

Support to the EC Programme on

Linking Information and Decision-Making
to Improve Food Security

for Selected Greater Mekong Sub-Regional Countries

SCOPING STUDY ON FOOD SECURITY AND NUTRITION INFORMATION IN MYANMAR

May 2011



WITH THE GENEROUS SUPPORT OF THE EUROPEAN UNION



Tin Maung Shwe National Food Security Information Consultant

Thida Chaw Hlaing FAO National Project Coordinator

May 2011, Myanmar

NATIONAL CONSULTANT'S REPORT



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Acronyms

CSO	Central Statistical Organization
DAP	Department of Agricultural Planning
DOHP	Department of Health Planning
DOT	Directorate of Trade
DOMH	Department of Meteorology and Hydrology
FAO	Food and Agriculture Organization of the United Nations
FIVIMS	Food Insecurity, Vulnerability Information and Mapping Systems Initiative
FSATG	Food Security and Agriculture Thematic Group
FSWG	Food Security Working Group
MAPT	Myanmar Agriculture Produce Trading
MAS	Myanmar Agriculture Service
MIMU	Myanmar Information Management Unit
MOAI	Ministry of Agriculture and Irrigation
MOC	Ministry of Commerce
МОН	Ministry of Health
MOSWRR	Ministry of Social Warfare, Relief and Resettlement
MNPED	Ministry of National Planning and Economic Development
MNTN	Myanmar Nutrition Technical Network
NNC	National Nutrition Center
PD	Population Department
SC	Save the Children
SLRD	Settlement and Land Record Department
TGFSA	Thematic Group on Food Security and Agriculture
UMFCCI	Union of Myanmar Federation Chamber and Commerce Industry
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WFP	World Food Programme

1. Introduction

Myanmar has a diverse and favourable range of agro-ecological zones with varying climatic conditions, land quality and suitability for agricultural activities. This has enabled the country to be largely self-sufficient in basic food commodities, with surplus production of rice, pulses and fish in most years. As such, Myanmar is generally food secure at the national level, with a potentially important role to play in regional food security, by helping to fill the gaps of food deficit countries in Asia.

A joint government/UN household living condition survey conducted in March 2007¹ found that 10% of the population fall below the food poverty line at the national level. Poverty is highest in Chin State, where some 40% of the population suffer from food poverty, followed by Shan north and Shan east. The lowest incident of food poverty was in Kayin State, at 2%. The findings indicated considerable variability in food security conditions at sub-national levels. The results from a Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS) analysis in 2002 identified a total of 52 townships (18%) which were classified as being very highly vulnerable, 49 (17%) highly vulnerable, 62 (22%) moderately vulnerable and the remaining 122 (43%) having only a relatively low level of vulnerability. Twenty-nine of the 52 very highly vulnerable townships were located in Shan State alone. Similarly, 79% of the townships in Shan are either very



highly or highly vulnerable. All townships in Chin and two-thirds of townships in Kachin are also very highly or highly vulnerable. While Myanmar is generally food secure at the national level, recent household food security assessments conducted by various agencies confirm that many poor households both in rural and urban areas still face the threat of food insecurity.

1.1 The State of Food Security Information in Myanmar

Information is a critical resource for the operation and management of public and private enterprises and organizations. The availability of relevant and timely information is vital for effective decision-making. Information must be readily accessible at the right time, and reliable in order to guide decision-making.

Food security information in Myanmar is gathered in two ways. The first is through the regular monitoring and reporting of key indicators on topics such as rainfall and other climate data of selected commodities and others. Gathering, analyzing and reporting such information on a regular basis is the responsibility of respective government agencies. In Myanmar, this information is often for internal use for progressive reporting and recording and may not be easily accessed outside of government. Government's Central Statistical Organization (CSO) collects statistical information, including food and nutrition related data, from respective government agencies. The information is then verified for publication in quarterly and annual reports. Food security information gathered in this manner is generally used for overall estimation of national and sub-national food security status and is used as a reference for researchers and evaluation groups.

The second way food security information is gathered is through regular and ad hoc assessments and surveys conducted periodically by Government, UN agencies, academic and research groups, NGOs and others. These provide valuable information and analysis on current food security conditions and trends in areas and on topics of particular concern and interest. They may be national or local in scope, covering overall food security conditions, or focused on particular themes. Following is a brief summary of some recent assessments that have provided benchmark information and analysis on food security in Myanmar.

² Myanmar Agricultural Sector Review Investment Strategy Volume 1- Sector Review, studied by FAO on behalf of UNDP and Government of Myanmar in 2004.

¹ Poverty Profile: Integrated Household Living Condition Survey in Myanmar, conducted by UNDP, Ministry of National Planning and Economic Development and UNOPS in June 2007 with technical assistance of IDEA.

The report on the <u>Identification and Assessment of the Poor Insecure and Vulnerable in the Union of Myanmar</u> (FAO, 2007) verified that the current status of data or proxy data that could provide insight into food availability, access, stability and utilization is extremely scarce, of poor quality, and sometimes contradictory. Most official data are verified only at the first or second administrative levels, and data quality even at these levels is very low. Poor reliability of time series data makes it difficult to draw proper conclusions. According to the assessment mission, the same or similar data collected by different institutions sometime showed extremely contradictory results. The low quality of the data is a result of underreporting, limitations on data collection and supervision, poor data transmission, and compilation.

The Myanmar Agricultural Sector Review (UNDP, 2004) was conducted by the FAO Investment Center on behalf of UNDP and Government, in collaboration with Government agencies and private sector organizations. The review addressed issues affecting agricultural development and identified potential long-term investment strategies. Information on rural social structure and poverty included analysis of the state of rural poverty and food insecurity, and endemic rural poverty rates based on child malnutrition. The food security information utilised in this study was based on secondary information and rapid assessment. The report included policy recommendations for agricultural sector development. The scope and severity of household food insecurity and vulnerability of the poor was not be clearly stated in the report.

A joint <u>FAO/WFP Crop and Food Supply Assessment Mission</u> (CFSAM) (2009) aimed to analyse food supply at the national and sub-national levels, and identify what assistance was needed to ensure food security and promote agricultural development. While national in scope, the assessment focused on food insecure and vulnerable areas, particularly in Cyclone Nargis-affected areas. The assessment was carried out by collecting available data and information on crop production, food supply, livelihoods and food security from various sources, including from government and non-governmental organizations (NGOs), international agencies and the private sector. The assessment mission recommended that a nationwide comprehensive food security and vulnerability analysis, representative at state/division level, be conducted.

The <u>Integrated Household Living Condition Survey</u> (2007) was a joint initiative of UNDP and the Government of Myanmar (GOM) which aimed to provide government and partners with a reliable, updated, and integrated assessment of all major aspects of household living conditions in Myanmar. The survey included indicators for monitoring progress towards MDGs. CSO was an important partner, particularly on the nationwide quantitative study, with technical assistance from International Development Evaluation Association (IDEA), Quebec City, Canada. The survey collected data on peoples' perception of poverty, as well as on household consumption and food expenditure to develop a food poverty index. Anthropometrical data on children under five years of age were also collected. The survey provided important information relevant to household food security status.

Various additional assessments on food need requirements and nutritional status have been conducted by NGOs and UN agencies in the context of emergency assistance provided in the Nargis affected areas. The scope and coverage of these assessments was limited, based on available funding and technical support. Information was shared amongst cluster groups to monitor the implementation of the Post Nargis Recovery Plan by sector. Overall, NGO assessments and food security related information in the Nargis affected areas were driven by the information requirements of the individual organisations. The lack of a well structured information system resulted in duplication in some areas, and under-coverage in other areas. However, in the aftermath of the Cyclone Nargis response, there is a greatly enhanced awareness amongst different levels of users of the importance of a reliable food security information system. Growing user demand for timely and reliable information to guide response and recovery plans based on the Nargis experience offers an opportunity for strengthening food security information systems in Myanmar.

In summary, the major weaknesses of food security information systems in Myanmar include methodology, technique, analysis and coordination between agencies. Issues of timeliness and reliability remain major concerns of information users. The lack of coordination and information sharing between interest groups often results in duplication of efforts and inconsistent conclusions and recommendation. Most information is prepared for internal use by government and other agencies and is often not available to the public. Urgent support is needed to build well functioning and efficient food security information systems in Myanmar.

1.2 Objectives of the Scoping Study on Food Security and Nutrition Information

The primary objective of this study is to identify ways to increase the value of existing food security information systems in order to better meet the needs of the decision-makers and decision-making processes in Myanmar. The study assesses current information systems against the requirements of government, development partners and other potential users of food security information by analysing both the demand and supply of information. It identifies information requirements; available products that help meet the requirements and identify crucial gaps that need to be filled. Recommendations are provided to guide concrete action aimed at improving the relevancy, efficiency, coordination and integration in data collection, management and dissemination efforts.

1.3 Organization of the Report

This report is prepared and written for those institutions and interest groups who are willing to work together to improve food security information systems in Myanmar. It is hoped that donor and technical agencies will be interested in implementing the recommended actions by providing funds and technical support.

The report is organized into five sections which include: defining food security and food security information, analysis of the demand for food security information, supply side analysis to meet the demand, strengthening food security information systems, and recommendations for action. In the first section, the scope and range of food security information is discussed and a conceptual framework with appropriate indicators is proposed. In the second section, the needs of various users and the uses of information is discussed and analyzed, along with the purposes and importance of information in terms of availability and reliability. Section three provides a supply side analysis to determine whether or not the demand is being met. In the fourth section, recommendations are made to build institutional capacity to strengthen food security information systems. Finally, specific activities are proposed to turn the recommendations into concrete action.

2. Defining Food Security and Food Security Information

A common understanding of food security, in its broadest sense is required to bridge the gap between the demand and supply of information. This requires a clear conceptual framework that embraces the full scope and all dimensions of food security as a foundation for food security information systems. Past perceptions of food security that focused on production, self-sufficiency and filling food gaps with food aid are no longer adequate given today's challenges. With growing market economies and trade liberalization, consideration of comparative advantage has helped ensure more efficient production, including of non-food commodities. With poor and traditionally food insecure communities becoming more integrated into market economies, peoples' livelihoods and opportunities for household income have become more and more important in ensuring food security. The importance of food safety and good nutritional practices has become well understood as prerequisites to ensure good health and food security.

2.1 Defining Food Security

Most organizations interviewed for this study are using the 2002 World Food Summit definition of food security:

Food security is said to exist when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

This definition recognizes the key food security concepts of food availability, access, stability and utilization.

It is widely recognised that food insecurity occurs in two different time dimensions. Acute food insecurity is generally the result of an emergency or shock, is relatively short-term and often requires immediate action to save lives and livelihoods. Chronic food insecurity is long-term, usually linked with poverty and typically requires well targeted development initiatives to build sustainable livelihoods.

Acute food insecurity occurs as a result of a shock such as a flood, storm, drought, a sudden surge in food prices, conflict or other events that create instability and disrupt the normal livelihood of affected households. The devastating event of Cyclone Nargis in 2008, for example, required the immediate support of national and

international agencies and the private sector to provide food aid and other life saving assistance. Loss of key livelihood assets such as livestock, farm implements and other working capital including family labour can slow recovery efforts and resumption of normal food production. It takes time over the medium-term for individuals, households and communities to restore their livelihood conditions. Health and malnutrition factors may also hamper recovery. In the case of acute food insecurity, immediate food and other assistance may be required to save lives, while support to rebuild the livelihoods of affected households, such as through agricultural recovery, is also required.

In contrast, chronic or long-term food insecurity is typically a result of poverty. The specific causes of chronic food insecurity may include the unavailability of food due to poor production practices or market failures, and/or the inaccessibility of food due to low income. At national level, 10% of the population are considered to live under the food poverty line, although there is great variation between the States and Divisions. Food poverty is highest in Chin State with a food poverty headcount index of 40%. This is based on a minimum level of food expenditure on a consumption basket necessary to satisfy the caloric requirements of household members (UNDP, 2007). High level of food insecurity in Chin State is further indicated by high levels of severe and moderately malnourished children under the age of five, previously estimated at 31.8%. According to its basic definition, food security can be understood by considering the following four dimensions:

Food Availability: At the household level, sufficient quantities of food must be available through own production or at local markets to feed the population. In emergencies, food availability in some areas may be supplemented by food aid. Wild foods and gifts may also contribute to food availability. At the national level, the amount of food available is a function of national production plus stock and imports, including food aid, minus the quantity of exports, seed, feed and post-harvest loss.

Access to Food: Access to food depends on whether consumers have enough money to purchase the food they require. It is the ability of a household to secure food in the market place from household income sources or through other sources such as transfers or gifts. This underscores the importance of household purchasing power. Whether households have access to food depends upon factors such as household income, food prices, employment opportunity and working resources, such as labour, capital and capability.

Food Utilization: Food utilization refers to the capacity of the human body to absorb safe and nutritious food required for good nutrition This depends on the quantity, quality and diversity of food consumed in the household, as well as adequate health care and sanitation services, and maternal and child care. Food utilization also concerns food management within households, including good practices on food processing, storage, preparation, nutrition and intra-household equitable food distribution.

Stability: Stability is typically linked to the vulnerability context and risk factors that can negatively impact food availability or access to food. It requires that food is available to individuals and households at all times, so they have constant access to the food they require. Due to different agro-ecological conditions in Myanmar, different varieties of foods are grown in different sub-national regions. Remote areas like parts of Shan, Chin, Kachin and Rakhine States, that are difficult to reach due to poor communication and road access, may face unstable food supplies, particularly in off-seasons. Households may have difficulties ensuring a stable supply of healthy and nutritionally diverse foods for all members in the off-season.

2.2 A Food Security Conceptual Framework

There are various conceptual frameworks and models that help identify and link the different dimensions and determinants of food security.

To understand the multi-disciplinary and cross-sectoral nature of food security, it is important to identify the wide range and scope of food security information to be included in a comprehensive food security information system. A food security conceptual framework is illustrated below in order to provide a common understanding of the many factors affecting food security at different levels (Figure 1). This globally accepted comprehensive food security framework was developed by the multi-agency FIVIMS initiative. It should be modified based on

³ Multiple Indicator Cluster Survey conducted by Department of Health Planning, Ministry of Health, in 2003.

in-depth discussions with concerned agencies to better reflect the many factors and dimensions of food security in Myanmar, and to identify appropriate food security indicators at different levels, to guide food security information efforts.

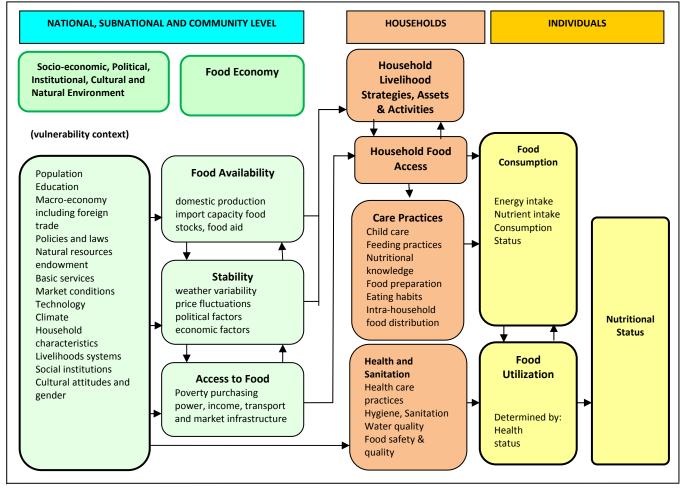


Figure 1: Food Security Conceptual Framework

Source: FIVIMS Secretariat

This framework clearly illustrates food security conditions and determinates at different levels of the society: national, sub-national, community, household and individual levels. It illustrates, defines indicators and identifies linkages among the four dimensions of food security: availability, access, stability and utilization. It provides valuable insight into the types of information that could be included in a comprehensive food security information system.

There is wide range of potential indicators that could be monitored, analyzed and reported by food security information systems. It is essential to have a clear understanding of the potential usefulness of each indicator to enhance understanding of food security. Figure 2 provides a grouping of potential indicators at each level of society, an important first step in identifying appropriate food security indicators in Myanmar.

Figure 2: Identifying Food Security Indicators in different level of Society

National and Sub-National Context Indicators					
Demographic Conditions	Environmental Conditions	Economic Conditions			
Socio-Cultural Conditions	Risk & Hazards Conditions	Emergency & Shocks			

National Food Economy Indicators						
Food Availability	Stability of Food	Food Access				
Н	ousehold Context Indic	ators				
Care & Feeding Practices	Household Characteristics	Health & Sanitation				
Individual Outcome Indicators						
Food Consumption status	Health Status	Nutrition Status				

Source: FIVIMS Tools and Tips, FAO

Due to the multi-sectoral and multi-disciplinary nature of food security, indicators should be selected based on the needs of users at national, sub-national and individual level. Different groups and institutions may choose to utilize different indicators according to the role they play in informing different food insecurity decisions. The flow chart in Figure 3 illustrates the process of identifying and choosing appropriate indicators based on a country's demographic, socio-economic and strategic factors.

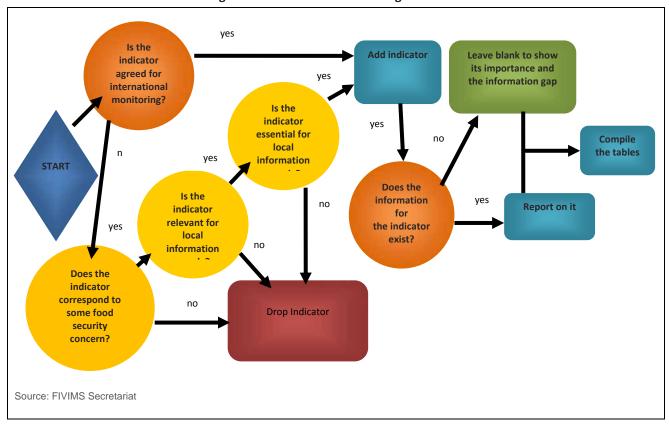


Figure 3: Flow Chart for Choosing Indicators

2.3 National Priorities and Plans for Food Security and Food Security Information

2.3.1 The Food Economy of Myanmar

Food should be considered in terms of the variety needed to support the dietary and nutritional needs of people. Cereals for starch; pulses, fish and meat for protein; vegetables and fruits for minerals and vitamin; and essential fats from edible oil, mainly vegetable oils are the main items for food. With the exception of vegetable oil, which is imported annually (palm oil), Myanmar is able to produce enough food to meet the basic requirements of its population. Rice, pulses and fishery products are major export commodities. Accordingly,

Myanmar is known to be food sufficient. Despite this, some areas suffer from insufficient food, particularly in the food deficit hilly region and central dry zone.

Rice is the main staple food, and people eat more rice in Myanmar compared to other Asian countries. The FAO STAT (updated in November 2008) presents that Myanmar people has consumed less rice over time as the per capita rice consumption in kg was 212, 215, 208, 206, 205, 202 and 196 in 1997, 1998, 1999, 2000, 2001, 2002 and 2003 respectively. However, rice consumption rate of Myanmar people is still high, compared with other Asian countries.

Livestock, including cattle sheep, goats, pigs and poultry are raised by most rural households. The commercial livestock sector in Myanmar is relatively small. At the national level, domestic meat production is considered sufficient to meet existing consumption patterns. Myanmar is rich in fishery resources, including both marine and fresh water fisheries. Over the past decade, fish production has increased significantly over two folds from 700,000 MT in 1998 to 1,867,000 MT in 2008.⁴ Fish and fisheries products are important for Myanmar people as main source of diet from animal protein, which accounts for 10 percent of monthly expenditure of average household.⁵

While agricultural development is important for the whole nation, it is especially important for rural areas where some 70% of the country's population reside and depend primarily on agricultural production as their main source of income. Moreover, employment opportunities for landless labour and other rural people depend heavily on agricultural activities.

