



# KINGDOM OF CAMBODIA Nation Religion King

# National Strategy for Food Security and Nutrition (NSFSN 2014 - 2018)



## Prepared by:

Council for Agricultural and Rural Development (CARD) in Consultation with the Technical Working Group for Social Protection and Food Security and Nutrition (TWG-SP&FSN)

Phnom Penh, April 2014



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#### **Foreword**

Food Security and Nutrition are recognized and considered as individual basic rights under the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights, both of which the Kingdom of Cambodia has ratified. The Royal Government of Cambodia (RGC), under the brilliant leadership of Samdech Akka Moha Sena PadeiTecho HUN SEN, Prime Minister of the Kingdom of Cambodia, has prioritized Food Security and Nutrition as an important cross-cutting issue to fully develop the human resources and economy of Cambodia. This was highlighted in the keynote speech delivered by Samdech Prime Minister at the 4<sup>th</sup> National Seminar on Food Security and Nutrition, in May 2012, under the theme "Child and Maternal Nutrition". In his speech, Samdech Prime Minister pointed out that "solutions to food security and nutrition are not only respond to the so-far prioritized policy of the Royal Government but also it significantly contributes to poverty reduction, hardship alleviation, the bettering of standards of living and the promotion of the people's welfare." As such, Food Security and Nutrition have been incorporated into the Rectangular Strategy Phase III (2014 - 2018) and the National Strategic Development Plan (2014 - 2018).

Food Security and Nutrition are coordinated by the Council for Agricultural and Rural Development (CARD) that has been playing a vital role since 1999 on behalf of the RGC. CARD is a chair of the Technical Working Group for Social Protection, Food Security and Nutrition (TWG-SP&FSN), which the RGC has established for the purpose of coordinating, formulating and leading the implementation of these strategies, and policies on Social Protection, Food Security and Nutrition sector and also to monitor and evaluate their progress.

The National Strategy for Food Security and Nutrition (2014 - 2018) incorporates three main objectives. (1) To ensure that Cambodian households can produce and gain access to nutritious food through more productive and diversified agriculture and livestock production, sustainable use of fisheries and forest resources and from non-agricultural employment and income opportunities. (2) To reduce child and maternal malnutrition by scale-up health sector nutrition services and nutrition education, improve domestic water supply, sanitation and hygiene practices, expand fortification of food with micronutrients, enhance availability and use of nutritious and safe food at the community and household levels and use social protection instruments for enhancing nutrition. (3) To improve the stability of the food supply amid risks and shocks using social protection instruments and enhancing the capacity of poor and vulnerable households to cope with natural disasters and climate change.

To accomplish the above objectives, all relevant ministries and institutions must engage in their joint multi-task implementation, especially the sub-national authorities must jointly implementation of the strategy with quality, transparency and accountability to eliminate poverty and food insecurity, reduce child and maternal malnutrition through human resource development, fund raising from institutions and development partners, implementation of the prioritized action plans in the strategy and transform them into real action at the grassroots level.

On behalf of CARD, I would like to extend my sincere thanks to the relevant ministries and agencies, development partners, national and international organizations who are the members of Technical Working Group for Social Protection, Food Security and Nutrition for their active contribution to the development of the National Strategy for Food Security and Nutrition (2014 - 2018) to make this strategy comprehensive and responsive to the real situation in Cambodia. I would like to also thank the World Food Program (WFP) in Cambodia for facilitating this with development partners, the United Nations Children's Fund (UNICEF) in Cambodia for sponsoring this publication, the United States Agency for International Development (USAID) for its sponsorship via the Reproductive and Child Health Alliance (RACHA) in making this draft strategy possible in 2013 and the Food and Agriculture Organization (FAO) for sponsoring the finalization of this strategy.

Phnom Penfi ....., 201

YIM Chhay Ly

Deputy Prime Minister,
Chairman of the Council for
Agricultural and Rural Development

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#### **List of Abbreviations**

**CBNP** 

**ADB** Asian Development Bank

CARD Council for Agricultural and Rural Development
CAS Cambodian Anthropometric Survey (2008)
CBHI Community-Based Health Insurance

Community-Based Nutrition Program

**CC** Commune Councils

**CCSP** Cambodian Climate Change Strategic Plan

CCM Clean Development Mechanism
CCT Conditional Cash Transfer

CCWC Consultative Committee for Women and Children
CDCF Cambodian Development Cooperation Forum
CDHS Cambodia Demographic and Health Survey

**CDP/CIP** Commune Development Plan/ Commune Investment Plan

**CDRI** Cambodian Development Research Institute

**CFW** Cash for Work

CMDGs Cambodia Millennium Development Goals
CNIP Cambodia Nutrition Investment Plan

**CPI** Consumer Price Index

**CPRs** Common Property Resources

**CRC** Cambodian Red Cross

CSES Cambodia Socio-economic Survey
EFAP Emergency Food Assistance Project

**ELC** Economic Land Concession

**EU-FF** EU Food Facility

**FAO** Food and Agriculture Organization of the United Nations

**FDI** Foreign Direct Investment

**FNPP/FMPP** FAO, Netherlands Partnership Programme /FAO Multidonor Partnership Programme

**FFW** Food for Work

**FSN** Food Security and Nutrition

**FSNIMTF** Food Security and Nutrition Information Management Task Force

**FSNIS** Food Security and Nutrition Information System **GAFSP** Global Agriculture and Food Security Program

**GDP** Gross Domestic Product

GIZ Gesellschaft für Internationale Zusammenarbeit, GmbH

HARVEST Helping Address Rural Vulnerabilities and Ecosystem Stability

HEF Health Equity Fund
HKI Helen Keller International
HSSP Health Sector Support Program
ID Poor Identification of Poor Households

IECInformation Education and CommunicationIFADInternational Fund for Agricultural DevelopmentIFPRIInternational Food Policy Research InstituteIMCIIntegrated Management of Childhood IllnessIPCIntegrated Food Security Phase Classification

IYCF Infant and Young Child Feeding

**LASED** Land Allocation for Social and Economic Development

MAFF Ministry of Agriculture, Forestry and FisheriesMDER Minimum Dietary Energy Requirement

**M&E** Monitoring and Evaluation

**MDG-F JP** MDG Fund – Joint Program Children Food Security and Nutrition

**MEF** Ministry of Economy and Finance

**MoC** Ministry of Commerce

**MoE** Ministry of Environment

**MoEYS** Ministry of Education, Youth and Sports

**MoH** Ministry of Health

MIH Ministry of Industry and Handicraft

**Mol** Ministry of Interior

**MLMUPC** Ministry of Land Management, Urban Planning and Construction

MLVT Ministry of Labor and Vocational Training

**MoP** Ministry of Planning

**MoSAVYR** Ministry of Social Affairs, Veterans and Youth Rehabilitation

**MoWA** Ministry of Women's Affairs

**MOWRAM** Ministry of Water Resources and Meteorology

MRD Ministry of Rural Development

NAPA National Adaptation Program of Action to Climate Change
NCDD National Committee for Decentralization and Deconcentration

NCDM National Committee for Disaster Management

NCN National Council for Nutrition
NFSF National Food Security Forum
NFSTF National Food Security Task Force
NGO Non-Governmental Organization
NIS National Institute of Statistics
NNP National Nutrition Program

NP-SNDD National Program on Sub-National Democratic Development

**NSCFF** National Sub Committee for Food Fortification

**NSCIDD** National Sub Committee for Iodine Deficiency Disorder

**NSDP** National Strategic Development Plan

**NSFSN** National Strategy for Food Security and Nutrition 2014-2018

**FSNDAT** Food Security and Nutrition Data Analysis Team

**FSNIMTF** Food Security and Nutrition Information Management Task Force **NSPS** National Social Protection Strategy (for the Poor and Vulnerable)

**PWP** Public Work Program

**RACHA** Reproductive and Child Health Alliance **REED** Reducing Emissions from Deforestation

**RGC** Royal Government of Cambodia

**RS** Rectangular Strategy of the Royal Government of Cambodia

**RWSSHS** Rural Water Supply, Sanitation and Hygiene Strategy

**SAM** Severe Acute Malnutrition

**SAW** Strategy on Agriculture and Water 2006-2010

SFFSN Strategic Framework for Food Security and Nutrition in Cambodia

SME Small and Medium Enterprises
SNEC Supreme National Economic Council

SP Social Protection
SSN Social Safety Nets
SUN Scaling Up Nutrition

**SRI** System of Rice Intensification

ToT Terms of Trade

TVET Technical Vocational Education and Training

**TWG** Technical Working Group

**TWG-FSN** Technical Working Group on Food Security and Nutrition

TWG-SP&FSN Technical Working Group on Social Protection and Food Security and Nutrition

**UNICEF** United Nations Children's Fund

**USAID** United States Agency for International Development

**WASH** Water, Sanitation and Hygiene

**WB** World Bank

**WFP** World Food Programme

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#### **Executive Summary**

The 4th National Seminar on Food Security and Nutrition in 2012 presided over by **Samdech Akka Moha Sena Padei Techo HUN SEN**, Prime Minister of the Kingdom of Cambodia, mandated the Council for Agricultural and Rural Development (CARD) to coordinate the development of a comprehensive and applicable food security strategy for Cambodia. The National Strategy for Food Security and Nutrition (NSFSN 2014-2018) was developed by the CARD in consultation with relevant ministries, government agencies, development partners and civil society organizations. The NSFSN builds on the Strategic Framework for Food Security and Nutrition (SFFSN 2008-2013) and the results of its review in 2011 and 2012.

