



UNIVERSITY OF MALAWI

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**Evaluation of the Nutrition Surveillance Programme in
Malawi**

BY

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CERTIFICATE OF APPROVAL

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DECLARATION

I hereby declare that this dissertation is my original work and has not been presented for any other award at the University of Malawi or any other university.

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ABSTRACT

Introduction: Nutrition Surveillance is defined as a regular and timely collection, analysis and reporting of data on nutrition risk factors, nutritional status and nutrition-related diseases in the population. In Malawi Nutrition Surveillance System (NSS) started in May 2003, it was aimed at providing early warning signs on acute malnutrition among under-five children for timely response. **Objectives:** The objective of the study was to evaluate the performance of NSS in Malawi from 2005. Specifically the study assessed: quality of data, institutional capacity, utilisation of information, factors that affecting its utilisation and also conducted a SWOT analysis of NSS since its inception. **Methodology:** The study was conducted in 9 randomly selected districts. Data was collected using a structured questionnaire and review of secondary data. Data was analyzed using Analy-nut and Microsoft office excel. **Results:** On average, only 42 % (3824) of the total required data (9100) was being collected, of this 77% (2957) was usable for analysis. On average, bulletin production delayed by 6 weeks and 4 days from date of data collection to reporting. The study revealed that surveillance information is not utilised both at district and national levels. It was also found that none of the Districts evaluated had included surveillance activities in the current District Implementation Plans (DIP). **Conclusion:** The study reveals that the system has been set up but it is shaky due to poor coordination between AAH and MoH rendering the hand over process by November 2007 unattainable. Although the system has been functional for three years in well established structures, lack of participation by MoH, non inclusion of NSS activities in the DIPs underpin its sustainability. Data quality and quantity was also found to be of major concern, it is therefore important for MoH to strengthen the programme for it to start achieving its objectives.

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ABBREVIATIONS AND ACRONYMS

AAH	Action Against Hunger
AIDS	Acquired Immune Deficiency Syndrome
CTC	Community Therapeutic Care
CDC	Centre for Disease Control
D	Number of districts per region
DEHO	District Environmental Health Officer
DHMT	District Health Management Team
DHO	District Health Officer
DIP	District Implementation Plan
DN	District Nutritionist
EU	European Union
FGDs	Focus Group Discussions
GMC	Growth Monitoring Clinics
HIV	Human Immune deficient Virus
HMIS	Health Information Management System
HSA	Health Surveillance Assistant
ID	Identity
ICN	International Conference in Nutrition
IDSR	Integrated Disease Surveillance and Response
Lzs	Livelihood zones
MCH	Maternal and Child Health
MDHS	Malawi Demographic and Health Survey
MOH	Ministry of Health

MPH	Master in Public Health
MUAC	Mid-Upper Arm Circumference
MVAC	Malawi Vulnerability Assessment Committee
NGO	Non Governmental Organisation
OPC	Office of the President and Cabinet
SFP	Supplementary Feeding Programme
TFP	Therapeutic Feeding Programme
TND	Total Number of Districts
TNDR	Total Number of District per Region
TNP	Targeted Nutrition Programme
TS	Total Sample
UNICEF	United Nations Children Fund
VAC	Vulnerability Assessment Committee
WFP	World Food Programme
WHO	World Health Organisation

CHAPTER 1: INTRODUCTION

Nutritional surveillance first came into prominence at the World Food Conference of 1974, in Rome. Since then the concept has evolved and has been applied in many developing countries. Nutritional surveillance is defined as “to watch over nutrition in order to make decisions that lead to the improvement of nutrition status in populations” [1]. It is also defined as a regular and timely collection, analysis and reporting of data on nutrition risk factors, nutrition status and nutrition-related diseases in the population [2]. Without an adequate surveillance system at both the national and local levels, nutrition status of individuals may progressively deteriorate without detection, or disasters may occur without warning.

The objectives of nutritional surveillance are to describe the population's nutritional status, with particular reference to at ‘risk’ subgroups; to elucidate causal relationships to permit selection of preventive measures; to promote governmental decisions which will meet the needs of both normal development and emergencies, to predict the evolution of nutritional problems based on an assessment of current trends and to monitor nutrition Programmes and evaluate their effectiveness [3]. In 1992, the International Conference in Nutrition (ICN) held in Rome outlined steps for governments to follow in the fight against hunger and malnutrition. Emphasis was placed on the need for countries to implement the Plan of Action in Nutrition, which had 9 action points. The first action point was to define the magnitude and extent of malnutrition. A follow up on the ICN held in Harare in 2001 revealed that there was little progress in terms of defining the extent and magnitude of malnutrition with a

majority of countries using data collected at sub-national level during and around 1991. The protracted food insecurity in Southern Africa between 2000 and 2003 has seen countries form Vulnerability Assessment Committees (VAC) and working together to develop methodologies to assess food security and nutrition impact at household level.

1.1 Background

The Nutrition Surveillance in Malawi was initiated as a result of 2001/2002 food crisis which resulted into high levels of malnutrition among under five children. The Programme began in May 2003 as a pilot in 6 districts. It increased to 15 districts by the end of 2004 and by mid 2005 Nutrition Surveillance system was operational in all the districts except Likoma. The aim of the Programme is to provide nationwide information on the trends of nutritional status of under-five children by tracking changes in nutritional status over time in order to give early warning signs on acute malnutrition. The system is also aimed at providing up to date information to government and other key stakeholders for timely response to the deteriorating nutritional status among under-five children.

The system monitors trends in nutritional status of 9100 children from the 130 selected sentinel sites across the country (350 children per district translating into 70 children per health facility also called sentinel sites in each of the 27 districts in Malawi except for Likoma). These children are randomly selected from a population of children attending the Growth Monitoring Clinics (GMC) at the health centre. The surveillance is a cohort study where same children are followed up for one year.

Implementation of the Programme is done by MOH in collaboration with Action Against Hunger whose involvement in the Programme is to strengthen the national

ownership and capacity to recognize, react and address malnutrition by putting the system in place and build capacity of Ministry of Health staff to independently implement and sustain. AAH is also mandated to ensure sustainability of the Programme through strengthening of the national and district level capacity to continue the implementation without external support. To achieve this, several activities were put in place which includes:

- Collection of site data at the district offices, review and forward quickly for analysis through efficient system
- Data analysis and preparation of the bulletin at monthly intervals
- Train district managers (DHMT) in data management for timely feedback and utilisation of information.
- Sensitise village heads, village committees and caregivers of children on the surveillance
- Train three MOH central level staff in data management

AAH as partner of MOH in the Programme implementation is supposed to provide technical guidance and strengthen national ownership (refer annex 5 for detailed activities on Nutrition Surveillance phase 2).