2.3.2 Food Security Related Policies and Plans

As a part of the 1988 reform programme, the Government of Myanmar recognized food security as a key element of its agricultural policy. Objectives developed for the agricultural sector focused on two main areas: (1) commercialization of agriculture, and (2) maintaining food security. Other significant reform measures that supported food security include rice trade liberalization, the allocation of waste and fallow land to private investors for agriculture purposes, the exemption of import tax on agricultural inputs, and other adjustment measures supporting the market economy.

Programmes to increase agriculture productivity have focused on improving water management. In the Central Dry Zone, water scarcity has limited agricultural productivity amongst the rural poor. Irrigation facilities and networks have been established through dams, reservoirs and pumping stations from big rivers. Most irrigation schemes have been focused in the dry zone and in food deficit areas. The upland development programme was launched in hilly areas, particularly in Chin State and Shan State by establishing terrace farming. Other rural development programmes have also been implemented, giving priority to the food deficit area.

Myanmar's National Plan of Action for Food and Nutrition (NPAFN), 2006-2010 was prepared by the National Nutrition Centre (NNC) of the Department of Health. It identifies four major sectors for action: (1) Improving Household Food Security, (2) Food Quality and Food Safety, (3) Improving Nutrition Related Health Care Services and (4) Prevention of Malnutrition and Nutrition Promotion Action.

Important activities to improve household food security include: dissemination of technology related to production, preservation, storage and distribution of food; generation of family income by developing financial institutions; and monitoring food security status to cope with emergencies. Under food quality and food safety sector, enforcing quality control measures for food manufacturers and encouragement of research related to quality control measures for food production were major activities among others to be implemented. Action activities to improve nutrition related health care services included integration of nutrition projects, growth monitoring children up to five years age and health education to producers as well as consumers. Program activities which included enhancing nutrition research projects; incorporating nutrition into health care program; and establishing information network for food and nutrition were laid down in five years (2006-2010) national plan of action for food and nutrition to prevent malnutrition and nutrition -promotion in the public.

⁴ Source: CSO, Livestock and Fisheries Statistics (2008-2009); Note: Unit Viss is converted into Metric Ton

Source: CSO, Monthly household expenditure by State and Division in 2006, Statistical Year Book, 2008

National Plan of Action for Food and Nutrition for next five years covering 2011 to 2015 is under preparation to strengthen existing activities for ensuring household food security, food safety and promotion of nutritional education into the public.

Nutrition and health information are important and essential components of a food security information system. Health status and dietary intake are important to ensure the effective utilization of food by individuals, and their nutritional status. Information on food consumption is essential to measure dietary intake. According to a survey conducted by the National Nutrition Centre (NNC), the level of food consumption of several population groups is well below the national average. Data on nutrition-related infectious diseases is also important as it can provide insight on immediate causes of malnutrition. Other underlying causes of infectious diseases may be closely linked with household food insecurity, including the lack of care, poor water quality and sanitation, poor health and access to essential services.

Other factors affecting household food security are generally economic such as household income, price of food, market access and performance, investment, job opportunities, etc. This information is crucial for planners and decision-makers to formulate appropriate policies and plans for immediate, short-term, and long-term action required to ensure the food security in Myanmar.

This section highlights the need for diverse food security information systems that cover a wide range of information and indicators to help identify and support national priorities and plans to ensure food security.

3. Demand Side Analysis: Needs for Food Security Information

This section discusses the various uses of food security information and identifies the information demands of decision-makers and other users at different levels. It is important to understand the range of uses and users of food security information. A successful food security information system requires continuous and reliable monitoring to determine how information is being used and by whom. This is important to measure the value of the system, and thus provide further insight and guidance to develop and strengthen Myanmar's food security information systems in an effective, efficient and sustainable way.

3.1 The Uses of Food Security Information

Amongst the many possible uses of food security information, the most common include: (1) to provide early warnings, (2) to inform emergency response, (3) to guide long-term and short-term planning, (4) for monitoring and evaluation, and (5) for livelihood and vulnerability assessment.

Early Warning Information is essential for food security, and its importance is well understood and appreciated by users. Early warning information includes climate and weather forecasts and monitoring to anticipate storms, floods and droughts, and to help forecast crop production prospects as the season progresses. Monitoring the prevalence of crop and livestock pests and diseases is also important to monitor production prospects. Market and trade information is also crucial for early warning purposes, including information on commodity flows and food prices, imports and exports. Price and commodity flow information allows traders to adjust their stock levels and delivery plans, and enables farmers to determine when to sell and when to store their produce. Early warning information is important for disaster preparedness and planning and for risk mitigation.

In the aftermath of Cyclone Nargis there is an increased awareness and appreciation of metrological and early warning information. During the post-Nargis recovery period, an outbreak of hopper burn diseases on rice and severe incidents of rat infestation in the Delta further highlighted the crucial role of early warning systems to guide response plans and preventive measures. In the dry zone, sesame producers depend heavily on rainfall information provided by the Crop Enterprises and Services under the Ministry of Agriculture and Irrigation (MOAI) to guide timely land preparation and cropping practices, as sesame production depends on the timing and amount of rainfall throughout the growing season. However, currently such information does not reflect the unique conditions of specific areas. Poultry farmers benefit from avian influenza surveillance which provides crucial early warning information for the preparation and prevention of the disease. This information also alerts consumers to prevent the spread of the disease in their households.

The extent to which early warning information is actually used, depends in part on its timely and effective dissemination. One of the most efficient ways of disseminating information throughout the country, including directly to farmers, is using media such as radio and television. Examples include the Agribusiness News, Commerce Journal, the weekly Market Journal, and E-Trade Market Reports, which provide useful early warning information to the public. The Meteorological and Hydrological Department provides climate and whether information and analysis which is well trusted by the public.

Emergency Response Information: Food security information plays a crucial role in guiding emergency response. Needs assessments describe the potential impact of an event on people's livelihoods, help identify affected areas and populations, and guide response options and planning. Understanding the scope of needs during an emergency requires multi-sectoral and multi-agency assessments, including on nutrition, health status and threats, and economic factors such as food availability, market prices and conditions, transport and communication.

In 2008, a Post-Nargis Joint Assessment (PONJA) was conducted through the collaboration of GOM, UNDP and ASEAN to identify emergency humanitarian requirements. FAO conducted a "Needs Assessment for the Cyclone Nargis Affected Areas on Agriculture", which covered crops, livestock, fisheries and forestry. The United Nations Children's Fund (UNICEF), the Myanmar Red Cross Society (MRCS) and the Federation of Red Cross and Red Crescent Societies (IFRC), deployed assessment teams to affected areas. These assessments identified immediate emergency needs, as well as longer-term recovery and rehabilitation needs in Nargis affected areas. The Post-Nargis Recovery and Preparedness Plan (PONREPP) was the prominent outcome of the assessments conducted by various agencies, which was well regarded and considered to contain highly valuable information. Over time, coordination, information sharing and collaboration to update information improved through clusters meetings and the contributions of multi-agency groups such as the Myanmar Nutrition Technical Network (MNTN) and the Food Security and Agriculture Thematic Group (FSATG). While these groups have outlived the Nargis response, the effective utilization of available information, and linking information and decision-making to improve food security still needs to be improved.

Long-Term and Short-Term Planning: Food security information plays a key role in guiding planning efforts at all levels. This includes policies, plans and development programmes at the national and sub-national levels, as well as private sector and household level plans, for example production and marketing-related decisions. This requires timely, relevant and reliable food security information. It also requires an appropriate range of information to understand emerging issues and problems, as well as people's livelihood context to effectively support development strategies and plans.

Government plans for food production are primarily informed by the annual MOAI publication *Myanmar Agriculture at a Glance*. This booklet provides basic information on the agriculture, fishery, livestock and forestry sectors, including production data, input use, natural resources, climate data, demographic information, growth rate and crop prices. It is the main source of information for planning by government and other interest groups. There is no sign at present that information generated by non-governmental agencies, such as assessment and survey reports, are used by government for food production planning. In contrast, the National Nutrition Center is currently collaborating with INGOs to update the National Plan of Action for Food and Nutrition (NPAFN) for the next five years (2011-2016). This includes information sharing, and the use of household food security information to identify household nutritional status.

Monitoring and Evaluation: Both short and long-term food security plans need regular monitoring and evaluation to ensure that goals, objectives and targets are being met. Currently, monitoring and evaluation during the implementation of development plans guides the improvement of management processes, focusing primarily on expenditures and logistical support rather than the impact of the activities on reducing food insecurity and vulnerability.

The joint Government/UNDP Integrated Household Living Conditions Survey (UNDP, 2007), evaluated progress towards achieving the Millennium Development Goals (MDG) for relevant sectors, and provided information on household food security. It provides important linkages between household poverty, food insecurity and malnutrition levels. Government agencies should also prepare regular monitoring and evaluation reports using

existing data and information collected from the different levels of respective agencies, as well as information gathered by other government and non-government agencies. For example, market and trade information is available from a range of government and non-governmental sources such as E-Trade Myanmar, Commerce Journal, Myanmar Trade Net, and Agri-Business News.

Existing food security-related monitoring and evaluation systems should allow for modifications when needed, and should be able to expand when activities become well functioning. Monitoring and evaluation systems need to evaluate food security outcomes of both developmental and emergency initiatives to provide information for appropriate future interventions.

Rural Livelihood: Rural livelihoods are highly dependent on agriculture and related activities. Due to the seasonality of crop production, food prices fluctuate with the cropping cycle, where prices typically fall at harvest time and rise steadily during the rest of year. When seasonal price fluctuations are substantial, they can send confusing signals to farmers, causing unstable food crop production, which in turn can further affect prices. Market information, including on commodity flows and prices, plays a key role in ensuring food security in terms of food availability and access to food, particularly for low-income households. For example, onion prices in 2010 dropped almost 10 times compared to the previous year due to unstable trade and market function. This has affected both producers and consumers, particularly low-income and urban households. This sends important signals to producers to adjust their production plan for the following year. This highlights the importance of market data and information as part of Myanmar's food security information systems.

3.2 Food Security Information utilized for Different Purposes

Food security information is used for different purposes depending on the interest and requirements of the user. While the above section focused on the wide range of uses, this section considers the users and the different purposes for which information is used. The same data may be interpreted differently to meet the needs of different users. For example, farmers use meteorological information to manage potential risks to their crop production, while fisherfolk use the same information to guide fishing decisions. The frequency information is required depends on how it is being used. For example, farmers require daily rainfall information to guide production decisions during the course of the season, while planners, researchers and analysts may require seasonal rainfall information to understand climate related outcomes.

Food producers need to know daily commodity prices to make marketing decisions. They seek such information from a variety of sources including brokers, neighbours and trade agents in their villages. Daily commodity price information is not available through radio and television media, which are available in most villages. Price information reported in some journals and newsletters which are published weekly or monthly, provide important information on price trends, but is too late to be of use to food producers.

Users of food security information have different interests and different purposes. Senior government officials use information to make decisions on national policies. Other levels of government staff need information to plan and implement strategies, programmes and projects. Donors, UN agencies and other development partners, academic and research institutions, the private sector need information to meet their own particular requirements. Households as well need information to guide food security related decisions and livelihood strategies. Emergency planners and response agencies, such as WFP, have a particular need for timely and reliable information, often under difficult emergency conditions. Such users often have their own information systems to ensure they have the right information at the right time. In this case, these organizations are both producers and users of information.

3.3 Importance of Information: Availability and Reliability

Delivery and distribution system of the information is important for the users to make their decision in time. Capability of using information depends upon availability of information that is right in place and time when users need. For instant, commodity price information is available in wholesale market for traders and retail market for consumers. However, for producers, daily market price information is delivered by the brokers or by means of weekly market information and commerce journals which are not available in far reaching rural areas. Despite radio and television are most effective distribution channels for dissemination of information, currently

these media are not in use for commodity flow and market prices. Late information is not useful to the users in case of making decision on daily production. For example, vegetable and fishery producers want the variation of the market prices on daily basis since they have to make decision on picking or late harvesting the perishable products which cannot be stored for longer time span in nature. The information should be available in terms of price variation on different quality and standard. Price information on specific quality and standard is less paid attention in most commodities. Systematic data collection technique seems to be weak and need to be strengthened existing market information services established in state institutions. E Trade of Myanmar which is one of the marketing and trade information beneficiary services provides updated information to the users. However, it is not readily available for the grass root level users, particularly food producers. Food security and early warning reports are periodically submitted by the concerned government agencies to respective upper senior level officials for information that is not available for public users. Rain, flood and storm usually threaten the production of food crops and fishery sector and also livelihood of the people in most years. Early warning on growing of crops is usually informed by Myanma Agricultural Service to the growers before the growing season and harvesting time through news papers and radio, television media. This information covers the instruction for growers in general. The farmers need region-wise ago-metrological early warning information for their specific field condition and nature of different agricultural practices.

Reliability on information is also important for users in decision making process, particularly in planning, business and evaluation on activities Food security information has an important role in informing and guiding long term planning for planners. Likewise, daily commodity flow and price information play key factors required to make decision in trading business. However there are few sources like E-Trade Myanmar, Agri-business news, wholesale prices of commodity exchange centre, which can provide reliable information to users. Quality of data and information depend upon mainly source of information, data collecting and processing technique, punctuality and frequency in information gathering and technical capability of the information collector. Information and raw data are normally gathered by staff assigned in different level by administration and submit required information as report periodically which is mostly adjusted in line with the planning target. In most of the reports, achievements are close to planned target in order to reduce the administrative pressure. How users trust on information from official report and publication is the question. As an example, data and information recorded in Statistical Year Book (CSO) are gathered from official reports, referring sources to respective government agencies and published after systematic processing raw data and information. There are few joint assessment reports related to food security and livelihood situation done by collaborating with government agencies and international organizations, which are mostly relied by the users in formulating program activities and projects

These state the importance of understanding and addressing the issues from demand side as an essential step in strengthening food security information system in Myanmar.

4. Meeting the Demand: Supply Side Analysis on Food Security Information

The above section focuses on the need for food security information from the demand side, by looking at the uses and users of such information. It is this demand for reliable, timely and accessible information that must drive the supply of food security information, and guide the development of appropriate mechanisms to support effective, efficient and sustainable food security information systems.

4.1 Food Security Information Systems in Myanmar

The current supply of food security information is discussed in this section. It examines various types of information provided by different institutions. This information is used to develop food security information system map, which helps clarify who is producing what information related to different aspects of food security. In particular, this section reviews the most important food security information systems which include: Myanmar Agriculture at a Glance, The Myanmar Census of Agriculture (2003), Fishery Statistics, Livestock and Fisheries Statistics, Market Information Service, E Trade Myanmar, Metrological Information, the Statistical Year Book, Myanmar Trade Net, Commerce Journal, etc.

2.3.1 Agriculture, Livestock and Fisheries Information

Myanmar Agriculture at a Glance is a booklet prepared with assistance from agencies under MOAI and other related institutions, in order to capture the clear insight of Myanmar agriculture. It is published annually and distributed to interest groups. It includes a country profile, information on climate, water and land resources and utilization, time series data on the area sown, yield and production of major crops, prices of selected crops at harvest time, export of principle commodities, agricultural input use, production statistics for livestock and fishery products, as well as information on the extraction and utilization of the forest products. It pulls together a range of relevant information on the key agriculture sub-sectors and provides a brief account of information relevant for investors making business decisions.

The **Myanmar Census of Agriculture (2003)** was conducted by the Settlement and Land Record Department (SLRD) under the Ministry of Agriculture and Irrigation in 2001 and was completed in 2003, with support from FAO. The census covered all village tracts within the country, except for highly urbanized areas. It gathered information on a wide range of agricultural indicators, including on the demography of farm households, farm holdings and farming practices for different crops, input utilization and resources for farming, livestock and fishing activities and the utilization of the hired labour. The census intended to meet the most pressing needs of the general public, government officials and the private sector in support of policy formulation, decision-making and target setting. It supported long-term planning for agricultural development based on the actual characteristic of farm households, taking into account changes in economic factors related to agricultural production. SLRD is currently conducting an updated agricultural census, which should be complete in 2011.

Fishery Statistics are published annually by the Fishery Department, and provide ten years of statistical trends covering fishery production by type of culture and fishery practices, export quantity, value and destination of fishery products, fishing facilities and other fishery-related business information. Export prices and quality control information are available in the Fishery Inspection and Quality Control (FIQC) report. Market prices and commodity flows in municipal wholesale markets are observed and recorded irregularly in the Divisional Office of the Department of Fishery (DoF). As a normal practice, information flows through the reporting system from the township up to the DoF headquarters where it is processed and stored in digital format (CDs). Price trends of various fishery products and trade information are included in the Ngwe Pin Lae Private Journal, which is printed and disseminated to users as a monthly publication. Information related to external trade and border trade of fishery and fishery products are reported in the Statistics of Exported Fish and Fishery Products from Myanmar, which is published annually by the Department of Fishery. Most of the fish, prawn culture and marine fishery enterprises have their own market intelligence systems using telephone or electronic communication in support of domestic markets and external trade. Most small fishery businesses and individual fisherman obtain daily market price information from the fish and fishery product collection centres located in towns near their villages.

Livestock and Fisheries Statistics: Central Statistical Organization (CSO) in collaboration with Ministry of Livestock and Fisheries publishes Livestock and Fisheries Statistics once in three years. Time series data covering 20 years of livestock breeding population and production of meat in kind such as cattle, buffalo, sheep & goat, pig, fowl, duck and others and production of milk and egg are recorded in the statistical book. Time series data of livestock breeding by type of ownership such as state organizations, cooperative and private sector are also available in the publication. Production of fish by mean of sources such as fresh water, marine and leasable fisheries is recorded covering last 20 years. Production of fish by state and division can also be observed for last 7 years in the publication. Other information such as area of aquaculture, distribution of brood stock, export volume of fish and marine products and destination, veterinary care, prices and share of livestock and fishery in GDP and meat and fish consumption per month by state and division as 2008 survey are available in the Livestock and Fisheries Statistics.

2.3.1 Market and Trade Information

The Market Information Service (MIS) for agricultural commodities was established by the Department of Agricultural Planning (DAP) with technical support from FAO in 1999. Price data are currently collected in 15 markets, covering 11 cities and towns. Commodity flows and current wholesale price trends of major commodities are analysed. Agricultural commodity price information is disseminated through the weekly Agribusiness News Journal. Agriculture extension agents make this information available to farmers, although

timely dissemination is a problem for farmers in distant areas. Nonetheless, the information provided through the Journal is useful to farmers for marketing decisions. A Monthly Price Bulletin is also prepared in both local language and in English. The Bulletin presents domestic wholesale price comparisons with international prices of major export commodities and considers the impact of economic factors on prices, commodity flows and domestic production. Weekly wholesale market price data and changes during the month are reported. The Bulletin does not provide price forecasts or food outlooks, which are important for decision-makers to plan exports and possible interventions in support of food security. The Myanmar MIS requires support to build the technical and analytical capacity of staff. A sample of the Monthly Price Bulletin is included in Annex 3.

E-Trade Myanmar is a private company established in 2003 with the main intention of providing business information to trading companies. It provides market prices of agriculture commodities, commodity inflow, outflow and other business information. It disseminates daily market information through the Internet and through Short Message Services (SMS). The company has further developed its services by providing a weekly analysis of price trends, published in hardcopy format for members without Internet access. The company collects raw data for key commodities from 10 locations including from exchange centres, wholesale markets and from rice mills located in main rice producing areas. Data collection techniques, management and storage systems are systematic to ensure reliability and user confidence in the information. The information is sold to users for an annual fee of 350,000 kyats (US\$350) per year. Weekly, monthly and annual information and analysis is available. E-Trade is an important source of timely and reliable information that for traders and business enterprises in Myanmar. It may be less relevant for small farmers and businesses at the grass root level where Internet and cell phone access is not available. E-Trade information is available online at www.etrademyanmar.com.