Improving Food Security and Nutrition (FSN) is relevant for the achievements of the Cambodian Millennium Development Goals (CMDGs) and is as an **important development priority** of the Royal Government of Cambodia (RGC), addressed in the Government's Rectangular Strategy, the National Strategic Development Plan (NSDP 2014-2018) and recognized as a priority in numerous sector policies and plans.

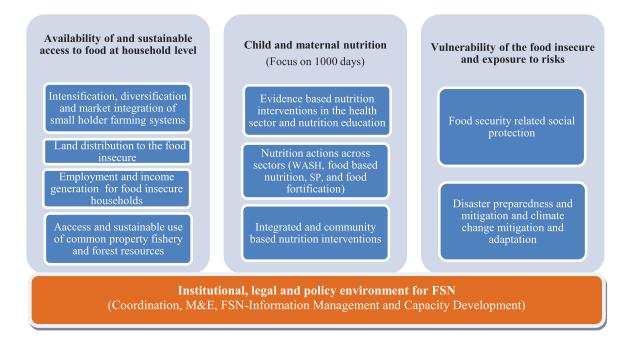
A strategy for Food Security and Nutrition requires a **multi-dimensional and integrated approach** over a large range of development themes. To improve food security and nutrition, strategies, policies, and investments in the fields of agriculture, fishery and forestry, management of water resources, health, water and sanitation, education and social protection are all decisive. The NSFSN was developed to complement the existing sector strategies and plans, to fill existing gaps and to serve as a platform for joint inter-sectorial action to enhance food security and nutrition. The **scope of the NSFSN** is broad, comprising of priority actions over all four dimensions of FSN (availability, access, use and utilisation of food and stability of these three dimensions). The NSFSN defines programmatic priorities and priority actions in these fields based on an analysis of the FSN situation at the national, household and individual level and lays out a pathway to enhance institutional arrangements essential to improve FSN in Cambodia over the next five years.

The **FSN situation analysis for Cambodia** showed that considerable progress has been achieved with regard to FSN over the last decade. Cambodia is fully rice self-sufficient producing a surplus of over three million metric tons (Mill MT) of rice in 2013 and is on the way to becoming an important rice exporter in the region. Food is available all over the country and markets are well integrated. **Food availability at the national and regional level** is therefore largely achieved.

Based on impressive rates of poverty reduction from 47.8 % in 2007 to 18.8% in 2013, and reduced consumption inequity, overall **household food access** and food consumption has improved considerably in recent years, although disparities by regions and social groups continue to persist. Cambodians still face a wide range of constraints affecting household food security such as low agricultural productivity and diversification, limited access and unsustainable use of forestry and fishery resources, landlessness for a large proportion of the rural population, and insufficient employment and income opportunities, specifically in rural areas. As the last financial and economic crisis showed, **stability of food access for the poor** and near-poor is easily compromised by idiosyncratic shocks, socio-economic crises or natural disasters. Increasing coping capacities of vulnerable groups by scaling up social safety nets and improved disaster preparedness and mitigation mechanisms (including climate change adaptation) remains a challenge for the future.

Improved food consumption does not automatically translate to improved child and maternal **nutrition** as dietary diversity and quality of food, intra-familial food distribution, nutrition related behavior and capacities of care takers, safe water, sanitation and hygiene as well as access to health services all affect the nutrition status. Considerable improvements in child and maternal mortality, and some child and maternal nutrition indicators took place between 2000 and 2010. However, overall child and maternal malnutrition has not been reduced since 2005. In 2010, there was nearly 40% chronic malnutrition among children under five years of age and 20% female malnutrition which are unacceptably high levels. Child and maternal undernutrition differs considerably by regions and social groups. The rural, poor and noneducated, having a higher incidence of undernutrition than the rich, urban and educated, stresses the need for well-targeted and integrated interventions. Undernutrition during early childhood affects the entire life of an individual, leads to poorer cognitive development and educational outcomes and thus seriously hampers the human capital formation, productivity and economic growth of a country. The social and economic costs of malnutrition are high<sup>1</sup> whereas investments to improve FSN have been shown to provide high returns. The NSFSN therefore has a clear focus on improving child and maternal nutrition over the next five years.

Based on the FSN situation analysis and the analysis of scope and coverage of existing interventions, the NSFSN addresses the following **three priority areas** for the period 2014-2018:



The NSFSN (2014-2018) contains a **long term vision**, a goal and three objectives.

Aligned with the international definition of FSN the RGC's **long-term vision** is the achievement of food security and adequate nutrition in Cambodia as an important condition to ensure a high level of human and economic development, prosperity and equity for all Cambodians:

"All Cambodians have physical, social and economic access to sufficient, safe, and nutritious food, at all times, to meet their dietary needs and food preferences and optimize the utilization of this food for a healthy and productive life."

<sup>&</sup>lt;sup>1</sup> Based on a recent study CARD, UNICEF and WFP estimate that Cambodia loses an estimated \$400 million in gross domestic product annually due to malnutrition throughout the life cycle and micronutrient deficiencies represents a national burden of more than \$200 million annually.

The **overall goal** is focusing on substantial progress towards this vision, measurable by significant improvements to household food consumption and child and maternal malnutrition until 2018.

"By 2018, Cambodians will have substantially improved physical, social and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences and optimize the utilization of this food to keep a healthy and productive life."

Based on an analysis of existing gaps and strategic options and the consultative process in 2013 the NFSNS identifies **three objectives**, as well as prioritized actions (key interventions and instruments) to achieve them.

<u>**Objective 1**</u>: Food-insecure households increase availability and access to food through more productive and diversified agriculture and livestock production, sustainable fisheries and forestry, and from non- agricultural employment and income opportunities.

**Objective 2:** Cambodians improve use and utilization of their food resulting in reduced child and maternal malnutrition and enhanced human and economic development.

<u>Objective 3:</u> Improved food security related social protection and enhanced capacities of poor and vulnerable households to cope with risks and shocks increase the stability of their food supply.

Institutional arrangements for the crosscutting issues of FSN are already in place in Cambodia and have been for many years. Progress was made specifically by setting up the Technical Working Group for FSN (TWG-FSN) and its secretariat in 2004. In early 2014, the TWG on FSN was merged with the Working Group on Social Protection to a new TWG SP & FSN presided by the chairman of CARD to enhance synergies between these two important crosscutting issues. Improved inter-ministerial coordination for FSN-information management resulted in the joint production of a quarterly FSN-Bulletin and, through a joint trainer pool, capacities for mainstreaming FSN at national and decentralized level were enhanced. However, for effectively and efficiently implementing the priorities outlined in the NSFSN much needs to be done to build on these achievements and further enhance coordination and integration of actions, results- based monitoring and evaluation of interventions and to scale up efforts to improve national capacities for sustainable solutions to eliminate food insecurity and malnutrition in Cambodia.

The NSFSN therefore also addresses the institutional and policy environment for effective implementation of the strategy and outlines guiding principles and priority actions to improve and further develop: 1. Coordination and policy oversight for FSN; 2. Monitoring and evaluation (M&E); 3. FSN related knowledge and information management; 4. Capacity-building for FSN at national and sub-national level; and, 5. Selection of beneficiaries and targeting of FSN interventions.

**Further operationalization of the NSFSN 2014-2018** through national programs and projects will be based on a participatory and nationally owned process organized by CARD with the TWG-SP&FSN involving relevant government institutions at the national and subnational level, development partners as well as civil society. CARD will coordinate discussions with the ministries on the next steps and resource requirements to scale up existing or start new programs and to implement prioritized actions as outlined in the NSFSN. At the same time the guiding principles for improved coordination, M&E and FSN information management and capacity development will be further specified and the M&E framework of the strategy finalized<sup>2</sup>. As recommended by the Prime Minister of Cambodia during the high level Seminar on FSN in May 2012 a **nutrition action and investment plan** to improve child and maternal nutrition will be developed in 2014 across sectors to further operationalize the priority actions outlined for objective 2 of the NSFSN.

All indicators and targets will be aligned with the result framework of the NSDP 2014-2018.

### 1. Introduction

#### 1.1. Background and History for Developing a NSFSN

Improving Food Security and Nutrition (FSN) is an important development priority of the Royal Government of Cambodia (RGC) and is relevant for the achievements of the Cambodian Millennium Development Goals (CMDGs). Food Security and Nutrition is addressed in the Government's Rectangular Strategy (RS 2014-2018) and the National Strategic Development Plan (NSDP 2014-2018). FSN is further recognized as a basic human right under the Universal Declaration on Human Rights and the International Covenant on Economic, Social and Cultural Rights, which both have been ratified by Cambodia.

The radical governance of the Khmer Rouge from 1975 to 1979 led to widespread malnutrition and poverty. It was not until the formation of the Royal Government of Cambodia in 1993 that new policy frameworks could be progressively developed. A consistent theme in all national government policy frameworks has been the priority given to the alleviation of poverty, including hunger. Several large scale programs with FSN-related components and activities were implemented from 1996 onwards<sup>3</sup>. However, these programs lacked the support of a strategic and holistic cross-cutting policy reference framework that a National Strategy for Food Security and Nutrition could have provided.

As social and economic costs of malnutrition for the Cambodian population are considerable, and investments in FSN have been shown to provide high returns and benefits for national and social development, the RGC outlined policy guidance on FSN for Cambodia in 2008. **The "Strategic Framework for Food Security and Nutrition" (SFFSN 2008-2012)** was developed by CARD in a broad process of consultation involving various ministries and Government agencies, development partners and Non-Governmental Organizations (NGOs) during 2007 and expressed in its Goal that "by 2012, poor and food-insecure Cambodians have substantially improved physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life."

Against the background of challenges posed by the global food price and economic crisis in 2008 and 2009, changes in the policy and institutional context as well as upcoming new strategies and programs related to FSN, CARD organized at the end of **2011 a review of the SFFSN** in order to assess the progress that has been made and to ensure that the document remains a valuable reference framework for FSN in Cambodia<sup>4</sup>.