Data collection at each sentinel site is done by the health surveillance assistants (HSAs) that were trained by Action Against Hunger on data collection methodology. The HSAs are under supervision of the medical assistant at health centre level and Maternal and Child Health coordinator (MCH) at district level. The District Health Officer (DHO) is responsible for decision making and allocation of resources for all health related Programmes at district level.

The Nutrition Surveillance utilizes the GMC at health facilities which are conducted on regular basis for data collection. The number of clinic sessions per month varies from one GMC to another depending on the number of under five children in the catchment area. Some GMCs hold monthly sessions, while others are done on a weekly or daily basis. Therefore, to ensure that children that attend GMC on different static dates in a month have an equal chance of being selected, a random sampling is carried out at all the GMC sessions. Measurement of children enrolled in this Programme is taken once a month and once enrolled in are followed up for a period of 1 year. In cases where caregivers do not bring a sampled child to any one of the GMC session the HSAs are supposed to follow up that child. A child is replaced when s/he either dies, leaves the catchment area for over three months, reaches 60 months or when the child has been defaulting clinics for over three months and follow up visit have not been successful.. Child replacement is done using random sampling, and follows the same selection procedure.

Once the 70 children are selected, each child's name, address and Identity (ID) are recorded in order to follow the same child each month. It is this ID and anthropometric data that are sent to AAH for analysis. Child ids are used for data entry purposes and do not include children names in order to maintain confidentiality. Other information collected from the sampled children includes child age in months, sex, height, (measured to the nearest mm), weight (measured to the nearest 0.1 kg), Mid-Upper-Arm Circumference (MUAC) and presence or absence of bilateral oedema. The occurrence of acute diarrhoea in the preceding two weeks is also assessed. Once data

has been collected by MOH staff (HSAs) it is sent to AAH where MOH staff from the Nutrition Unit is attached for data entry, cleaning, analysis and reporting while MOH Nutrition Unit is responsible for the dissemination of the bulletin.

1.2 Statement of the problem

Since the inception of the programme there has been no evaluation conducted to determine the performance of the Nutrition Surveillance System whether it is meeting its intended objectives and the extent to which surveillance information has been utilised.

1.3 Literature review

Literature has shown that Nutrition Surveillance provides technical assistance and guidance on nutrition indicators, evaluation design and the analysis and interpretation of data [4].

Nutrition surveillance was first defined at the World Food Conference in 1974 as “an ongoing system for generating information on the current and future magnitude, distribution and causes of malnutrition in population for policy formulation, programme planning, management and evaluation” [5].

Nutritional surveillance is defined as “to watch over nutrition in order to make decisions that lead to the improvement of nutrition status in populations” [1]. It is also defined as a regular and timely collection, analysis and reporting of data on nutrition risk factors, nutrition status and nutrition-related diseases in the population [2].

The objectives of nutrition surveillance are to describe the population nutrition status with particular reference to at 'risk' to elucidate causal relationships to permit selection of preventive measures, to promote government decisions which will meet the needs of both normal development and emergencies, to predict the evolution of nutritional problems based on an assessment of current trends and to monitor nutrition programmes and evaluate their effectiveness [3].

It is indicated that early warning system should be evaluated on the accuracy of data they produce as well as their capacity for data processing, analysis and interpretation. It was further highlighted that it is important for the information produced to arrive in timely fashion, giving decision makers enough lead way to produce the necessary policy responses and that decision makers to be committed to using the data produced by these systems [6].

In Ethiopia Nutrition Surveillance has been an important component of early warning system over the last few years. Many non-governmental organization (NGOs) that provide relief and rehabilitation have introduced it into their regular activities, often to assess the impact of their Programmes. The Relief and Rehabilitation Commission issued guidelines for collection of information by agencies so that it can be compared and pooled for common use [7].

In Ethiopia, a number of organizations operate nutrition related information systems. These systems function to provide early warning systems (EWS) and to contribute to Nutrition Surveillance. The amount of nutrition related information collected via these

systems is extensive. However the amount of collected data that is subsequently analyzed is small and the amount of analyzed data that is transformed into actionable information for use by decision makers is even smaller. It was further reported that the information systems are also overwhelmed by the amount of data they collect, institution capacity for data analysis is limited, and the channels for dissemination of information to decision makers are ineffective [8].

A review on Nutrition surveillance Systems in Somalia in November 2006 showed that nutrition assessment systems in Somalia were standardised through group effort between Somalia Aid Coordinating body, UNICEF and FSAU in 1997. The system has undergone several developments to further improve the process of data collection, analysis and dissemination. The process included peer review assessments and monthly coordination meetings with all partners working in nutrition. It was further reported that the system perceived weaknesses such as shortage of trained staff for data collection and analysis [9].

A review on Nutrition and Health Information and Surveillance System done at several clinics and health centres in Namibia showed that attendance to Growth Monitoring Programme was poor except for very young ages for whom immunisation was required after that most children were only brought to the clinic when sick. It was also reported that attendance was very poor after 9 months. It was further reported that analysis and use of nutrition data at facility, district and regional level was very limited. The report also indicated that there was lack of feedback from the national level to district, regional and health centres [10].

A review on national Nutrition Surveillance in Botswana conducted in 2006 showed that timeliness of reporting and utilization of the information being collected with the system were the main issues. The report further indicated that some of the district and clinic level health staff had never seen the bulletin and that there was no sufficient training and capacity building. It also reported that at national level there was no dedicated surveillance post which was detrimental to the operations of the system; the staff/nutritionist available had other multiple responsibilities to run other Programmes [11].

Nutrition and Health surveillance evaluation conducted in Bangladesh revealed that information generated by the Nutrition Surveillance helped policy makers, Programme managers and donor organisation on many development activities in areas of health, nutrition, food security, gender disparities, and poverty [12].

The Nutrition Surveillance evaluation coordinated by Centre for Disease Control (CDC) has shown that the system provides highly useful information but has also presented significant methodological challenges relating to representation, quality control, and indicator sensitivity/specificity. The study further indicated that the concept of Nutrition Surveillance must be expanded beyond maternal and child nutrition to include nutrition related behaviour and risk factors in adolescence and adults [13].

An evaluation on Nutrition Surveillance – a community-based approach in Sudan revealed that community-based Nutrition Surveillance was far less costly than other nutrition monitoring surveys. The evaluation also revealed that full involvement of the community from planning stage ensured sustainability and it further suggested that training communities with very close supervision can improve the Programme implementation [14].