Myanmar Trade Net is operated by the Trade Information Promotion Division (TIPD) under the Ministry of Commerce (MOC), and provides online data and information to users for annual fee of 13,000 Kyats (US\$13). It provides market prices for agricultural trade commodities, particularly rice, pulses, culinary crops and fruits. Trade flow and volume, from both domestic and border trade, are updated regularly. The information can be downloaded and used for further analysis. Project staff collects price information on farmer's selling price at collection centres in township markets. The information is then sent to the TIPD, either by phone or fax, where professional staff enters and analyze the data. Information is published for public dissemination through the weekly Trade Journal and in the monthly Trade News. This information is primarily used by traders to support export decision for major commodities such as rice and pulses. Information is available at the TIPD website www.myanmartradenet.com.

2.3.1 Statistical Information

Statistical Yearbooks and other statistical information are published by the Central Statistical Organization (CSO), which is the government agency responsible for collecting data from 98 government agencies from 30 Ministries, as well as information gathered through surveys and censuses conducted in the country. Statistical Yearbooks include comprehensive statistics on: climate, population, labour and employment, health, agriculture, livestock, fishery, forestry, foreign trade, price, internal trade and household expenditures. These indicators are important for food security, agriculture and nutrition. Past trends from time series data are available, although with a two-year lag at the time of publication. The CSO also publishes selected monthly economic indicators for the last two consecutive years, and annual information for past 5 years. Monthly reports have a three month time lag and highlight exports and imports of principle commodities by quantity and value, as well as retail prices for fish, meat and agricultural crops. Data are collected from the respective state institutions and is then entered into a database system. There is currently no practice of sharing primary data which are stored by the respective agencies. Statistical Yearbooks are also available for various sectors including agriculture, forestry, fishery and livestock, and are published once every three years on a rotational basis. These contain specific and detailed information that is relevant to food security issues.

2.3.2 Health and Nutrition Information

A **Statistical Profile of Children and Women in Myanmar** is published once every three years by CSO, which includes a chapter on health and nutrition. The prevalence of malnutrition is reported by gender, area and age group. Data and information on the percentage of malnutrition by maternal education, iodized salt

consumption and daily food intake in terms of calories and protein are useful for decision-makers to develop nutritional plans.

Multi-Indicator Cluster Surveys have been conducted by the Department of Health Planning and the National Nutrition Centre (NNC). Updated information will be published in 2011 based on the analysis of survey data. These series of primary data and information are collected from the concerned state agencies by the CSO, which stores, manages and publishes reports in both hard and soft copy.

Metrological Information is an essential component of an early warning system and currently functions well in Myanmar. Daily weather forecasts cover precipitation and temperature for each State and Division, including forecasts for the upcoming days, and special announcements for emergency conditions. This information is disseminated to the public through local media, including radio, television and newspapers. It is disseminated efficiently and effectively, and reaches decision-makers at the grass root level, including farmers and fishery enterprises. Government agencies responsible for farmer extension and education programmes further distribute early warning messages, and assist farmers to take appropriate measures in terms of growing, caring, and taking preventive measures against pest and diseases. Specific early warning messages regarding crop care and agronomic practices for particular areas cannot be provided due to the absence of an ago-meteorologist in MOAI.

4.2 Contribution of Intergovernmental Organization and Development Partners to Myanmar Food Security Information

The 2009 FAO/WFP Crop and Food Supply Assessment Mission (CFSAM) in Myanmar provided an overview of the food security situation, by looking into agriculture and food production, and food availability at the national and sub-national levels. The report assesses the food supply and demand outlook, household vulnerability to food insecurity, nutritional status, and offers recommendations on agriculture production, policies and food security interventions. The assessment was conducted by FAO and WFP, in collaboration with national counterpart agencies. Available information was collected from government agencies and from assessment reports of other agencies. The CFSAM was conducted following cyclone Nargis in 2009 to investigate the needs of the people in the Nargis devastated areas for agricultural production recovery. The assessment also aimed to describe the overall picture of household vulnerability to food insecurity and nutritional status in Chin and Rakhine states. It is suggested that a baseline survey should be conducted in areas with a high percentage of food insecure and vulnerable people, those living below the poverty line, giving priority to Chin and Rakhine states. The assessment made recommendations for technical agencies to consider when planning for initiatives for sustainable agricultural development. This report is available on the internet as part of the FAO World Wide Web.

The Integrated Household Living Conditions Survey In Myanmar (2007) was a joint effort of the Ministry of National Planning and Economic Development (MoNPED) and UNDP. The survey was conducted in 2005 and the results published in 2007. It aims to describe the poverty profile of households in each State and Division and to provide MDG relevant information. Indicators relevant to food security were included in the survey. Demographic characteristics of the household, as well as questions on consumption, expenditure, household business activities and labour employment provided useful information to understand food security in the context of vulnerability and food accessibility at household level. The results of an updated version of this survey will be published in 2011 to provide users with information on livelihood trends and changes in the status of household food security.

The **Food Security and Agriculture Thematic Group (FSATG)** coordinates agricultural and a wide range of food security issues at national level. Its members include UN agencies, international and local NGOs. FAO and WFP co-chair the FSATG. Food security issues and strategies to be formulated at the national level are discussed in the group. FSATG members meet monthly (every third Wednesday of the month) and share information related to the national food security situation, including food availability, utilization, quality and access. At present, the group is refining necessary indicators to guide food security assessments in order to facilitate effective food security programming and decision-making to help improve food security conditions throughout the country.

The **Myanmar Nutrition Technical Network (MNTN)** plays an active role in information sharing and coordination of nutritional activities among development partners. Its members include 28 international and local NGOs, which have prepared a joint action plan. MNTN development partners meet once every three months to share information on implementation progress of planned activities to improve nutritional status and to update the plan of action. The network identifies emerging issues on malnutrition, harmonizes technical guidelines, and collaborates on nutrition surveillance for timely warning and intervention. Meetings are facilitated by a UNICEF consultant, who prepares minutes of each meeting, including discussion and related information, which are distributed to members and are available at the UNICEF country office.

The **Food Security Working Group (FSWG)** brings together national and international NGOs supporting food security activities in Myanmar and aims to promote cooperation and networking amongst member organizations in order to promote more effective and appropriate interventions to improve food security in Myanmar. Its activities include networking and collaboration among NGOs and dialogue with government institutions. It conducts various food security related studies and provides services and information resources for learning and exchange through training activities. The group has the potential to help link food security information with users through its various meetings, seminars and workshops.

4.3 Food Security Information Map

CSO, MIMU, PD CSO, MNPED DOMH, MOF MOSWRR MOAI, MOLF, DOMH Risk, Shock, Demographic Economic Environmental Socio-cultural Conditions Conditions Conditions Conditions Hazards Ş ₽ MOAI, MOLF ood Availabilit H/H cso nitation Statistics Expenditu Selected SLRD Indicator мон Market \gri-Report Crop Report Nutrition Price News census FAO, Report Food Security Information 8 8 8 8 CSO, MNPED MIS/MOC MOC, SLRD Crop Accessib FAO/WFP Price Report Cluster Survey Assessment Bulltin Health/Nutrition **FIVIMS** Crop MNTN Assessment Report Report Meeting Report Food Stability Health Status Nutritional Care/Feeding Food Status Consumption Practices MOAI, MOLF. MOH, NNC, CSO. MOH, NNC, CSO, CSO, MNPED. MOH, NNC. MNTN, UNICEF MOC, eTrade MNTN MNTN FAO, WFP

Figure 4: Food Security Information Map in Myanmar

Type of Food Security Information

Responsible Institute

National and Sub National Context Indicator National Food Security Indicator Household Context Indicator Individual Outcome Indicator

Frequency of Information Products



Mapping food security information considers (1) the various agencies and institutions implementing food security activities in respective areas, and (2) the wide range of potential food security indicators, as described in Figure 2 above. The study attempts to develop a food security information system map in Figure 4 above. Different types of food security information products are located in oval boxes in the centre of the map. The frequency of the information products are prepared and indicated by different colours. Moving outwards, the map shows how the information products contribute to our understanding of food security. For example, some products improve understanding of the food security context, such as underlying causes, while others are more focused on food security outcomes, such as the trend and number of food insecure people. Different information products may focus on national or sub-national issues, while others focus on the household and individual levels. The outer edge of the map identifies the major institutions and agencies involved in the different types of food security information. This map may be useful as a tool for the recently formed national Food Security Steering Committee to establish coordinating mechanisms for an effective and efficient food security information system.

5. Building a Better Food Security Information System

5.1 Government Plans for Food Security Information

Ensuring food security is a high priority for the nation and amongst the most important issues addressed in the national development plan. Special programmes and priority projects are being implemented in food insecure areas, particularly in the dry zone and remote areas, in order to improve food availability and food sufficiency. In the priority framework for food and agricultural development, strengthening agricultural statistics and information systems is included in the strategic action to provide appropriate information for designing suitable food security action programmes. It focuses on three strategic activities: (1) institutionalizing agricultural information, (2) establishing documentation and data management systems, and (3) upgrading existing market information systems. There are additional related actions as described below.

1. Rural development

- Promote farmers' access to markets.
- * Develop farm and rural road networks: food-for-work and cash-for-work.
- Develop rural communication through internet communication technology (ICT).

2. Disaster preparedness

- * Develop disaster preparedness and risk management guidelines in relation to sustainable agriculture and livelihoods through broad consultation.
- * Establish a community food and agricultural reserve system in disaster prone areas.

3. Mitigation and adaptation to climate change

- * Impact assessment of the effect of climate change on crop production.
- Integrated dry zone greening.

The National Plan of Action on Food and Nutrition (NPAFN, 2006- 2010) is currently being updated for the next five years (2011-2015). The objectives and strategic action programmes will continue to support the goals of the existing plan of action, and will extend the activities to be implemented. The updated NPAFN will maintain the four major focuses of the current plan of action:

- 1. Improving household food security
- 2. Improving food quality and food safety
- 3. Improving nutrition related health care
- 4. Prevention of malnutrition and nutrition promotion

Implementation of these four strategic actions will contribute to the goal of achieving safe, adequate and well-balanced nutrition on a long-term basis in order to enhance the physical and mental development of the people of Myanmar. The NPAFN focuses on household food security, particularly for mothers and children under-5.

The National Nutritional Strategy (Chapter 8 of the NPAFN), clearly states that information, education and communication are the key elements of a social mobilization strategy. It acknowledges that the exchange of data from surveys and analyses will contribute to enhanced awareness and understanding of local and regional needs, and national responsibilities. In addition, the quality of services, which is included in the capacity building strategy, should be strengthened through training programmes for participants involved in development activities.

As a member of the ASEAN, Myanmar shares food security information under the framework of ASEAN Food Security Information System (AFSIS). The Settlement and Land Record Department (SLRD), under the Ministry of Agriculture and Irrigation, is the focal point for AFSIS activities. The AFSIS network focuses on sharing information on five major food crops: rice, maize, soybean, sugar and cassava. National data for land utilization, cropping areas, production, and the utilization and stock of main crops are the primary indicators monitored through AFSIS.

The National Food Security Committee was established in October 2009, and is chaired by the Minister for Agriculture and Irrigation and co-chair by the Minister for Livestock and Fisheries, and the Minister for Forestry. The Committee is composed of 10 members including five Deputy Ministers from Agriculture and Irrigation, with the remainder from concerned Ministries that are closely related to food security and nutrition. In addition, Presidents of key related associations contribute to the Committee as members. The Director General of the Department of Agricultural Planning, MoAl serves as the Secretary of the Committee.

5.2 Recommendations to Strengthen Food Security Information Systems

This Scoping Study has aimed to review the extent of existing food security information systems in the country, to identify gaps and to explore possible opportunities to strengthen food security information in Myanmar. In line with national objectives and strategies on food security, and in support of relevant national action programmes and stakeholders' initiatives to strengthen existing food security information systems, the following recommendations are proposed to support policy implementation with the aim of building better food security information systems in Myanmar. The recommendations are organized within the following themes.

- 1. Responsibility and roles of institutions for better coordination
- 2. Building capacity to improve skills, techniques and analysis
- 3. Exchange of food security information
- 4. Improving data quality and data sources
- 5. Linking information and decision-makers: paving the way

5.2.1 Responsibility and Roles of Institutions for Better Coordination

Recommendation 1.1: Establish the National Food Security and Nutrition Committee (NFSNC)

The NFNSC will be responsible for setting strategic objectives and for identifying essential elements of the national development plan in pursuit of improved food security and nutrition for the people of Myanmar. This will require the formation of a Food Security and Nutrition Steering Committee (FSNSC) to support the NFSNC. The FSNSC should be co-chaired by senior level officials from food and nutrition related departments. Technical Working Groups (TWGs) need to be formed to work out the strategic activities at the technical level in respective sectors. Given the cross-sectoral nature of the Committee, five TWGs should be formed, including: TWG (agriculture), TWG (livestock & fisheries), TWG (nutrition), TWG (trade & price information), and a multiagencies, cross sectoral Core Analyst Group (Information Networking). These technical working groups should comprise senior technical staff from the line Ministries, along with representatives from technical institutions and relevant private sector associations. These groups can guide principles on methodology and technical matters and further improve coordination between government agencies and donors to ensure complementarities and avoid duplication of effort of food security programmes and projects. These groups will help direct resources towards priority areas and direct studies toward the underlying theme of household food security and vulnerability. Decision-making processes will be assisted and facilitated by these technical working groups through dialogue, coordination, and information sharing amongst agencies and with existing donor and NGO groups, particularly the FSATG cooperating with FSWG and MLWG, and MNTN. A proposed structure for the coordinating mechanism of the NFSC is presented in Annex 5

To support the TWGs, technical members of the core analyst group should include an agronomist, a livestock expert, a fishery expert, a database management expert, a webmaster, an agro-meteorologist, an agricultural economics, a GIS technician and a food security specialist who have basic working experience in their respective fields of expertise. Advanced technical trainings are required for technicians who are participating in the core analyst group. Through this arrangement, technical staff from the respective government agencies would benefit from the trainings and work experience, building their capacity to use analytical tools and methods in order to transfer their technical knowledge to the next generation of young professionals. Sample Terms of Reference for the TWGs, which have been used in Cambodia, are presented in Annex 10.

Recommendation 1.2: Strengthening Early Warning System and Disaster preparedness

Based on the degree of emergency and preparedness early warning should be informed to the public. Early warning information on agriculture, livestock, fisheries, nutrition and meteorology are being provided by the respective departments such as Myanma Agriculture Service (MAS), Livestock breeding and Veterinary Department, Fishery Department, Department of Health Planning (DOHP) and Department of Meteorology and Hydrology (DOMH) and disseminate it to public mostly through radio, television and news papers. National Disaster Preparedness Committee had been formed chaired by Prime Minister. Disaster Preparedness Planning Committee and sector wise Sub-Committees have been formed as a great start to set the preparedness plans for prevention and emergency response based on type of disaster occurrence such as flood, earth quake and sunami, forest fire, drought, land slid, snow storm and storm. Their main roles are to prepare the activities which cover early warning and preventive measures for occurrence of disaster and rehabilitation in mostly happen areas. Therefore, they need data and information of likely occurrence of disaster and need to produce the early warning information timely basis. Building a net work of food security information producers and analysts will support these groups for preparing their regular reports and early warning messages to meet their own reporting requirement. Estimation and forecasting methods need to be consistent and to imply the advanced analytical tools in analysis. In addition that Monsoon Forum and other education and awareness information activities need to be addressed by national experts and facilitators.

5.2.2 Building Capacity to Improve Skills, Techniques and Analysis

Recommendation 2.1: Technical Training on Data Collection, Management and Analytical Tools - from Data to Information

CSO is the core agency responsible for organizing and managing processed data that are provided by state agencies for periodic publication. In the agriculture sector, village level staff collects raw data and provide information that is compiled in townships. These data are checked by supervisors at different levels before being sent to the headquarters office. Primary data are collected, recorded and compiled manually on paper. Without proper training in data processing and management, and without electronic facilities at township, district, and even at some divisional levels, it will be difficult to manage reliable data throughout frequent reporting periods, such as the weekly crop report on sown areas and production. Typically, agricultural data are compiled from physical field visits where each surveyor records data on a cadastral map. A digitized mapping system has been initiated in some areas, and there are plans to extend the digitized system to all cadastral map areas. Appropriate trainings for intermediate level staffs to improve technical skill in information management, as well as technical trainings for modern GIS and digitized mapping will be needed.

Primary data related to food and nutrition is typically collected by basic level staffs with limited knowledge on data collection techniques. Staffs at intermediate levels are relying on basic technical skills for data processing, management and analysis of food security information. Proper data interpretation is essential to provide a clear and easy to understand picture to decision-makers. Most information that is related to food security and nutrition is presented in data form, rather than being analysed and graphically presented in a manner that can be easily understood and readily used. Capacity building activities and programmes should be established for technical staff at basic and intermediate levels who are responsible for data collection, management and analysis.

Food balance analysis is a key analytical tool for food security and early warning information. Calculating food balance is based on certain norms and assumptions on production volume, per capita consumption, utilization for seeds, post harvest loss, export/import volume and other uses. However many of the norms that are used to

calculate food balance have been fixed for a long time, and are not based on recent surveys or information. Therefore, it is difficult to verify whether the sufficiency ratio is positive for all food items. Edible oil still imported annually. Consumption patterns and food habits are naturally different in different parts of the country, and between rural and urban. There are different kinds of cereals and protein foods being utilized by local people. Because of the complex nature of food intake in different parts of the country, it is difficult to estimate the food balance stock in each area and to set the plan for food security. It is recommended that technical assistance on methodology and analytical tools are needed to support food balance analysis.

Recommendation 2.2: Strengthening the Market Information System

The Trade Information Promotion Division under the Ministry of Commerce and the Market Information Service (MIS) under the Department of Agricultural Planning play a crucial function by providing market information services in support of decision-making. They prepare comprehensive and analytical weekly and monthly reports and briefs for decision-makers and other stakeholders and users. Each institution currently prepares their own weekly and monthly news and reports to meet their own requirements. For the most part, the products of these institutions represent a duplication of effort in market information. Mechanisms for collaboration and information sharing across agencies and Ministries should be strengthened.

With the exception of price trend and commodity flow analysis, information concerned with the impact of disasters on market behaviour and household livelihood is lacking. Efforts should be made to gather more information in order to support government efforts to improve food security of vulnerable groups within the country. In this context, an analysis study related to the impact of disaster on market behaviour is recommended.

5.2.3 Exchange of Food Security Information

Recommendation 3.1 Convene Regular Meetings to Exchange Information

In addition to regular coordination meetings convened by development partners to exchange food security related information, such as the FSATG and MNTN, there are also formal meetings between agencies and concerned Ministries to set the plan, formulate the projects and report the progress of activities in the context of national food security and nutrition development. In the case of the MNTN, the NNC under the MoH is the co-chair and participates regularly to share updated information on nutritional activities implemented by the state agency. This has resulted in improved coordination and collaboration between government and partners on nutrition related initiatives, including on nutrition information and analysis.

Under the auspices of proposed Food Security Steering Committee, it is recommended that a regular biannual forum be created to allow for an open discussion on food security issues. Participants should include concerned government agencies, core members of the thematic groups, development partners and the private sector in order to enhance cooperation on food security and nutritional action programmes and projects. It will also provide the opportunity for sharing updated information and discussing information needs that will help bridge the gap between users and producers.