The review results showed that the SFFSN was a helpful document to create awareness and supported the mainstreaming of FSN in the NSDP, new strategies like the Strategy on Agriculture and Water (SAW), the National Social Protection Strategy (NSPS), the National Nutrition Strategy (NNS) and large scale programs related to FSN. Intensification of interministerial coordination, improving monitoring and evaluation and FSN related capacity development as well as to increase focus and prioritize the interventions were among the key recommendations resulting from the review for a new national strategy document on FSN.

The National Strategy for Food Security and Nutrition (NSFSN 2014-2018) defines strategic options and priority activities based on an updated FSN situation analysis and lays out a

<sup>&</sup>lt;sup>3</sup> These included broader-scale rural development programs which included improving food security among their aims or activities

<sup>&</sup>lt;sup>4</sup> See RGC/CARD, Review Report, Strategic Framework for Food Security and Nutrition in Cambodia, December 2011.

pathway to enhance institutional arrangements essential to improve FSN in Cambodia over the next five years. The NSFSN will provide a platform for coordination and monitoring across sectors on which more operationalized action and investment plans can be built.

#### 1.2. Conceptual Framework and Scope of NSFSN

The NSFSN adopts the universally accepted definition of food security as a situation "when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life." Malnutrition and more broadly food insecurity are caused by a complex interaction of factors and improving food security is therefore a multi-sector challenge.

To help unravel this complexity, the concept of food security and nutrition<sup>5</sup> identifies four causal dimensions of food security: 1. Food Availability; 2. Food Access; 3. Use & Utilization of Food; and, 4. Food Stability.

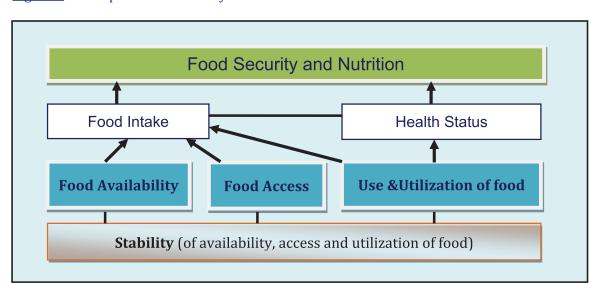


Figure 1: Concept of Food Security and Nutrition

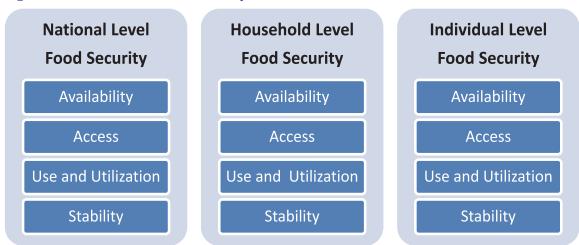
- **1. Food Availability**: Relates mainly to the ability to directly produce sufficient food to meet the nutritional needs through own efforts in agricultural and livestock production and through gathering from Common Property Resources (CPRs) including forests and fisheries.
- **2. Food Access:** Relates to income and purchasing power of people to acquire sufficient food through the market. Markets themselves may lack infrastructure, services and capital to provide a sufficient stock to meet minimum food requirements. Besides own income, targeted social transfers (safety nets) may provide purchasing power to the poor to meet their food needs.
- **3. Use and Utilization of Food:** Relates to adequate nutrition (nutrition practices) and health. Pregnant and lactating women may themselves be malnourished, limiting the nutrition available to their infants. Mother-child care practices may not be appropriate for child health and nutrition. A high incidence of infections such as acute respiratory infection and diarrhea and a lack of maternal and child health services will reduce mother and child health and nutrition. A lack of access to safe drinking water and hygienic sanitation will increase illness and infection rates and decrease health and nutritional status.

<sup>&</sup>lt;sup>5</sup> In the broad definition from FAO the term "food security" actually entails also nutrition. In this strategy the term "Food Security and Nutrition" (FSN) is used as a way to emphasize that food security cannot be reduced to food production and economic access to food but demands also its adequate use and utilization.

**4. Food Stability:** Instability in the regular supply of sufficient food and clean water causes malnutrition and food insecurity. Causes of instability can include flood and drought impacts on agriculture, environmental degradation or changes in access to (CPR), shifts in purchasing power, and political instability including wars and conflict. People may be experiencing acute instability (or temporary food insecurity) at one point in time (crisis) which renders them more vulnerable to the impacts of instability in the future.

Besides the causal dimensions, food security also needs to be analyzed at **different levels**: at the global and national level (macro-level food security), at the household level and at the individual level (referred to as household food security and nutrition).<sup>6</sup>

Figure 2: Three Levels of Food Security



- National (macro level) food security is not equal to national food self-sufficiency but is best understood as a situation where the availability of food on the national level equals at least the demand of the population at each point in time (either from own food production or food imports or a combination of both). Macro level food security in Cambodia has been achieved for many years as the country produces large surpluses of the national staple food, rice, and is becoming an important rice exporter in the region. A variety of important food items need to be imported, but Cambodia can ensure the supply and national availability of these foods by trading in the regional and global market. As national food security is not a concern for Cambodia, the NSFSN is focusing primarily on household and individual level food security.
- **Household food security** exists when a household has access to the food needed for a healthy life for all its members (adequate in terms of quality, quantity, safety, and culturally acceptable), and when access is stable and not at high risk. Household food security depends strongly on the entitlements of a household to food either from its own food production, through food purchase from own income or food and cash transfers.
- **Individual food security** depends on appropriate intra-household distribution of food, as well as the nutritional dimensions which depend on the correct utilization of food, the individual health status and the physiological interaction between nutrient absorption and diseases. Due to the special role of children in the future development of the society and economy and their high vulnerability, the NSFSN pays special attention to the nutrition and health status of children and mothers.

Food security at the national level does not imply food security at the household or the individual level. Therefore to measure the aggregated outcome of food security at all levels,

Sometimes between "macro level" and "micro-level" (household, individual level) an intermediate ("meso-level") is introduced to emphasize that there may be relevant regional or local variations in a country with regard to availability, access and use and utilization of food.

the NSFSN uses household food consumption, and the three measures of children's nutritional status. Only if no child malnutrition persists we can consider that a country has achieved full food security

According to its duration food insecurity can be further described as chronic or transitory: **Chronic food insecurity** means that people are unable to meet their minimum food requirements over a longer period due to poverty, inadequate access to productive or financial resources. **Transitory food insecurity** relates often to socio-economic shocks (like global food price rises or economic recessions), natural disasters (such as floods and droughts), and conflicts that can affect food security at all three levels. In addition, effects of long-term changes in natural conditions, (climate change) can compromise food security<sup>8</sup>. Disaster risk management and as well as social safety nets can cushion the adverse effects of these events on food security and help people to avoid negative coping mechanisms, like the depletion of productive assets, rendering them chronically food insecure.

Although poverty is not the only reason, **poverty is a major cause for food insecurity** and malnutrition, poverty and food insecurity are deeply interrelated and often an intergenerational phenomena. The poor generally have a lower or less balanced food intake and limited caring capacities for their children which leads to poor human development outcomes, low income and perpetuate poverty in the next generation

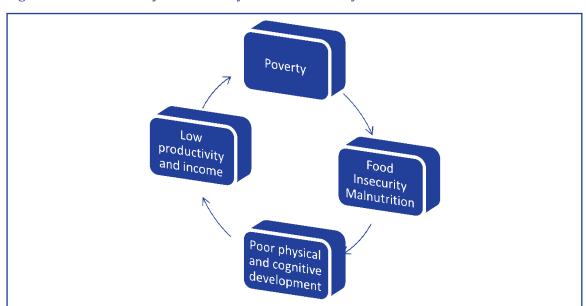


Figure 3: The Vicious Cycle of Poverty & Food Insecurity

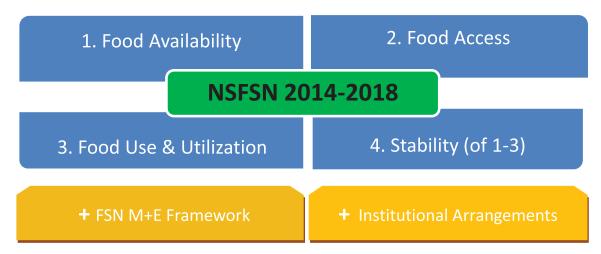
A Food Security Strategy requires a multi-dimensional approach over a large range of sectors. To improve food security, strategies, policies, and investments in the fields of; agriculture, fishery and forestry, management of water resources, public health/nutrition, water and sanitation, education and social protection are all decisive. Therefore, the NSFSN emphasizes combined and integrated efforts by all relevant ministries and government agencies as well as the private sector, civil society organizations and development partners.

The scope of the NSFSN is broad, comprising of priority actions over all four dimensions of FSN and lays out principles with regard to the institutional arrangements for implementation and monitoring and evaluation (M&E) of the strategy.

<sup>&</sup>lt;sup>7</sup> Child anthropometrics (stunting, underweight and wasting) are the aggregated outcome indicator for food security as they are influenced by all four dimensions of FSN.

The concept of seasonal food security falls between chronic and transitory food insecurity. Seasonal food insecurity occurs often during the agricultural lean season and can be seen as recurrent, transitory food insecurity.

Figure 4: Scope of the NFSNS 2014-2018



The NSFSN is a comprehensive document by keeping focus on priorities areas and key actions across all relevant sectors. It is not necessarily referring to all aspects related to the crosscutting issue FSN.

