1	1	0	1	1	1				
Comment	To avoid poisoning	0	0	To avoid pesticides from entering the body	0	To avoid diseases	To avoid poisoning	To avoid poisoning				
Washing hands before eating in the field when spraying	1	0	1	1	0	1	1	2				
Comment	To avoid poisoning	0	0	To avoid pesticides from entering the body	0	To avoid diseases	To avoid poisoning	It is bad to eat while spraying				
Washing hands before smoking when spraying	1	1	1	1	0	2	1	2				
Comment	To avoid poisoning	0	0	To avoid pesticides from entering the body	0	you have to wash after smoking	To avoid poisoning	dangerous to smoke				

Washing whole body after spraying	1	1	1	1	0	1	1	1
Comment	For cleanness	0	0	To avoid pesticides from entering the body	0		For cleanliness hygiene	To avoid poisoning
Change clothes after spraying	1	1	1	1	0	1	1	1
Comment	For cleanliness	0	0	To avoid pesticides from entering the body	0	0	For cleanliness hygiene	To avoid poisoning

Improvement was also recorded in the pesticide storage, disposal used containers, transportation, alternative methods of controlling pest and changes in mindsets as seen from the answers in the table below;-

1. How do you store the pesticide before and after use?

Answer:-Lockable box, In a store, Lockable box, Cool lockable place, Separate house, Safe place, Cool and secret place, Lock in cupboard, proper storage, Safe place gazetted for that purpose, On long table or box labelled poison 'danger'

2. How do you dispose of un-used pesticides / containers?

Answer: Dig a hole and put the power it in, By burying them, Digging a pit, Pesticide store sealed, Throw in the bush and in the pit, bury in a pit latrine (dig hole), If plastic wash them, put in a pit, Burry or burn, Destroy them, Hang it on a tree, If plastic wash them,

3. How do you transport the pesticides?

Knapsack and bag, Put in a pot, In a sealed container with a bicycle, bicycle and box for pesticide, box for pesticide, sealed containers on a bicycle, From dealers, Put in special bag, Transport in original containers, Empty bag, Put in boxes and wrap in a polythene bag, by using a proper bag in a box or containers, In a bag without mixing with other things

4. Are you using any alternative methods of controlling pests, if yes what methods are you using?

Using Natural pesticide, Organic manure, Using Natural pesticide, uprooting sick plants, Organic and chemicals used, Organic and chemicals used Natural pesticides, Urine, Organic pesticide, Natural pesticides, Tobacco leavers, ash, tobacco, Natural method-tobacco, urine, IPM Methods Natural pesticides, Urine of animals

5. What changes if any have happened as a result of the PHE project in the farmers groups and village?

There is improvement in pesticide handling, Using protective gears, storing pesticides, use organic manure, Development among group members, Pesticide storage and management, Reduced wastage of pesticide, Good transportation of pesticides, Reading labels of pesticide before use, Seeking advice from agro dealers before use, Growing of pest free crops and good harvests are obtained, Farmers have bought boots, gloves, overalls to protect themselves, How to assemble spray pump, Keeping pesticides away from children, No eating fruits and vegetables after spraying, Farmers have bought protective gears, Knowing where to buy pesticides from genuine agro dealers, Farmers can now work as a team, Farmers have learnt when to spray their crops, Farmers destroy empty containers, Improved crop yields, Wash vegetables before consuming them, Improvement in health, Income generation by the farmers, Dissemination of the information to the comrades, Harvest after 14 days or 7 days after spraying

The numbers of trained farmers has also increased tremendously from the initial 2 selected farmers from each participating group. This is illustrated below, where the interviewees were asked to give the number of farmers so far trained in PHE and IPM aspects as a result of the project.

Other group members that have participated in UNACOH-PHE training (Pallisa)

Group name	Current membership	Number of members selected from the group to participate in the project	Other group members outside the selected 2 who participated in the training
Aitiji Ibakor	20	2	15
Apopong United Farmers Association	75	2	45
Agule United Christian Dev Association	26	2	26
Kadodio wake up producer Organisation saving and	30	2	25

Obwanai mixed farmers association	80	2	40
Okunguro joint adult education association	20	2	5

In Parish the number of trained farmers following the PHE project rose from the initial intended 20 farmers from 10 groups to approximately 160 farmers, which members benefited from the training by the 2 selected members, village meetings and interventions from UNACOH directly.

Other group members that have participated in UNACOH-PHE training (Wakiso)

Group name	Current membership	Number of members selected from the group to participate in the project	Other group members outside the selected 2 who participated in the training		
Masaali Farmers Group	25	2	20		
Enyonyi Enkeeze	30	2	25		
Kyankima farmers group	20	2	9		
Kyosima Onaanya Farmers group	30	2	30		
Naludepo	20	2	10		
Save the community development initiative	30	2	21		
Ba Namukisa Development Group	25	2	20		
Manyangwa young farmers group	10	2	9		

Wakiso even performed better in getting the message across, 18 farmers were selected as one group dropped at the beginning of the project. However, the multiplier effect enabled Wakiso to reach a figure of 171 members trained as a result of the project. The reasons given for their achievements and reaching those numbers and not more were given as follows;

- Could not go round the whole village due to lack of transport means such as a bicycle
- It was rainy season and farmers go to their gardens, Lack of transport refund during trainings
- The equipments provided by UNACOH helped
- Farmers were very interested in project activities
- Some people come from far and may require transport
- Some are not interested some are busy and some need transport money
- Some do not come due to lack of incentives
- All farmers are interested in vegetable growing
- Laziness to attend meetings and poor attitudes towards meetings

Finally all interviewees were asked to give their opinion of what they think UNACOH should do in future in order to improve on the project and the following ideas were listed and these have also been used by the consultants to suggest output and activities in the proposal for the second phase;-

- Giving farmers bicycles for transport, Give additional spring pumps, gloves and boots, T-shirts, continue training farmers
- To continue monitoring the progress of farmers through visiting farmers
- To print more booklets, IEC materials, give more sprayers and facilitate the PHE farmer trainings
- Pay some allowance to TOTs, To expand manpower through training more members from the groups,
- Extend trainings beyond our sub county, train more trainers because pesticides use has become permanent
- Providing different tours to the farmers, providing more equipments
- Opening TV programmes, more radio programmes in different stations and newspaper articles
- Reach out to all the Ugandans

Untrained farmers

The interviewed untrained farmers were of ages between 23 and 63 with 7 male and 6 female. Some of them came from the same farmers groups like those who were selected for training in the PHE project.

Others came from different farmers group which had nothing to do with the PHE-project, however all the untrained farmers were aware of the project and what it stood for.

All (100%) the untrained farmers from both districts had never seen any IEC materials distributed by UNACOH and as such could not comment on them. They however agreed that in the last two years they have received information on pesticide use, health and environment. Such information was delivered to them through their colleagues in the group, through the trainer and UNACOH's staff on their visits to the districts.

They claim to have found the information useful toward improvement for their knowledge and skills. 92% of them claimed to having attended village meetings organised by the PHE trained farmers and said that the attendances of these meetings were good to fair.

85% say that the farmers attending the village meetings were very enthusiastic about the contents of trainings.

However, when asked whether they had received an support from PHE trained Agro Extension workers and agro dealers in the IPM approach only 38% of them responded positively and said that the type of support was in the form of, **teaching how to use pesticides and the application of proper doses**.

All the untrained farmers interviewed from Pallisa had heard the radio programme on PHE project on Continental FM, which their counterparts from Wakiso, only one had heard the programmed and could not remember on which radio station. Those who had heard the programme said they were satisfied with the timing.

All untrained farmers but one responded negatively on whether the PHE trained Health Educators had conducted any awareness and distributed IEC materials on pesticides use, health and environment in their villages in the last one year.

85% think that their knowledge and that of village members, on pesticide use has improved as a result of the PHE project. This is exemplified by, the dressing code, putting on pesticide gear, storage of pesticides, information got from trained farmers and an overall Knowledge on how to handle and keep pesticides.

Among those interviewed at least 46% have themselves experienced pesticides poisoning in the last two years, while 31% have seen a farmer who has been exposed to pesticides poisoning and in both cases they have reacted by providing first aid and thereafter going to hospital immediately. The cases were more pronounced in Pallisa District.

It is only in Pallisa where the untrained farmers think that the IPM Strategies are now more visible in their villages as a result of the PHE project and give reasons such as, the training given, IPM strategies are very easy to use and people are now aware of using pesticides.

Those in Wakiso who do not think that the IPM strategies are more visible there as a result of the PHE project, gave reasons for this as,

- Farmers have not taken it seriously,
- Most farmers in the villages are not concerned about protecting themselves unlike trained farmers who know the effect of pesticides
- Some farmers cannot afford to get equipments to use while applying pesticides
- Most Farmers are small scale who do not use pesticides

As a result of the PHE project farmers in Pallisa are adopting to IPM strategies through, the acquired knowledge on how to mix and store pesticides, how to spray, how to reduce use of strong pesticides, how to protect the environment.