Recommendation 3.2: Initiate Information Sharing at Divisional/Provincial Level

Responsible personnel at divisional/provincial level normally meet frequently to report on the progress of their activities to the local administrative authority, and present plans for implementation of planned activities. The divisional and provincial personnel of line Ministries feed information up to the central level as required. However, they usually receive instructions from the central level, rather than feedback or information they require to support their own decision-making processes. The Agriculture Supervision Committee, comprising agencies under the Ministry of Agriculture and Irrigation, is the existing organizational unit that could share monthly information among agencies. Other related government agencies from different Ministries, particularly from MOLF, MOH and MoNPED, could participate in sharing information. The meeting could fall under the auspices of existing Agriculture Supervision Committee and chaired by the chairman of the Committee, which is normally the Divisional Manager of Myanma Agriculture Service. This recommendation would support the decision-making process at the divisional/provincial level to improve food security.

Recommendation 3.3: Develop Web-based Information Exchange

In the near future, the government is planning to develop Public Access Centres to provide Internet access to the rural areas. A few are being established on a pilot scale. There is also a programme to develop a network of

Fixed Wireless Phones which uses Code Divided Multiple Access (CDMA) technology. A private company, e-Trade Myanmar, has already established a website that is available for registered members to subscribe to market and trade data information. Stakeholders from UMFCCI are planning to establish a similar website to share information with other agencies.

The Directorate of Trade has established web-based price and trade information that can be subscribed to by users. It is recommended to develop a web-based food security information system at the Department of Agricultural Planning (DAP) as it has already established a web page (www.moai.gov.mm) for agricultural information. DAP is coordinating with 11 agencies under MOAI as well as other food security related line Ministries and serves as the executive body to support the Minister.

To expand web-based exchange of food security information will require webmaster training for professional staff to develop a food security information website, as well as other technical instruments and facilities. This web-based networking will enable and enhance professional networking within the country as well as internationally for those who are interesting in food security information in Myanmar.

Recommendation 3.4: Use the Media

Using the media is a most effective way to disseminate food security information to potential users. The media can play a potentially important role of informing the public on food security issues and concerns that will help users to take necessary and appropriate decisions and action. The public needs to understand the information clearly in order to take immediate action on emerging issues as well as to prepare their medium and long-term plans. Effectively using the media can help ensure that important food security information reaches potential users at the right time.

Radio, television and the print media are the most effective forms of communication to disseminate information to the majority of people throughout the country, who already have access to such media. The use of radio and television will help ensure that people in rural areas receive important information at the right time. Myanma Radio and Television-4 (MRTV-4) has one slot Sunday talk for educating and sharing knowledge to the public. There is a good opportunity for information producers to deal with MRTV for the purpose of educating and informing the public about food security issues. This requires training food security information producers on how to deal with the media as well as training the media on how to report food security issues. This should be done in close cooperation between line Ministries who produce information and MRTV under the Ministry of Information.

5.2.4 Improving Data Quality and Developing Data Sources

While both users and producers of information understand and agree that data quality is basic and essential, it is a difficult task that requires government commitment, good will and consensus amongst the technical units of different government and non-government agencies. Collaboration and cooperation among these agencies is required for the benefit of the nation. Undermining these preconditions will limit success and progress to improve data quality and to develop new data sources.

Recommendation 4.1: Build Consensus on Food Security Indicators

Given the broad range of food security indicators, it is necessary to identify and agree upon a reasonable number of key indicators that can provide an accurate and timely understanding of the situation. These parameters must be easily measured, evaluated and presented in a readily usable format in order to understand food security conditions and vulnerable groups. It is also necessary to identify food security and nutrition indicators that can be used as measuring sticks for monitoring and evaluation purposes. In the context of food and nutrition information, indicators need to be chosen on the basis of the country's data needs, while also considering users' needs at local and national levels. Different institutions may choose different indicators and measuring units according to the role they play in reducing food insecurity and vulnerability. However, the system should include all indicators that are considered relevant and essential for the various users. In choosing key indicators, consistent principle should be established to ensure consensus among stakeholders and government agencies. It is recommended that the FSWG organize the hard activity of reviewing existing indicators, assessing basic needs with minimum requirements, and identifying and choosing indicators by organizing a consensus building workshop.

Recommendation 4.2: Improved Data Quality for Crop Forecasting

Accurate and timely information for crop forecasting and estimation is essential for food producers to make necessary preparation in their food production as well as for traders and policy makers to make their plans at the right time to ensure food security. In the event of an emergency, timely information is essential to raise the alarm and guide response efforts to help ensure food security. Currently, crop forecasting is done by SLRD, which uses the cadastral mapping system as a basic land demarcating unit where primary data are recorded and compiled manually. As a result, data quality and the overall accuracy of crop forecasting and estimation are subject to man-made errors, which could be minimized.

A digitized mapping system, employing modern techniques and products such as remote sensing and geographic information systems, could produce better estimates of land utilization and crop forecasting at a more accurate and efficient level. Developing a digitized mapping system could also help promote food security through the expansion of agricultural land from potential land resources. SLRD is working on digitising the cadastral map survey unit which covers 500 acres of land with natural and man-made boundaries for ground recognition. This activity has been successfully implemented in four divisions. Technical expertise, training and equipment to enhance skills in GIS and remote sensing analysis are required. It is recommended that a training programme for application of advanced technology and provision of the digitized facilities to improve data quality, reporting and accuracy of crop forecasting.

Recommendation 4.3: Build a Food Security Database for Livestock and Fishery Market Information Livestock and fisheries data, including on production, health, export volumes and values, are collected and

compiled by township level staff, and are sent to district and divisional offices. Data and information are then processed and recorded at the headquarter office of Departments of Fisheries (DoF) and Livestock Breeding and Veterinary Department (LBVD) and the Directorate of Planning and Statistics (DoPS), MOLF for final approval before being sent to the MNPED and CSO.

Daily market prices and information are valuable for producers and traders to make their decisions on curing and selling of fresh meat and fish. Market information on fishery and livestock products need to be published daily or weekly. There are existing data and information collection systems in DoF and LBVD for annual publications and internal reporting. The existing system should be strengthened to disseminate market information regularly in order to meet the demand of users. It is recommended that existing information systems are strengthened by upgrading the skills and knowledge of staff responsible for data management and analysis through training and support exercises.

5.2.5 Linking Food Security Information to Decision-Makers: Paving the Way

Recommendation 5.1: Help Senior Decision-Makers Support Food Security Information

It is important for senior policy makers to clearly understand the holistic concept and broad scope and range of food security information. Most consider that food insecurity can be solved by providing food aid and assistance, and by increasing food crops production. Despite its importance, information concerned with food insecurity and vulnerability at the household level seldom reaches senior level decision-makers. It is recommended to convene a half-day information session organised by DAP for the National Food Security Committee Members and other supporting technical groups, and a one day seminar for other information users. It is recommended that a senior international food security information expert from FAO should act as a facilitator for such sessions.

Recommendation 5.2: Introduce Food Security Information at Divisional/ Provincial Level

An Agricultural Supervision Committee has been formed in each Division and Province, chaired by the Divisional Manager of Myanma Agriculture Service. Other departments related to food security and nutrition cooperate on development activities under the guidance of local authority. These include both producers and users of information. They need to clearly understand the value and use of information related to their job, and how the information can be used. Materials and information developed under recommendation 5.1 can be modified for use at the sub-national level. Resources from FSATG, MNTN and FSWG may contribute their effort and support for this initiative.

Recommendation 5.3: Work with Donors to harmonized understanding Food Security and related Issues

Through rehabilitation and recovery activities in the Nargis devastated areas, many donors supported action plans with different perspectives on food security and livelihoods based on their particular interests. Similar action programmes have been launched in other parts of the country in the context of food insecurity and vulnerability. Partner activities need to be in line with the country's priorities and programme activities related to food security and nutrition as laid out in the Country Programme Framework (2011-2015) in cooperation and partnership with FAO and Republic of the Union of Myanmar for agriculture and food security when it is released. This will require a one-day meeting session for representatives of donors, head of international and local NGOs. The meeting can be hosted by FAO with the participation of the heads of the related state agencies.

5.3 Additional Considerations

The recommendations of this scoping study are by no means comprehensive. They are based on food security related documents and studies undertaken by different agencies, and from the information and perspectives of the people who were consulted during this scoping study. Many additional recommendations and activities could be included which would benefit the country and enhance food security information systems.

Upgrade Agro-Meteorology Stations of MAS

Agro-meteorology stations were established in most township offices of Myanma Agriculture Service (MAS) over the last 30 years and record precipitation, rainfall intensity and temperature within a township area. Measuring devices are old and some measuring materials have been substituted with locally made replacements. Upgrading devices and training for recording methods and data entry is needed for an accurate analysis of climate change impacts, and for crop modelling and early warning. It may attract technical support from FAO and upgrading the ago-met stations should be considered by donor agencies.

Upgrade Nutrient Testing Laboratory

The NNC needs to know the nutrient contents contained in food to measure the minimum requirements for individual health. Testing instruments need to be upgraded and training is required for new lab-technicians. Technical and funding assistance is required by donor agencies for surveillance of household food security status.

6. The Way Forward

Moving forward from planning to action requires specific activities that will address each recommendation. These activities are packaged to attract support from government, donors and technical agencies.

6.1 From Recommendations to Actions

The 14 recommendations of this study are listed below:

1. Responsibility and Roles of Institutions for Better Coordination

- 1.1 Activating the role and responsibility of National Food Security Committee (NFSC)
- 1.2 Strengthening early warning and risk mitigation

2. Building Capacity to improve Skill, Technique and Analysis

- 2.1 Technical Training on Data Collection, Management and Analytical Tools: from Data to Information
- 2.2 Strengthening Market Information Systems

3. Exchange of Food Security Information: Formal to Action

- 3.1 Convene Regular Meetings to Exchange Information
- 3.2 Initiate Information Sharing at Divisional/Provincial Level
- 3.3 Develop Web-based Information Exchange
- 3.4 Use the Media

4. Improve Data Quality and Develop Data Source

4.1 Build Consensus on Food Security Indicators

- 4.2 Improve Data Quality on Crop Forecasting
- 4.3 Build Food Security Database for Livestock and Fishery Market information

5. Linking Food Security Information to Decision-makers: Building Efficient Information Providers

- 5.1 Help Senior Decision-makers support understanding Food Security Information
- 5.2 Introduce Food Security Information at Divisional/Provincial Level
- 5.3 Work with Donors to harmonized understanding Food Security and related Issues

The following 10 activities are proposed to implement the 14 recommendations of this study. Activities that are closely linked could be packaged into a single project. However, it may be difficult to mobilise assistance from a single donor to support all activities, which could delay implementation. Some activities require no financial resources. By packaging the recommendation as discrete activities, different stakeholders may choose to support one or more activities. It is expected that the implementation of these proposed activities will support the effort to fill the gap between users and producers and improve food security information systems in Myanmar.

The following 10 activities are proposed to implement the recommendations:

- Activity 1: Establishing a coordination mechanism to improve food security and nutrition information (Recommendation 1.1, 3.1 and 3.2)
- Activity 2: Building capacity for food security analysis and reporting (Recommendation 2.1, 3.1)
- Activity 3: Build consensus on food security indicators (Recommendation 4.1)
- Activity 4: Establishing a web-based information exchange (Recommendation 3.3)
- Activity 5: Strengthening market information system (Recommendation 2.2, 4.3)
- Activity 6: Improving data quality for crop forecasting (Recommendation 4.2)
- Activity 7: Introducing food security information to decision-makers (Recommendation 5.2)
- Activity 8: Convening informative workshops on the importance of food security information (Recommendation 5.1, 5.2)
- Activity 9: Strengthening early warning system and disaster preparedness (Recommendation 1.2)
- Activity 10: Study agriculture market behaviour in disaster prone areas (Recommendation 2.2)

Summary project proposals have been prepared for each of above proposed activities and are presented in Annex 7. The summary proposals include five sections: (1) background and justification, (2) objectives and expected outputs, (3) main activities, (4) institutional roles and responsibilities and (5) indicative budget and timing.

6.2 Assessing the Proposed Actions

An assessment of the proposed actions is listed in the following table. The ranking of the proposed projects represents the consultant's option. Others may have their own choice for ranking Budgets are just indicative and needs to be confirmed prior implementation.

Proposed Action	Main Activities	Rank	Timing/ Sequencing	Success Criteria	Indicative Budget	Assumption
Establishing structure of coordination mechanism to improve food security and nutrition	 Study similar structures Prepare TORs Convene workshop for consensus Advocate proposed structure 	1	Immediate	Potentially high (Gov. mandate)	None	Close cooperation of related Ministries
Build capacity for food security analysis and reporting	1.Organized technicians in core analyst group 2.Training use of methodology and analytical tools technical support by 3 international consultants 3.Reporting skill practices 4. Networking and information through media	2	As soon as resources are identified for 2 years	High (Willingness to cooperate and potential professional)	US\$ 50,000	Right persons to right place assigned
Building consensus on Food Security Indicators	1.Review of existing indicator used 2. Categorizing and ordering indicators 3.Convene workshop for consensus 4. Develop a set of tool & tested	3	As soon as resources are identified for 3 months	High	US\$ 25,000	Good will and commitment of agencies
Strengthening early warning system and disaster preparedness	 Focus climate change effect on food production Monsoon Forum Information sharing workshops 	4	As soon as resources are identified	High	US\$ 5,000	Good facilitation and participation

Proposed Action	Main Activities	Rank	Timing/ Sequencing	Success Criteria	Indicative Budget	Assumption
Establishing web based information exchange	1.International consultants launching & support 2. Software/web customization 3. Webmaster launch 4. Communicating network to users & producers	5	Following action 2 as soon as resources are identified for 6 months	Moderate	US\$ 50,000	Good cooperation of the WG (FSN) participating agencies
Strengthening market information system	1. Training for data base management (Agi, Livestock & Fisheries2. Data to information & Reporting	6	As soon as resources are identified for 1 year	High	US\$ 26,000	Good coordination of DoT, DAP, DoPS (MOLF)
Improving data quality in crop forecasting	1. Trainings to all Division/Province level 2. GIS, Digital mapping training by experts 3.Application on land and crops 4.Material support	7	As soon as resources are identified for 3 years	High	US 260,000	Having basic resources and absorptive capacity
Introducing Food Security Information System	Convene workshops: 1 in Capital and 1 in Yangon	8	Following action 1 for 2 months	Moderate	US\$ 5,000	Motivation of decision makers is sufficient
Convening informative workshop to understand the importance of food security information	Convene workshop to stakeholders in selected States & Regions	9	As soon as resources are identified	High	US\$ 10,000	Willingness to participate
Study agriculture market behavior in disaster prone areas	1. Surveys in 2 areas. 1 in delta and 1 in dry zone	10	Immediate as soon as resources are identified	High	US\$ 20,000	Study skill is sufficient at YAU
				Total Budget	US\$495,000	

Annex 1: Terms of Reference

National Food Security and Nutrition Information Consultant

25 days (5 weeks, in capital city with three day field visit)

Background

Under the EC-FAO Food Security Programme, project GCP/RAS/247/EC aims to link information and decision-making to improve food security in Cambodia, Lao PDR and Myanmar, by working with national, regional and global partners and information systems. Overall, national information systems in the three project countries often fall short of meeting the range and timing of food security information requirements. Most existing information systems are not demand driven and often work in isolation from one another. In some cases, potential users are unaware of, or may not have easy access to available information and analysis. Information that is available is not always meaningfully analysed and is often presented in a way that makes it difficult for non-experts to extract and understand key messages that could inform decision-making processes. There are very few food security information products, and none provide a holistic or integrated analysis of food security conditions, prospects or issues in either the development or emergency context.

Objectives and Expected Outcomes

In order to link food security and nutrition-related information and decision-making, a good understanding of national information systems and decision-making processes is required in each country. The objective of the proposed consultancy is to identify information requirements, assess current information systems and products that help meet the requirements, and propose measures to guide efforts to fill the gaps, both by the project and by related initiatives. The consultancy will make concrete recommendations to improve the relevance, efficiency and co-ordination of data collection, management and dissemination efforts, in line with the roles and needs of key users. It aims to enhance coordination of different systems in terms of their operation and in the delivery of more relevant and user-friendly information products to their clients, the information users.

Expected Outputs

- Review of food security policies, strategies and food security conceptual framework.
- Mapping of national and regional food security information systems.
- Food security information supply and demand side analysis.
- Strengths and weakness of national food security information systems identified.
- Institutional and capacity building needs identified.
- Gaps that can be addressed by the project identified.
- Prioritisation of work plan activities.

Terms of Reference

Under the overall supervision of the Coordinator, Regional Operations Branch (RAPR), the direct technical supervision of the project's Chief Technical Adviser (who will contribute at least one of week time to this study), the guidance of the FAO Representative, and in close collaboration with the National Project Coordinator (who will contribute at least three of weeks time to this study), the National Focal Point and relevant FAO technical divisions, the National Focal Security Information Consultant will undertake the following specific activities.

- Review government food security policies and strategies, integrated national development plans and relevant sectoral policies and strategies that contribute and relate to food security, to (1) assess information requirements given national priorities and plans, and (2) identify and assess policies and plans that relate to information systems.
- On the basis of the above, articulate a country-specific food security conceptual framework that
 illustrate the multiple dimensions, multi-sectoral and multi-agency nature and scope of food security
 that will help define the scope of, and requirements for food security information in both emergency
 and development contexts, and for both chronic and transitory food insecurity.
- Review the **demand side** perspective by identifying food security and nutrition information
 requirements, the type of data and information used by different client groups in relation to their
 decision-making needs through. User groups considered should include, but are not limited to:
 ministers and parliamentarians, secretary-generals and senior staff of sectoral ministries and crosssectoral government agencies, UN agencies, NGOs, donors, research and academic community, farmer
 groups and farmers, traders, millers, and others. Identify how the nature of the demand for different
 types of information, including assessments of food supply, varies among these client groups.
- Review of the supply side through a systematic comparative analysis of the individual systems currently
 operating, including but not limited to: sectoral and multi-sectoral government agencies, national

statistics office, UN agencies, NGOs, development projects, private sector, research and academic institutions and others. The analysis should include a review of the type and adequacy of data collected, the sample design, the methods of data management and analysis, responsibilities, current capacity, information products and dissemination strategies, including for national monitoring systems.

- Undertake a field visit to the provincial and district level to conduct a similar assessment as above of food security and nutrition information demand and supply at the sub-national level.
- Undertake field visit to community level to assess food security information and nutrition demand and supply at community and farmer levels.
- Prepare a comprehensive "map" of food security and nutrition information systems in the country that shows who provides what information, spatial and temporal coverage, the flow of the information, the products prepared, the frequency and timing of information flows and other relevant information. Relate this to the food security conceptual framework prepared for the country.
- Prepare a comprehensive "inventory" of food security and nutrition information products, including
 who prepares what, the content of each product (distinguising between data reporting and analysis),
 the frequency and timing of information dissemination, who the product users are and how the
 products are used.
- Assess the current degree of coordination among institutions and the scope for enhancing coordination
 and reducing inefficiencies arising from duplication of effort. Propose roles, responsibilities and
 coordination mechanisms to enhance the efficiency of national food security information systems.
- Recommend enhancements to food security information structures, systems, products and capacity within sectoral and multi-sectoral government structures.
- To turn the above recommendations into action, prepare one page concept notes for technical and institutional improvements for possible support through the project, or by other partners.
- Undertake related activities as requested by the project CTA.

Timing and Deliverables

The consultancy is for 25 days working days, five working weeks. There will be a one week break in the consultancy to allow for technical review of the consultant's draft report by FAO, on the basis of which the consultant will finalise the report. The expected output is a 20-25 page report with relevant technical annexes. The following key benchmarks are anticipated:

- By Day 3: Submit work plan to complete tasks.
- By Day 8: Submit an annotated outline of report.
- By Day 13: Complete field visits (est. 3 days)
- By Day 16: Submit first draft report.
- By Day 18: Present preliminary findings, conclusions, recommendations to stakeholders.
- By Day 23: Submit second draft report to FAO.
- By Day 25: Submit Final report.