#### 1.3. Process of NSFSN Development

In 2012 and 2013, CARD organized stakeholder meetings and consultations workshops, giving government representatives, development partners and civil society representatives the opportunity to decide on scope and nature of the strategy, explore strategic options and to discuss and define priority areas and intervention in-depth. Further on a working group comprising government, Development Partners (DPs) and NGOs linked to the Technical Working Group-FSN (TWG-FSN) had been organized as a mechanism to provide inputs and constant comments to CARD during the formulation process. Specifically the following events took place during the formulation:

- Discussion on the results of the SFFSN review and on the scope of the new NSFSN during meetings of the TWG-FSN in March and June 2012
- Kick-off meeting for the formulation of the NSFSN in February 2013 and establishment of an inter-sectorial core group providing inputs and comments during the formulation process
- 1<sup>st</sup> consultative workshop on the NSFSN formulation in April 2013 with relevant ministries, DPs and NGOs to discuss priority areas, objectives and priority actions
- Compilation of a first draft of the NSFSN by end of June 2013
- Circulation of the 1<sup>st</sup> draft of the NSFSN to ministries, development partners and civil society organizations for comments from December 2013 to January 2014
- Review of 1st draft based on comments and input from stakeholders
- 2<sup>nd</sup> consultative workshop to present and discuss final draft of the NSFSN on 24<sup>th</sup> of February 2014 and finalization of document during April 2014
- Approval of the NSFSN by the CARD
- National and provincial dissemination of the NSFSN

#### 2. The Current State of Food Security and Nutrition in Cambodia

#### 2.1. Assessment of Macro Level Food Security

Macro (national) level food security is determined by the level of food production, stock levels and net trade of a country. Cambodia achieved national food security and is self-sufficient for the national staple rice since 1995 and 1996 and has become an important rice exporter. The following graph shows the continuously increasing paddy and rice surplus over the past years in Cambodia.

■ Paddy Surplus MT ■ Rice Surplus MT 

Figure 5: Trend in National Paddy and Milled Rice Production Surplus (2006-2012)

Source: MAFF

Figure 6: Cambodia Food Balance Sheet in 2012/2013

	Wet Season	Dry Season	Total
Cultivated Area in ha.	2,512,038	495,507	3,007,545
Destroyed Area in ha.	36,025	42	36,067
Replanting Area in ha.	8,819		8,819
Harvested Area in ha.	2,484,832	495,465	2,980,297
Yield in mt./ha.	2.872	4.349	3.117
Paddy Rice Production in mt.	7,136,139	2,154,801	9,290,940
Seed requirements and post-harve	st losses (13%) in m	it.	1,207,822
Remaining paddy available for con	sumption in mt.		8,083,118
Converted into milled rice (64% m	5,173,195		
Food requirement per year in mt.	2,142,178		
National Surplus Production of I	Rice in mt.		3,031,017

Source: MAFF

However, most paddy rice is sold by farmers at a low price immediately after harvest and exported through informal cross border channels to Vietnam or Thailand to be re-imported as milled rice at a later period of the year at higher prices. Improving the rice value chain was specifically addressed by the RGC through the Policy on the Paddy Production and Rice Export launched in 2010. Based on the implementation of this policy official white rice export increased from 15,800 MT in 2009 to 192,600 MT in 2012/2013.

Regional disparities within Cambodia with regard to rice production exists but in 2012 and 2013 most of the 24 provinces showed a positive rice balance except for the rice production of Phnom Penh, Koh Kong and Preah Sihanouk was not fully covered by provincial production.

Cambodia still imports a wide variety of food items and the country is implementing policies to diversify agricultural production for the local market and to take advantage of comparative advantages for export. However, food markets within Cambodia are generally well integrated with limited regional price variations and local availability of food, other than rice, is not representing a concern. Even in 2011 and 2012 – the year Cambodia faced flooding in 18 provinces - Cambodia was in surplus for most of the locally grown cereals and increased its national rice surplus to more than 2.7 million tons.

Although food security at the national level is achieved, availability of food from own production in poor farm households is often not sufficient in quantity and quality to meet their food requirements and Sanitation and Phyto-Sanitation Standards (SPS) are not fully applied.

Priority actions to improve availability of food at household level through intensification and diversification of smallholder production systems and sustainable use of common property fishery and forestry resources are laid out in the NSFSN under 6.3.1

#### 2.2. Assessment of Household Food Security and Recent Challenges

Food access at the household level depends on own food production and from food purchases through the market. Purchasing power is determined by employment and income (including transfer income) but also by food prices. Poverty rate and food poverty rate as well as rate of undernourished people are generally used as proxy indicators for household's food security. The following analysis of household food security focuses on economic growth, poverty, (food) prices, real wages and household food consumption. Changes in household food security during the last financial and economic crisis are discussed to take-on lessons learned.

#### Economic growth and food price and economic crisis in 2008 and 2009

Economic growth is a necessary but not sufficient condition for poverty reduction. From the mid-1990s until 2007, Cambodia experienced a period of high growth. This rapid growth improved net purchasing power by increasing per capita income by nearly three times from US \$248 in 1994 to US\$ 760 in 2008<sup>10</sup>.



Figure 7: GDP Growth 1994-2013 (Constant Prices 2010)

Source: MoP/NIS

However, economic growth was narrow based and mainly driven by garment, tourism and construction industries. Foreign Direct Investment (FDI) played a crucial role specifically in the period before the last crisis (and increased from \$US 121 million US\$ in 2004 to US\$ 868 Million in 2007).

Economic growth in Cambodia went along with poverty reduction and improvements in health and education. Considerable gains in overall food security outcome were achieved and child malnutrition rates decreased constantly along with high economic growth in between 2000 to 2005. However, the global financial and economic crisis in 2007/2008 also affected the Cambodian economy, and growth temporarily came to a halt in 2009.

Studies indicated that high food prices in 2008 contributed to adverse coping strategies like shifting to lower value food items<sup>11</sup>, which affected specifically urban poor<sup>12</sup>. On the other side, it seems that market oriented agricultural producers benefitted from higher farm gate prices and wages for unskilled agricultural labor increased along with the rising prices for staple food (the poverty rate even decreased in 2008, specifically for the poorest income quintile)<sup>13</sup>. This situation changed in 2009, when global economic downturn negatively affected employment and wages in the garment, construction and tourism industries and the poverty reduction gains from the previous years were partly reversed. People, especially women, tried to adjust to this situation by taking new or secondary jobs, mainly in agriculture.

The RGC responded to the food price crises and the slowing economy in 2009 by immediate measures to mitigate the impact of high food and agricultural input prices<sup>14</sup> by short term measures to enhance smallholder agriculture and to increase the coverage of Social Safety Nets (SSN). At the same time structural and institutional weaknesses were addressed by developing policies to enhance agriculture intensification/diversification and social protection to be better prepared for future socio-economic shocks and a National Food (and seed) Reserve System was established to be prepared for future crisis.

#### Lessons Learned from the Last Crisis:

- As the majority of households not only in urban, but also in rural areas are net-food buyers rising food prices are more likely to lead to lower household welfare, specifically for the poor.
- Agricultural producers responded positively to incentives through higher farm gate prices but were often frustrated by subsequent price volatility
- Rather small changes in income and purchasing power (due to higher prices or loss of employment) can move a considerable number of households back into poverty in Cambodia and affect their access to adequate food.
- To cope with the impact of the crisis households responded by taking new (often temporary) jobs specifically in agriculture. However, alternative employment opportunities (beyond agriculture) that provide adequate income during times of crisis are still rare.
- Saving and lending capacities of many households eroded during the two crises and affected their capability to cope with future major shocks.
- Cambodia may have to adjust again to the sluggish global economy (triggered by the current state indebtedness crisis in Europe and USA) there is a need to further diversify the economy, enhancing agricultural productivity and creating rural employment opportunities
- An effective social safety nets system (which can respond rapidly to crisis) is important to cushion the impact of future crisis and enhance coping capacities and social capital of the poor and food insecure.

<sup>&</sup>lt;sup>11</sup> Cambodian Development Research Institute (CDRI), Impact of High Food Prices in Cambodia, August 2008.

This may explain the high increase in child wasting rates in urban areas reported by the CAS in 2008.

World Bank, Poverty and Social Impact of the Global Economic Crises, April 2011.

Besides short term market intervention to stabilize rice prices this included mainly monetary policies (increased reserve requirements to be maintained at the NBC, increased minimum capital requirements for commercial banks, short term NBC loans for local banks, etc.), special credit lines to rice millers, tax exemption and reductions on agricultural and industrial investments, scholarships to provide short vocational training courses to former garment workers and unemployed youths as well as small loans for startup businesses.

Due to strong growth in garment exports, and also backed by a recovery in the construction and tourism sectors and increased agricultural exports, Cambodia's economy is now back to the pre-crisis growth path and the GDP per capita increased from US\$ 931 in 2012 to more than 1000 US\$ by 2014.

#### Poverty Rates and Inequality

Along with high economic growth rates substantial progress was achieved in the reduction of poverty in Cambodia over the last years. Based on a new defined poverty rate and adjusted to inflation<sup>15</sup> poverty more than halved in just four years from 47.8 % in 2007 to an estimated 18.8% in 2013. However, there are still a high number of people whose consumption is near the poverty line and they may easily fall back into poverty in times of crisis.