The untrained farmers in Pallisa also think that the project is succeeding in their villages as many a farmer are;

- Using methods and skills they were trained,
- Have reduced use of strong pesticides,
- Farmers have reduced use of strong pesticides
- There is improved knowledge on pesticide usage

The untrained farmers suggested the following actions for the UNACOH project to succeed in their areas;

- UNACOH should come to monitor the project and progress of farmers
- Support communities with equipments, like spray pump
- To continue giving services, train and also avail protective gear
- Further reach communities such as churches, schools and village meetings rather than groups only, use radio and TVs shots to promote the programme on WBS, UBC OR Bukedde which is cheap in advertising
- Do more advertisement
- UNACOH has to train more people in the villages so that they can understand the project
- To work closely with other organisations such as Tukolere Wamu, (Wakiso)
- Should work together with the Government local leaders (LC1),
- Distribution of posters to churches, mosques and hospitals
- Teach people at all levels up to village level

Finally the untrained farmers were asked to list what they have done given their exposure to the UNACOH project in their villages; the following were listed by interviewees from Pallisa district;

- Learnt the dress code for spraying and keeping the children and pregnant women away
- Trained other farmers, putting on protective gear
- Shared knowledge with other farmers
- Taught other people, puts on the overall when spraying

Health Educators

All the Health care workers (Pallisa) who participated in UNACOH provided training sessions, agreed during the interviews that all the trainings and knowledge attained was very relevant to their work. All (100%) claim to have greatly improved their understanding of pesticides compared to the baseline when only 38.5% knew something about pesticides and the remaining 61.5% of them didn't know any pesticide class.

The following were the reasons why they claimed that the trainings were very relevant;

- Though pesticides are beneficial they can also be harmful to humans and other animals if not properly handled.
- There has been remarkable improvement regarding pesticide management and creation of awareness.
- There was creation of awareness during purchasing, transportation, storage, mixing and application of pesticides and highlighted the health effects of pesticides.

All health care workers think that their knowledge on pesticides poisonings has improved as a result of the project and are now able to;

- Interact with the communities about the dangers of pesticides and the need for proper storage, mixing, application and disposal of containers
- Improve services in managing poison cases
- Sensitize communities relating to increased negative effects of domestic violence

50% of the educators say that their ability to conduct IEC activities on pesticides in the villages improved as a result of the PHE project and so far have been able to conduct IEC related activities in at least two villages for each of the 4 interviewed during this year alone. There is however no printed materials from UNACOH as yet and the educators are still waiting for them as promised.

Again 50% of the health educators have the opinion that the trained farmers are adapting to the IPM strategies as some of them have adopted biological control measures like urine and ash.

When asked if they have faced any challenges in implementing and performing your PHE project work, the following were listed:

- Lack of training manuals and printed materials (IEC Materials).
- Lack of facilitation for community sensitization, due to limited funds.

75% of the interviewed Health educators were happy with the way UNACOH was handling the PHE project, with the following opinions as to how UNACOH could in future do a better job with the projects;

- Improve on health education to solve the problem of hazardous effects of pesticides which occur in the community.
- Provide IEC materials, facilitation of health workers and SDA allowances, transport, routine support and supervision.
- Intensify in sensitization strategy such as radio talk shows, expand the project to cover other subcounties, involve Village Health Teams to improve understanding of the project.
- Facilitation for training of VHTs to improve IEC dissemination, facilitating monitoring and assessment of
 project activities to enhance networking with various partners affected by pesticide misuse.
- Strengthen collaboration with health educators, involving health educators in farmers' groups' sensitization to assess whether the messages given are health promoting.
- Encouraging the community to take on services like diagnosis management of cases and registration.
- The district focal persons should be facilitated to produce reports concerning the project for updates at the district level

Health Care Workers

In all 10 HCWs were interviewed 4 in Pallisa and 6 in Wakiso, all knew what the PHE project was all about and all had attended UNACOH's organised trainings on prevention, diagnosis and treatment in August, October 2011 and February 2012. However, the attendance was poor in Wakiso as absenteeism was high during the trainings.

They were provided with materials during the trainings and all agreed that the trainings were very relevant and easily applicable to their work and gave the following explanations why;

- Easily understood and relevant to the field of pesticide poisoning, prevention and Management
- Acquired skills that enabled Health workers to implement pesticide poisoning thus saving life and reducing such cases to happen in the community
- Got knowledge on how to diagnose different cases of pesticide poisoning through signs and symptoms.
- Got Knowledge on how to give victims first aid and then giving definitive treatment for each category of the pesticide such as Atropines
- It was easily applicable by health workers and can now manage a patient with pesticide poisoning

- Most community members now practice agriculture with responsibly use of pesticides.
- Training elaborated the dangers of pesticides to humans and environment

The acquired skills have been used in the following ways according to the HCWs;

- Training fellow staff, treating and managing patients of poisoning
- History taking and diagnosis, educating farmers on proper handling of pesticides
- Have used the skills for saving lives and training fellow staff
- Sensitization of the community about the programme
- Managing cases of poisoning and conducting health education

The HCW think that their knowledge on pesticides poisonings has improved as a result of the project and have shared this knowledge with fellow staff and student nurses at the hospital.

Like the Health Educators the HCWs are also waiting for the printed IEC materials from UNACOH to be able to disseminate these to the farmers and other stakeholders.

However, they have received the Pesticide Intoxication forms from UNACOH and are currently using them for registration of pesticide poisoning cases especially in Pallisa. Wakiso received the forms later and have not fully started the exercise.

The HCWs think that their ability to diagnose and treat pesticide poisoning has improved as a result of this project from 0% to up to 90% in Pallisa and Wakiso, with strong showing in Pallisa than in Wakiso.

There were also some challenges they faced while implementing and performing their PHE project work among which are;

- Financial support in terms of CME allowance, community sensitization about pesticide use and prevention
- Lack of essential drugs like Atropines at lower health centres
- CME s want allowance
- Drugs for managing poisoning cases are not supplied at the health centre three (3)
- people using the pesticides when they are not aware of side effects

The HCWs were also happy with UNACOH's efforts and all think that UNACOH has the ability to carry on with the project to achieve its intended objectives because;

- UNACOH is available in the place to provide support all the time
- UNACOH can monitor through data collection, supervision and support to trainees
- Involves different groups such as health workers, farmers, agro-dealers and other health providers which is a good approach in achieving health for all
- Has good ideas and way forward
- Has excellent training skills and good funding of activities
- UNACOH has become a voice to the voiceless as pesticide poisoning has been a silent killer to the poor farmers

The recommended the following to UNACOH to do in future in order to improve on the project;

- Facilitation to community sensitization, facilitations to trainings done by other stakeholders such as Community Mobilization Experts (CMEs) of the hospital staff, motivation to already trained staff
- support and supervision on health workers, provision of IEC materials,
- Motivate the health workers, Improve on communication to the target groups,
- Hold meetings with the pesticide district committees. Community sensitization

- Need to sensitize lower communities through regular shows and dramas,
- Need to provide IEC materials to lower Health Centre for consultation by the health workers.
- Engage the National medical stores to push the Antidotes for various pesticides to lower Health Centre since Health Centre III do not order for essential drugs
- Improve on the community involvement and funding in order to sustain the project under community sensitization by health educators.
- There should also be motivation for the already trained staff
- Uphold trainings for health workers and village health teams
- Facilitate health education of farmers and staff handling such cases
- Make trainings residential because long distances usually make people to miss trainings
- Uphold trainings for health workers, supply drugs at H/C III
- Provide more reading materials and posters, trainings
- Sensitization through radio talk shows, TVs, news papers

Extension Workers

4 Extension workers were interviewed, 2 from each district of Pallisa and Wakiso. They are all aware of the PHE project and its objectives. All have participated in the trainings provided by UNACOH and think that the IPM trainings were very relevant to their work with the PHE project.

The reasons given for this claim are that they gained;

- Knowledge on how to use pesticides in a safe way and protect the environment, practical training on IPM
- Extension workers got to know the dangers of handling pesticides poorly, right from agro dealers up to storage, learned how pesticides get into contact with their bodies and how pesticides are destructive to the environment.
- Training notes/manuals provided were easy to interpret and understand. It also acts as a refresher course to agricultural extension workers.
- Visual aids helped highlight the course content hence increased rate of adoption of knowledge.

Furthermore, the Extensionists think that their knowledge on pesticides poisonings and management has improved as a result of the project and their ability to conduct IEC activities on pesticides in the villages improved from knowing very little at the beginning of the project to about 60%-75% during the project period.