Qualifications

The consultant will possess the following skills, qualifications and experience:

- Significant experience in working with a wide range of different institutions (government and non-government) involved in the collation, flow and use of information for decision-making purposes.
- Significant experience designing and working with food security information systems across government institutions, as well as understanding of how this information can be fed to decision-making processes.
- At least five years experience in designing and managing food security information systems.
- At least five years experience in managing, designing and preparing food security information products.
- Excellent English language capability (written and spoken) and good computer skills.

Annex 2: List of Persons Met

Ministry of Agriculture and Irrigation

- U Hla Kyaw, Deputy Director General, Department of Agricultural Planning
- U Aung Hlaing, Director, International Relation Div,, Department of Agricultural Planning
- U Soe Win Maung, Director, National Planning Div., Department of Agricultural Planning
- Daw Amar Aye, Assistant Director, Department of Agricultural Planning
- U Aye Maung Sein, Director, Settlement and Land Record Department
- U Saw Hlaing, Director, Settlement and Land Record Department
- U Maung Yi Yi, General Manager, Planning Div., Myanma Agriculture Service
- U Kyaw Swe, Director, Survey Department
- U Aung Kyaw Moe, Director, Survey Department
- U Than Aye, Director, Survey Department
- U Hla Kaing, Deputy Director, Survey Department
- U Kyaw Kyaw Tun, Assistant Director, Survey Department
- U Zay Ya Htwe, Assistant Director, Survey Department
- U Thant Zin Oo, Staff Officer, Survey Department
- U Ko Ko Maung, Staff Officer, Survey Department
- U Hein Lin Sar, Staff Officer, Survey Department
- U Min Zaw, Staff Officer, Survey Department

Ministry of Commerce

- U Myint Soe, Managing Director, Myanma Agriculture Produce Trading
- Daw Tin Cho Oo, Assistant General Manager, Myanma Agriculture Produce Trading
- U Min Min, Director, Directorate of Trade

Ministry of National Planning and Economic Development

- U Tun Tun Naing, Director General, Central Statistical Organization
- U San Myint, Deputy Director General, Central Statistical Organization
- Daw Mar Lar Aung, Director, Central Statistical Organization
- U Oo Tun Hlaing, Director, Central Statistical Organization

Ministry of Health

- Dr. Saw Lwin, Deputy Director General (Disease Control), Department of Health
- Dr. Aye Aye Thaw, Director, Head of National Nutrition Centre, Department of Health

United Nations

- Dr. Shin Emaei, Resident Representative, FAO
- Dr. Aung Swe, Assistant Resident Representative, FAO
- Dr. Aye Thwin, Public Health Nutritionist, UNICEF
- Dr. Po Po Myint, National Consultant, UNICEF

Others

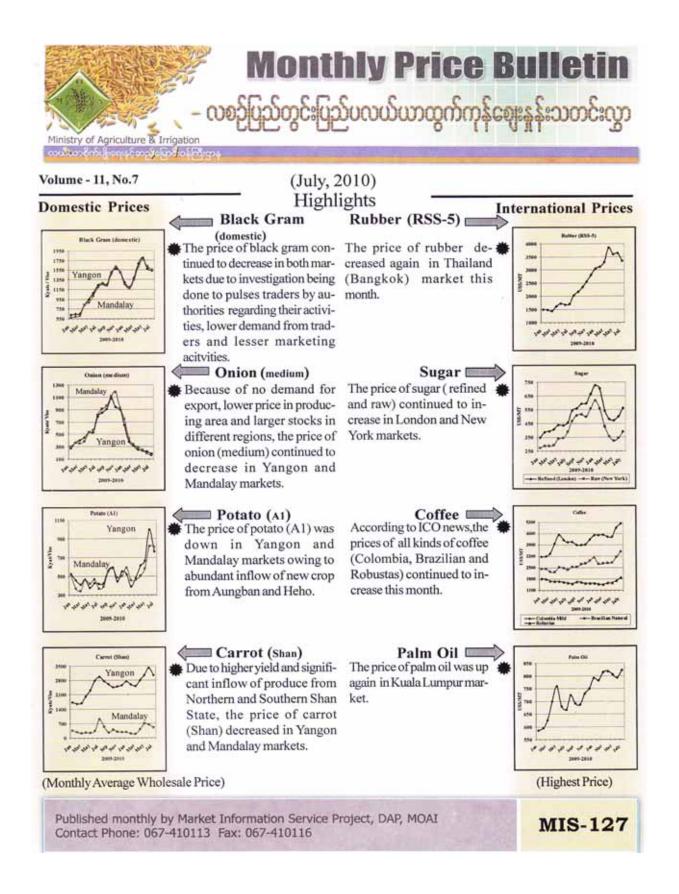
- Mr. Michael Gabriel, Country Director, Mercy Corps Myanmar
- Nyunt Nyunt Win, Data Officer, Myanmar Information Management Unit
- Kyaw Naing Win, GIS Manager, Myanmar Information Management Unit
- Chit Khine, President, Myanmar Rice Industry Association
- Ye Min Aung, Secretary General, Myanmar Rice Industry Association
- Aung Zaw Oo, Jiont Secretary-2, Myanmar Rice Industry Association

- Han Tun, Executive Vice- President, Myanmar Fishery Federation
- Kyaw Myint, Marketing Specialist, E Tarde Myanmar
- U Saw La Phawa, Assistant Director, Fishery Department

District and Township Visits

- U Min Thein, Assistant Director,, Settlement and Land Record Department Mandalay Division
- U Tun Hla Aung, Assistant Director, Settlement and Land Record Department, Yamethin District
- U Kyaw Htae, Township Officer, Settlement and Land Record Department, Yamethin Township
- U Thein Zaw, Township Officer Settlement and Land Record Department, Pyawbwe Township
- U Win Nyunt, Township Manager, Myanma Cotton Enterprise, Yamethin Township
- U Saw Win, Manager, Myanma Agriculture Service, Yamethin District
- Daw Cho Ngwe Oo, Manager, Myanma Agricultural Development Bank, Yamethin Township
- U Ko Ko Aung, Township Officer, Settlement and Land Record Department, Pantanaw Township
- U Khin Maung San, Deputy Township Officer, Myanma Agriculture Service, Pantanaw Township
- U Salai Tharyar, Supervisor, Myanma Agriculture Service, Pantanaw Township
- 12 Farmers from Inma Village, Kyontone village and Kanyingu village, Pantanaw Township
- 30 Farmers in Yamethin Township

Annex 3: Monthly Market Information Bulletin



Annex 4: List of Full Time Meteorology and Hydrology Stations

List of Meteorology and Hydrology Station under Department of Meteorology and Hydrology, Ministry of Transport

No.	Title		Total Stations
1.	Full Time (Meteorology, Meteorology/Hydrology) Stations	:	115
2.	Rainfall part time Stations (Upper Burma - 65, Lower – 45)		110
3.	Rainfall Intensity Stations	:	Nil

The Detail Stations

No.	Station	Latitude	Longitude	Attitude (m)
1.	Putao	27° 20'	97° 25'	409
2.	Myitkyina	25° 22'	97° 24'	145
3.	Bhamo	24° 16'	97° 12'	111
4.	Mogaung	21° 37'	97° 33'	1052
5.	Mohnyin	24° 47'	96° 22'	209
6.	Falan	22° 55'	93° 41'	1372
7.	Mindat	21° 23'	93° 57'	1395
8.	Hakha	22° 39'	93° 37'	1866
9.	Paletwa	21° 18'	92° 51'	55
10.	Tedim	23° 23'	93° 40'	1727
11.	Lashio	22° 56'	97° 45'	856
12.	Hsipaw	22° 36'	97° 18'	436
13.	Taunggyi	20° 47'	97° 03'	1436
14.	Pin Laung	20° 03'	96° 46'	1463
15.	Loilem	20° 55'	97° 33'	1355
16.	Monghsat	20° 33'	99° 16'	568
17.	Heho	20° 43'	96° 50'	1159
18.	Naungcho	25° 22'	96° 18'	833
19.	Namsang	21° 15'	96° 53'	965
20.	Kengtung	21° 18'	99° 37'	827
21.	Hkanti	26° 00'	95° 42'	142
22.	Homalin	24° 52'	94° 55'	131
23.	Mawlaik	23° 38'	94° 25'	114
24.	Kalaymyo	23° 12'	94° 04'	152
25.	Katha	24° 10'	96° 20'	94
26.	Shwebo	22° 35'	95° 43'	106
27.	Yay Oo	22° 45'	95° 25'	103
28.	Monywa	22° 06'	95° 08'	81
29.	Kalaywa	23° 12'	94° 18'	109
30.	Kyemon	22° 02'	95° 14'	303
31.	Sagaing	21° 52'	95° 59'	64
32.	Tamu	24° 12'	94° 18'	177
33.	Minlin	22° 52'	94° 30'	107
34.	Pintebu	24° 05'	95° 22'	259

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35.	Kanbulu	23° 12'	95° 41'	171
36.	Maungdaw	20° 50'	92° 21'	6
37.	Sittwe	20° 08'	92° 53'	5
38.	Kyaukpyu	19° 26'	93° 34'	5
39.	Thandwe	18° 28'	94° 21'	9
40.	Gwa	17° 35'	94° 35'	3
41.		24° 47'	24° 47'	
42.	Kyauktaw	20° 51'	92° 38'	3
43.	Ann	19° 46'	94° 00'	15
44.	Hpa-an	16° 45'	97° 40'	9
45.	Kawkareik	16° 33'	98° 15'	17
46.	Loikaw	19° 41'	97° 13'	896
47.	Bawlakhe	19° 10'	97° 20'	142
48.	Mandalay	21° 59'	96° 06'	93
49.	Meiktila	20° 20'	95° 50'	214
50.	Naung Oo	21° 12'	94° 55'	61
51.	Yamethin	20° 25'	96° 09'	199
52.	Pyinmana	19° 43'	96° 13'	98
53.	Moekok	22° 55'	96° 30'	1176
54.	Myingyan	21° 28'	95° 23'	60
55.	Pyin Oo Lwin	20° 01'	96° 28'	1078
56.	Tada Oo	21° 43'	95° 57'	83
57.	Magway	20° 07'	94° 56'	52
58.	Taungdwingyi	20° 01'	95° 33'	136
59.	Minbu	20° 10'	94° 53'	51
60.	Pakokku	21° 20'	95° 05'	57
61.	Chauk	20° 54'	94° 50'	61
62.	Aungban	19° 22'	95° 13'	58
63.	Gangaw	22° 10'	94° 08'	314
64.	Pyay	18° 48'	95° 13'	38
65.	Tharrawaddy	17° 38'	95° 48'	15
66.	Bago	17° 20'	96° 30'	9
67.	Gyobingauk	18° 13'	95° 40'	27
68.	Phyu	18° 30'	96° 27'	48
69.	Laytatpyin	18° 95'	95° 25'	76
70.	Taungoo	18° 55'	96° 28'	49
71.	Shwegyin	17° 55'	96° 52'	12
72.	Pathein	16° 46'	94° 46'	4
73.	Maubin	16° 44'	95° 39'	3
74.	Hinthada	17° 40'	95° 25'	13
75.	Ngathaing	17° 24'	95° 05'	6
76.	Pyapon	16° 16'	95° 40'	2
77.	Hmawbi	17° 02'	95° 38'	5
78.	KabaAye	16° 52'	96° 10'	20
79.	Mingaladon	16° 54'	96° 11'	28
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80.	Co Co Island	14° 07'	93° 22'	5
81.	Khayan	16° 54'	96° 34'	4
82.	Bilin	17° 13'	97° 14'	61
83.	Thaton	16° 55'	97° 22'	9
84.	Mawlamyine	16° 30'	97° 37'	21
85.	Yay	15° 15'	97° 11'	37
86.	Mudon	16° 14'	97° 43'	10
87.	Kyaikkhame	16° 05'	97° 34'	6
88.	Dawei	14° 06'	98° 13'	16
89.	Kawthong	09° 58'	98° 35'	46
90.	Myeik	12° 26'	98° 36'	36
91.	Machanbaw	-	-	-
92.	Varr	22° 50'	94° 40'	285
93.	Ranthalo	22° 54'	93° 27'	
94.	Kyaukme	22° 11'	96° 15'	
95.	Moemeik	23° 23'	96° 09'	181
96.	Myinmu	21° 56'	95° 39'	
97.	Myauk Oo	20° 35'	92° 15'	
98.	Taunggoke	19° 00'	94° 32'	
99.	Hpa-an (agro)	16° 45'	97° 40'	
100.	Lunkyaw	21° 30'	96° 30'	
101.	Hlaingtat	20° 48'	96° 11'	152
102.	Yezin	19° 50'	96° 00'	
103.	Tatkong	20° 07'	96° 12'	
104.	Sinphyugyun	20° 39'	94° 43'	
105.	Pauk	-	-	
106.	Zaungtu	-	-	
107.	Khamon	-	-	
108.	Tuang Oo (air)	18° 55'	96° 28'	498
109.	Nyaung Lay Bin	-	-	
110.	Tagontaing	18° 00'	95° 00'	
111.	Zalun	-	-	
112.	Myaung Mya	-	-	
113.	Hmawbi (Agro)	17° 06'	96° 04'	
114.	Theinzayat	-	-	
115.	Lounglon	14° 00'	96° 15'	

List of Hydrology Station under Department of Meteorology and Hydrology, Ministry of Transport

River	Ayeyarwaddy	Chindwin	Dokahwaddy	Sittoung	Shwegin	Bago	Thanlwin	Nagwun	
Stations	1. Myitkyina	1. Khamti	1.Thipaw	1. Taungoo	1. Shwegin	1. Bago	1.Paan	1.Pathein	
	2. Bhamo	2. Momalin	2. Myitngae	2.Madauk					
	3.Katha	3.Mawlaik							
	4.Mandalay	4.Kalewa							
	5.Sagaing	5.Monywa							
	6.NaungU								
	7.Chauk								
	8.Minbu								
	9.Magway								
	10.Aungban								
	11.Pyay								
	12.Hinthada								
Total Stations	12	5	2	2	1	1	1	1	=25

Annex 5: Trade News



Agricultural Products Basic Prices for Export on 20-8-2010

USS/MT

1	Black Matpe		14	Kidney Bean (FAQ)	670-680
	FAQ	940-950	15	Sultanipya (FAQ)	700-720
	SQ	1040-1050	16	Peyin (FAQ)	660-680
u			17	Small White Bean (FAQ)	565-585
2	Green Mung Bean		18	Small White Kidney Beans	
	FAQ (Anyar)	1120-1130		(FAQ)	565-585
	FAQ (Pakokku)	1220-1230	19	Soya Bean (FAQ)	610-630
	Big (Anyar)	6	20	Nylon Bean (FAQ)	860-880
	(Size 3.25 mm Above)		21	Red Flat Bean (FAQ)	720-740
	Shwe War Small	1350-1370	22	Green Peas	
	(Under 3.5 mm)	A CHARACTER OF LIS		Big	950-980
				Small	1410-1430
3	Toor Whole		23	Sesame Seeds	11 4 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5
30	Red(FAQ)	790-800		Science	1700-180
	White-Red (FAQ)	690-700		Black	1350-145
	White (FAQ)	690-700		White	1375-140
			24	Niger	790-810
4	Black Eved Bean		25	Turmeric	423,753
7.	FAQ	780-790		Shansa	1450-150
	SQ (12.5 Sieve)	890-900		Kyauk Se	1550-160
ď		10000		Turmeric Bulb	1200-130
5	Brown Bean (FAQ)	850-870	26	Ginger	950-1000
6	Chick Peas (White) FAQ	700-720		Dry	1400-145
7	Chick Peas (Yellow)FAQ	740-760		Slide	1600-170
8	Bocate (FAQ)	770-790	27	Tamarind	750000 G20
9	Lab Lab Bean (FAQ)	1130-1150		With Seed (New)	350-400
10	Yellow Maize (FAQ)	270-290		Without Seed (New)	600-650
11	Millet (FAQ)	215-265		N N	
12	Onion	3500000			
10	Size 20 mm to 35 mm	260-280			
	Size 35 mm & Up	280-300			
13	Butter Bean (FAO)	800-820			
2	1110	SON 15-70			

Note: Prices are quoted as reference for license application only.



Myanmar Rice Industry and Private Sector Participation

larmers used to borrow money from the rich and it was called "pinhtung pay", "ahlan pay", "angant pay" etc; depending on various locality. At the time of colonial rules, agriculture loans for cultivating paddy used to obtain between July and August cultivating season and it was resettled or paid back at the harvesting time. In 2009-2010, Myanmar Agriculture



Development Bank (MADB) has lent loans at the rate of 20,000 Kyats per acre to the farmers. The bank loans were released to 1.3 million farmers amounting over 93 million Kyats in that year. MADB bank loans network has a wide scope of performance because of her organized 193 outlets throughout the country,

The estimated production cost will be amounted to 900 billion Kyats for cultivation areas of 17 million acres that produce 1500 million baskets based on current paddy production cost. Under the current conditions, the average production cost for rain-fed paddy is 130,000 Kyats per acre whereas 180,000 Kyats for summer paddy. MADB's bank loans cover just over 10 percent

Because of high interest rates charged by the rich, rice industry specialized companies emerged to help the farmers. There were altogether 32 companies established in Ayeyarwaddy Division, Bago Division and Rakhine State. In 2009, the companies had issued agriculture loans amounted to more than 10 billion Kyats

and almost all loans had been reportedly collected. That mount covered 10 percent of the sum issued by MADB. Even the loans were provided by the companies, the farmers still borrow short term loans from the rich. Therefore, it highlights the need of microfinancing for the rice industry. The farmers from a place where there is no establishment of rice industry specialized companies want the companies to come and perform similar activities. The emergence of rice industry specialized companies is the deep involvement of private sector in the initial stage of rice supply chain, such as supporting agriculture loans, providing quality strains, assisting facilities and modern methodologies. Especially delivering selected quality strains will enhance the high quality products at the coming harvesting time. We can dream of quality seed production companies that will come into being in the near future. Source: CJ Vol:10, No:29,2-8-

2010

Tin Cho Oo

Annex 6: MNTN Development Partners and its Activities

No.	Organization	Surveillance	SF/TF	IYCF/IEC	Micronutrients	Remarks	Areas
1	Action Contre La Faim						Maungdaw, Buthidaung and Sittwe
2	ADRA					MC-Positive deviance	Labutta
3	Amara Foundation					No more Nut: Acivities- potential depending on resource	
4	AMDA						Kokant special region 1-Loikai and Konegyan
5	Aide Médicale Internationale						NRS(Screening,HE)Dala,Twante and SeikgyiKhanaungto (Nut:Support to PLHA)
6	Médecins Sans Frontières - Holland (AZG)					Surveillance, ATFP	Hlaing Tharyar, Maungdaw south
7	Care					As CP of WFP,Distrbution of dry ration to PLHA	Nargis area,Kayah State,Distribution of dry ration in 5 townships in Mandalay Division and Monywa,Mawlamyaing,Muse,Mudon and Lashio
8	FAO					Information-FS- Nutrition	In planning
9	GAA-Welt Hunger Hilfe					No more Nut: Acivities in the Delta	As WFP partner in Wa Special region 2.
10	IRC				4		Middle Island (Labutta)
11	Malteser International						NRS(Maungdaw)
12	Médecins du Monde					Food supplementation to PLHA	Yangon,Myitkyina
13	Merlin						Labutta,Thantlang,Hakha
14	Myanmar Friendship Foundation						Dedaye,Twante,Mawlamyainggyun
15	МНАА					No more Nut: Acivities, potential depending on resource	
16	Médecins Sans Frontières - Switzerland MSF (CH)						Dawei
18	NNC(MOH)					whole country through Basic Health Infrastructure	
19	Pact					Food distribution	Child nutrition eg HE on exclusive breast feeding through mother groups in Pwint Phyu Township in Magway Division