It is reported that clinic based growth monitoring is the only source of regular nutritional data available nationally. Furthermore as it is frequently an established part of the national health information system, it is an easily accessible source of data providing the trends. However it has also been reported that clinic based growth monitoring has major weaknesses in that the population which attend clinics is not representative of the total population due to the fact that only healthier children attend clinic and fewer children over the age of one year attend clinics as vaccinations are completed and mothers see no reason to attend [15].

1.4 Justification of the study

The evaluation was conducted to find out whether the required foundation by Ministry of health in Nutrition Surveillance had been laid with support from AAH, and at the same time find out whether the envisioned results of putting up such a system have been achieved so far. The evaluation was expected to provide an opportunity for mending shortfalls of the whole system that would affect its sustainability and usefulness.

CHAPTER 2: OBJECTIVES OF THE STUDY

2.1 Broad Objective of the study

The main objective of the study was to evaluate the performance of Nutrition Surveillance Programme in Malawi from 2005.

2.2 Specific Objectives

Specifically the study aimed at assessing:-

1. Quality of data being collected and analyzed.
2. The extent to which the surveillance information is used at district and national levels
3. Factors that affect the use of surveillance information at district and national level.
4. The Institutional capacity at district and national levels to independently run the surveillance Programme by November, 2007 when the technical support from Action Against Hunger phases out.
5. To conduct a SWOT analysis of Nutrition Surveillance Programme since its inception.

CHAPTER 3: METHODOLOGY

Several methodologies were employed during the evaluation and these included: comprehensive desk review of the Programme proposal, surveillance bulletins and key in-format interviews. A total of 33 key DHMT members from the selected 9 districts were interviewed using a structured questionnaire. These included: DHOs, DEHOs, MCH coordinators and District nutritionists. 18 Focus group discussions (FGDs) were also conducted with HSAs from the 18 selected sentinel sites and each FGD had an average of 5 HSAs (both trained and untrained on data collection). The untrained HSAs were included so that they could also provide information on their perception of the Programme (refer Annexes 1, 2 and 3 for the questionnaires used for data collection).

3.1 Type of research study

This was a cross sectional study that used both qualitative and quantitative study approach.

3.2 Study Place

The study was conducted in 9 of the 27 districts in all the three regions of Malawi. The districts were Nkhata-bay and Mzimba in northern region, Dowa, Salima, and Nkhatakota in central region, and Mulanje, Chiradzulu, Chikwawa and Nsanje in southern region. The districts were selected proportionally to represent other districts in all the three regions and in each district 2 health facilities (sentinel sites) were also selected to represent the other sentinel sites within the district.

3.3 Study population

The study population was representatives of organizations and institutions at various levels involved in one way or the other in Nutrition Surveillance Programme. Representatives that were consulted were: policy makers, donors (UNICEF and WFP), Ministry of Health staff both at national, district and health centres levels (these Deputy Director of Nutrition in the MOH- Nutrition Unit, DHMT members, health centre supervisors and HSAs), AAH (the major partner of MOH in Nutrition Surveillance) and other NGOs that are members of the Targeted Nutrition Programme.

3.4 Study period

The study was conducted from April to June 2007. Data was collected and analysed in April and May 2007 respectively.

3.5 Sampling

Multi-stage sampling technique was used to determine the number of districts and sentinel sites to be included in the evaluation. In each district two sentinel sites were randomly selected to represent other sites. The first stage involved calculating proportions to come up with representative sample of districts in each region to be evaluated. This was done using the following formula $D = TS/TND \times (TNDR)$

Where

D=Number of districts to be evaluated per region

TS=Total Sample

TND=Total number of districts in the country

TNDR=Total number of districts per region

After determining the number of districts to be evaluated per region, simple random sampling methodology was used to select districts to represent each region. At district level simple random sampling was also used to select sentinel sites.

At facility level, purposeful sampling methodology was used to select individuals to be interviewed (DHOs, DEHOs, MCH coordinators and Medical Assistants) and HSAs to be included in the focus group discussions (both trained and untrained).

At national level, the Deputy Director of Nutrition in MOH, Action Against Hunger surveillance coordinator, WFP nutrition coordinator, and UNICEF head of nutrition were also interviewed on the utilization, importance of Nutrition Surveillance and its achievements since its inception. Other stakeholders interviewed were the NGOs that are members of the Targeted Nutrition Programme (TNP). These NGOs were interviewed to get their perceptions on Nutrition Surveillance.

3.6 Data Collection

At national level, data was collected using key informant interviews with key stakeholders from NGOs, Development partners and MOH staff.

At district level, data was collected using key informant interviews with the DHOs, DEHOs, MCH coordinators, and District Nutritionists at district level using a structured questionnaire.

At facility level, Medical Assistants were interviewed at facility level while focus group discussions (FGDs) were conducted with HSAs.

Secondary data from AAH data base was also used to validate information being reported.

3.7 Data Management

Quantitative data was analyzed using Analy-nut (a computer package developed specifically for surveillance by AAH) to validate the quantity and quality of data being analyzed while for qualitative data descriptive analysis was used. After each field day, the study team met to look into the data collected through interviews and focus group discussions and interpreted it jointly. In most cases, the obtained data was validated to interviewee by repeating what they had explained; this was done to ensure that what was recorded was exactly what was said. At the end of the entire field work, the principle investigator transcribed the data and analyzed the whole data set.

3.8 Study Limitations

The evaluation encountered several constraints which included: lack of baseline data along with the lack of capacity building indicators, this made the evaluation difficult to quantify Programme impact as such the evaluation relied on interviews and secondary information which may have missed a lot of critical information. The study could not establish the actual numbers of default rate by age (<1year and >1year) due to lack of completeness of data and frequent child replacement. It was also not possible to accurately test the extent to which the Nutrition Surveillance System currently implemented by MOH in collaboration with AAH is sustainable until after external donor support ends.

CHAPTER 4: RESULTS

4.1 Data quality and quantity

Table below shows total number of children measured compared with (cf) total number of children with usable data by month

Table 1: Quantity and Quality of Nutrition Surveillance Data for Selected Months (June 2005 to March 2007)