The Extensionists have conducted IEC related activities during the last one year, covering 26 villages between the 2 interviewed in Pallisa. For Wakiso project area the two interviewed covered 14 villages between themselves.

75% of them have been in contact with more than 100 farmers over the project period and the remaining 25% have covered between 50-100 farmers, to inform the farmers on the IPM gained knowledge. All agreed to having supported UNACOH trained farmer groups on the application of IPM approaches. This the Extensionists have done through;

- Training farmers, communication on mass media such as radio shows
- Telling groups of farmers on alternative natural pesticides using the local language
- Encouraging farmers to use resistant varieties and cultural control methods before using chemicals
- Training on safe handling of acaricides to farmer groups

75% agreed that the PHE Project staff conducted supervisory visits to support their extension services to farmers and delivered some printed IEC materials on the IMP to support their extension work towards the farmers; this was done mostly in Pallisa district.

Extensionists agreed that the farmers were adopting IPM farming strategies and gave the following as indicators;

- Farmers attend the meetings in big numbers
- Farmers also agree now that, the organic approach is less expensive than inorganic approach and the materials are easily available and easy to use.
- The farmers confesses that these also are not poisonous and do not pollute the environment,
- Farmers are reading Manufacturers instructions before applying the chemicals.
- Farmers' attitude has changed towards pesticide and acaricides use is seen in the way they talk and discuss IPM strategies.

All Extensionists admitted to having faced some challenges in the process of implementing and performing your PHE project work, some of which were mentioned as being;

- IEC Materials provided are not enough
- There are no enough materials for demonstration during the training
- There is lack of spray pumps and protective wear to use during demonstration for the technical staff.
- High demands by farmers for equipment such as spray pumps during demonstration time.

The Extensionists also believe that UNACOH has the ability to carry on with the project to achieve its intended objectives and gave reasons for this claim as;

- UNACOHs ability to trains farmers regularly
- The chosen groups respond to the trainings positively and continue to do so
- The radio shows which UNACOH conducts have been spreading messages widely up to the neighboring districts

They are happy with the way UNACOH staff is supporting them in carrying out project activities and recommend a continuation of the project with suggestions on what UNACOH can do in future in order to improve on the project like;

- Provide farmers with enough training materials,
- Provide extension workers with attractive allowances and transport means such as bicycles,
- Intensify on radio talk shows
- Provide more materials for the training and give reasonable facilitation allowance for extension staff,
- Frequent visits and supervision to both extension workers and farmers.

Agro dealers

4 Agro dealers were interviewed, 2 from each district of Pallisa and Wakiso. They are all aware of the PHE project and its objectives. All have participated in UNACOH's organised Theoretical and practical trainings on Integrated Pest Management and this that it was quite relevant to their work.

The reasons given for this claim are that they;

- Acquired knowledge on pesticide management and control
- The trainers simplified the language to their understanding
- Local languages were used.
- Trainings were carried out practically.
- Participants were also given pamphlet and booklets for reference

Furthermore, the Agro dealers think that their knowledge on pesticides poisonings and management has improved as a result of the project and are better equipped in informing the farmers about pesticides use and management.

They have been able to use the acquired knowledge and skills to;

- Improving on their business skills and sharing ideas with customers
- Advice farmers on how to use the pesticide and protect the environment
- Offer consultancy services to the farmers
- Train farmers on proper use and handling of pesticides.

50% of them have been in contact with more than 100 farmers over the project period and the remaining 50% have been in contact with between 50-100 farmers, to inform the farmers on pesticides and their management.

100% agreed that the PHE Project staff have conducted supervisory visits to support their IPM / PHE promotional work and delivered some printed IEC materials relating to the IMP Project. The Dealers are able to understand the materials and have even distributed some to the farmers, including those who are not part of the IPM project.

Agro dealers agreed that the farmers were adopting IPM farming strategies and gave the following as indicators;

- Learned how to use pesticide gears.
- Can now control pesticides use by reading the level
- Farmers seek for explanation while purchasing pesticide and also remind us on some things
- They have knowledge on pesticide selection for the affected crop and the specific time for spraying.

Agro dealers also admitted to having faced some challenges in talking to farmers about using less toxic pesticides and use of protective equipment for handling pesticides, some of which were mentioned as being;

- Some farmers say that they are used to the situation even if you try to change their minds
- Some farmers say that they have used the pesticides for long but have not seen any changes
- Farmers pretend to be knowing much and under-look at agro dealers because of their poor financial status.
- They always think that they have knowledge on pesticide selection for the affected crop and the specific time for spraying.

The Agro dealers were sure that UNACOH has the ability to carry on with the project to achieve its intended objectives and gave reasons for this claim as follows;

- The project has brought changes to the farmers
- Farmers buying the pesticides now days read labels on the bottles as result of awareness created by UNACOH.
- Farmers attend trainings after home work.
- UNACOH schedules meetings properly thus not affecting the activities/work of the farmers,
- UNACOH has trained health workers who are capable of saving lives of people trying to commit suicide with pesticides, UNACOH created awareness on vegetable growing.
- UNACOH has more support from agro-dealers because it has protected their lives and increased their earnings.
- UNACOH has stretched/outreached to the local people/farmers.
- Farmers like the trainings because it enables them to remember what they were taught.

The Agro Dealers are happy with the way UNACOH staff is supporting them in their IPM / PHE promotional work and recommend a continuation of the project with suggestions on what UNACOH can do in future in order to improve on the project like;

To continue giving knowledge and skills

- Improve on the motivation by allowing all the farmers to go for talk shows, receive T-shirts, increase on the transport allowance
- Increase on trainings and services given to farmers
- Mobilizing all community members to attend all trainings. It should talk to the ministry of agriculture to ban the making of fake herbicides and pesticides.

The comparison survey to the baseline also showed some improvement in terms of knowledge although when it comes to practice, they are still constrained by lack of enough shop space to install ample aeration. Most agro dealers still sell other agro inputs such as seeds, fertilisers together with pesticides and yet a few agro dealers still prepare their meals within the shop premises.

6.8 TOOLS / COPIES OF EVALUATION QUESTIONAIRES

Objectives 2 Questionnaire

Objective Two: The number of cases of pesticides poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts (**prevent pesticide pollution of the environment** using integrated pest management approach)

Date		Place _			Filled by _		
1. Na	me						
2. Age	e						
		age a farmer group					
	Yes	☐ No		Not Sure			
2. What is	the name of t	ne farmer group	you be	long to?			
b) Did the project?		/our farmer gro		ticipate in you Not Sure	ur selection to	participate ir	n this
	Yes	☐ No					
		r received any s about IPM dist				educational	and
		Yes		No		Not Sure	
(i) (ii) (iii) (iv)	Booklet Pamphlet posters Flip chart						
If yes how	v many per ca	tegory					
4. Are the	IEC materials	easy to underst	and (in	terms of cont	ent and langu	ıage?)	
	Ye	es		No	Not Su	ure	
b) If no, ple	ease give reas	sons.					

6. Have environme	you attended nt.	UNACOH	organised	trainings	on	pesticide	use,	health	and
	Yes	☐ No		Not Sure					
b) If yes wh	nen did you rec	eive these t	rainings?						
6. What mo	odules or topics	s have you o	liscussed d	uring the tr	ainin	ıg?			
☐ Wo ☐ Pro ☐ Ag ☐ Pe ☐ Int	owledge sharir orld of pesticide oper pesticide l ricultural plagu esticide impact egrated manag ricultural marke	es nandling es on health ar Jement of pe	nd environm						
7. Durin	g the trainings	were you pr	ovided with	training m	anua	als / materi	als?		
	Yes	☐ No		Not Sure					
8. Did you	read or someo	ne read the	materials fo	or you and	unde	erstood the	conte	nt?	
	Yes	☐ No		Not Sure					
9. Did you	find the training	g useful in te	erms new kr	nowledge a	and s	kills?			
	Yes		No						
Please ex	plain.								
10. How ha	ave you used th	ne acquired	knowledge	and skills?					
11. How m	any people hav	e you told a	about the ac	quired IPM	1 Kno	owledge?			
Less than	50 50)-100		more th	an 1	00			
	ou conducted anmunity about t								and
	Yes	☐ No							
b) How wa	s attendance o	f the village	meetings?						
Very (Good () Go	od ()	Fair ()	Poor ()	Very Po	or ()	
13. Were p	articipants entl	nusiastic abo	out the cont	ents of the	villa	ge meetin	gs?		
	Yes	☐ No		Not Sure					

14 Were	there any challen	ges faced in c	conducti	ng the village meetings?
	Yes	☐ No		Not Sure
b) If yes,	Please explain			
15. Have	the PHE Project	staff conducte	ed any s	upervisory visits for your village meetings
	Yes	☐ No		
	you received any n the IPM approac	• •	UNAC	OH trained agro extension workers and agro
	Yes	☐ No		Not Sure
b) If yes	what kind of supp	ort		
17. Have	you heard any ra	idio programm	ne in rela	ation to the PHE project?
	Yes	□No		
b) If yes	which station?			
c) Are y	ou satisfied with th Yes	ne timing, con	tent, dui No	ration, and choice of station?
Please	explain.			
	the Health Educa s use, health and		•	rainings and distributed IEC materials on village?
	Yes		NΦ	Not Sure
-		wledge and t	hat of v	illage members has improved as a result of
this proje	Yes		No	
b) Please	e give reasons for	your answer.		
20. Since	e the IPM trainings	s have you ex	perience	ed any pesticide poisoning?
	Yes		N₫	Not Sure
b) If y	es did you report	the case to th	ne health	n unit (name the unit)?
21. Withi		oup / village h	ave you	seen any cases of pesticide poisoning in the
	Yes	☐ No		Not Sure
	ves, what action was benefits have yo			ople? of your involvement in the PHE project?