No.	Organization	Surveillance	SF/TF	IYCF/IEC	Micronutrients	Remarks	Areas
20	Relief International					Mobile PHC clinic - collect baseline MUAC data and training to CHW, micronutrient supplementation to pregnant & lactating women and children	Bogale (KyeinChaungGyi VT), Phapone, Dedaya, Kungyangone
21	Save the Children in Myanmar					IYCF and safety nets for breastfeeding mothers	Kungyangone, Mawgyun, Middle islands, Hline bone, Magway, Minbu, Pakokku, Pwintphyu,
						Maternal and Child Nutrition - Supplementary Feeding for U3 and PLW	
						IYCF and Supplementary feeding for MAM and PLW	Thegone
						Through Basic Health Staffs, NNC, DOH in 325 townships	(1) Biannual Vit. A supplementation campaign for 6-59 months old children in all 325 townships through Ministry of Health (MOH) (2) Biannual deworming campaign for 2-9 years old children in all 325 townships through MOH (3) Vit. A, Vit B1, Iron/folate supplementaiton and deworming for preganant and/ or lactating mother throughout the year in all 325 townships through MOH (4) lodized salt production, usage and monitoring through Ministry of Health and Ministry of Mine.
22	UNICEF					2. Through ACF in NRS 3. Through WFP in Wa, Kokant and Magway	(5) Hospital Based Management of Acute Malnutrition in 22 Hospital Nutrition Units through MOH (6) Community Based Management of Acute Malnutrition - TF 2 townships in delta through MOH, 3 townships in NRS through ACF and MOH, 2 townships in Chin; Nut surveillance for timely warning in Delta, Chin & NRS townships through MOH (7) Proper Infant and Young Child Feeding - advocacy, training, supplies and equipments through MOH in all 325 Townships (8) Production and distribuiton of more than 10 kinds of IEC materials for all 325 townships (9) Nationwide Studies/ Surveys e.g School Based Survey on Household Iodized Salt Consumption, Urinary Iodine Excretion Survey, Food and Nutrition Survey, Scope and Causes of Infnatile Beriberi Study, Low Birth Weigh Study, Micronutrient Sprinkle Study,
23	UNHCR					Through implementing partners	Maungdaw,Buthidaung and Sittwe
24	World Concern Myanmar	<u> </u>				Control William St. Fac.	Kyaikhto
25	WFP					Food Security, Blended food distribution ,HE and support HIV/TB patients	Magway,Lashio,NRS,Delta
26	WHO					Normative functions	

No.	Organization	Surveillance	SF/TF	IYCF/IEC	Micronutrients	Remarks	Areas
27	World Vision						Kawthaung,Hlaingtharyar,Pathein,Myeik,Kengteng,Tachilek, Chauk,Yenanchaung (WFP Ready made food package distribution), Kokant (Food for work)

Red letters are updated ones based on MNTN workshop updates on 16.9.09

Blue-- added May 2010 by bilateral contacts

Annex 7: Building Better Food Security Information Systems in Myanmar

The Scoping Study resulted in the following 14 recommendations:

1. Responsibility and Roles of Institutions for Better Coordination

- 1.1 Activating the role and responsibility of National Food Security Committee (NFSC)
- 1.2 Strengthening early warning and risk mitigation

2. Building Capacity to improve Skill, Technique and Analysis

- 2.1 Training on Data Collection, Management and Analytical Tools: from Data to Information
- 2.2 Strengthening Market Information System

3. Exchange of Food Security Information: Formal to Action

- 3.1 Convene Regular Meetings to Exchange Information
- 3.2 Initiate Information Sharing at Divisional/Provincial Level
- 3.3 Develop Web- based Information Exchange
- 3.4 Use the Media

4. Improve Data Quality and Develop Data Source

- 4.1 Build Consensus on Food Security Indicators
- 4.2 Improve Data Quality on Crop Forecasting
- 4.3 Build Food Security Database for Livestock and Fishery Market information

5. Linking Food Security Information to Decision Makers: Building Efficient Information Providers

- 5.1 Help Upper Level Decision Makers support understanding Food Security Informatio4
- 5.2 Introduce Food Security Information at Divisional/Provincial Level
- 5.3 Work with Donors to harmonized understanding Food Security and related Issues

The following nine activities are proposed to implement the recommendations.

- Activity 1: Establishing the structure of a coordination mechanism to improve food security and nutrition (Recommendation 1.1, 3.1 and 3.2)
- Activity 2: Building capacity for food security analysis and reporting (Recommendation 2.1, 3.1)
- Activity 3: Build consensus on food security indicators (Recommendation 4.1)
- Activity 4: Establishing a web based information exchange (Recommendation3.3)
- Activity 5: Strengthening market information systems (Recommendation 2.2, 4.3)
- Activity 6: Improving data quality in crop forecasting (Recommendation 4.2)
- Activity 7: Introducing food security information systems to decision makers (Recommendation 5.2)
- Activity 8: Convening informative workshops to promote the importance of food security information (Recommendation 5.1, 5.2)
- Activity 9: Strengthening early warning system and disaster preparedness (Recommendation 1.2)
- Activity 10: Study agriculture market behaviour in disaster prone areas (Recommendation 2.2)

Activity 1: Establishing Structure of Coordination Mechanism of Food Security and Nutrition at Central Level to improve Information Networking

Background and Justification

The National Food Security Committee (NFSC) consists of 13 members chaired by the Minister for Agriculture and Irrigation and the Minister for Livestock Breeding and Fisheries, and co-chaired by the Minister for Forestry. Members of the committee include Deputy Ministers from relevant Ministries and Presidents of Union of Myanmar Federation Chamber and Commerce Industry, Myanmar Women Entrepreneurs' Association and Myanmar Maternal and Child Welfare Association. The Director General of the Department of Agricultural Planning acts as Secretary.

Supporting groups are essential for decision-making of the NFSC in guiding food security policy and projects to improve food security information system. Terms of references of these supporting groups are needed to manage the implementing activities and for monitoring and evaluation purposes. There are prototype structures of food security coordination mechanisms practiced by other countries, which could be considered in order to set up the supporting groups to be in line with the country's institutional structure and responsibilities of the agencies involved in activities to improve food security. Supporting groups and their terms of references are not well established yet at present. Therefore, it is expected that the proposed structure of coordination mechanisms will provide the pieces of information to be considered in establishing complete structure to facilitate coordination among the agencies to improve food security information systems. This requires in-depth discussions on the proposed structures of coordination mechanism among the concerned agencies to reach consensus and also requires advocating the upper level decision-makers. With the establishment of this structure, participation of information users will help keep food security information systems on track and demand driven. To emphasize the participatory nature of this group, it is proposed that the chair and co-chair of the NFSC should be on rotational basis.

Objectives and Expected Outputs

The objectives are to: (1) enhance coordination and harmonization of food security activities and methods; (2) facilitate the exchange of food security information between producers and users; and (3) provide essential information to the National Food Security Committee to enable them to make more informed decisions.

The expected outputs include: (1) harmonization and coordination of methods and assessments resulting in less duplication of information and consensus on key food security indicators; (2) improved information exchange and sharing through websites and media; (3) establishment of a demand driven and responsive food security information system; (4) more informative reports to government and other decision-makers to allow for appropriate and effective action.

Main Activities

- 1. Study the structure of the coordination mechanism and hold discussions to reach a consensus;
- 2. Propose the mandate, terms of references, and networking activities, to be approved by the NFSC through support of FSNC. Submit the coordinating mechanism and networking activities to the Cabinet for approval;
- 3. Convene regular meeting of the NFSC and FSNC with FSATG and MNTN on a regular and frequent basis, as required.

Institutional responsibilities

As secretary of the NFSC, the Department of Agricultural Planning will be the primary agency to undertake the main activities and advocate NFSC to get approval from Cabinet. DoPS, DOH, CSO are key agencies to assign the members in Technical Working Groups and networking coordination.

Indicative Budget and Timing

There is no cost implication. Need to undertake immediately.

Activity 2: Build Capacity for Food Security Analysis and Reporting

Background and Justification

In order to improve the food security information system, it is necessary to build capacity in data analysis, collection and the transformation of data into information for reporting. Two steps can be taken to ensure staff meet the required skill level: (1) the development of technical skills through appropriate training in methodology and analytical tools; and (2) enhance reporting skills by using the web and media for networking and communications.

To ensure the necessary technical skills are present amongst government staff, intensive training on methodology, data management, and processing should be conducted. Necessary analytical tools should also be provided to improve the analyses of data. The trainees will be chosen from core analyst group members and also from the staff assigned in planning and statistics departments under the MOAI, MOLF, MOC, MNPED, CSO and MOH. FAO could facilitate this training, explore training modules of various technical institutes, or develop training modules.

To help information providers reach decision-makers, stakeholders and users throughout the country, training is required for reporting, networking and communication. Trainings on the effective use of media is also required. The media is an effective way to disseminate information, and presents an opportunity to reach less educated individuals. With radios and televisions being spread throughout the country, the media is one of the most effective ways to disseminate information to the people living in villages. Training will target food security information producers from government agencies and from other stakeholders that use government media, particularly radio, television and Sunday Talks, to report information and disseminate the information to target groups.

Various alternatives exist for delivering these training activities. FAO and various academic institutions under the ASEAN development programs like SEARCA have developed training modules and materials on reporting skills, using the media and market analysis for food security. These institutions may assist in training activities. Alternatively, international and regional consultants could be recruited to conduct trainings in the country.

Objectives and Expected Outputs

The objectives are: (1) to improve the methodology and analytical skills of the assigned staff from core analysis groups and the staff from relevant agencies; (2) to produce more effective food security reports; (3) to enhance networking and communication through the media.

The expected outcomes include: (1) informative reports that are likely to be more understandable to different levels of users; (2) a better networking communication to all stakeholders; (3) a more thorough food security analysis to support informed decision-making.

Main Activities

- 1. Identify development institutes in the region and collaborating partners to conduct trainings;
- 2. Conduct the trainings.

Institutional Responsibilities

The proposed Food Security and Nutrition Steering Committee (FSNSC) should take the lead role in organizing these training activities. FAO, DAP, and ASEAN focal agencies for AMAF should contact potential training institutions and explore donor agencies for support. Priority for participation in training activities should be given to members of the core analyst group and cross-cutting relevant institutions as often as possible.

Indicative Budget

Activities	Unit	Rate (US\$)	Cost(US\$
Consultancy services			
1. Ago-Met Expert	20 days	300	6000
2. FSIS Expert	20 days	300	6000
3. Analysis Expert	20 days	300	6000
Travel (air fare & per diem)			
1. 3 Experts		5000	15000
Training for 20 trainees	20 personsx20 days	20	8000
Reporting skill practices	20 persons x 10 days	30	6000
Networking & media dealing			2000
Logistics & Materials			1000
Total			50000

Timing: Training should commence as soon as resources and collaborating partners have been identified.

Activity 3: Building Consensus on Food Security Indicators⁶

Background

Myanmar has been experiencing a greater frequency of climate related hazards that impact the food security of the country – especially in the dry zone region. In recent years there has been a growth in the number of national agencies and civil society groups working to improve food insecurity. As a result the need for a common understanding of food insecurity is required. The dry spell last year – called by many 'a drought' – highlighted the uncoordinated analysis of the problem and demonstrated the need for a more common approach to determine the severity of a crisis and decisions making process required for an appropriate response.

Purpose

The purpose of this intervention is to contribute to the development of a common set of agreed indicators and approaches that can be used to measure and determine the severity of food insecurity in Myanmar.

A three-step approach will contribute to this common purpose. The first step will be to collect and develop a synthesis of all relevant indicators and tools used by key stakeholders in the food security sector. The second step will be to hold a workshop with partners and government to present and agree on the findings of stage one. The final step will be to develop a common set of credible food security tools and methodologies that can be used by FSWG members and other stakeholders for the collection and analyses of food security data.

Expected Outputs

- 1. A set of common indicators to assess the severity of food insecurity and measure the impact of food security programmes.
- 2. A set of tools and methodologies for gathering, analysing and presenting different levels of food security information.
- 3. A general consensus from agencies in the food security sector on the minimum requirement of information needed to be collected and presented to demonstrate the food security situation in a credible manner.
- 4. FSWG members that have the knowledge and capacity to carry out FS assessments to the defined standard.
- 5. A comprehensive joint assessment of the dry zone for information and advocacy purposes.

Main Activities and Timeline

Step 1: The Consultation (12 working days)

This step will be a proactive collection and review of existing material used by national and international agencies to monitor and analyze food insecurity and food security projects in Myanmar. The purpose of this step is to gather indicators, questionnaires, databases, reporting formats, analytical frameworks etc., and order the information needed for step 2. The ordering of information will follow the logic of gold, silver and bronze standards of food security programming. This categorization will be done based on the resources of the implementer, the capacities and ability of staff/organizations, and the degree of confidence of information.

Step 2: The Workshop (3 working days)

This step will be a national workshop to present the findings of the step 1 and get agreement from the partners on the best approaches to take forward following the workshop. The workshop will lead to the definition of suitable food security indicators for measuring the severity of food insecurity and the impacts of food security programmes. Another product of this workshop will be a set of tools needed to gather and present information in a coherent manner.

Step 3: The Finalization and Testing of Tools (25 working days)

This step will involve taking the outcomes of the workshop, proceedings and agreements and develop a set of tools that will be suitable for all agencies to conduct a credible food security assessment and measure the

⁶ Reference: Concept Note prepared by FSWG

impact of food security projects. The tools will be tested as part of the dry zone joint assessment. The process will provide an opportunity to engage the Ministry of Agriculture and open up the comparison of food insecurity in the dry zone area.

This whole project will be done over a period of three months.

Institutional Responsibilities

FSWG has the potential capacity to implement the main activities. FSATG and MNTN will support the project by encouraging government agencies to participate in the activities and provide required information.

Indicative B	udget US\$
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Step 1	6,500
Step 2	3,500
Step 3	<u>15,000</u>
Total cost	25,000

Activity 4: Strengthening Early Warning System and Disaster Preparedness

Background and Justification

Early warning information on agriculture, livestock, fisheries, nutrition and meteorology is provided by the respective departments including the Myanmar Agriculture Service (MAS), Livestock Breeding and Veterinary Department, Fishery Department, Department of Health Planning (DoHP), and Department of Meteorology and Hydrology (DoMH). If there is a warning for the public, respective departments will prepare the early warning information and disseminate it mostly through radio, television and newspapers. The National Disaster Preparedness Central Committee (NDPCC) was formed in 2005 and is chaired by the Prime Minister. The Disaster Preparedness Planning Committee and sector wise Sub-Committees have been formed to develop preparedness plans for prevention and emergency response based on the type of disaster such as flood, earth quake and tsunami, forest fire, drought, landslid, snow storm and/or storm. Their primary role is to prepare activities that deal with preventive measures, early warning, and rehabilitation in the event of a disaster. In order to produce early warning information on a reliable basis, they need data and information of likely occurrence of disaster.

Building a network of food security information producers and core analyst groups will support these sub-committees in their efforts to prepare regular reports and early warning messages. To ensure the consistency of estimation and forecasting methods, the use of advanced analytical tools during analysis is essential. This requires assistance from a donor agency to acquire the analytical tools needed to produce reliable early warning information. FAO could be asked for technical support as required by the concerned government agencies. Relevant information should be disseminated in a timely and regular basis to ensure that the public is aware of prevention and preparedness methods for disaster situations. In this context, the Monsoon Forum and other educational resources should be addressed immediately when resources are available.

Objectives and Expected Outputs

The objectives are: (1) to build the capacity of the assigned staff in preparing information for early warning and disaster preparedness activities; (2) to produce comprehensive, reliable and timely information and reports as needed by peoples from target areas, information users and decision makers.

The expected outputs are: (1) a well functioning early warning system; (2) timely and informative reports and announcements for target peoples, stakeholders and users to prepare for a disaster; (3) well informed community awareness activities.

Main Activities

- 1. Monsoon Forum to be convened in two places Nay Pyi Taw and Yangon in 2011 with participation of government agencies and stakeholders, particularly INGOs, local NGOs, and donor agencies;
- 2. Seminars or workshops covering similar topics as the Monsoon Forum to be convened in five selected States and Regions.

Institutional Responsibilities

International experts are invited to contribute their experiences and knowledge in the forum. The Department of Agricultural Planning will play key role in organizing the activities as well as cooperating with the Department of Meteorology and Hydrology and other relevant agencies.

Indicative Budget

The indicative budget is based on one year of activities that is estimated at US\$5,000 and covers two Monsoon Forums and seminars in five States and Regions. International experts are invited to share their knowledge and experiences in the Monsoon Forums. These activities should be operated annually for three consecutive years. Donors may support funds for the follow up activities.

Timing

Need to start as soon as possible before next monsoon season. To be effective the activities need to be continued at least consecutive three years.

Activity 5: Establishing a Web-Based Information Exchange

Background and Justification

The National Food Security Committee (NFSC) has been formed in Myanmar. The study proposes to establish a coordination mechanism between the Food Security and Nutrition (FSN) Steering Committee and supporting Working Groups to activate the food security information system and to improve information exchange within the country. The mechanism should organize the food security information produced from various agencies and institutions on a website to allow for easy access by the users. Therefore, a web based networking unit should be established to promote the free and easy exchange of food security information within Myanmar and internationally. Once we join the exchange, all available data, analysis and reports will be accessible immediately.

In the proposed coordinating mechanism structure, one networking unit is to be established and located in Department of Agricultural Planning (DAP), which is the secretariat office of the NFSC. The existing website established by the DAP needs to be improved and strengthened by launching web pages that cover all cross sector information related to the food security. Users of the website will be able to search for information by type, subject matter, events, demography or institutions, as well as communicate with one another and share information.

Downloadable software and web based applications will be available free of charge, and can be easily adapted and customized to meet the particular requirements in connection with food security. This will support the public awareness campaign and ensure broad base participation in the exchange.

Objectives and Expected Outputs

The objective is to provide free access and easy information collection and exchange of food security and nutrition information via the Internet.

The expected outputs include: (1) enhanced access to food security and nutrition data and information; (2) a well established information exchange centre for all producers and users; (3) better use of food security information and more informative mechanisms for the decision making process.

Main Activities

- 1. Web base launching supported by consultancy services;
- 2. Customize food security and nutrition information network;
- 3. Prepare advocacy awareness plan and materials;
- 4. Linking information and decision making;
- 5. Overall maintenance of site and quality control of data and information.

Indicative Budget

Particulars	Unit	Rate(US\$)	Cost(US\$
Consultancy services			
International FSIS Expert for website development	30 days	500	15,000
National FSIS Asst. for launching services	30 days	80	2,400
International Expert for support	15 days	500	7,500
National Profession for support	15 days	80	1,200
Software/customization & web master			15,000
Travel (air fare & per diem			
FSIS Expert for launching			7,000
Trainings for web management & networking	3 days	400	1,200
Advanced material			4,200
Total			50,000

Institutional Responsibilities

The Department of Agricultural Planning under Ministry of Agriculture and Irrigation will manage the website maintenance and networking. The Core Analyst Group, under the supervision of the Food Security and Nutrition Steering Committee, will take the overall responsibility for data collection, processing, analysis, management, exchange of information, and networking.

Timing

Launching the web based food security and nutrition data and information at the existing www.moai.dap.mm website can begin immediately. Trainings for website management and networking can start after assigning the members to the Core Analyst and Networking Group.