Month/ Year of Monthly Bulletin	# of Districts Reporting	# of Nutrition Surveillance Sites Reporting (out of 130)	# of Nutrition Surveillance sites with Usable records (out of 130)	# of Districts with more than 100 valid records	# of Child Records collected	# of Usable child records	% of Records lost to poor data quality	% of the targeted 9,100 records valid
Jun-05	19/20 districts	49 sites	34 sites	16/20 districts	4.3 records	NA	NA	NA
Jul-05	22/24 district	76 sites	41 sites	21/26 districts	4457 records	NA	NA	NA
Aug-05	22/24 district	72 sites	46 sites	21/26 districts	4826 records	NA	NA	NA
Sep-05	15/24 districts	73 sites	41 sites	13/26 districts	4050 records	NA	NA	NA
Oct-05	20/26 districts	78 sites	56 sites	19/26 districts	3405 records	3045 records	11%	33%
Nov-05	18/26 districts	51 sites	63 sites	17/26 districts	1936 records	1630 records	16%	18%
Dec-05	21/26 districts	84 sites	62 sites	19/26 districts	4292 records	3429 records	20%	38%
Jan-06	25/26 districts	111 sites	88 sites	22/26 districts	5001 records	3905 records	22%	43%
Feb-06	23/26 districts	105 sites	74 sites	18/26 districts	4883 records	4043 records	17%	44%
Mar-06	24/26 districts	109 sites	87 sites	16/26 districts	4910 records	3748 records	24%	41%
Apr-06	23/26 districts	108 sites	73 sites	19/26 districts	4406 records	3642 records	17%	40%
May-06	21/26 districts	91 sites	68 sites	15/26 districts	3427 records	2507 records	27%	28%
Jun-06	22/26 districts	72 sites	54 sites	16/24 districts	3485 records	2371 records	32%	26%
Jul-06	20/26 districts	82 sites	63 sites	13/26 districts	3662 records	2757 records	25%	30%
Aug-06	23/26 districts	105 sites	73 sites	16/26 districts	4900 records	3175 records	35%	35%

Sep-06	19/26 districts	86 sites	65 sites	14/26 districts	4034 records	2910 records	28%	32%
Oct-06	21/26 districts	84 sites	68 sites	12/26 districts	3740 records	2733 records	27%	30%
Nov-06	20/26 districts	83 sites	60 sites	10/26 districts	2581 records	1884 records	27%	21%
Dec-06	21/26 districts	87 sites	55 sites	9/26 districts	3798 records	2233 records	41%	25%
Jan-07	22/26 districts	70 sites	47 sites	11/26 districts	3446 records	2443 records	29%	27%
Feb-07	23/26 districts	78 sites	66 sites	17 /26 districts	3750 records	3640 records	3%	40%
Mar-07	20/26 districts	64 sites	54 sites	16/26 districts	3184 records	3135 records	2%	34%
Average	22/26 districts	86 sites	65 sites	16/26 districts	3824 records	2957 records	23%	32%

Table 2: Default rate

Table below shows percentage of children defaulting (total number of children measured against total sample).

	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06
Total sample	9100	9100	9100	9100	9100	9100	9100	9100	9100	9100	9100
Total children measured	4509	4706	5198	4459	3405	1936	4292	5001	4883	4910	4406
Total defaulters	4591	4394	3902	4641	5695	7164	4808	4099	4217	4190	4694
% defaulters	50%	48%	43%	51%	63%	79%	53%	45%	46%	46%	52%

	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
Total sample	9100	9100	9100	9100	9100	9100	9100	9100	9100	9100	9100
Total children measured	3427	3485	3662	4900	4034	3740	2581	3798	3446	3750	3184
Total defaulters	5673	5615	5438	4200	5066	5360	6519	5302	5654	5350	5916
% defaulters	62%	62%	60%	46%	56%	59%	72%	58%	62%	59%	65%

The majority of HSAs indicated that there was high default rate mostly among children over the age of one year compared with those less than one year old because mothers feel that there is no special benefit to bring their children to the GMC. *“We are experiencing high default rate among children over the age of 1 year, the majority of them start defaulting after finishing immunisation and most caregivers do not see the need to continue bringing their children to the GMC and feel that they are not benefiting anything from this programme”*, HSAs. The majority of the HSAs further indicated that high default rate was also attributed to the methodology used in data collection which only select children coming to the health centre who in most cases come for medical treatment and does not sample children in the outreach clinics as such it is difficult to follow up these children especially those coming from far because once get cured they do not come back for measurements.

It was also reported that absconders are normally replaced by children under the age of one year rather than those over one year because they are the ones who regularly attend GMC. It was also reported that during child replacement, sampling methodology is not followed in order to measure more children *“We pick any child who comes to the health centre to replace those absconding and most of the picked to replace the absconders are children under 1 year because this age group is the one which regularly attends GMC. When doing child replacement we don’t even follow the sampling methodology to make sure that we are able to reach the required sample of 70, if we had to use the sampling methodology we were told we could not capture more children”*, HSAs.

It was observed that data collection forms from all sites visited were not completely filled especially on weight for height column which required a calculation to fill in and determine the nutrition status of the child.

4.2 Timeliness, extent of use and usefulness of surveillance data at district and national levels

4.2.1 Table 3: Timeliness of bulletin dissemination

Table below shows Length of time the bulletin took to be produced and disseminated for use. The information provided in this was from June 2005 to March 2007

MONTHLY BULLETIN	June 2005	July 2005	Aug 2005	Sept 2005	Oct 2005	Nov 2005	Dec 2005	Jan 2006	Feb 2006	Mar 2006	Apr 2006
Length of time from Data collection to Bulletin dissemination	7 weeks & 5days	8 Weeks & 2 days	6 Weeks & 4 days	5 weeks & 4days	5 Weeks & 6 days	4 Weeks & 3 days	3 weeks & 2days	3 weeks & 3days	6 weeks & 5days	6 weeks & 2days	9 weeks & 5days

MONTHLY BULLETIN	May 2006	Jun 2006	Jul 2006	Aug 2006	Sept 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2007	Feb 2007	Mar 2007
Length of time from Data collection to Bulletin dissemination	8 weeks & 5days	8 weeks & 4days	8 Weeks & 6days	6 weeks & 3days	6 weeks & 4days	7 weeks & 3days	7weeks & 6days	6 weeks & 4days	6 weeks & 2days	8 weeks	9 weeks & 4days
Median length of time from Data collection to Bulletin dissemination	6 weeks and 4 days										

4.2.2 Utilisation and Usefulness of Surveillance Bulletin

The majority 90% (30) of the people interviewed were of the view that surveillance is a very useful tool for tracking levels of malnutrition considering the high levels of malnutrition, disease burden and food insecurity in the country. However the interviewees doubted the credibility of the information reported in the Surveillance bulletins *“Nutrition Surveillance is a very useful tool for tracking levels of malnutrition over time but I really doubt the credibility of the data being collected and what is being reported in the bulletin,” stakeholders (Key informants)*. On the other hand some stakeholders indicated that the Programme needs to be replaced with other surveillance Programmes like MVAC and periodic nutrition surveys.