23. Are there any d	sadvant	ages	as a resu	ilt of p	racticing IPM strategies?	
24. Do you think that the IPM Strategies are now more visible in your village as a result of the PHE project?						
Yes		r	No		Not Sure	
b) Please give r	easons f	for you	ur answe	r.		
25. Are members of project?	f your co	mmur	nity adop	ting to	the IPM strategies as a result of the PHE	
Yes		<u> </u>	No		Not Sure	
Please give rea	sons for	your a	answer.			
26. Are there any famarketing of IPM pr					been created to promote production and E Project?	
Yes		N	lo		Not Sure	
27. Are you happy community?	with the	way U	INACOH	is imp	plementing the PHE project n your	
Yes			No		Not Sure	
28. Is there anythin	g you thi	nk UN	NACOH is	s not o	doing well in the project?	
29. Do you think the	e project	is sud	cceeding N	_	ur village / community, is so why? Not Sure	
Give reasons fo	r your ar	nswer				
30. In your opinion	what sho	ould U	NACOH	do in	future in order to improve on the project?	
					IPM Strategies are members of the tion and safety measures?	
PROTECTION SAFETY MEASUR	AND	YES	NO	WH.	Y / COMMENT	
Ordinary clothes	<u> LO</u>					
Gloves						
Overalls						
Boots						
Masks						
Hat						
Long sleeved shirt						

Other		

Precautions taken after handling pesticides	YES	NO	WHY / COMMENT
Wash hands immediately after mixing			
Wash hands immediately after spraying			
Washing hands before eating in the field when spraying			
Washing hands before smoking when spraying			
Washing whole body after spraying			
Change clothes after spraying			

- 1. How do you store the pesticide before and after use?
- 2. How do you dispose off un-used pesticides / containers?
- 3. How do you transport the pesticides?
- 4. Are you using any alternative methods of controlling pests, if yes what methods are you using?
- 5. What changes if any have happened as a result of the PHE project in the farmers groups and village

Objectives 2 Questionnaire

Objective Two: The number of cases of pesticides poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts (**prevent pesticide pollution of the environment** using integrated pest management approach)

Target g	roup: UNTRAIN	ED FARMERS	3		
Date		Place _			Filled by
4. N	ame				
5. A	ge				
6. N 1. Are yo	ame of your villague a member of a	ge farmer group	in your o	community?	
	Yes	☐ No		Not Sure	
1b. If yes	, what is the nam	ne of the farme	er group	you belong to?	
2. Do you	ı know what the I	PHE project is	all abou	ut?	
	Yes	☐ No		Not Sure	
3. Have y project?	ou ever seen an	y IEC material	s distrib	uted by UNACC	PH in relation to the PHE
		Yes		No	Not Sure
(i) (ii) (iii) (iv)	Booklet Pamphlet posters Flip chart				
3b. If yes	s to the above ho	w many per ca	ategory		
3c. Are t	he IEC materials	easy to under	rstand (i	n terms of conte	nt and language)
If no, plea	Yes ase give reasons			No	Not Sure

4. Have you received any information on pesticide use, health and environment in the last two years?

	Yes		No	
4b. If yes, b	y whom?			
5. Did you f	find the informa	tion useful in	terms ne	ew knowledge and skills?
	Yes	☐ No		Not Sure
				m farmers and village community about the nised by PHE trained farmers?
	Yes	☐ No		Not Sure
6b. If yes d	id you attend ar	ny of these vill	lage me	etings?
, 	Yes	, No	J	
	100			
6c. How wa	as attendance o	f the village m	neetings	?
Very good		Good	_ Faii	r, Poor, Very Poor
6d. Were p	articipants enth	usiastic about	t the cor	ntents of the village meetings?
	Yes	☐ No		Not Sure
	e farmers in you vorkers and agr			received any support from PHE trained agro approach?
	Yes	☐ No		Not Sure
If yes what	kind of support			
8. Have you	u heard any rad	lio programme	e in relat	ion to the PHE project?
	Yes		No	
8b. If yes v	which station?			
8c. Are you	ı satisfied with t Yes	he timing, cor	ntent, du No	ration, and choice of station?
If no please	e explain.			
				ucted any awareness and distributed IEC nent in your village in the last one year?
	Yes	☐ No		Not Sure

	think your knowle		of village	members or	n pesticide	use has
	Yes	No				
10b. Please giv	e reasons for you	r answer.				
11. In the past	two years have yo	u experienced	any pestici	de poisoning	?	
☐ Ye	s 🔲 N	lo 🗌	Not Sure			
11b. If yes wha	t action did you ta	ke?				
12. Within you	· village have you	seen any cases	of pesticid	e poisoning i	n the last tw	o years?
☐ Ye	s 🔲 N	lo 🗌	Not Sure			
If yes, what	action was taken	by these peop	e?			
13. Do you thir the PHE project	k that the IPM Str	ategies are nov	v more visik	ole in your vill	age as a re	sult of
☐ Ye	s 🔲 N	lo 🗌	Not Sure			
Please give	e reasons					
14. As a result	of the PHE projec	t are farmers in	the village	adopting to I	PM strategi	es?
☐ Ye	s 🔲 1	No 🗌	Not Sure			
Please give	e reasons					
15. Do you thir	s Project is su	cceeding in you	ur village / o Not Sure	community, is	so why?	
Give reaso	ns for your answei	ſ				
16. In your oping your village?	nion, what should	UNACOH do in	future in o	rder to improv	e on the pr	oject in

Objective one: prevention, registration diagnosis and treatment of pesticide poisoning is improved in the health clinics in 2 districts. (To promote the safe handling of pesticides while improving prevention, diagnosis and treatment of pesticide poisonings- reduce the negative effects of pesticides in humans)

Target	group	o: Health Car	e Workers	;		
Date_			Place			Filled by
1.	Name	<u> </u>				
3.	Name	of your Hos	pital /Healt	h Centre_		
1. Do y	ou kno	ow what the Pl	HE project	is all abou	t and who it is	s meant for?
] Y	'es	☐ No		Not Sure	
		attended UNA oisonings?	.COH orga	— nised train	ings on preve	ention, diagnosis and treatment
] Y	'es	☐ No		Not Sure	
b) I	f yes w	vhen did you re	eceive thes	se trainings	s?	
3. Wha	at was	the level of att	endance fo	or the traini	ngs?	
Very g	ood	good		fair	poor	
4. Dur	ing the	trainings wer	e you provi	ded with to	aining manua	als /materials?
] Y	'es	☐ No		Not Sure	
5. Wei	re the	trainings relev	ant and ea	sily applica	able?	
] Y	'es		No		
b) Plea	ise exp	olain.				
6. How	have	you used the a	acquired kr	nowledge a	and skills?	
7. Do y	-	ink your know	rledge on p	oesticides	poisonings h	as improved as a result of the
] Y	'es	☐ No		Not Sure	
8. Have	e you s	shared the acq	uired know	rledge with	anyone at th	e Hospital / Health Centre?
	-	'es	☐ No	-	-	
ــ ۱f Yes.	- with w	ho?	_			

•	ooisoning cases		•	naterials to g	uide you in the management of
Booklet (), Pamphlet () Poste	ers (), Flip chart ()
b) If YES, h	ow many of ead	ch of the at	oove?		
c) Are the IE	EC materials ea	sy to unde	rstand (in	terms of cor	itent and language?)
	Yes		No		Not Sure
10. Have yo	ou received the	Pesticide I	ntoxicatio	n forms from	UNACOH?
	Yes		No		
b) If yes who	en did you rece	ive this for	m?		
11. Have yo	ou started using	this Form	?		
П	Yes		No		
		ms have y	ou registe	ered any pest	icide poisoning cases?
	·				
Ye:	S		No		
b) If yes, h	low many have	you registe	ered?		
Less	s than 25	:	25 to 50 _	, Mo	ore than 50
13. Do you result of this		y to diagno	se and tre	eat pesticide	poisoning has improved as a
Yes		☐ No			
b) If Yes, by	what percenta	ge out of 1	00%		
14. Have yo	ou faced any ch	allenges in	impleme	nting and per	forming your PHE project work?
☐ Ye	s	☐ No		Not Sure	
b) It	f yes please exp	olain.			
15. Are you activities?	u happy with th	ne way UN	NACOH s	taff is suppo	rting you in carrying out project
	Yes	□No		Not Sure	

16. Do you objectives?		H has the ability	/ to cai	rry on with the project to achieve its intended				
	Yes	☐ No		Not Sure				
b) Please	give reasons w	vhy.						
17. Is there	17. Is there anything you think UNACOH is not doing well in the project?							
	Yes	No		Not Sure				
18. In your opinion, what should UNACOH do in future in order to improve on the project?								