Activity 6: Strengthening Market Information System

Background and Justification

The Market Information Service (MIS) was established in 2000, and is operated by staff from the Department of Agricultural Planning, Ministry of Agricultural and Irrigation (MOAI). Agriculture commodity prices are collected daily in Yangon and Mandalay city markets, and on every Wednesday in other locations. In total, MIS covers 11 cities or towns. These price data, price trends and commodity flow information are printed in the weekly MIS Agribusiness News Journal which is also available online at www.moai.dap.mm. The printed journal is distributed through agriculture extension agents but does not reach the farmers until at least two weeks after publication. Daily market prices of livestock and fishery commodities are available in municipal markets. Systematic price collection, data management, and analysis is not be done yet. However, some fishery and livestock commodity price data are mentioned in some private journals. The collection method, analytical tools and market information trainings required for the staff of MIS, Fishery Department (FD) and Livestock, Breeding and Veterinary Department (LBVD) should be strengthened. Regular commodity market prices and commodity flow information on fishery and livestock could be sent by assigned collectors of FD and LBVD and organized at the MIS unit for further analysis and informative reporting. The Directorate of Trade (DoT), Ministry of Commerce has a public access website as well as a subscription site www.maynmartradenet.com where retail prices of major trade commodities and foreign trade information are available. Close relation between MIS and the Information Unit of DoT could strengthen the market information system in Myanmar.

Myanmar Radio and Television (MRTV) already broadcast an agriculture extension program for MOAI. If market price broadcast is included in the program, it would be a valuable exercise to fill up the information gap that is required by the users. Discussion should be initiated between the MOAI and the Ministry of Information, the parent body of MRTV, to explore the possibility of initiating market price broadcasts on a daily basis. In dealing with broadcasting through MRTV, training for MIS staff should be arranged to ensure the most effective messages of market information are sent to public.

Objectives and Expected Outputs

The objectives are: (1) to upgrade the skills of MIS staff and assigned staff for market information from FD and LBVD in the collection and analysis of price data and to explore how they can best supply additional market-related data to Head Office; (2) to strengthen the capacity of operations by providing appropriate software and ICT facilities; (3) to improve the methodology and techniques used for producing information.

The expected outputs are: (1) a well organized market information system that covers food security and other related inputs and trade information; (2) public access to market information through a website; (3) a new generation of skilled staff in MIS.

Main Activities

- 1. Two one-week training sessions for assigned staff in MIS unit (agriculture, livestock and fisheries) to improve skills in data base management and analysis;
- 2. Provision of the advanced software and operating facilities;
- 3. National market information workshop, with participants including the market information staff, information providers from the private sector, and representatives from media.

Indicative Budget

Particulars	Unit	Rate	Cost US\$
Training for data base	30 persons x 10 days	20	6000
Consultancy	10 days	500	5000
International travel & per diem			4000
National workshop	1 time		1000
Software & materials			10000
Total			26000

Institutional Responsibilities

The MIS Unit, located at DAP, is primarily responsible for data management and analysis to produce information to the public. FD and LVBD will assign the price information collectors and send price data regularly to MIS Unit. DoT will support trade data and information to MIS Unit and also provide technical support to facilitate web customization.

Timing

Start immediately; as soon as possible after forming network group at DAP. Trainings and practice have a sixmonth duration.

Activity 7: Improving Data Quality in Crop Forecasting

Background and Justification

In the agriculture sector, village level staffs collect raw data and provide information that is then compiled in townships. After supervisors at different levels check the subsequently compiled data, it is finally reported to the headquarter office. Primary data are collected, recorded, and compiled on paper manually. Without proper training in data processing and management, and a lack of electronic facilities at township, district, and some divisional levels, it is difficult to manage corrected data throughout frequent reporting periods, particularly for weekly reports on crop sown areas and production. Agricultural data are compiled from field visits of each surveyor who then records data on a cadastral map. A digitized mapping system is initiating in some areas and intends to eventually cover all cadastral map areas. This mapping system is an effective mechanism in land resource management and administration as well as for accuracy in crop forecasting. With SLRD being the key agency undertaking these activities, its capability should be strengthened by recruiting technical professionals and call for support facilities. Support is needed for the appropriate training of intermediate level staff to improve technical skill in information management, and technical trainings for modern GIS and digitized mapping.

Objectives and Expected Outputs

The objectives are to: (1) establish an effective mechanism for land resource management; (2) improve the accuracy of crop forecasting and land resource allocation; (3) develop a better land management and land record system.

The expected outputs are: (1) digitized maps with better land resource images; (2) crop forecasting records with high levels of accuracy; (3) trained staff with GIS and digital mapping technology skills.

Main activities

- 1. Data management and forecasting training for staffs from all Divisions/Provinces, as well as staff from headquarter, to be conducted by an international expert;
- 2. GIS and digital mapping training for 10 participants abroad;
- 3. Application of digital mapping in crop forecasting for practical use and exercises.

Institutional Responsibilities

The Settlement and Land Record Department will be the counterpart agency to carry out the proposed activities. The Survey Department under the same Ministry will support mapping facilities. SLRD is given the mandate as the main responsible agency in data management, recording of land, and crop forecasting. The staff from SLRD will participate in all activities as trainees.

Timing – 3 years

Indicative Budget

Particulars	Unit	Rate (US\$)	Cost (US\$)
1. Consultancy Expert	30 days	500	15,000
2. Remote sensing & GIS training	10 persons	8500	85,500
3. GIS/RS/GPS/Image map			144,000
4. Travel cost & Sundry			15,500
Total			260,000

Activity 8: Introducing Food Security Information System

Background and Justification

Food security information is used by a wide variety of users for different purposes. Its ultimate use is to enable decision makers to make correct and timely decisions. Decisions are made at all levels of society, including policy makers, planners, household, and individuals. International organizations, NGOs, and private business sectors also need information for making decision related to their activities. Researchers and interest groups use the information as reference in their reports and publication. Therefore, improving food security requires well informed and appropriate decision.

Due to broad nature of food security, it can be difficult to understand by all users. Sometimes food insecurity is equated with food aids or increased production. Even if data and information is available and disseminated timely, it may not be clearly understood by all users. It needs advocacy with upper level decision makers and planners so they understand the emerging issues for food security. Introducing an efficient use of food security information should be discussed at a half-day retreat in the capital city with guidance from the National Food Security Committee and cooperation of Food Security and Nutrition Steering Committee.

A similar retreat should also be held in Yangon for stakeholders, donors agencies, international NGOs, and local NGOs to introduce the current reality of food security and different dimensions in order to consider how they can play their part in supporting of requirements for food security.

Objectives and Expected Outputs

The objectives are to: (1) ensure senior level government and non-government decision-makers understand key issues of food security in Myanmar; (2) ensure the understanding and the efficient use of information to support their better decision-making.

The expected outputs are: (1) a more informed system available for senior level decision-makers; (2) building better mechanism between government and non-government organization for cooperating on food security issues.

Main Activities

- 1. Try to support the main agencies (DAP, CSO, DoHP, NNC, FD, LBVD, DoT), with coordination of FSATG and MNTN, in advocating upper level decision-making bodies on food security information system
- 2. Prepare materials needed to introduce food security information to senior level decision-makers.
- 3. Identify a skilled facilitator who can present the setting and concept of food security information.
- 4. Chair and members of the National Food Security Committee and senior level decision-makers from relevant Ministries, private sector associations and INGOs and NGOs are invited to participate.
- 5. Convene workshops; one in Nay Pyi Taw and one in Yangon.

Indicative Budget

Particulars	Unit	Rate	Cost US\$
Facilitator	3 days	500	1500
Prepare materials	2 days	250	500
Workshops	2 places	1000	2000
Logistics			1000
Total			5000

Timing

Follow activity 1 as soon as possible. Preparation of workshops takes 2 months.

Activity 9: Convene an Informative Workshop to Understand the Importance of Food Security Information

Background and Justification

For administrative purposes, there are 14 States and Regions in the country. State and Regional communities require a clear understanding of the food security information system including what it is used for, how it is disseminated it, and how to provide feedback to information producers. Decision markers at State and Regional levels are the key players in communication mechanism between users and producers and must therefore have a clear understanding of food security information.

Similar to the proposed activity 8, which deals with introducing food security information system at the central level, similar meetings or workshops are required at State and Regional levels. State and Region personnel from most Ministries are required to feed information up to the central level as well as to decision makers at the grass root level and village staff. At this middle level, exchange of information between agencies is weak as data are recorded and mostly used for the agency's own purposes. To exchange information in a well functioning manner, regular meetings and workshops related to food security information should be convened and chaired by the Regional Manager of the Myanmar Agriculture Service who is the chairman of the state/region Agriculture Supervision Committee.

As the State/Regional personnel from relevant line Ministries will also become producers of the information, they must first understand the value and effective use of information that is required for their jobs. They should also understand how their information can be used for food security related analysis.

It is recommended that the initial effort of this meeting and workshop activity be convened at two cities and at five selected places of state and region cities (Mandalay city, Taunggyi township, Mon Ywa Township, Magwe Township and Pathein Township) where representatives from other neighbours States and Regions are able to attend. Once this is complete, a similar follow-up activity should be held at the township level by the arrangement of state/region Agriculture Supervision Committees.

Objectives and Expected Outputs

The objectives are to: (1) facilitate the exchange of food security information between producers and users at State and Regional levels; (2) create awareness and understanding on the usefulness of food security information.

The expected outputs are: (1) a support mechanism for decision-makers on planning and implementation process; (2) appropriate interventions related to food security issues.

Indicative Budget

Particulars	Unit	Rate	Cost US\$
National Workshop	2 places	1,000	2,000
Sub-national Workshops	5 places	1,000	5,000
Logistic support			3,000
Total			10,000

Main Activities

- 1. Seek support and coordination of senior officials from line Ministries.
- 2. Prepare materials to introduce food security information to users and producers at sub-national levels.
- 3. Convene initial workshops in two cities, one in Nay Pyi Taw and one in Yangon, following five workshops in five selected locations where representatives from remaining States and Regions are able to attend.
- 4. Develop a plan to repeat these activities at community levels.

Institutional Responsibilities

For activities at all locations and levels, the Department of Agricultural Panning, with coordination and support from the Directorate of Planning and Statistics of MOLF, CSO and Department of Health Planning, will organize the workshops, meetings, and take a lead role as the chair of the workshops in both cities. At the State and Regional level, the Chairman of the Agriculture Supervision Committee will chair the workshops and meetings with full collaboration of relevant line state agencies.

Timing: The activity should begin once the proposed coordination mechanisms become functional.

Activity 10: Study Agriculture Market Behaviour in Disaster Prone Areas

Background and Justification

At the local level, disasters can significantly impact household livelihoods and push already vulnerable groups further into poverty. The loss of income earners, through death or injury, the interruption of production or access to markets, and the destruction of productive assets are all examples of how cyclones can affect local and household economies. Often such impacts are worsened by an accumulation of everyday and frequently occurring small-scale hazards that can erode livelihoods over a period of time. The capacity of a household or local community to absorb the impact and recover from a major natural hazard is significantly limited due to their weakened economies. A lack of diversity in the economy can also undermine security, whether it is of a household or nation. The importance of diversification for rural livelihood sustainability has long been recognized as a mechanism to cope with changing market conditions and climatic fluctuations. There is a tension here between the dictates of global trade, which push countries towards specialization, and the insecurity that a lack of diversity brings. This is the case particularly for countries like Myanmar that "specialize" in primary agricultural commodity exports such as rice and pulses.

The study area will include the Nargis affected Areas in Ayeyarwady Division (Bogalay and Pyarpone Township) and the focal market (Yangon) and Magwe township in the dry zone area. A field study for collecting primary data will be carried out to assess the current performance of the agricultural markets both in production and focal wholesale markets, and the value chain impact in market behaviour. The stratified random sampling procedure will be employed when collecting the primary data. Farmer, primary collector, miller, wholesaler, and retailer are considered as different strata sampling units to understanding their behaviour within marketing system during policy changes or disasters such as drought saturation. These time series data will be obtained from the Market Information Service (MIS), which is under the Ministry of Agriculture and Irrigation. Other necessary secondary data will be gathered from published documents and official records of the Ministry of Agriculture and Irrigation (MOAI) and other relevant institutions.

Objectives and Expected Outputs

The objectives are to: (1) examine the market performance of rural markets and propose measures to facilitate the role of markets in improving the welfare of poor households; (2) examine the marketing costs and margins along the various marketing channels of selected crops (rice, pulses and oil crops) by observing market behaviour and functions of market intermediaries; and (3) propose government interventions to improve the livelihoods of the rural people in the long run.

The expected outputs are: (1) potential market demand for major food commodities and opportunities for product promotion; (2) impact of marketing chain and market behaviour on household income and expenditure on food; (3) proposed interventions to improve rural livelihood.

Indicative Budget

Particulars	Unit	Rate (US\$)	Cost (US\$)
National Consultancy	2 persons	2,500	5,000
Survey contract	2 places	5,000	10,000
Enumerators training	40 persons		1,000
Travels			3,000
Materials and reporting			1,000
Total			20,000

Institutional Responsibilities

Two agricultural economists from Yezin Agriculture University will undertake overall study and analysis as national consultants. Analysis and reporting are to be completed on contractual terms.

Timing: Start as soon as possible as resources are available.

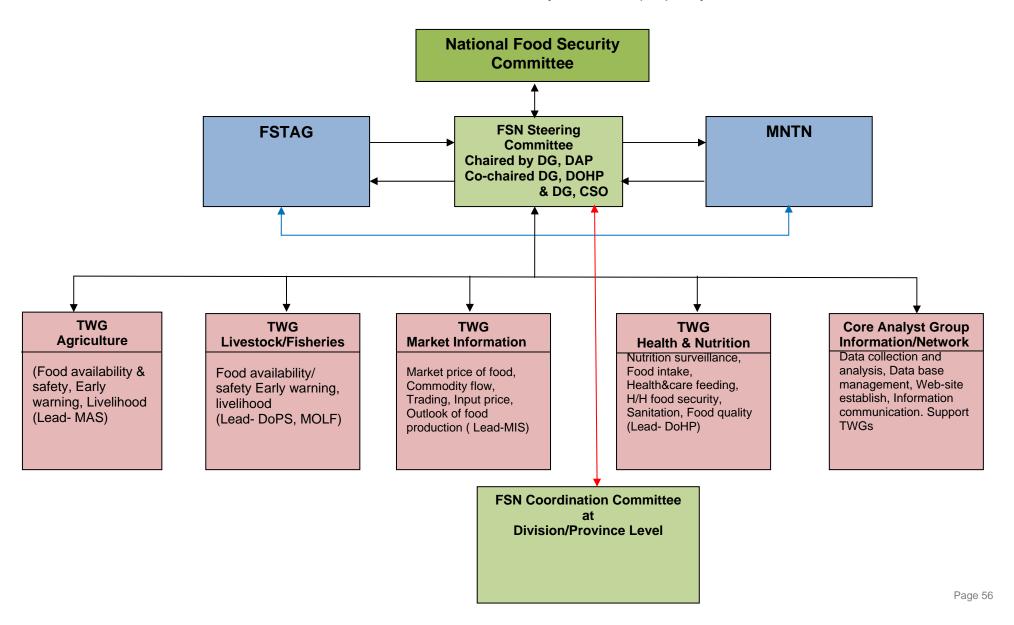
Annex 8: Information Pamphlets for Disaster Preparedness





Annex 9: Proposed Structure of Coordination

Coordination Mechanism of Food Security and Nutrition (FSN) in Myanmar



Annex 10.1: TOR for Permanent Secretariat of the TWG on FSN - Cambodia

Background

Food security will be achieved "when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food, and meet their dietary needs and food preferences for an active and healthy life".

FSN is addressed in Cambodia's Millennium Development Goals (CMDG) and specifically in the first Goal aiming at the eradication of extreme hunger and poverty. Food and Nutrition Security contributes to and is influenced by poverty reduction and is related to various sectors such as agriculture, health, rural development and education. A cross-sectoral and integrated approach with enhanced coordination among all stakeholders is, therefore necessary to improve FSN in Cambodia. The Royal Government of Cambodia (RGC) assigned the responsibility to coordinate food security issues to the Council for Agricultural and Rural Development (CARD). Chaired by H.E. Dr. Yim Chhay Ly, Deputy Prime Minister, CARD works with relevant ministries and local authorities in all provinces and in collaboration with UN agencies and national and international organizations.

To ensure the implementation of the recommendations made at two National Seminars on Food Security and Nutrition (1999 and 2003), CARD created the National Food Security Forum (FSF) in February 2003. The FSF meets on a monthly basis and has successfully served as a place to share information and to promote coordination among stakeholders, RGC, IOs and NGOs. In December 2004, out of core participants of the FSF, a "Technical Working Group on Food Security and Nutrition" (TWG-FSN) was officially established as one of the 18 government/donor TWG to coordinate and harmonize efforts of the RGC and the donor community in this area and to ensure that Food Security and Nutrition are adequately reflected in the NSDP and relevant sector strategies. The Secretary General of CARD and the Secretary General of the IMTC/NCN in MoP chairs the TWGFSN. FAO and WFP are providing co-chairs from the donor side.

The TWG-FSN will be supported by a secretariat, funded by both the Government and donor organizations.

Objective

The overall objective of the Secretariat of the TWG-FSN is to improve the effectiveness of the work of the TWG-FSN through supporting documentation and monitoring, enhancing information exchange, and promoting coordination and networking among the members of the TWG-FSN and with other TWGs.

Scope and Functions of the Secretariat

The Secretariat provides technical assistance and support and facilitating functions to the TWG and has the following main tasks:

- 1. to prepare and organize the meetings of the TWG-FSN quarterly and to elaborate and disseminate minutes and other work-output of the group;
- 2. to facilitate the establishment of annual work plans of the TWG and to monitor its results and draft the quarterly and annual progress reports to be submitted to CDC;
- 3. to facilitate the development of a national food security policy and to follow up the mainstreaming of the crosscutting issue of FSN in the NSDP process and relevant sector strategies;
- 4. to link on a regular basis with other TWGs and relevant stakeholders and enhance networking and coordination;
- 5. to establish and update a database on FSN-related interventions in Cambodia in cooperation with the FSNIS in CARD and other stakeholders;
- to analyze and disseminate relevant information, experiences and lessons learnt with regard to FSN in Cambodia and to provide relevant documents to the members of the TWG in cooperation with FSNIS and other stakeholders;
- 7. to facilitate the organization of joint program/project appraisal and evaluation missions on behalf of the TWG-FSN;

- 8. to provide managerial and logistical support to organize the national seminar on FSN as well as other events on behalf of the TWG; and
- 9. to carry out all other tasks as requested by the TWG.

Staffing and funding of the Secretariat

The Secretariat will be fully owned by the government with initial donor assistance. It is based in the Council for Agricultural and Rural Development (CARD). The secretariat is composed of at least 3 staff members: One experienced in FSN issues from CARD will be nominated to lead the Secretariat assisted by one deputy and one administrative support staff. (detailed Job-descriptions and profile needs to be developed)

The secretariat will be funded out of the annual CARD budget (staff and offices) and through contributions from the donors being members of the TWG. In 2006 and 2007 the FNPP7 on Food Security Policy for Poverty Reduction in Cambodia based in CARD will support the Permanent Secretariat, including the support for the operation, incentive for the staff and capacity building.

Equipment and operational cost

Equipment needed:

- 3 desktop computers
- 1 laptop
- 1 Laser printer
- 1 LCD projector

Annual operational cost:

Stationary and office supplies: USD 100/month

MBPI for 3 staff members: USD 1000/month

• Miscellaneous: USD 100/month

⁷ FNPP – FAO-Netherlands Partnership Program "Food Security Policy for Poverty Reduction"

Annex 10.2: TOR for TWG on Food Security and Nutrition – Cambodia

Background

Cambodia is one of the countries where more than 36 % of the population lives below the poverty line. Cambodia's first Millennium Development Goals (CMDGs) is to eradicate extreme hunger and poverty. Improved food security and nutrition (FSN) are consequently essential elements of the National Strategy Development Plan (NSDP). Setting clear strategic objectives, actionable measures and indicators are necessary to track progress towards the achievement of these goals.