MOH and other stakeholders indicated that the surveillance has not been quite useful in providing timely information on nutritional status in the country due to late reporting. It was also highlighted that despite these shortfalls the programme has at one point provided nutrition indicators in the Malawi Vulnerability Assessment Committee (MVAC). All districts evaluated indicated that surveillance information had never been utilised in the districts and it was found that only 2 (22%) of the 9 districts received the bulletin once since the inception of the programme while 7 (78%) of the 9 districts evaluated reported that they had never received the bulletin, and none of the interviewees indicated to have read the surveillance bulletin. On the other hand all interviewees at the central level reported that bulletins were being received but are always received late for action (on average bulletin is late by 6 to 9 weeks).

Table 4: Factors affect use of surveillance information

Table below shows factors affecting use of surveillance information at district and national level

The majority mentioned the following as factors affecting use of surveillance information at district and national level.

National level	District level
• Delay in reporting - by the time it was reported the situation may have changed • Credibility of surveillance data - Information was questionable given high percentages of unusable data especially height data that is discarded due to poor quality • The surveillance shows little information on health and non on caring practices e.g. Breastfeeding which have direct link to cause of malnutrition • The stakeholders lost confidence with AAH in the implementation of the Programme. The programme is seen as AAH rather than MOH. • There is no proper coordination	• Bulletin not received regularly • Little involvement of the DHMT in the whole process therefore not conversant with the Programme • Programme perceived as AAH with their own agenda • DHMT not sure of how to use the surveillance information because there was no programme orientation since its inception

between MOH and partners on how the surveillance information could be utilised.	
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4.3 Institution capacity of MOH to run system on its own

4.3.1 Program design awareness

At district level, the majority 63.6% (21) of the respondents most of whom are members of the DHMT indicated that they were just briefed on the whole design of the Programme, 24.2% (8) indicated that consultation with DHMT was not done while 12.1 (4) of the respondents were new and did not comment. While at national level MOH, Donor partners and AAH staff who were interviewed all indicated that there had been consultation in designing the programme, however both MOH and AAH who are the major implementing partners indicated that once the programme took off collaboration stopped.

4.3.2 Data collection, methodology used and flow

The majority (97%) of people interviewed reported that data is collected at health facility level by the HSAs through the growth monitoring clinics. The majority of health staff interviewed at district level hinted that collection of data at facility level creates sample bias and methodological errors. *“We only sample those who come to the static health but I feel there is need to sample even those in outreach GMC rather than just concentrating on those coming to the health facility, we don’t get a true representation of children with this methodology”*, HSAs. AAH staff shared same sentiments *“we are only using this methodology for easy collection of data but the*

methodology is quite questionable as it does not take into account those staying very far from the health facility that may even be more vulnerable”.

In terms of data flow, it was discovered that data is sent directly to AAH without passing through the District Health Office. DEHOs, District Nutritionists and MCH coordinators who are supposed to supervise the programme reported being by-passed in all activities regarding surveillance. *“AAH do things on their own even going directly to the sites to collect data forms, I have not been involved in supervision of data collection nor check the data being collected”, District nutritionist and MCH coordinator.* At central level (Nutrition Unit) shared same sentiments that surveillance data does not pass through the office and that AAH is in control of all the data management.

4.3.3 Planning, Budgeting and Ownership of the system

4.3.3.1 Planning and budgeting

The DHMT members indicated that surveillance activities were neither budgeted for nor included in the District Implementation Plan (DIP) in the current financial year (2007/08). The DEHOs and MCH coordinators explained that since inception of the programme all activities were handled by AAH. The majority of the MCH coordinators, District Nutritionist and DEHOs interviewed further admitted of being unsure of the activities to be included in the DIP. *“AAH do things without district health team involvement and we were not sure of the activities to be included in the DIP”, MCH coordinators/DEHOs,* these sentiments were also shared by AAH field staff *“We had not been involving MOH in planning for activities hence lack of capacity building in terms of programme implementation at district level”.*

4.3.2.2 Ownership

At district level the majority 90 % (30) of the DHMT members interviewed were of the impression that the Nutrition Surveillance Programme is owned by AAH and only use government structures for data collection. The DHMT members also reported that all activities ranging from trainings, supervision and data management were handled by AAH, the MOH staff (HSAs) are only responsible for data collection and forwarding to AAH while the DEHOs and MCH coordinators were not fully involved in the programme implementation. *“It is only AAH who comes to supervise us no one from the District Health Office had ever come to supervise us,”* HSAs. At central level however, MOH pointed out that the Programme is supposed to be owned by government. *“AAH was just mandated to put the system in place and to assist in the technical management of the Programme through capacity building,”* MOH staff.

MOH staff further explained that there was poor coordination in terms of planning and lack of well defined terms of reference between AAH and MOH (Nutrition Unit) which later saw AAH dominating in the implementation of the Programme. It was also pointed out that although MOH had allocated an officer to work with AAH in the Programme implementation this officer was not adequately utilized when available. On the other hand AAH alluded to the fact that though the officer was assigned he was not always available to work with them and that they were failing to train this officer as originally planned.

The majority (95%) of the DHMT members interviewed indicated that district health staffs were not ready to take over a programme in which they were seldom involved in.

The DHMT indicated that they do not feel to be part of the Programme. *“Imagine even trainings were conducted by AAH I was just there observing, so what kind of capacity were they building to me?”* MCH Coordinator.

4.3.2.3 Sustainability

The majority (95%) of DHMT members interviewed felt that, the Nutrition Surveillance systems as currently implemented is not sustainable and MOH (Nutrition Unit) which is supposed to take a lead played a passive role in the Programme implementation. Donor partners also indicated that it will be tough for MOH to ensure Programme sustainability in the absence of financial support which AAH was getting and also due to inadequate capacity building both at national and district level. *“The programme was not properly planned and relied too much on donor support both financially and technically which MOH will not manage, I am of the view that this programme is not sustainable since the only capacity built to MOH is training data collectors and nothing beyond that”*, stakeholders (key informant). The Nutrition Unit hinted that the handing over process was not properly planned hence delayed as it only started 4 months prior to the alleged full handing over to government. The Nutrition Unit further indicated that it would be difficult to sustain the system as there was no proper transition with AAH.

Almost all interviewees indicated that the system is being implemented in well established and permanent structures of the MOH which makes the Programme more promising in terms of sustainability. It was also emphasised that financial and technical support during the transition period would be required to increase sustainability chances. *“I feel the programme had not been properly handled on the*

part of AAH, several people had been employed to coordinate the programme and each one of them came with his own ideas contributing to lack of continuity in terms of programme management within AAH,” in addition to this we had rarely involved MOH except in resolving operational problems which I feel will undermined the sustainability of the programme,” AAH staff.

Shortage of staff at the national office (Nutrition Unit) was reported to have affected MOH on their involvement despite the Unit having allegedly allocated one officer to work with AAH. Apparently this officer was either not fully involved or was not available when needed in the process of implementation of the Programme. At the time of the evaluation it was reported that neither the attached officer nor any officer within MOH took part in planning for the exit strategy.