Objective One Related Questions

Objective one: prevention, registration diagnosis and treatment of pesticide poisoning is improved in the health clinics in 2 districts. (To promote the safe handling of pesticides while improving prevention, diagnosis and treatment of pesticide poisonings- reduce the negative effects of pesticides in humans)

Target	group: HEAL	TH EDUCATO	RS			
Date_		Place		Fil	led by	
1.	Name					
2.	Age					
	Name of your H ou know what F				s meant for?	
	Yes	☐ No	<u> </u>	Not Sure		
	re you attended ent of pesticide		ganised	I trainings on	prevention, o	diagnosis and
	Yes	☐ No	<u> </u>	Not Sure		
b) I	f yes when did y	ou receive the	ese trair	nings?		
3. Wha	at was the level	of attendance	for the t	rainings?		
Very g	ood go	od	fair	po	or	
4. Dur	ing the trainings	were you pro	vided w	ith training ma	anuals /materi	als?
	Yes	☐ No		Not Sure		
5. We	re the trainings i	elevant and e	asily ap	plicable?		
	Yes		No			
,	ase explain. have you used	the acquired I	knowled	lge and skills'	?	
	Yes	☐ No				
,	ase explain. you think your kr oject?	nowledge on p	esticide	es poisonings	has improved	as a result of
	Yes	☐ No		Not Sure		

•	8. Has your ability to conduct IEC activities on pesticides in the villages improved as a result of the PHE project?						
	Yes			No			
b) If Yes, by	what percer	ntage out of 1	00%				
9. Have you	conducted a	any IEC relate	ed act	ivities in the	last one year?		
Yes No 10. In how many villages have you conducted PHE / IEC activities?							
-	u received a	ny UNACOH	printe	ed IEC mate	rials relating to the I	PHE	
project?		Yes					
- Post - Flipo							
(Spec	ify numbers	for each cate	egory)				
b) Are langua		iterials easy t	to und	erstand (in t	erms of content and	t	
	Yes		No		Not Sure		
12. Have you	u distributed	any IEC mate	erials	in the village	es of participating d	istrict?	
	Yes			No			
b) If y	es, which IE	C materials d	did you	u distribute?			
13. In your o	pinion are th	ne trained farr	mers a	adapting to t	the IPM strategies?		
	Yes		No	0			
b) Giv	e reasons fo	or your answe	er.				
14. Have you project work	•	challenges in	imple	ementing and	d performing your P	HE	
	Yes	☐ No		Not Sure			
b) If	yes please	explain.					

15. Do you think UNACOH has the ability to carry on with the project to achieve its intended objectives?									
	Yes	☐ No		Not Sure					
b) Pleas	b) Please give reasons why.								
•	16. Are you happy with the way UNACOH staff is supporting you in carrying out project activities?								
	Yes	☐ No		Not Sure					
17. Is there anything you think UNACOH is not doing well in the project?									
	es	□No		Not Sure					
18. In your opinion, what should UNACOH do in future in order to improve on the project?									

Activities related questions - Objective 2 and 3

Objective Two: The number of cases of pesticides poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts (**prevent pesticide pollution of the environment** using integrated pest management approach)

Target	t group:	Agricultural	Extension \	Worker	S
Date_		Place			Filled by
1.	Name				
2.	Age				
3.	Name of	f your District	t		
1. Do y	you knov	v what PHE p	oroject is all	about	and who it is meant for?
] Ye	s] No		Not Sure
	-	attended UN. t Manageme	_	anised	Theoretical and practical trainings or
] Yes	s _] No		
b) l	If yes wh	en did you re	eceive these	e trainir	ngs?
		e level of atte			inings? poor
4. Dur	ring the t	rainings were	e you provic	ded with	n training manuals /materials?
] Ye	s]No	I	Not Sure
5. We	ere the tra	ainings releva	ant and eas	ily appl	icable?
] Ye	s]	No	
,	ase expla v have yo	ain. ou used the a	acquired kno	owledge	e and skills?
		nk your kno result of the p		pestici	des poisonings and management has
] Ye	s] No		Not Sure
	-	ility to conduce PHE project?		ities on	pesticides in the villages improved as

☐ Yes ☐ No								
b) If Yes, by what percentage out of 100%								
9. Have you conducted any IEC related activities	in the last one year?							
☐ Yes ☐ No								
10. In how many villages have you conducted Ph	HE / IEC activities?							
11. How many people have you told about the ac	equired IPM Knowledge?							
Less than 50 50-100 n	nore than 100							
12. Have you supported any of the UNACOH train application of IPM approaches?	ined farmer groups on the							
☐ Yes ☐No ☐ No	t Sure							
b) If yes what kind of support								
13. Have the PHE Project staff conducted any extension services to farmers?	y supervisory visits to support your							
Yes No 14. Have you received any UNACOH printed IEC project?	C materials relating to the PHE							
Yes	No							
PamphletsPostersFlipchartBooklet								
(Specify numbers for each category).								
b) Are the IEC materials easy to understal language?)	b) Are the IEC materials easy to understand (in terms of content and language?)							
☐ Yes ☐ No	□ Not Sure							
15. Have you distributed any IEC materials in the	e villages of the participating district?							
☐ Yes ☐ No								
b) If yes, which IEC materials did you distribute?								

16. In your	opinion are tr	ne trained fai	rmers ad	apting to th	ie ipivi strat	tegles?			
	Yes			☐ No					
b) Gi	ve reasons fo	or your answ	er.						
17. Have yo project work	ou faced any </td <td>challenges ir</td> <td>n implem</td> <td>nenting and</td> <td>performing</td> <td>g your PHE</td> <td></td>	challenges ir	n implem	nenting and	performing	g your PHE			
	Yes	□No		Not Sure					
b) l	f yes please	explain.							
18. Do you intended ob		OH has the	ability to	carry on w	vith the pro	ject to achiev	e its		
	Yes	☐ No)	□Not	Sure				
b) Please	give reasons	why.							
19. Are you project activ		the way U	NACOH	staff is su	pporting yo	ou in carrying	out		
	Yes	☐ No	□ No	ot Sure					
20. Is there	anything you	think UNAC	COH is no	ot doing we	II in the pro	oject?			
	Yes	□No	☐ No	t Sure					
21. In your project?	opinion, wha	at should UN	NACOH	do in future	e in order t	to improve on	the		

Activities related questions Objective two and three

Objective Two: The number of cases of pesticides poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts (**prevent pesticide pollution of the environment** using integrated pest management approach)

Target	group: Ag	ricultural Inputs De	ealers		
Date		Place		Filled by	
1. N	Name				
2. <i>A</i>	\ge				
3. 1	Name of you	ır District			-
1. Do yo	ou know wh	at PHE project is a	all abou	it and who it is meant for?	
	Yes	□No		Not Sure	
	e you atten ed Pest Ma		ganise	d Theoretical and practical trainings	on
	Yes		No		
b) If	yes when o	lid you receive the	se trair	nings?	
3. What	was the lev	vel of attendance f	or the t	rainings?	
Very go	od	good	fair	poor	
4. Durin	g the trainir	ngs were you prov	ided wi	th training manuals /materials?	
	Yes	□No		Not Sure	
5. Were	e the trainin	gs relevant and ea	asily ap	plicable?	
	Yes] No		
,	se explain. have you u	sed the acquired k	nowled	ge and skills?	
-	-	our knowledge or It of the project?	n pesti	cides poisonings and management h	as
	Yes	□No		Not Sure	

8. Are you now be result of the PHE p	project?	ers about	t pesticides use and management as a
	otective equipment		on the use of less toxic pesticides and dling pesticides since you acquired the
Less than 50	50-100		more than 100
10. Have the PHE / PHE promotional	-	ucted any	y supervisory visits to support your IPM
Yes	S	☐ No	0
11. Have you rece project?	eived any UNACOH	printed I	IEC materials relating to the PHE
project:	Y	es	No
PamphletsPostersFlipchartBooklet	S		
(Specify nu	mbers for each cat	egory).	
b) Are the li language?)	•	to unders	stand (in terms of content and
☐ Yes		☐ No	□ Not Sure
12. Have you distance Shop?	tributed any IEC n	naterials	to farmers who visit your Agro inputs
☐ Yes	S	☐ No	o
,	hich IEC materials on are the trained far	•	distribute? apting to the IPM strategies?
Yes	[No	
b) Give reas	sons for your answ	er.	