70 60 50 40 30 20 10 0 2004 2007 2008 2009 2010 2011 2013 63.3 47.8 29.9 22.9 21.1 19.8 18.8 Povert Rate

Figure 8: Development of Poverty Rate in Cambodia 2007-2011 (Using New Poverty Line)

Source: MoP

Estimates for 2009 CSES data based on the new poverty line shows 22.9% total poverty and 4.2% food poverty for Cambodia (compared to 63.2% and 19.7% respectively in 2004)<sup>16</sup>. However, poverty and food poverty are higher in rural areas where about 91% of the poor live.<sup>17</sup>

Area	Food Poverty Rate in %	Poverty Rate in %
Phnom Penh <sup>18</sup>	0.3	12.8
Other Urban Areas	2	19.3
Rural Areas	5.1	24.6
Cambodia (weighted average)	4.2	22.9

Figure 9: Percentages of Persons below Poverty and Food Poverty Line in 2009 by Area

Source: MoP

There continues to be significant differences of poverty rates between and within provinces. District level estimates (from the small area estimates of poverty and malnutrition based on 2009 Cambodian Socio-Economic Survey (CSES) data) <sup>19</sup> show a poverty incidence within a range from 6.5% to 50.9% with a general pattern of relatively low poverty in Phnom Penh, slightly higher in the plains, river valleys and the shores around the Tonle Sap, but high levels in the northeast uplands.

MoP, Poverty in Cambodia – A New Approach (Redefining the Poverty Line) April 2013; The new poverty line is calculated on a reference food basket for 2,200 K-Calories consumed by the bottom 5<sup>th</sup> to 30<sup>th</sup> percentile of households plus selected non-food items and provisions for consumption of clean water.

The figures for 2004 are based on a report from World Bank using the new method of calculating the poverty line.

<sup>&</sup>lt;sup>17</sup> The remaining poor are in relatively better conditions as the Poverty Gap and the Poverty Depth Indices have also significantly decreased both in urban and rural areas between 2004 and 2011. See WB, Poverty Assessment 2013, November 2013.

Poverty in urban areas is rather low but against the background of rural urban migration and a continued increasing urban growth rate (at 2.21% from 1998 to 2008), the proportion of vulnerable urban households may grow specifically in poor settlement areas around Phnom Penh.

<sup>&</sup>lt;sup>19</sup> See MoP/WFP, Small Area Estimates of Poverty and Malnutrition in Cambodia, May 2013.

Analysis from the CSES data shows that income inequality - after a temporary increase in 2007, has decreased in Cambodia in urban and in rural areas and this has substantially contributed to the sharp reduction in poverty rates.

Figure 10: Consumption Shares and GINI Values, Cambodia

Income Equity Indicators	2007	2008	2009	2010	2011
Consumption of 20% Poorest in %	6.85	7.46	8.00	8.34	8.98
GINI Coefficient	0.411	0.381	0.343	0.341	0.313

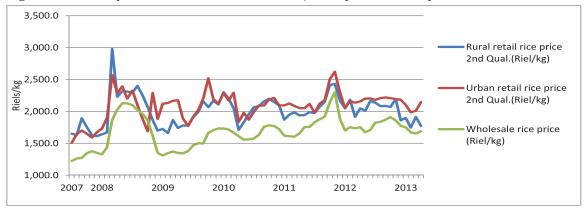
Source: CSES, MoP

If this trend persists, two of the targets for the CMDG 1 indicators (poverty rate of 19% and consumption of poorest 20% of population of no less than 10% of total consumption) will likely be achieved by the end of 2015.

#### **Food Prices:**

In early 2008 food and specifically rice prices went up considerably in Cambodia following global trends. Poor household's purchasing power was temporarily reduced which affected food consumption patterns and may have impacted on nutrition and health status. Food prices and rice prices came down in 2009 and, after a short increase in 2011, are currently rather stable.

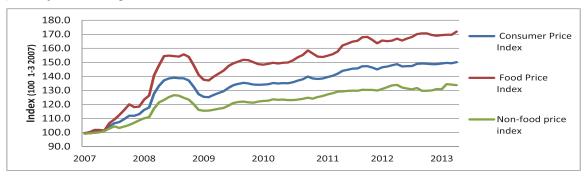
Figure 11: Development of Rice Prices between January 2007 and April 2013 in Cambodia



Source: MAFF (Wholesale Price), WFP (Retail Prices)

Although rice prices were falling sharply since the mid-2008s they showed an upward trend until 2013 and are still at a level above the pre-crisis reference point in early 2007. The ratio of food to non-food prices, an indicator for the food purchasing power of households, was in late 2011 still 22% points higher than when the food price crisis started in early 2008

<u>Figure 12:</u> Relative Change in Consumer Prices, Food Prices and Non-food Prices from January 2007 to April 2013



Source: National Institute of Statistics (NIS)

Over 2013, the year on year inflation rate, Consumer Price Index, (CPI) as well as the food price index (FPI) measuring the cost of food items in the general consumption basket, were with 4.7% and 6.2% respectively rather modest.<sup>20</sup>

A deterioration of food purchasing power, limiting access to food, occurs only when higher prices are not compensated for by increased real wages. The following graph shows that the terms of trade (ToT) for the daily wage rate for unskilled laborers and the average price for rural rice, lowest quality, from January 2009 to December 2013. Recently the ToT are improving as food price inflation is low and wages increased substantially against the background of strong demand for labor in the garment, construction and agriculture sectors.

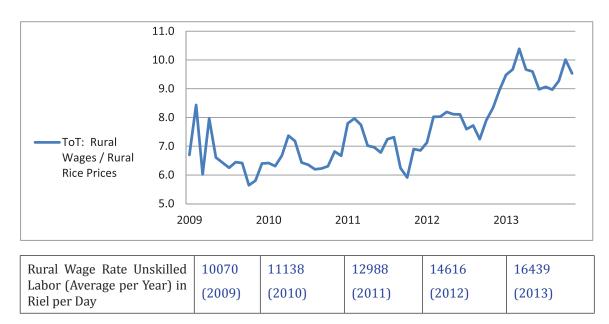


Figure 13: ToT Rural Wages Unskilled Labor / Rural Retail Rice Price (Lowest Quality)

Sources: WFP

In spite of the positive development with regards to household's purchasing power during the last two years, the poor remain highly vulnerable to volatile food prices in a country like Cambodia where a large part of household income is spent on food. The average share of food in total household expenditures decreased with higher income and better socio-economic conditions from 68% in 1993 to 55% in 2004 and 51% in 2011. <sup>21</sup> But the poorest wealth quintile households still spend more than two thirds of their household budget on food. As even in rural areas most households are net food buyers<sup>22</sup>, they do not necessarily benefit from higher farm gate prices for rice and other staples.

#### Food Consumption

According to the food security trend analysis<sup>23</sup> based on food expenditure data from the 2004 and 2009 CSES surveys, overall food consumption improved in Cambodia over this period: 33% of Cambodians in 2009 were undernourished (or food deprived) consuming less than

NIS, The general consumer price index (CPI) collected by NIS measures the cost of a consumption basket of 259 items.

<sup>&</sup>lt;sup>21</sup> See World Bank, Basic Poverty Results using the new 2009 based method, Cambodia, December 2011.

See: Rapid assessment of impact of rising food prices on the poor and vulnerable and policy response in Cambodia, CDRI, June2012. In this context it needs to be considered that about 25% of the rural households are landless and another 20-25% have less than 0.5 ha. agricultural land at their disposal.

<sup>&</sup>lt;sup>23</sup> See Food Security Trend Analysis Report, CSES 2004 and 2009, NIS/FAO, April 2001.

the Minimum Daily Energy Requirement (MDER) compared to 37% in 2004<sup>24</sup>. However, undernourishment was substantially higher in the lower wealth quintile in 2009 (59%).

The cost of purchasing 1000kcal in Riel (Dietary Energy Unit Value) doubled from 700 Riel in 2004 to 1400 Riel in 2009 mainly due to high food prices in 2008. In 2009, Cambodian households purchased on average 49% of their food from markets and even in rural areas 43% of consumed food was purchased from markets (against the background of high food prices it seems that rural populations slightly reduced food purchases and increased consumption from their own food production.)

Consistent with global trends, the consumption of carbohydrates decreased in Cambodia and fat and protein consumption increased between 2004 and 2009, showing a better balanced macronutrient food intake. For all three macronutrients, the average consumption of Cambodians in 2009 was within the minimum/maximum ranges recommended by WHO. Also dietary diversity changed with Cambodians eating more fish, meat, eggs and pulses, but less cereals (rice) and vegetables in 2009 than five years previously. <sup>25</sup> Overall the findings of the analysis revealed that food consumption for the population as a whole increased and was more balanced in 2009 than in 2004 in spite of the negative impact of the food price crisis<sup>26</sup>. In spite of general improvements with regard to food intake, for many Cambodians the daily diet is still not providing sufficient micronutrients.

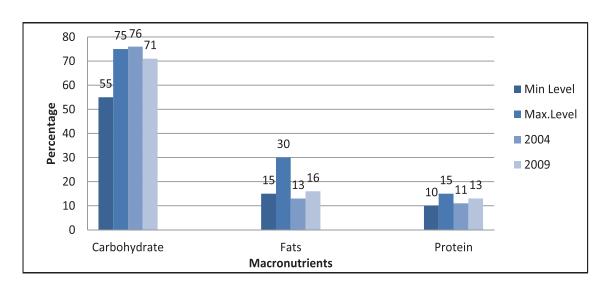


Figure 14: Share of Dietary Energy Consumption from Macronutrient as per WHO Recommendations

Source: NIS, Food Security Trend Analysis Report

Improved household food consumption does not necessarily translate in improved child nutrition. Dietary diversity and quality of food, intra-familial food distribution and nutrition related behavior and capacities of care takers as well as access to health services, sanitation and clean water all affect the nutrition status of children. The 2008 and 2009, the global food price and economic crisis seems to have affected the long term trend in improving overall FSN outcome (child nutrition) along with poverty reduction. As household food consumption also improved, reasons for this are likely to be, to a large extent, related to the use and utilization of food.