The study also revealed that out of the 9 districts evaluated, none had included surveillance activities in the current dips (2007/2008). It was hence feared that without planning in the current financial year, there will be a gap that would affect sustainability of the Programme.

The majority of interviewees indicated that capacity was built on data collection as training was provided at district level where 4 HSAs were trained per sentinel site. It was however pointed out that no capacity building was provided at supervisory level (DEHOs, DN and MHC Coordinators), who are supposed to take over the management role of the programme. *“All trainings are planned, coordinated and facilitated by AAH there had been no such a thing like capacity building at supervisory level, we had been at the training at times only as observers yet this was supposed to be done by all of us*

to ensure continuity if MOH had to take over,” that is why I said this programme is for AAH, District nutritionists and MCH coordinators.

The majority of people interviewed both at national and district levels concurred that MOH was not ready to take up the system. Most were adamant that MOH was not adequately involved and handing over the programme to them by November 2007 was not practical.

4.4 SWOT Analysis

Table 5: Shows the Strength, Weaknesses, Opportunities and Threats of the Nutrition surveillance as currently implemented

STRENGTH	WEAKNESS
✓ The system is implemented using government structures which create greater opportunity for sustainability since these structures are well established and permanent ✓ Data collection is done at facility level through GMC therefore it is easier to collect data and dispatch ✓ The system is recognized by donor agencies and government; this is therefore likely to ensure support for its sustainability.	✓ Data is collected at facility level therefore it is not representative of the whole catchment area because children who come for measurement are only those around the facility as such misses out other children in the outreach clinic (sample bias) ✓ Surveillance bulletins are not regularly sent to districts and if sent they are usually quarterly which is late for utilization.

✓ Through support from an NGO it is well set up and has an establish data base. ✓ It is the only tool that shows up to date information on the trends of the nutrition status of the under five children in Malawi ✓ Districts Health Offices are capable to implement the Programme if adequately supported or involved in all surveillance activities ✓ Decentralized set up of MOH will aid the system in terms of data management for timely reporting and action	✓ Data dispatch from the district to AAH for analysis is usually late. ✓ High default rate among clients resulting to low data being analyzed hence likely to have unrepresentative information ✓ Level of involvement by DHMT is very minimal. ✓ Lack of feed back to health centres
OPPORTUNITIES	THREATS
✓ The system can be easily expanded to outreach centres using same HSAs to collect data in their catchment areas. ✓ The system can be integrated with other Programme like IDSR ✓ Several stakeholders are interested in the Nutrition Surveillance system ✓ Several of its activities are already part of GMC activities	✓ Lack of foundation participation by the DHMT/DHO ✓ The Programme may not be prioritized in terms of resource allocation ✓ Time constraint in the MOH may affect its implementation

CHAPTER 5: DISCUSSION

The results have shown that on average, only 77% (20) of the 26 districts collecting data were reporting data to central level (AAH) for analysis. Of the 130 sentinel sites collecting data, only 66 % (86) of sentinel sites were reporting and of those only 50 % (65) of the sites had usable data (Valid) for analysis. Overall, the total number of records to be collected in a month was supposed to be 9100 in all the 130 sentinel sites from the 26 districts. Frustratingly, on average only 42 % (3824) of the records per month were being collected. Of the data collected (3824 records) only 32 % (2957) of the records were used for analysis (valid) while 23 % (867) of the data was lost due to poor quality and not used during the analysis. Similarly, Oliphant [8] also reported that data quality is a major issue in nutrition related information. It was observed that most data being discarded was due to poor height measurements compared to other anthropometric measurements. It was therefore quite difficult to validate the usable data analyzed and there are some levels of possibility of measurement errors with this data. HSAs interviewed attributed poor data to huge work load during the GMCs since there were lots of children attending the clinics. Apart from just taking the measurements for the surveillance, HSAs are also supposed to carry out routine work during the clinics. Problems of data quality, quantity and methodology used in data collection have potentially introduced a lot of bias.

At the time of interview with the HSAs it became apparent that there was a high default rate among over one year children compared with those less than one year old and that most of the children being replaced are less than 1 year old. This is because the majority of caregivers stop taking their children to the growth monitoring clinics after

completing immunization and would only bring their children to the health centre when sick, these results concurred with what Shoham et al [15] and Chortad S et al [10] reported. This might also be the reason why it was difficult to get the 9100 children. Lack of incentives to the programme also contributed to high default rate because mothers do not see the importance of taking their children for measurement and feel that it is not worthy travelling long distances just to have their children measured. Another reason why mothers did not take their children to GMCs is that some mothers are already expecting another baby and do not have time to take the child to the GMCs. More replacements with less than 1 year olds give biased representation of information instead of representing children of up to 5 years. Incompleteness of the data collection forms especially on weight for height column which required calculations to determine the nutritional status of the child does not provide an opportunity to identify a malnourished child and refer for treatment.

The median duration from data collection to dissemination of the bulletin was found to be 6 weeks and 4 days which translate to more than two months. On average dissemination is delayed by 6 to 9 weeks, therefore considering its use of providing timely information it is doubtful that the system is serving its intended purpose. The delay in reporting from the district to AAH has seriously affected timelines in reporting and Bailes [11] also reported similar problems. The delay in reporting could be as a result of multiple factors ranging from data collection, mode of sending to AAH through the post and lack of involvement by the DHOs hence the Programme not receiving the much needed support from the DHMT.

Though the central level reported that they had been receiving the Nutrition Surveillance bulletin each month, most of these respondents were not the direct implementers of nutrition programmes (were policy makers) which implies that Nutrition Surveillance information may only influence policy but policies may not be translated into relevant actions due to lack of feedback on the same.

It was also established from both national and district level that the surveillance information is not adequately utilized though indicated that the surveillance is a useful tool for monitoring malnutrition trends. It was observed that the credibility of the Programme is quite questionable and needs to be looked at critically if the surveillance information is to be taken seriously. Though the surveillance has provided information at a certain point on nutrition indicators in the Malawi Vulnerability Assessment Committee (MVAC) as reported, the issue of data quality and quantity is still a very big challenge.

Almost 63.6% (21) respondents (mainly members of the DHMT) indicated that they were just briefed on the design of the Programme, it was quite clear that they did not take part in the implementation of the programme nor follow up what they were briefed on. On the other hand 24.2% (8) of the respondents indicated that they were not consulted on the Programme while 12.1% (4) of the respondents were new and knew nothing on the programme onset. It is therefore quite clear that the programme was driven by AAH only without the involvement of the MOH staff at supervisory level. Apart from data collection all other activities were done by AAH thus trainings, supervision and data analysis which left out key people both at national and district

levels. This scenario has therefore created a lot of doubt on the continuity and sustainability of the Programme after AAH pulls out their support to government. It had also been observed that though AAH through the District Health Office had appointed a district focal person for surveillance and that this person was trained, at the time of the study this person was neither available nor active. This is an indication that there was very little consultation between AAH and the DHO rather the DHO was the one supposed to appoint this officer.