14. Have you faced any challenges in talking to farmers about using less toxic pesticides and use of protective equipment for handling pesticides?

		Yes	∐ No		Not Sure			
	b)	If yes please	explain.					
15. Do you think UNACOH has the ability to carry on with the project to achieve intended objectives?								
	☐ Ye:	S	☐ No		Not Sure			
	b) Please	e give reason	s why.					
16. Are you happy with the way UNACOH staff is supporting you in your IPM / PHE promotional work?								
		Yes	☐ No		Not Sure			
	17. Is there	e anything yo	ou think UNAC	OH is r	not doing well in the project?			
		Yes	□No		Not Sure			
	18. In you project?	r opinion, wh	nat should UN	IACOH	do in future in order to improve on the			

KII QUESTIONS FOR CAO, DAO, DHO, LC 3 CHAIRPERSON AND SUB COUNTY CHIEF

COU	NTY CHIEF
Date_	PlaceFilled by
1.	Do you know UNACOH as an organisation?
2.	☐ Yes ☐ No ☐ Not Sure What is your understanding of the PHE / IPM Project and what is your role in this project?
3.	Are your aware of the activities carried out under this project?
4.	Are these project activities addressing a real development need of th communities in your district?
5.	What do you consider to be the key successes registered since the inceptio of the project in your district?
6.	Have you noted any challenges in the implementation of this project? Why Were the challenges solved and how?
7.	Do you have any concrete plans for strengthening and carrying forward th relationship you have with UNACOH? Please explain.
QUES	STIONS FOR DISTRICT PESTICIDE COMMITTEE (DPC)
1.	When was the DPC constituted?
2.	What do you see as your key role as a member of the district pesticide committee?
3.	How many times has the district pesticide committee met so far?
4.	Have you participated in any UNACOH organised information seminar / conferences on Integrated Pest Management strategies.

- conferences on Integrated Pest Management strategies.
- 5. As a DPC have you promoted any concrete action on the use and sale of pesticides in the district?
- 6. From your point of view how has UNACOH and in particular the PHE project benefited from your involvement?
- 7. Have you ever seen any PHE IEC materials (booklet, pamphlet, posters, flip charts) containing information on pesticide use and management in your district?
- 8. Do you think that IPM practices are now more visible in your area?

		Yes	☐ No	☐ Not Sure				
9. Give	reasor	ns						
10. Do y	ou thinl	k the project is	s succeeding?					
		Yes	□No	☐ Not Sure				
11. Wha	11. What will be the major challenge that will limit success?							
12. What could be done differently based on your experience with the PHE project?								

ie9	TIONS FOR ADMINISTRATOR
1.	For how long have you been working on this project?
2.	And for how long have been working as the administrator for the project?
3.	Are you fulltime or part-time?
4.	Are you contractual, permanent or temporally?
5.	We noted that there has been a high staff turnover in this project, what could be the reason?
6.	What is your highest level of education?
7.	Are there any opportunities for career growth and development in the organisation?
8.	Do you have the requisite knowledge and skills to execute your project responsibilities?
9.	Are lessons and best practices documented and shared with other stakeholders?
10.	. What factors are affecting you performance at work?
11.	. What would it take for UNACOH to retain your services in the organisation?
12.	Does the project have enough resources to carry out the project activities?
13.	Are there any constraints in accessing resources to run the project?
14.	. We noted that on many occasions there are budget balances, what could be the reason for the under spending?
15.	. How do you reconcile budget balances with claims of inadequate funds especially in relation to the baseline and midterm surveys?
16.	Are there effective mechanisms for feedback and redress in place among staff members?
17.	. Do you think the project is succeeding? Give reasons.
18.	It has been noted that some activities are running behind schedule, what could be the reasons for this?
19.	Is the PHE project addressing the real problems of the targeted audiences? Give reasons for your answer?

Not Sure

20. Does the project staff hold monthly meetings?

21. Are minutes taken during these meetings?

Yes

No

	۷۷.	Docs the project c	licering	Commi	ittee mee	t as was planned (quarterly):	
] Yes		No		Not Sure	
	b) I	f no, give reasons	why				
	23.	Are the minutes ta	ıken dur	ing thes	se meetin	gs?	
] Yes			Nd□	Not Sure	
	24.	How could UNAC	OH impr	ove in t	the mana	gement of the PHE project?	
QU	IES ⁻	TIONS FOR APC I	HEALTH	<u>I</u>			
	1.	For how long have	you be	en worl	king on th	nis project?	
	2.	And for how long I	nave be	en work	king as the	e APC - Health	
	3.	Are you fulltime or	part-tim	ne			
	4.	Are you contractu	al, perm	anent o	or tempora	ally?	
	5.	We noted that the reason?	re has b	een a h	nigh staff	turnover in this project, what could	I be the
	6.	What is your highe	est level	of educ	cation?		
	7.	Are there any opp	ortunitie	s for ca	reer grov	vth and development in the organi	sation?
	8.	Do you have the r responsibilities?	equisite	knowle	dge and	skills to execute your project	
	9.	Are lessons and b	est prac	tices do	ocumente	ed and shared with other stakehold	ders?
	10.	What factors are a	affecting	you pe	rformance	e at work?	
	11.	What would it take	for UN	ACOH t	to retain y	our services in the organisation?	
	12.	How do you recon relation to the bas				h claims of inadequate funds espe ys?	ecially in
	13.	Are there effective members?	mecha	nisms f	or feedba	ick and redress in place among st	aff
	14.	Do you think the p	roject is	succee	eding? Gi	ve reasons	
	15.	It has been noted	that son	ne activ	rities are r	running behind schedule, what co	uld be

the reasons for this?

16.			project r your ar		•	real pr	oblems of t	he targete	d audier	nces? Giv	е
17.	Doe	es the p	roject st	aff ho	ld monthly	y meet	ings?				
		Yes			No		Not Sure				
		b) Are	minutes	taken	during th	ese m	eetings?				
	18.	Does th	ne projed	ct Stee	ering Com	nmittee	meet as w	as planned	d (quarte	erly)?	
]	Y	es			∐No		Not Sur	re		
b) I	f no	, give re	easons v	vhy							
18.	Are	the mir	nutes tal	ken du	ıring thes	e meet	ings?				
]	Yes			No		Not Sure				
19.	The	e health	compor	nent is	lagging b	ehind,	what could	l be the rea	ason for	this?	
20.			•		articipant turn up in		p at the beo	ginning of t	he proje	ect in Wak	iso
21.	wor			•			us stakeho orkers and a	•			е
22.			•		organisati Sive reaso		nd technica	I capacity	of UNAC	COH to	
23.	Ηον	w could	UNACC)H imp	orove in th	ne mar	agement of	f the PHE	project?		
	ΟIJ	FSTIOI	NS EOB	A D C	AGRICUI	THE	:				
1							<u>.</u> this project	2			
			J			Ū	the APC – A				
			ltime or			ng as	ilio Ai O – A	TONIO			
		•		•	manent or	temno	orally?				
	We	•		•		-	f turnover i	n this proje	ect, what	could be	the

6. What is your highest level of education?

7. Are there any opportunities for career growth and development in the organisation?							
8. Do you have the requisite knowledge and skills to execute your project responsibilities?							
Are lessons and best practices documented and shared with other stakeholders?							
10. What factors are affecting you performance at work?							
11. What would it take for UNACOH to retain your services in the organisation?							
12. How do you reconcile budget balances with claims of inadequate funds especially in relation to the baseline and midterm surveys?							
13. Are there effective mechanisms for feedback and redress in place among staff members?							
14. Do you think the project is succeeding? Give reasons							
15. It has been noted that some activities are running behind schedule, what could be the reasons for this?							
16. Is the PHE project addressing the real problems of the targeted audiences? Give reasons for your answer?							
17. Do the project staffs hold monthly meetings?							
Yes No Not Sure							
b) Are minutes taken during these meetings?							
18. Does the project Steering Committee meet as was planned (quarterly)?							
Yes No Not Sure							
19. b) If no, give reasons why							
20. Are the minutes taken during these meetings?							
Yes No Not Sure							
21. What has been the response of the various stakeholders (farmers / health care workers / health educators/ extension workers and agro dealers) response to the project?							
22. How would you rate the organisational and technical capacity of UNACOH to implement this project? Give reasons.							
23. How could UNACOH improve in the management of the PHE project?							