See Food Security Trend Analysis Report. The MDER is the weighted average of minimum energy requirements considering sex and age structure of a population. For 2009, the MDER was estimated to be 1762 kcal/person/day in Cambodia. The concept of undernourishment is different from the food poverty and figures for this two indicators cannot be compared.

For all data see NIS/FAO, Food Security Trend Analysis Report, 2011.

<sup>&</sup>lt;sup>26</sup> However, it is not evident that the poor improved their micronutrient intake. As the CSES was carried out over the whole year of 2009 the impact of the economic crisis was probably not fully reflected in the data.

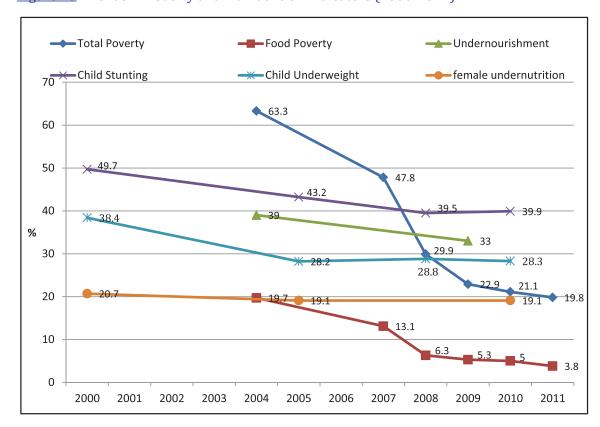


Figure 15: Trends in Poverty and Malnutrition Indicators (2000-2011)

Source: CDHS 2000, 2005, 2010, CSES 2004 and 2009 Food Security Trend Analysis Report NIS

#### 2.3. Assessment of Child and Maternal Nutrition

#### **Child Nutrition**

The nutritional status of children under five years of age is the aggregated outcome indicator for the food insecurity situation at the national, regional or local level<sup>27</sup>.

Undernutrition in children under five years age is measured by three indicators: 1) The rate of stunting (low height for age) indicates the proportion of children exposed to chronic or long-term malnutrition; 2) the rate of underweight (low weight for age) indicates the proportion of children exposed to a combination of chronic and acute malnutrition; 3) and, the rate of wasting (low weight for height) indicates the proportion of children with acute malnutrition. Three Cambodia Demographic and Health Surveys /CDHS) - 2000, 2005, 2010 - and one Cambodian Anthropometric Survey (2008) provide the trends of malnutrition in children (aged under five years) between 2000 and 2010 (see Figure 16).

A trend analysis of child anthropometrics shows that there was significant progress in under five nutrition between 2000 and 2005, but since then improvements have come to a halt. Chronic malnutrition in children (stunting), which is not responsive to short term changes, declined between 2005 and 2008 (the year of the food price crisis) from 43.2% to 39.5% and stagnated until 2010 (39.9%). Progress in child underweight also stagnated during 2005 and 2010 (28.2% and 28.3%). For acute malnutrition (wasting) the trend was even reversed and its prevalence increased in Cambodia from 8.4% (2005) to 8.9% (2008) to 10.9% (2010) and there are now an estimated cases of 66,000 to 83,000 severely thin children in the country on an annual basis.

As under-nourished children face increased risks of infection, illness and premature death, 54 percent of all cases of under-five mortality in Cambodia are associated with malnutrition. Under-nutrition also has negative effects on children's physical and mental growth and development and therefore on their human potential.

49.7 43.2 39.5 39.9 38.4 28.8 28.2 28.3 16.8 10.9 8.9 8.4 **CDHS** CDHS **CDHS CDHS** CAS CDHS CDHS CAS **CDHS** CAS CDHS CDHS 2000 2005 2008 2010 2000 2005 2008 2010 2000 2005 2008 2010 UNDERWEIGHT STUNTED (short) WASTED (thin)

Figure 16: Trends in under Five Malnutrition from 2000-2010

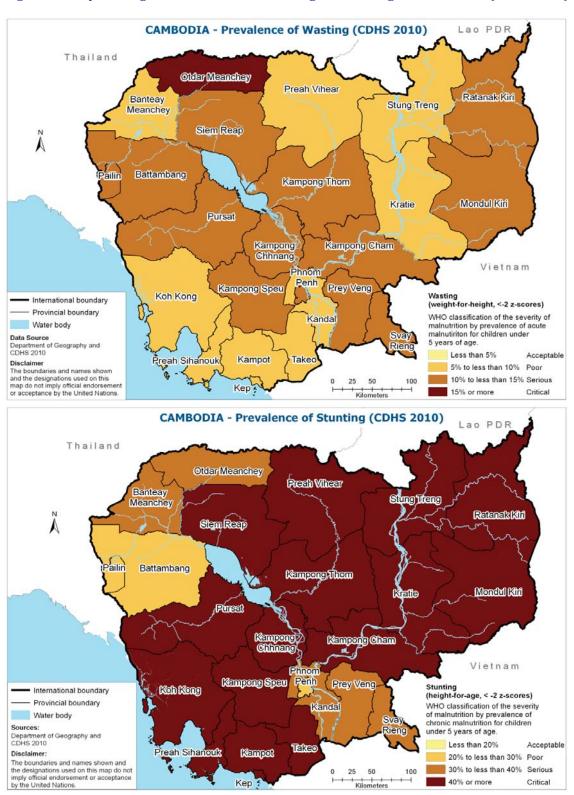
Source: CDHS 2000, 2005, 2010, Cambodian Anthropometric Survey 2008

- The **gap between rural and urban** areas is growing. In 2010, 42.2% of children were chronically malnourished (stunted) and 30% underweight in rural areas against 27.5% and 18.4% respectively in urban areas<sup>28</sup>. Although the incidence of child malnutrition is significantly higher in rural areas, urban food and nutrition insecurity exists in Cambodia, specifically in poor locations and settlement areas around Phnom Penh.<sup>29</sup>
- An important characteristic of the prevalence of child malnutrition in Cambodia is that it varies greatly according to geographical areas and social groups. This highlights the essential need to identify and target the malnourished and food-insecure by region and social group to provide the most effective interventions. The provincial variations for chronic malnutrition (stunting) and acute malnutrition (wasting) are shown in the two maps below. In 15 provinces chronic malnutrition of children is at a critical level.

In 2005, both rural and urban areas had a rate of underweight of 28%. In 2010, the difference was more than a 10% point difference with an urban underweight rate 18.4% and a rural of 28.3%.

Against the background of the 2008 food price crisis the 2008 CAS showed alarming high acute child malnutrition (waisting) rates in poor settlement areas in Phnom Phen (16%) and a recent baseline survey revealed high chronic malnutrition rates in 2 Khans in Phnom Phen (FAO, Urban Food Security and Livelihoods Assessment, June 2012).

Figure 17: Maps on Regional Prevalence of Stunting and Wasting of Children < 5 (CDHS 2010) 30



Source: Both MAPs, WFP

For example the national under-five stunting rate of children in 2010 is 39.9 % nationally, but it is 25.1% in Phnom Penh, 26.5% in Battambang/Pailin (provinces with lowest levels) but 50.3% in Siem Reap, 54.9% in the Mondulkiri/Rattanakiri and 56.4% in the Preah Vihear/Steung Treng cluster. Furthermore, wide variations in commune-level stunting rates, (ranging from 18% to 62%) and underweight rates (ranging from 10 to 50%) exist. See MoP/WFP, Small Area estimates of Poverty and Malnutrition in Cambodia, 2013.

A more detailed analysis of the CDHS survey data from 2010<sup>31</sup> shows that:

- Children from uneducated mothers have higher malnutrition rates than from educated mothers. This shows the importance of female education for appropriate nutritional behavior and child care.<sup>32</sup>
- Children are more likely to be underweight or stunted if open defecation is common practice in their families. This underlines the importance of good sanitation and hygiene practices for child nutrition.
- Children **breastfed** are less stunted or underweight than children not receiving breast milk.
- **Stunting and underweight are strongly correlated to the poverty status** of the household<sup>33</sup>. In the lowest wealth quintiles in 2010 twice as many children were stunted than in the highest quintile (51.1% against 23.1%) whereas acute malnutrition (reflecting more the health status of the child) seems to be less linked to the poverty status. However, poverty is not the only reason for child malnutrition as even in the richest wealth quintiles one out of five children is underweight.

■ Stunting ■ Underweight 60 50 40 30 20 10 0 None Never 20 30 40 50 Primary Ever Secondary+ Wealth HH openly defectating Mothers Education Breastfeeding

Figure 18: Child Malnutrition by Wealth, Open Defecation, Mother's Education and Breastfeeding

Source: CDHS 2010 (World Bank Analysis)

Insufficient complementary feeding after the age of six months contributes significantly to the persistent high child malnutrition rates. A sharp increase in growth faltering begins with the introduction of complementary foods. In 2010, only 24% of children met the minimum standard with respect to all three Infant and Young Child Feeding (IYCF) policy feeding

Based on regression analysis where important covariates were included (carried out by UNICEF and World Bank in 2013.)

However, there is no causal relationship. Also uneducated mothers can have well-nourished children. See N. Ikeda, Y. Irieb & K. Shibuya. Determinants of reduced child stunting in Cambodia: analysis of pooled data from three Demographic and Health Surveys.

This is not only linked to the limited purchasing power of poor households resulting in lower (or lower quality) food intake of their children, but also to the (in general) lower caring capacities of poor mothers (lower education, more time constraints) preventing them from appropriate child feeding. Higher prevalence of undernutrition and micro nutrient deficiencies in poor mothers, as well as limited access to clean water and sanitation of poor families are other factors explaining the correlation between poverty status and child malnutrition.

practices.<sup>34</sup> Complementary feeding – both behaviors and access to fortified complementary foods – is therefore one of the most burning problems with regard to child nutrition in Cambodia.