Nutrition Surveillance data is collected at facility level through growth monitoring clinics. DHOs, MCH coordinators and HSAs reported that collection of data at facility level creates selection bias since these children may not represent those in remote areas. Sholam et al [15] also reported similar weakness with clinic based surveillance. It is also important to realize that the majority of children that come at the health centre are those that are staying close to the health facility while those that come from far only come when they have medical problems otherwise their GMC are conducted right in their communities through outreach clinics. This has therefore greatly contributed to low turn up of children for measurement, HSAs who are the actual implementers of the Programme indicated that expanding the Programme to outreach clinics would help to capture more children and improve on data quality and quantity and would also help to follow up defaulters. However, expanding the Programme to outreach clinics would also require a lot of resources such as height boards for each outreach site collecting data. This process however, seemed to be the most effective way of improving data quantity and quality because there will be fewer children to be measured and follow up would be much easier for the HSAs.

The study revealed that the surveillance activities were neither budgeted for nor included in the District Implementation Plans (DIP) in the current financial year (2007/2008; this is an indication that the programme was not properly coordinated, this therefore poses a big challenge in terms of Programme continuity and its sustainability. It was also observed that the planning of the Programme was done at central level without adequate consultation with the DHMT. This has also contributed to lack of support by DHMT as it was viewed as an AAH rather than MOH Programme. These could also be some of the reasons why the DHMT did not include surveillance activities in the District implementation plan (DIP) as they were not sure as to who owns the programme. This implies that there was poor coordination between AAH and MOH at all levels in the implementation of the Programme which will greatly undermine sustainability.

90% of the district staff interviewed had indicated that the programme is owned by AAH, this was so because AAH has not involved MOH in the programme implementation. Among other things, AAH labelled all the programme equipments with their logo which made MOH staff feel that it is AAH programme. Although at national level it was clear that AAH was only mandated to put the system in place and help MOH in capacity building this was not what was happening since the whole programme implementation was dominated by AAH. The mixed perceptions on Programme ownership are indications of poor planning and lack of proper coordination between the two parties. The assumed lack of commitment by the Nutrition Unit might have been the reason why the Programme was seen to be an AAH Programme. On the other hand, being a project funded Programme which has time limit; AAH might not

have enough time to collaborate with MOH staff including the Nutrition Unit on all activities.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

It is therefore conclusive to say, the Nutrition Surveillance system has been set up but it is shaky due to poor coordination between AAH and MOH. Participation of the MOH was minimal rendering the hand over process by November 2007 unattainable. Although the system has been functional for three years in well established structures lack of participation by the DHMT, non inclusion of surveillance activities in the current dips and the various experiences described in this evaluation would underpin sustainability of the Programme. Data quality, quantity and duration it takes from data collection to bulletin dissemination was also found to be a major concern by MOH and other stakeholders which needs to be looked into cautiously if the programme is to be taken serious. Though the MOH had entrusted AAH to set up the system it is quite clear that capacity built was not adequate since it only concentrated at data collection level leaving out key people like DEHOs, MCH coordinators and even the DHOs who are the key people in decision making and budgeting of activities at district level. It is therefore important for the Ministry to take a leading role to strengthen the programme for it to start achieving the intended purpose and ensure that information disseminated is representative and valid for decision making.

6.2 Recommendations

In view of the findings from this evaluation it is recommended that:

- i. European Union should continue funding AAH in order to provide enough time for transition before MOH to take up full control of the Programme. During this period there should be re-planning of the whole system with the central level (MOH/ Nutrition Unit) and DHMT at districts level taking the lead
- ii. MOH, AAH and other stakeholders should consider extending the programme to outreach clinics in order to have a representative sample of all children being measured and also to reduce selection bias. The number of children to be sampled in each outreach should depend on the number of outreach clinics each health facility has and each outreach clinic should be represented in proportion to the total population
- iii. MOH (Nutrition Unit) should ensure that Nutrition Surveillance activities are included in the District Implementation Plan in the next financial year.
- iv. MOH should consider including breastfeeding practices questions on the questionnaire since it is a better proxy indicator for child care aspect of nutritional status.
- v. MOH should consider decentralizing data entry, analysis and reporting to ensure timely reporting, action and ownership by districts.
- vi. MOH need to strengthen District Targeted Nutrition Programme committee meetings where the report could be disseminated on monthly basis to ensure that action is done.

- vii. MOH need to be proactive in the implementation of its Programmes where an NGO is involved in providing technical support and should ensure that timely feedback is being provided at all levels
- viii. MOH need to monitor and evaluate its NGO supported Programmes throughout the implementation period rather than to wait until when it is about to take over the Programme. This would help the Ministry in redirecting a Programme before things get out of hand.
- ix. There is need to start collaboration between AAH, Nutrition Unit and the DHOs this would play a vital role for Programme sustainability.

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APPENDICES

Appendix 1: EVALUATION QUESTIONNAIRE- For DHOs, DEHOs, DN and MCH

EVALUATION OF NUTRITION SURVEILLANCE SYSTEM IN MALAWI QUESTIONNAIRE	
Date of the interview:	
Name of enumerator	
District Name:	
Position of Person interviewed	
Name organization/ Health Facility:	
If health facility, type of facility: (1) District Hosp. (2) Health Centre (3) other,(specify)	
1. How has the District health Office/ Health facility been involved in the process¹ of the current Nutrition Surveillance? In terms of:	
 (a) Surveillance design and establishment at the facility	
 (b) Data collection	

¹ Means, who, what, when, how...

	© <i>Data flow</i>
	(d) <i>Data analysis</i>
	(e) <i>Report writing</i>
	(f) <i>Report dissemination</i>
-	
	(g) <i>How has the district utilised the information</i>
	(g) <i>Process timeliness</i>

2. As a DHO, DEHO, or MCH do you know the objectives of Nutrition Surveillance system in your district? Yes {1} No {2}. If yes what are the objectives?