Activities related questions Objective two and three

Objective Two: The number of cases of pesticides poisoning is lowered by promoting IPM strategies among farmers from 20 villages in 2 districts (**prevent pesticide pollution of the environment** using integrated pest management approach)

Date		Place _			Filled by
Name					
Position_					
		urvey and follow andling and sy			sticides usage, knowledge au conducted?
	Yes	☐ No		Not Sure	
b) If yes	were they co	nducted on sche	dule?		
	Yes		No		
c) If No ii	n 1, why have	n't any of the stu	udies bee	en conducted?	Please explain.
	II the particip		groups i	n the target	areas of Wakiso and Pallis
	Yes	☐ No		Not Sure	
3. Were t	here any chal	lenges in the sel	lection of	the farmers?	
	Yes	☐ No		Not Sure	
b) If yes,	what were the	e challenges the	n, please	name them!	
4. Are the	e participating	farmers coming	from 20	villages per di	strict?
	Yes	☐ No		Not Sure	
5. Did the	e farmer grou	ps participate in	the sele	ction of their r	epresentatives to participate

this project?

	Yes	☐ No		Not Sure
6. What is	the gender com	position of the	farmer	s?
Pallisa	Male		fer	male
Wakiso				
7. Have all	the 40 farmers	been trained in	10-15	theoretical and practical courses on IPM?
	Yes	☐ No		Not Sure
b) If No wh	nat were the rea	sons?		
8. Were th	e planned trainii	ngs conducted	by PHI	E according to schedule?
	Yes	☐ No		Not Sure
9. Were th	ere any challenç	ges associated	with th	ne seminar/trainings planning?
	Yes	☐ No		Not Sure
b) If yes, P	Please explain			
10. Are the	ere any challeng	es associated v	with the	e seminars themselves?
	Yes	☐ No		Not Sure
b) If yes, P	Please explain			
11. How w	as attendance o	of the seminars/	trainin	gs?
M	lore than expect	ed 🗌 as	s expe	cted less than expected
12. Were t	he participants (enthusiastic abo	out the	contents of the seminars?
	Yes	☐ No		Not Sure
13. Are rep	ports from the se	eminars availab	le?	
	Yes			Not Sure

14. How many agricultural extension workers and agro Pesticide dealers are participating in this project?

	Agro exten	sion work	kers Ag	ro Pesticide	dealers
Pallisa					
Wakiso					
15. Were	all these selecte	ed by the	DAO?		
	Yes	, ∏ No		Not Sure	
	all the selected and practical of		ural extensio	n workers a	and pesticide dealers trained in 5
	Yes	□ No	0 🗌	Not Sure	}
b) If No v	vhat were the re	asons?			
17. Were	the planned trai	nings con	nducted by P	HE Project	according to schedule?
	Yes	☐ No		Not Sure	
b) If No gi	ve reasons				
18. Were	there any challe	enges ass	ociated with	the semina	r/trainings planning?
	Yes	☐ No		Not Sure	
b) If yes, I	Please explain				
19. Were	there any challe	enges ass	ociated with	the semina	rs themselves?
	Yes	☐ No		Not Sure	
b) If yes,	Please explain				
20. How v	vas the attendar	nce of the	seminars/tra	ainings?	
Πм	lore than expect	ted 🗌	as expe	cted [less than expected
	participants entl		•	_	_
	Yes	☐ No		Not Sure	
22. Are re	ports from the s				
	Yes	☐ No		Not Sure	

23. Has UNACOH produced and distributed any of the following training manuals on pesticide? YES NO
5 educational booklets
5 pamphlets
5 posters
1 flipchart
b) If no, please explain
24. Have the trained farmers conducted village meetings to pass on their acquired knowledge and skills?
Yes No Not Sure
b) If YES how many?
Pallisa
25. Are there reports about these meetings?
Yes No Not Sure
26. Have the trained agricultural extension workers; stockists conducted trainings to farmers within the communities
Yes No Not Sure
27. Has project team (AGRIC) supervised such trainings?
Yes No Not Sure
b) If YES, how many have you supervised?
Pallisa Wakiso
28. Have there been any studies conducted in the field of agriculture, environment and pesticides through collaboration between universities in Uganda and Denmark?
Yes No Not Sure
b) If NO please explain.
c) If Yes, have the studies been published in international scientific papers, presented in conferences, and used for advocacy purposes with decision makers in Uganda?

Objective 3: The civil society, especially emphasising Uganda National Farmers Federation and district farmers groups, are aware of pesticide dangers and able to advocate for concrete actions in the 'district pesticide committees' and the National Chemical Agricultural Board to ensure sustainable food production. (To raise awareness in the population and advocate for proper control to minimize possible pesticide dangers)

1. Have the	e district pestici	de committ	ees been o	constituted?			
	Yes		No				
2. Were th	ere any challen	ges in cons	stituting the	se committe	es?		
	Yes		No				
b) If yes .w	hat were the ch	nallenges					
3. Have the	e district commi	ttees been	meeting o	n a regular b	asis?		
	Yes	☐ No		Not Sure			
b) If yes, h	ow many? Palli	sa	()	\	Wakiso	()	
4. Are min	utes taken durir	ng these me	eetings?				
	Yes		No				
5. Have the	e members of th	ne District F	Pesticide C	ommittees b	een trained	on four ser	ninars?
Ye	S	N	lo				
b) If Yes, in	n how many ser	minars?					
c) If no ple	ease explain						
6. Have the	e yearly District	Pesticide (Conference	es for all stak	eholders be	en held?	
	Yes		No				
b) If no, ple	ease explain.						
7. Has UN	ACOH establish	ned collabo	ration with	the National	Agricultural	Chemicals	Board?
	Yes	No		Not Sure			
8. Have ra	dio programme:	s been aire	d on the lo	cal radios?			
	Yes	□ No		Not Sure			

9. How many aired?	radio spots/ program	mes about pesticides have so far been produced and
	Pallisa	Wakiso
b) Were there	e any challenges in the	production and airing of the Radio programmes?
If Yes, please	e explain.	
	ny videos on pesticides n the districts?	and health /IPM/Environment have been produced and
b) Have there	e been any challenges	in video production and transmission?
11. How maprevention?	ny articles have beer	n printed in newspapers about pesticide dangers and
12. Have the	articles been evenly sp	pread in the project life-time?
	Yes	No
If no please e	explain.	
	ere a publication in 'F prevention produced?	arm Talk' to educate school children about pesticide
	Yes	No
b) If Yes, who	en?	
14. Has a listhe districts?	t of positive pesticides	for use in IPM farming been compiled and distributed in
	Yes	No
If no, [lease 6	explain	
14. Have far districts?	mer cooperatives prod	ucing and marketing IPM products been created in the
	Yes	No
b) If no, pleas	se explain.	
15. Has a stu Uganda and		oducts on the market been undertaken by Universities in
16. Is there a	strategy to promote IP Yes	M products in the market?

	g UNACOH's an ect and pesticide		National (Jontere	ence have there been presentations on the
	Yes		No		Not Sure
	is the level of avolunities as a resu				s, Pesticide usage and their dangers within
	Greatly improved		moderate	ely imp	roved still the same
19. Can t	his awareness be	attril	outed to th	ne PHE	project?
	Yes		No		Not Sure
In your o	oinion is there a n	nultip	lier effect t	towards	s the nearby communities?
	Yes		No		Not Sure
groups,		cate f	or concre	te actio	nal Farmers Federation and district farmers ns in the 'district pesticide committees' and
	Yes		No		Not Sure
b) Give reas	ons for your answ	ver			
21. Does th	e project staff hol	d mo	nthly meet	tings?	
	Yes		No		Not Sure
	utes taken during e project Steering				as planned (quarterly)?
	'es		No		Not Sure
b) If no, give	reasons why				
24. Are the	minutes taken dur	ing th	nese meet	ings?	
	Yes		No		Not Sure

Activities related questions - Objective one:

Objective One: (Prevention, registration, diagnosis and treatment of pesticide poisonings is improved in the health clinics in 2 districts).