Although there was no progress with regard to the overall reduction of child malnutrition between 2005 and 2010 some other nutrition outcome and key nutrition behavioral and service indicators improved considerably over the last five years.

Figure 19: Child Malnutrition Related Indicators in Cambodia 2000, 2005, 2010 (in %)

Indicator	CDHS 2000	CDHS 2005	CDHS 2010	CMDG 2015 Target (%)
Anaemia of children 6-59 months	63	62	55	42 (target NNS)
Children 1-5 receiving Vitamin A capsules	28,5	34,5	70,9	90
Exclusive breastfeeding	11,4	60	73,5	49 (MDG)
				70 (NNP)
Breastfeeding within 1 hour after delivery	11	35,1	65,2	62 (MDG)
Households using iodized salt	12	73	83	90

Source: CDHS 2000, 2005, 2010, CMDG

Figure 19 indicates that there have been very large improvements in the use of iodised salt, coverage of Vitamin A supplementation and exclusive breastfeeding up to six months of age as well as early initiation of breastfeeding. However, among Cambodian children aged 6-59 months old, 55 per cent are still anaemic. Anaemia prevalence has remained about the same as in the year 2000 and the current prevalence rates are a critical public health problem in Cambodia.

At the same time the CDHS 2010 revealed important progress in reducing infant and underfive mortality. Rates declined by more than 30 per cent between 2005 and 2010. Despite this remarkable achievement, nearly one in every 20 Cambodian children died before reaching their fifth birthday (2005-2010).

Figure 20: Infant and Under Five Year Mortality Rates Cambodia 2000 and 2005

Indicator	CDHS 2000	CDHS 2005	CDHS 2010	CMDG 2015 Target
Infant Mortality Rate - IMR (per 1,000 live births to age 11 months)	95	66	45	50
Under-five Mortality Rate - U5MR (per 1,000 live births to age 59 months)	124	83	54	65

Source: CDHS 2000, 2005, 2010, CMDG Report

#### **Maternal Nutrition**

The high prevalence of low body mass index in women has not changed much between 2000 and 2010 and one out of five women is undernourished and 6% of women have a height of less than 145cm which indicates that they were malnourished as children. Undernutrition of

 $<sup>^{34}</sup>$  83 % received breast milk or other milk products, 70% were fed the minimum number of times, but only 37% had been fed food from the minimum number of recommended food groups (CDHS 2010).

women is correlated with maternal mortality, premature birth, low birth-weight and child malnutrition. There was a significant increase in over nutrition (BMI <25) of women from 6% (2000) to 11% (2010)<sup>35</sup>. Against the background of rapid urbanization and changes in the food supply chain and dietary patterns over nutrition and obesity (also associated with increased maternal and infant mortality) is likely to become a concern specifically for the urban middle class in the future.

**Anaemia in women** - an underlying cause for maternal mortality and low birth weight (to which anaemia is a contributing factor) - decreased only marginally from 46.6% in 2005 to 44.1% in 2010. Anaemia among pregnant women decreased by 4% in the same time period but the rate of 53% was still well above the CMDG target of 39% for 2010. The rate of babies born with a **low birth weight** (8% in 2010) has not changed much since 2005.

70 ■ CDHS 2000 CDHS 2005 CDHS 2010 57.8 60 46.6 44.4 50 40 30 20.7 19.1 19.1 20 11 10 7.2 10 0 hight < 145cm BMI < 18.5 BMI >25 Anemia

Figure 21: Trend in Female (Women 15-49 Years) Malnutrition Indicators 2000 and 2010

Source: CDHS 2000, 2005, 2010,

Maternal malnutrition is also highly correlated to poverty but elimination of poverty would be not sufficient to fully address maternal malnutrition as 16% of the richest wealth quintile has a low body mass index and one out of three women in this quintile was anaemic in 2010. The result of an equity analysis of maternal anaemia prevalence by wealth group goes along with the general **social distribution of malnutrition in children:** the poor, rural and non-educated have a higher incident than the rich, urban and educated.

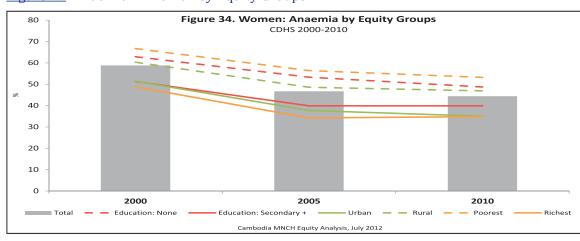


Figure 22: Anaemia in Women by Equity Groups

Source: CDHS 2000, 2005, 2010 (UNICEF Analysis)

Female over nutrition is higher in urban and (16%) than rural (5%) areas and more than three times higher in the highest (17%) than the lowest wealth quintile (5%). See CDHS 2010.

Child malnutrition and mortality rates in 2010 remained well above those of most of Cambodia's neighbours, with the exception of Laos and Myanmar as indicated in the following figure.

Figure 23: Regional Comparison of Child Malnutrition and Mortality Rates

Country	Stunting Rate (%)	Wasting Rate (%)	Underweight Rate (%)	Low birth weight Rate (%)	U5 Mortality Rate per 1000 live birth
China	10	3	4	3	15
Thailand	16	5	7	7	12
Malaysia	17	-	13	11	7
Viet Nam	23	4	12	5	22
Philippines	32	7	22	21	25
Myanmar	35	8	23	9	62
Cambodia	40	11	28	11	54
Lao PDR	48	7	31	11	42

Source: UNICEF, Improving Child Nutrition, 2013 (Rates for Countries Other than Cambodia are the Latest Available Rates in the Period 2007-2011)

#### 2.4 Conclusions from the FSN Situation Analysis

From the analysis of the food security situation in Cambodia and recent trends the following conclusions can be drawn:

#### **Macro Food Security:**

Cambodia has been producing a sizable rice surplus over many years and has well
integrated food markets. Food security at the macro level is therefore largely achieved
and of no specific concern for Cambodia today. The NSFSN therefore needs no specific
focus on national level food security but concentrates at household and individual level
(nutrition).

#### **Household Food Security**

- A considerable part of the food consumed by households in Cambodia comes from their own production. Increasing availability of sufficient nutritious food at household level through diversification is therefore important to improve overall household food consumption.
- As food insecurity is most prevalent in poor, rural population, sustainable development
  of income through market integration of small producers, as well as distribution of
  agricultural land to landless and land poor is important to enhance household food
  security.
- As also in rural areas half of the food at household level does not come from own food production, development of agricultural employment opportunities and generation of alternative job opportunities and income for the poor and food insecure in rural and urban areas remains a key challenge to ensure adequate access to food over time.<sup>36</sup>

<sup>&</sup>lt;sup>36</sup> This includes the diversification of the narrow based industrial sector, development of SME and improving conditions for the informal sector (absorbing a large part of the Cambodian labor force.)

- Common property fishery and forest are important food and income sources for the poor and food insecure and need to be protected and managed in a sustainable manner.
- The high share of Cambodians spend on food (from their household budget) and the
  fact that most rural households are net food buyers makes them vulnerable to volatile
  food prices. Impact of high food prices on the poor and food insecure needs therefore
  to be closely monitored and short term interventions to mitigate deterioration of their
  purchasing power need to be considered.
- At household level food consumption has improved considerably but regional and social inequities exist and need to be addressed through well-targeted interventions.
- As the last financial and economic crisis showed, food access by the poor and near-poor
  is easily compromised by external shocks related to socio-economic crisis and natural
  disasters. Increasing coping capacities of vulnerable groups by scaling up social safety
  nets and improved disaster preparedness and mitigation mechanisms remains a challenge
  for the future.

#### Food Security at Individual Level (Nutrition)

- In spite of considerable reduction of poverty and food poverty over recent years, child and maternal nutrition have not improved in Cambodia since 2005. With a chronic child undernutrition prevalence of nearly 40%, there is an urgent need to address this issue as a development priority in Cambodia. High child malnutrition is not only a public health issue but also a general constraint for the development of the human resource basis and further socio-economic prosperity of Cambodia. A recent study on the economic consequences of malnutrition in Cambodia estimated the burden, malnutrition represents to the national economy at US\$419 million annually or about 2.6% of GDP.
- Significant improvements were achieved in a couple of child and maternal nutrition related service delivery (such as uptake of antenatal care) and behavioral change indicators (such as early initiation and exclusive breastfeeding). Such progress needs to be protected and further interventions to improve nutrition related behavior, such as appropriate complementary feeding, be scaled up.
- Analysis shows that child and maternal undernutrition not only relates to the wealth status of households but also to access to sanitation and hygiene and the educational status of mothers. Improving food security at individual level in Cambodia also demands not only nutrition specific interventions but also nutrition sensitive actions across and strong coordination between sectors.
- On the other side over nutrition and obesity of women and children is rapidly increasing and the "double burden of malnutrition" in Cambodia needs to be addressed at an early stage to minimize impact on health status and to safe social and economic cost.

This figure is comprised of: 1) the net present value (NPV) of the lost workforce resulting from (malnutrition related) childhood deaths; 2) the NPV of lost future productivity due to cognitive and other deficits from childhood anemia and stunting; 3) current annual losses due to work performance deficits among anemic adults engaged in manual labor; and, 4) as well as expenses for health expenditures to treat (malnutrition related) excess cases of diarrhea, respiratory diseases and low birth weight. See: CARD/UNICEF/WFP, The Economic Consequences of Malnutrition In Cambodia, November 2013.