Food security will be achieved "when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food, and meet their dietary needs and food preferences for an active and healthy life". This definition provided by FAO comprises three main elements, namely availability, accessibility and utilization of food.

FSN contributes to and is influenced by poverty reduction and is related to various sectors such as agriculture, health, rural development, education, gender and reduction of mother and child mortality. A cross-sectoral and integrated approach with enhanced coordination between all stakeholders is therefore necessary.

The Royal Government of Cambodia (RGC) assigned this latter responsibility to the Council for Agricultural and Rural Development (CARD). Chaired by H.E. Samdech Hun Sen, Prime Minister, CARD works with relevant ministries and local authorities in collaboration with UN agencies and national and international organizations. To ensure the implementation of the recommendations made at two National Seminars on Food Security and Nutrition, CARD created the national Food Security Forum (FSF) in February 2003. The FSN meets on a monthly basis and has successfully served as a place to share information and to promote coordination among stakeholders, RGC, IOs and NGOs. In addition, the Inter-ministerial Technical Committee of the National Council of Nutrition (IMTC/NCN), chaired by the MoP is in charge of coordination and monitoring of the Cambodian Nutrition Investment Plan (CNIP). Therefore the Secretary General of CARD and the Secretary General of the IMTC/NCN will chair the TWGFSN, co-chaired by FAO and WFP.

At the FSF's session of April 2004, it was proposed and then agreed to establish a formal working group that would have the mandate to examine issues at the policy level and to function as one of the country's Technical Working Groups (TWG). Indeed, to simplify and harmonize efforts of the RGC and the donor community, it was considered appropriate to introduce various fora where the elaboration of policies in pursuit of the country's development could be discussed. Following the announcement by the RGC of its Rectangular Strategy during the pre-CG meeting of 10 September 2004, the 17th TWG, i.e. the Technical Working Group on Food Security and Nutrition (TWGFSN), was officially created.

Objectives and Functions of the TWG

The overall objective and purpose of the TWG is to improve food security and nutrition in Cambodia, in pursuit of the CMDG through the formulation and observation of the national poverty reduction and other strategies. To this effect, the following specific objectives and functions will be pursued:

1. Coordination

Coordination between and among the RGC and donors is a key function of TWGFSN given the cross-sectoral nature of FSN. Building upon the progress of the FSF, the TWGFSN will further improve coordination between the government and donors, with particular emphasis at the technical level so that duplication of programmes/projects is avoided and that funding channels and decision-making processes are enhanced. Enhanced coordination, which promotes the identification of links and complementarities between the government and donors, as well as sectors, helps to coordinate the efficient allocation and use of scarce resources. It enables directing resources towards prioritized areas and facilitates joint interventions, reviews and thematic studies such as households food security, vulnerability and mapping.

The TWGFSN will also link with other TWGs, such as the TWG on Agriculture and Water, the TWG on Health, the TWG on Land Management and the TWG on Education as well as with the already existing national

coordination structures with regard to nutrition (National Council for Nutrition (NCN)/ Inter-ministerial Technical Committee (IMTC)) in order to facilitate dialogue and coordination at the national policy level and addressing policies/targets including NSDP/CMDGs at CG Meetings. Linkage will be ensured through simultaneous membership of these groups by members of the TWGFSN.

2. Share information among Ministries, donors and other organisations

The TWGFSN will serve as a platform to exchange information between the RGC and donors at the policy level as well as on technical issues related to FSN. It will provide a link and dialogue between high-level policy work and field level implementation and project work addressed in the Food Security Forum. The existing food security and nutrition information system in CARD will be further strengthened and used as tool to exchange information and maintain a database/inventory on projects in the area of FSN and their funding status. The TWGFSN will also provide regular feedback to the FSF to achieve an identification and common understanding by its stakeholders of issues related to FSN by its stakeholders.

3. Monitor and provide feedback on progress towards national strategies and policies, such as NPRS, CMDGs and the Rectangular Strategy

In the context of strategic and policy dialogue, the TWGFSN will identify, monitor and evaluate progress towards relevant objectives, benchmarks and indicators. For example, TWGFSN will support efforts to further streamline and operationalize the use of FSN indicators and to strengthen respective data collection, analysis and evaluation mapping. This would serve as inputs to the TWGFSN to track progress towards the achievement of the objectives of the NPRS and CMDGs and also support the setting of realistic objectives in the Government's quest to achieve the CMDGs.

4. Policy formulation and prioritization

The TWGFSN will support medium- to long-term policy formulation, sector planning and activity prioritization aligned to wider policy dialogues, such as the CMDGs, NSDP and the Rectangular Strategy. The TWGFSN will help identify, prioritize and fund innovative approaches and outstanding issues at the national policy level in this regard. The decision making process will also be assisted and facilitated by the TWGFSN.

However, TWGFSN will not duplicate the tasks of the various concerned line ministries, with the government continuing to play the main role in the planning, targeting, prioritization and identification of indicators, as well as actual implementation and monitoring.

Organization

The TWGFSN Co-chaired by CARD, MoP, WFP and FAO will meet not less than four times each year. The chair may require additional meetings to take place in times of need.

The TWGFSN will formulate an annual work plan with a set of realistic and achievable targets that take into consideration relevant cross-sectoral priorities and goals relating to FSN.

The results of the work of the TWGFSN will be more broadly disseminated within the Food Security Forum so that all stakeholders have a clear idea on the direction and link of their activities with national strategies, policies and goals.

The TWGFSN will have its permanent secretariat in CARD, assisted by WFP.

Membership (Tentative membership – to be confirmed)

Initial membership of the TWGFSN will be as follows:

1. Chair:

Government

Co-chair: CARD and MoP

<u>Donor</u>

Co-chair: FAO and WFP

2. Government:

- Ministry of Agriculture, Forestry and Fisheries (MAFF)
- Ministry of Land Management, Urban Planning and Construction (MLMUPC)
- Ministry of Education, Youth and Sport (MoEYS)
- Ministry of Health (MoH)
- Ministry of Water Resources and Meteorology (MoWRAM)
- Ministry of Women's Affairs (MoWA)
- Ministry of Rural Development (MRD)

3. Donor Organizations:

- AusAid
- CIDA
- DFID
- EU
- GTZ (German representative)
- JIKA
- UNDP
- UNICEF
- WHO

4. NGOs:

- CCC
- GAA
- HKI
- Oxfam GB
- Medicam
- PFD

The membership may be reviewed at any time by agreement of at least two of the three Chairs.

Annex 10.3: TOR for FSN Information Management Task Force - Cambodia

(Revised as of June 2010)

Background

Food security will be achieved "when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food, and meet their dietary needs and food preferences for an active and healthy life" (FAO-World Food Summit: Plan of Action, 1996).

FSN is addressed in Cambodia's Millennium Development Goals (CMDG) and specifically in the first Goal aiming at the eradication of extreme hunger and poverty. Food and Nutrition Security contributes to and is influenced by poverty reduction and is related to various sectors such as agriculture, health, rural development and education. A cross-sectoral and integrated approach with enhanced coordination among all stakeholders is therefore necessary to improve FSN in Cambodia. The Royal Government of Cambodia (RGC) assigned the responsibility to coordinate food security and nutrition to the Council for Agricultural and Rural Development (CARD) Chaired by H.E. Dr. Yim Chhay Ly, Deputy Prime Minister. CARD works with relevant ministries and local authorities in all provinces and in collaboration with UN agencies and national and international organizations.

To ensure the implementation of the recommendations made at two National Seminars on Food Security and Nutrition (1999 and 2003), CARD created the National Food Security Forum (FSF) in February 2003. The FSF meets on a monthly basis and has successfully served as a place to share information and to promote coordination among stakeholders, RGC, IOs and NGOs. In December 2004, out of core participants of the FSF, a "Technical Working Group on Food Security and Nutrition" (TWG-FSN) was officially established to coordinate and harmonize efforts of the RGC and the development partner community in this area. The TWG-FSN is co-chaired by CARD and MoP, and facilitated by World Food Programme (WFP).

During the last years, various initiatives to establish food security and vulnerability related information systems or tools in Cambodia8 started and the need for a more intensive coordination emerged.

On 5th of July 2006, a national stakeholder workshop on FSN-related Information Systems was organized by the secretariat of the TWG-FSN in CARD with support from FAO under the chairmanship of the Minister of MAFF, H.E. Dr. Chan Sarun. The high-level workshop has resulted in a clear commitment to enhance coordination and cooperation of stakeholders with the aim of achieving synergies in building up a sustainable network for FSN related information management in Cambodia. The conclusions of the workshop (see Annex) were circulated among stakeholders and approved during a meeting of the TWG-FSN in July 2006. One of the concrete steps proposed by the national workshop was the establishment of a task force for FSN information management to be lead by MAFF. However, as the FIVIMS based in MAFF which should chair the meeting was stalled due to disrupted funding the establishment of the FSN information task force was postponed. However several activities were carried out in Cambodia⁹ to bring forward FSN related data collection, analysis and presentation/dissemination since than:

 In 2007 a national workshop on the need for a nutritional surveillance system for Cambodia organized by CARD lead to the conclusion to better focus first on promoting the harmonization, analysis and use of existing data sources (national survey from NIS and administrative statistics) with regard to FSN. Sentinel surveillance

Food Insecurity and Vulnerability Information and Mapping System (FIVIMS) in MAFF (currently supported under the EC/FAO Food Security Programme – Phase III "Food Security Information for Action")

Vulnerability Analysis and Mapping System (VAM) of WFP

Food Security and Nutrition Information System (FSNIS) in CARD (currently supported by the FNPP/FAO)

Cam-Info in the National Institute of Statistic/MoP (supported by UNICEF and GTZ)

- In 2007 FAO/EC "Food Security Information for Action" supported NIS to analyze food consumption based on CSES 2004 data and capacities for crop yield forecasting and the production of FSN information products was supported through the same project.
- In 2007 WFP in cooperation with CARD developed a web based "Food Security Atlas" for Cambodia which was updated in 2008 and an "integrated phase classification" (IPC) map for Cambodia was developed.
- Mid 2008 CDRI in cooperation with WFP carried out a survey on impact of high food prices in Cambodia
- In November 2008 NIS caried out the Cambodia Antropometric Survey (CAS) to follow up the impact of rising food prices on nutrition and health status of children and mothers with support from UNICEF. Capacities for nutrition data collection and analysis in NIS were built up.
- Since 2006 MoP built up a data base on poor households covering currently more than 7000 villages
- Recently a new phase of the FAO/EC project was launched focusing on market information analysis, agricultural disaster preparedness / climat change analysis and chronic food insecurity and vulnerability assessment
- A new project for Cambodia (MDG-Fund) jointly implemented by 4 UN Agencies, and relevant line ministries under the coordination of CARD intends to establish an integrated food security and nutrition monitoring system based on existing information systems and surveys.

The need for a harmonized and well coordinated FSN information and monitoring system is still pertinent for Cambodia and a specific task force of the TWG-FSN needs to be established for this purpose as recommanded earlier on.

Objective and mandate of the Task Force

The overall objective of the FSN Information Management Task Force is to support the further development of a FSN related information network in Cambodia and to enhance coordination and cooperation of stakeholders with the aim of achieving synergies between various initiatives based in different government structures and supported by various donor agencies. The task force follows up the implementation of the recommendations of the national workshop on FSN-Info System from July 2006.

Functions of the Task Force

The task force has the following main tasks:

- 1. To enhance active cooperation among the members in order to **better match data user needs** and to fill existing information gaps with regard to FSN (quality, frequency, disaggregating levels of FSN data). The task force will organize a FSN information users/provides forum at least once a year and establish a list of core indicators for FSN monitoring
- To coordinate the development of capacities for a better conceptual understanding of the FSN situation in Cambodia, data analysis and the use of data for action in ministries and relevant institutions at national and decentralized level.
- 3. To coordinate effectively with regard to data analysis, presentation and dissemination and in this context to promote the use of already existing data base, presentation, analysis and dissemination tools in order to minimize duplications of efforts, to reduce costs and transaction costs for government and to foster the sustainability of development efforts.
- 4. To **promote the use of information** for the monitoring of the FSN situation in Cambodia, FSN relevant strategy/program formulation and the design and targeting of interventions.
- To ensure that upcoming initiatives with regard to FSN related data management (collection, analysis, presentation and dissemination) are designed in the spirit to add value to and to complement existing systems and tools.

(1)

Modalities and Members of the FSN Information Task Force

The task force is an integral part of the TWG on FSN and reports to the TWG-FSN on a regular basis. The Task Force is headed by CARD, which is responsible for organizing regular (monthly) meetings, elaborating and disseminating minutes and other outputs of the task force and to report on progress and outcome of the work to the TWG-FSN (and other relevant TWG on request). The task force will establish an annual work plan outlining the priority activities with regard to FSN information management.

In order to be an efficient working body, the task force has as permanent members only representatives from key Government structures and development partner directly involved in food security and nutrition related information management in Cambodia, namely:

•	CARD	(chair)	(1)
•	MAFF	(co-chair)	(1)
•	NIS	(co-chair)	(1)
•	MoH	(PM)	(1)
•	WFP	(PM)	(1)
•	NCDM	(PM)	(1)
•	FAO	(PM)	(1)
•	UNICEF	(PM)	(1)

HIS (MoH),

Other information providers and data users (including sub-info systems in MAFF or other ministries) can be invited to meetings on an ad hoc basis and according to need. The chair will call for a forum twice a year to match user's needs and information services.

The information users and providers invited for theses meetings are the following (list is not exclusive):

•	Danish Church	(1)
•	EIS (MoEYS)	(1)
•	MoWA	(1)
•	MRD	(1)
•	MOWRAM	(1)
•	UNICEF	(1)
•	WHO	(1)
•	UNDP	(1)
•	ADB	(1)
•	WB	(1)
•	IFAD	(1)
•	NCDM	(1)
•	Red Cross Federation	(1)
•	CIDA	(1)
•	Fishery Administration	(1)
•	Forestry Administration	(1)
•	D&D data base system (Former Seila data base system)	(1)
•	Agricultural Information Documentation Center	(1)
•	NSDP Secretariat/MoP	(1)
•	Farming System Information Management system (DoA Extension)	(1)
•	Land Use Management Information System	(1)
•	Rice Information System for Extension (RISE)	(1)
•	Market Information System (DPSIC)	(1)

• CDRI (1)

Other interested stakeholders

In addition to the task force an interdisciplinary FSN data analysis team will be established in NIS to regularly compile and analyse data from health and agricultural administrative statistics and to follow up specific FSN related data analysis from national survey (CSES, CDHS..). The analysis team will also prepare FSN related information outputs for dissemination. The FSN data analysis team will be composed of:

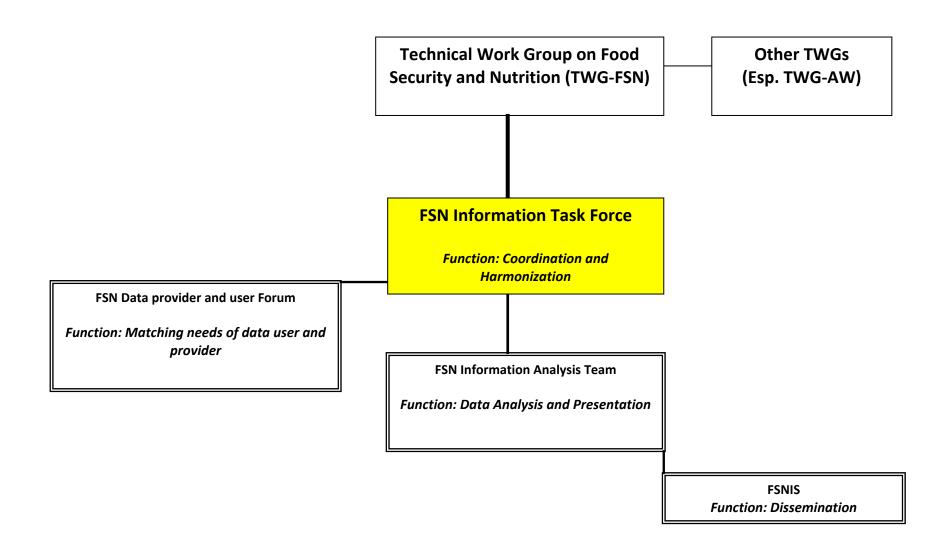
- MoP/NIS (2)
- MoP (1)
- MAFF (2)
- MoH/HIS (2)
- CARD (1)

The capacities of this team will be strengthened by development partners through their ongoing projects ¹⁰ and linkages to regional and global databases on FSN will be established.

Web-based dissemination of information will be carried out by CARD though the **FSNIS**, that serves as an national entry portal to FSN related information in Cambodia.

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¹⁰ EC/FAO, WFP/VAM, Unicef/MDG-fund



Annex 11: Food Security News



Annex 12: Trade News



Annex 13: Myanmar Fishery and Livestock Journal



Annex 14: Strategic Plan of Action on Food Security and Proposed Support

SPA-FS (2009-2013) ADB Proposed Support (2010-2011) Component 1: Food Security and Emergency/Shortage Relief Strategic Thrust 1: Strengthen food security Thrust 1: Making the regional emergency rice reserve system work arrangements. Output: Articulation and support for the establishment of the most Action Program 1.2: Develop regional food efficient and effective business model and management structure for security reserve initiatives and mechanisms the APTERR Activity 1.2.2: Support the • ASEAN national governments presented with the business model establishment of a long-term mechanism plans for improved emergency reserve system for ASEAN Plus Three emergency rice • APTERR business model and management structure defined for reserve consideration by ASEAN authority · Detailed implementation guidelines and monitoring system for tracking progress of the APTERR submitted to ASEAN authority for endorsement. • Studies on relevance of regional catastrophic risk insurance scheme for an enhanced APTERR completed **Component 2: Sustainable Food Trade Development**

Strategic Thrust 2: Promote conducive food market and trade

Action Program 2.1: Promote initiatives supporting sustainable food trade

Activity 2.1.1: Full compliance and implementation of the ASEAN Trade in Goods Agreement (ATIGA) provisions with respect to trade in products

Activity 2.1.2: Review and analyze international/ regional trade information, including prices, quantities traded, distribution, and logistics

Thrust 2: Promoting development of stable international market

Output: Development of the strategy and medium-term action plan for an expanded and stable rice trade in the region that is fully compliant with ATIGA

- Diagnostic assessment of the regional (ASEAN) rice market completed
- ASEAN authorities presented with the proposed strategy and mediumterm action plan for an expanded and stable rice trade in the region that is fully compliant with ATIGA
- ASEAN authorities presented with the draft implementing guidelines for the enabling agreement(s) to promote a stable and efficient regional rice market, within the ATIGA framework
- Stakeholders consulted about the reform initiatives

Component 3: Integrated Food Security Information System

Strategic Thrust 3: Strengthen Integrated Food Security Information Systems to Effectively Forecast, Plan, and Monitor Supplies and Utilization for Basic Food Commodities

Action Program 3.1: Reinforce the ASEAN Food Security Information System (AFSIS) project towards a long-term mechanism

Activity 3.1.3: Develop an early warning, monitoring, and surveillance information as a basis for sound development planning and policy decision to address food security, including the sharp rise of food prices

Thrust 3: Strengthening food information network in ASEAN

Output: Strengthened and wider outreach of the AIFS network

- Validation of AFSIS database and rice shortage early warning, monitoring and surveillance information system from the users' perspective
- Outreach of AFSIS network expanded

Source: Annex-12, AIFS, AMAF 31th Report, Brunei Darussalam, 2009