Target group: PH	E STAFF HEALT	ГН			
Date	Plac	е		Filled by	
Name					
Position					
Was the baseline poisonings and case		w up surve	ys about reaso	ns for acute pesti	icides
Yes	☐ No		Not Sure		
b) If yes were they c) If No why haven'			onducted?		
2. Has UNACOH p (IEC) on pesticides? 1 Book		stributed tl	ne Information	Educational Mat	erials
5 pamp	hlets				
5 poste	rs				
1 flipch	art				
b) If no, please expla	ain				
3. Does a register of	the number of p	esticides p	oisonings exist	in the two district	ts?
☐ Yes		No			
b) If Yes when were	the registers dis	tributed to	the health units	?	
c) Where the regis	ters distributed	in all the	participating he	ealth units in the	e two

		Yes		No		
If no,	give r	easons				
4. Ho\	w mar	ny healthcare	e workers are p	participa	ting in this	s project?
	Pal	llisa ()	Waki	so ()
		ere any chall ticipate in the	_	selectior	n of the h	ealthcare workers and health
		Yes	☐ No		Not Sure	e
b) If y	/es, w	hat were the	challenges, p	lease na	ame them	
6. Ho		iny healthcar	e workers hav	e been t	rained in	the 5 theoretical and practical
		Hea	alth educator's	healt	h curative	care worker
	Palli	sa				
	Wak	iso				
,		all the Health urse days?	n Care Worke	rs and	Health Ed	ducators been trained in the
		Yes	☐ No			
lf l	No wl	nat were the	reasons?			
7. We	re the	e planned trai	inings conduct	ed by P	HE accord	ding to schedule?
		Yes	☐ No		Not Sur	re
8. We	re the	ere any challe	enges associat	ted with	the semin	nar/trainings planning?
		Yes	☐ No		Not Sure	Э
If ye	es, Pl	ease explain				
9. Are	there	e any challen	ges associated	d with th	e semina	rs themselves?
		Yes	☐ No		Not Sure	

b) If yes, Please explain
10. How was attendance of the seminars/trainings?
☐ More than expected ☐ as expected ☐ less than expected
11. Were participants enthusiastic about the contents of the trainings?
☐ Yes ☐ No ☐ Not Sure
12. Are reports from the seminars available?
☐ Yes ☐ No ☐ Not Sure
13. In your opinion are the Health Care Workers able to diagnose and treat pesticid poisonings? Yes No
If Yes by what percentage out of 100%
14. Have the health educators conducted IEC activities about Pesticides in th villages of their district this year?
Yes No
If Yes how many villages have they covered so far?
Pallisa ()
Wakiso ()
15. Is there in existence a Guide for diagnostic procedures and treatment of pesticide poisonings used by health care workers in the two districts?
Yes No
16. Are all the trained healthcare personnel able to diagnose and treat pesticide poisonings?
☐ Yes ☐ No ☐ Not Sure
Please give reasons for your answer.

17. How do community members in the project districts get to know where to access pesticides poisoning treatment from trained health care workers?

pesticides through collaboration between universities in Uganda and Denmark?
☐ Yes ☐ No ☐ Not Sure
If NO please explain.
19. If Yes, have the studies been published in international scientific papers, presented in conferences, and used for advocacy purposes with decision makers in Uganda?
20. What is the current monthly number of farmers registered and treated for pesticides poisonings in the health systems?
Less than 10 11-50 51-100
21. Has there been an increase or a decrease in the numbers today as compared to before the PHE project?
☐ Yes ☐ No ☐ Not Sure
22. What has contributed to the increase or fall in the numbers?
☐ PHE project ☐ other factors. (Specify)
23. What is the level of awareness in the participating villages about pesticides poisonings?
Quite high moderate the same
24. Can this awareness be attributed to the project?
☐ Yes ☐ No ☐ not sure
@@@@@@@@@@@

Objective 3: The civil society, especially emphasising Uganda National Farmers Federation and district farmers groups, are aware of pesticide dangers and able to advocate for concrete actions in the 'district pesticide committees' and the National Chemical Agricultural Board to ensure sustainable food production. (To raise awareness in the population and advocate for proper control to minimize possible pesticide dangers)

1. Have the district pesticide committees been constituted?

	Yes		No							
2. Were there any challenges in constituting these committees?										
	Yes		N	0						
b) If yes .w	hat were the	challenge	S							
3. Have the	e district com	mittees be	en meetin	g on a regul	ar basis?					
	Yes	☐ No		Not Sure						
b) If yes, he	ow many? Pa	allisa	()	Wakiso	()				
4. Are minu	utes taken du	ring these	meetings'	?						
	Yes		1	No						
5. Have th seminars?	ne members	of the Di	strict Pest	icide Comn	nittees been trai	ined on fo	ur			
Yes			No							
b) If Yes, ir	n how many s	seminars?								
c) If no ple	ease explain?									
6. Have the	e yearly Distri	ict Pesticio	le Confere	nces for all	stakeholders bee	en held?				
	Yes		1	No						
b) If no, ple	ease explain.									
7. Has UN Board?	ACOH estab	lished coll	aboration	with the Na	tional Agricultura	al Chemica	als			
	Yes	☐ No		Not Sure						
8. Have rad	dio programm	nes been a	ired on the	e local radio	s?					
	Yes	□No		Not Sure						
9. How mand aired?	ny radio spot	s/ progran	nmes abou	ut pesticides	s have so far be	en produce	ed			
	Pallisa		Wakiso							

b) Were there any challenges in the production and airing of the Radio programmes?								
If Yes, please explain.								
10. How many videos on pesticides and health /IPM/Environment have been produced and transmitted in the districts?								
b) Have there been any challenges in video production and transmission?								
11. How many articles have been printed in newspapers about pesticide dangers and prevention?								
12. Have the articles been evenly spread in the project life-time?								
Yes No								
If no please explain.								
13. Was there a publication in 'Farm Talk' to educate school children about pesticide dangers and prevention produced?								
Yes No								
b) If Yes, when?								
14. Have farmer cooperatives producing and marketing IPM products been created in the districts?								
Yes No								
b) If no, please explain. 15. Has a study to promote IPM products on the market been undertaken by Universities in Uganda and Denmark?								
16. Is there a strategy to promote IPM products in the market? Yes No								
17. During UNACOH's annual National Conference have there been presentations on the PHE project and pesticides?								
☐ Yes ☐ No ☐ Not Sure								
18. What is the level of awareness on Pesticides, Pesticide usage and their dangers within the communities as a result of this project?								
☐ Greatly improved ☐ moderately improved ☐ still the same								

19	19. Can this awareness be attributed to the PHE project?								
		Yes	☐ No)		Not Sure			
In your opinion is there a multiplier effect towards the nearby communities?									
		Yes	□ No	0		Not Sure			
20. In your opinion do you think Uganda National Farmers Federation and district farmers groups, are able to advocate for concrete actions in the 'district pesticide committees' and the National Chemical Agricultural Board.									
		Yes	□ No	0		Not Sure			
b) Give reasons for your answer									
21. Does the project staff hold monthly meetings?									
		Yes			□lo	I	Not Sure		
22. Are minutes taken during these meetings?									
23. Does the project Steering Committee meet as was planned (quarterly)?									
☐ Yes ☐ No ☐ Not Sure b) If no, give reasons why									
24. Are the minutes taken during these meetings?									
		Yes		No		Not Sure			

UNACOH Pesticides, Health and Environment (PHE) 2010-2013

Ministry of Health and Ministry of Agriculture: Questions for Key Informants:

Ministry of Health and Ministry of Agriculture participates in the development of materials for farmers, extension workers and health care workers at a superior level. Directly they can be involved in revision of laws and regulations concerning pesticides and in revision of curricula in the health and agricultural careers.

- 1. Do you know UNACOH as an organisation?
- 2. What is your understanding of the PHE / IPM Project and what is your role in this project?
- 3. Are your aware of the activities carried out under this project?
- 4. Basing on your knowledge and information what factors are facilitating or constraining the project?
- 5. Has this project contributed to any new interventions / revision of laws and regulations concerning pesticides
- 6. Has this project contributing any new interventions in the revision of curricula in the health and agricultural training institutions? If yes please specify the interventions
- 7. What benefits does this collaboration bring to your Ministry?
- 8. If yes to no. 7 what steps are you doing to take full advantage of the benefits?
- 9. Do you have any concrete plans for strengthening and carrying forward the relationship you have with UNACOH? Please explain.

QUESTIONS FOR MEMBERS OF THE STEERING COMMITTEE

- 1. How often does the project steering committee meet?
- 2. Have you ever seen any IEC Material (booklet, pamphlet, posters, flip charts) containing information on pesticide prevention, diagnosis and treatment
- 3. What do you consider to be the proudest achievement of the steering committee in the PHE project?
- 4. Do you think that IPM Strategies are now more visible?

- 5. How do you rate the organisational and technical capacity of UNACOH to implement this project? Give reasons.
- 6. Have you noted any challenges in the implementation of this project? Why? Were the challenges solved and how?
- 7. How do you assess the level and quality of communication between the Steering Committee and the Project Management?
- 8. Do you think the project is succeeding? Give reasons
- 9. What will be the major challenge that will limit success?
- 10. What could be done differently based on your experience with the PHE project?