3 As the head of the District Health Office were you oriented or told on the Programme before it's on-set? Yes {1} No {2}

4a. Are Nutrition Surveillance activities planned and included in the DIP/health facility budget? Tick **Yes [1]**

No [2]

B. If no, how do you intend to sustain it when support from AAH stops?

5. Who collects data in the surveillance site?

6. Are the people involved in the surveillance data collection trained?

Yes {1}

No {2}

7. Yes, who trained them?

8. Can you describe the level of involvement by District Health Office/Central level in the trainings?

10. Can you comment on the whole process?

11. For each of the following steps, can you identify strengths, weaknesses, threats and opportunities of Nutrition Surveillance in the district/sentinel site/country?	
Data collection	
<i>Strengths</i>	<i>Weaknesses</i>
<i>Threats</i>	<i>Opportunities</i>
Data flow	
<i>Strengths</i>	<i>Weaknesses</i>
<i>Threats</i>	<i>Opportunities</i>
Data analysis	
<i>Strengths</i>	<i>Weaknesses</i>
<i>Threats</i>	<i>Opportunities</i>
Report writing	
<i>Strengths</i>	<i>Weaknesses</i>

<i>Threats</i>	<i>Opportunities</i>
Report dissemination and utilization	
<i>Strengths</i>	<i>Weaknesses</i>
<i>Threats</i>	<i>Opportunities</i>
<i>Training Coordination</i>	
<i>Strengths</i>	<i>Weakness</i>
<i>Threats</i>	<i>Opportunities</i>

12. Are the District (DHO)/Health facility/Central level receiving the monthly bulletin or any kind of feedback on the surveillance information?

Yes [1]

No [2]

If yes, what do you think about the bulletin? On;

– Presentation

– Readability

– Content

– Usefulness

13. How is the information provided by the bulletin utilized by the District/Health facility/Central level?-----

14a. Rating the monthly bulletin from 1 to 5 (5 being the max. And 1 the min.), what mark would you give to the surveillance bulletin as a pro-decision making tool at your level? Just circle: 1 2 3 4 5

B. Why are you giving that rate?

15. How would you qualify or describe the ownership of the Nutrition Surveillance system in District?

16. Regarding the current surveillance system, what could be the opportunities and way forward to improve the system?

17. What has been done so far at district level to take over the Programme?

18. Is this enough for you to run the Programme? Please comment

19. If such Programme is to be developed further, which areas need strengthening and how can this be done.

20. What would you recommend to ensure sustainability of the Programme?

Appendix 2: EVALUATION QUESTIONNAIRE- For Partners and Central level

EVALUATION OF NUTRITION SURVEILLANCE SYSTEM IN MALAWI	
QUESTIONNAIRE	
Date of the interview:	
Name of enumerator	
District Name:	
Position of Person interviewed	
Name organization/ Health Facility:	
If health facility, type of facility: (1) District Hosp. (2) Health Centre (3) other,(specify)	

1a. Do you know the objectives of Nutrition Surveillance?

YES [1]

NO [2]

B. If yes, what are the objectives?

2a. Are the set objectives met in the past years of implementation?

Yes [1]

No [2]

B. If yes what are the achievements?

If **no** why are the set objectives not met and how do you think surveillance should improve?

3. Do you have other ideas on tracking malnutrition in the country to provide as an early warnings system?

4a. In terms of indicators being used at the moment are they adequate?

Yes [1]

No [2]

B. If no what other indicators need to be included or excluded?

5. In terms of reporting are you happy with the monthly reporting?

Yes [1]

No [2]

6. Do you receive the report in time?

Yes [1]

No [2]

7a. Have you ever responded to the trends of malnutrition as indicated in the surveillance bulletin?

Yes [1]

No [2]

(b). If no why have you not responded

(c). If yes, how have you used the information

8a. Do you think surveillance is beneficial to the district and the nation as a whole?

Yes [1]

No [2]

(b). Comment please

9. If such Programme is to be developed further, which areas need strengthening and how can this be done.

10. What would you recommend to ensure sustainability of the Programme?

Appendix 3: EVALUATION QUESTIONNAIRE- For Action against Hunger

EVALUATION OF NUTRITION SURVEILLANCE SYSTEM IN MALAWI

QUESTIONNAIRE

Date of the interview:	
Name of enumerator	
District Name:	
Position of Person interviewed	
Name organization/ Health Facility:	
If health facility, type of facility: (1) District Hosp. (2) Health Centre (3) other,(specify)	

1. As an implementing partner, Will you briefly explain the following?

(a) How the Programme was initiated in the

(i) Country

(ii) District,

(b) What was the implementation process?

© What were your objectives of the system?

(d) Do you think you have achieved your objectives in the Programme (**Yes**) (**No?**)

If **Yes**, what are the achievements and If **No** Why have you not achieved the objectives

(e) What is the implementation structure?

(f) What were the key milestones and expected outputs?

2. What are the achievements of Nutrition Surveillance in the past years of implementation?

3. What are the major challenges you faced during the period of implementation?

4. In data quality can you comment your experience and how you handled if there were any problems?

5. What were the linkages between Nutrition Surveillance and other Programmes such as output monitoring, CTC, SFP, TFP etc?

6a. Do you know how many children have been linked or referred to other Programmes from Nutrition Surveillance?

Yes [1]

No [2]

B. If yes how many? -----

7a. At district level has the DHOs been helpful in the implementation of the Programme?

Yes [1]

No [2]

B. If yes, to what extent?

C. If no why?

8a. Do you think this is a sustainable Programme?

Yes [1]

No [2]

B. If no why?

9. What systems have you put in place at various levels to sustain the Programme?

10. Now that you would want to hand over to MOH, what are you recommending the government to do in general for it to be sustainable?

11. If such Programme is to be developed further, which areas need strengthening and how can this be done.

12. What would you recommend to ensure sustainability of the Programme?

Appendix 4: EVALUATION QUESTIONNAIRE- Guide questions for FGDs with HSAs

EVALUATION OF NUTRITION SURVEILLANCE SYSTEM IN MALAWI
QUESTIONNAIRE

Date of the interview:	
Name of enumerator	
District Name:	
Position of Person interviewed	
Name organization/ Health Facility:	
If health facility, type of facility: (1) District Hosp. (2) Health Centre (3) other,(specify)	

1. What do you know about surveillance?
2. Who own it?
3. Who collect data?
4. Were the data collectors trained? Yes if yes how many per facility?
5. How is data collected?
6. Are you comfortable with the data collection methodology? If No what would you recommend?
7. If child is defaulting do you follow-up that child? Who in the group has done that?
8. Do you get any feedback on Nutrition Surveillance?

9. Is this Programme assisting you?
10. How best can the Programme run to ease your work load?
11. Which areas are more boring in terms of data collection?
12. Do you think if AAH stops you can continue collect data?
13. Do you think data collected is accurate? If No why?
14. What are the challenges you are meeting in implementing this Programme?
15. What do you suggest to be done to improve the whole system?
16. What would you recommend to ensure sustainability of the Programme?

Sentinel sites except Likoma