#### 3. National Policies and Strategies for FSN and Institutional Set-Up

This section examines the current policy and institutional context of FSN in Cambodia. FSN has been identified repeatedly as an important priority under existing national policy frameworks and sector policies and many development programs in Cambodia identified improving FSN (or its causal dimensions) as an objective. Furthermore for many years the RGC has established coordination structures for the cross-cutting theme of FSN to support government ministries in the mainstreaming of FSN and the implementation of their strategies and plans.

#### 3.1. FSN in Overarching Cambodian Policies and Plans

As an important cross-cutting issue, FSN is addressed in all overarching policies and development plans of the RGC:

The RGC's Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III (2014-2018) sets the broad policy directions for improving FSN and identifies priorities for enhancing availability, access, utilization and stability of food, specifically in the sub rectangles, focusing on agricultural intensification and diversification, land reform, sustainable natural resources management, enhancing health and nutrition and establishing provision of social safety nets. The NSFSN is fully in line with this policy document.

FSN as an important cross-cutting issue is further addressed in **the NSDP 2014-2018** as a key policy priority and the most relevant actions to enhance availability, access, utilization and stability of food supply outlined in the NSFSN were included in chapter 4 of the overarching development plan for Cambodia. Also actions to enhance the political and policy environment for FSN are reflected in the NSDP and key indicators on FSN, like child malnutrition indicators are included as core indicators in the NSDP monitoring framework and the NSFSN aligns fully with the respective targets set in the NSDP.

The NSFSN is further linked to and contributes to the achievement of **Cambodia Millennium Development Goals (CMDGs)**. CMDG 1 is "Eradicate extreme poverty and hunger." However, improving FSN also plays important roles in achieving many of the other eight CMDGs.

Figure 24: FSN Linkages to Cambodian Millennium Development Goals

CMDG	Role of Improving FSN in Achieving the CMDGs
1: Eradicate extreme poverty and hunger.	Improved FSN is intrinsic to eradicating hunger. It is also a major dimension of eradicating poverty. Food insecurity and malnutrition erode human capital, reduce resilience to shocks and reduce labor force productivity.
2: Achieve universal nine-year basic education.	Improved FSN will contribute to increased school attendance and retention and lower drop-out rates, and will improve the performance of children in education.
3: Promote gender equality and empower women.	Food-secure and better nourished girls and women will enjoy better health and will benefit from better education, economic welfare, reproductive choices, child-rearing practices and their participation in the governance of civil society.
4: Reduce child mortality.	More than 50 per cent of Cambodian children aged under five years who die prematurely are malnourished. Improving child nutrition and FSN will directly reduce child mortality.
5: Improve maternal health.	Food insecurity and malnutrition are associated with most major risk factors for maternal mortality. Cambodian women and mothers suffer from high rates of malnutrition, resulting in illnesses that negatively affect maternal and young children's health.

6: Combat HIV/ AIDS, malaria and other diseases.	Food insecurity triggers coping mechanisms such as migratory labor and/or prostitution that increase the spread of HIV/AIDS. Adequate nutrition and food security are very important for extending the life of those living with HIV/AIDS and for decreasing mortality rates from malaria and other diseases.
7: Ensure environmental sustainability.	Food insecurity is a cause of unsustainable use of forest lands and resources. The food-insecure and very poor often depend on forests and fisheries as a food supply and for livelihood needs. Improving FSN is an important dimension of achieving environmental sustainability.
8: Forge global partnerships for development.	These partnerships need to include international donors and agencies with expertise in improving FSN and nutrition.
9: De-mining, UXO and victim assistance.	The food-insecure and very poor are particularly affected by and vulnerable to mines and UXO impacts due to their higher dependency on forests and fisheries as a food supply and for livelihood needs.

The RGC is signatory to a number of **international conventions** which provide the legal framework for recognizing food security as a basic human right under international law, specifically the International Covenant on Economic, Social and Cultural Rights (ICESCR) and adheres to the "Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of national food security" adopted by the 187 FAO member states in November 2004.

Moreover, the RGC committed to adopt the **ASEAN Integrated Food Security (AIFS) Framework** and its Strategic Plan of Action on Food Security (SPA-FS 2009-2013) developed and approved in 2008 as a response to the food crisis. These documents provide scope for joint pragmatic approaches for cooperation among ASEAN Member States in addressing food security in the region. The strategic plan of action lays out prioritized actions from four components<sup>38</sup> with the objective to increase food production, to reduce post-harvest losses, to promote conducive market and trade for agricultural commodities and inputs, to ensure food stability, to promote accessibility to agricultural inputs and to operationalize regional food emergency relief arrangements. High Level Consultation among member states took place recently to integrate Nutrition into the AIFS Framework and its Strategic Plan of Action.

The RGC is further supporting and preparing its membership to the international **Scaling-Up Nutrition (SUN)** movement launched in 2010 with the objective to create an enabling political environment, establish best practices, align actions and increase resources to enhance maternal and child nutrition.

The RGC reconfirmed its commitment to improve FSN as an important part of human capital development and sustainable economic growth, specifically during the **3rd National Seminar on Food Security and Nutrition under the Theme of Social Safety Nets** in July 2009 as well as during the **4**<sup>th</sup> **National Seminar on Food Security and Nutrition under the Theme Child and Maternal Nutrition** in May 2012<sup>39</sup>. Both events were organized by the CARD and presided over by **Samdech Akka Moha Sena Padei Techo HUN SEN**, Prime Minister of the Kingdom of Cambodia. In addition, CARD was mandated during the 4th National Seminar on FSN "To develop a comprehensive and applicable national strategy for FSN and action plans to enhance nutrition."

<sup>38 1.</sup> FS and Emergency Relief; 2. Sustainable Food Trade Development; 3. Integrated Food Security Information System; and, 4. Agricultural Innovation; See ASEAN Integrated Food Security (AIFS) Framework and Strategic Plan of Action on Food Security in the ASEAN Region (SPA-FS.)

<sup>&</sup>lt;sup>39</sup> High level National Seminars on Food Security and Nutrition were already previously organized by the Cambodian Government in 1999 and 2003.

#### 3.2. FSN in Relevant National Sector and Cross Sector Strategies and Policies

Several ministries have launched national sector strategies that address the food security situation directly or indirectly. The NSFSN was developed to complement these existing sector strategies and plans, to fill existing gaps and to serve as a platform for joint intersectorial action to enhance food security and nutrition. Figure 25 gives an overview of relevant strategies and plans related to FSN for each of the four dimension of FSN. The following strategies relates directly to objectives outlined in the NSFSN:

The **Strategy on Agriculture and Water** (SAW 2006-2010) of the Ministry of Agriculture, Forestry and Fisheries (MAFF) and the Ministry of Water Resources and Meteorology (MOWRAM) as well as the **Agricultural Sector Strategic Development Plan** 2009-2013 from MAFF reflects FSN in the vision statements and overall objectives. One of the six pillars of the Program Design Document for the SAW<sup>40</sup> focuses specifically on food insecure rural households. This pillar has two components: (1) Community self-reliance for food security and poverty reduction through intensification and diversification of smallholder farming systems; and, (2) Enhancement of Institutional and Policy Framework for FSN and improving information management. However, the SAW was not implemented through a program based approach as originally intended. Major FSN related programs were building on the SAW and specifically its food security pillar.<sup>41</sup>

The National Nutrition Strategy (NNS 2009-2015) developed in 2009 by the National Nutrition Program (NNP) of MoH is focusing on activities within the health sector to improve maternal and young child malnutrition, but underlines that a multi-sectorial approach is required to address successfully the causes of undernutrition. Objectives, indicators and targets and priority interventions of the NNS are fully aligned with the NSFSN. Currently MoH/NNP is embarking to operationalize the NNS strategy and prepared a "Fast Track Road Map for Improving Nutrition 2014-2020" to further upscale evidence based health sector nutrition interventions.

The National Social Protection Strategy for the Poor and Vulnerable (NSPS 2009-2013) was developed by CARD in collaboration with sector ministries and DPs and approved by the RGC in March 2011. The main goal of the NSPS is that "poor and vulnerable Cambodians will be increasingly protected against chronic poverty and hunger, shocks, destitution and social exclusion, and benefit from investments in their human capital." Food insecurity and child malnutrition are largely reflected as major sources of vulnerability and addressed in this strategy.

The "Policy Paper on the Promotion of Paddy Production and Rice Export" was developed and officially launched for implementation on 17 August 2010 with the vision to turn Cambodia into a key rice exporting country benefitting from worldwide increased food demand and prices. Until 2015, a paddy rice surplus of four million tons and milled rice export of at least one million ton should be achieved. The policy is comprehensive, integrating various sectors and is reflecting potential risks for household food security.

Further steps to operationalize the SAW were outlined in the Program Design Document (2010-2013) for the Strategy for Agriculture and Water, April 2010.

MAFF developed also a National Program for Household Food Security and Poverty Reduction in 2006 (before the development of the SAW). The Global Agriculture and Food Security Program (GAFSP) proposal of the RGC – implemented through Emergency Food Assistance Project II (EFAP) - was building on what was outlined in this strategy and the FS programm of the SAW.

Figure 25: Overview on Major National Policies, Strategies and Plans Relevant for FSN

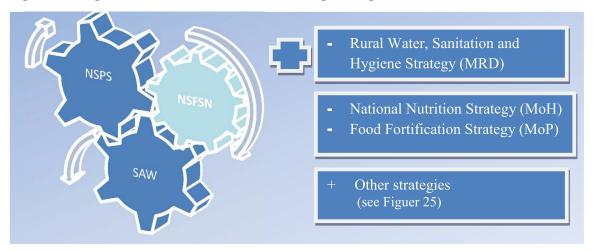
Dimension of FSN <sup>42</sup>	Strategies and Plans	Lead Ministry	Timeframe
	Agricultural Sector Strategic Development Plan Strategy on Agriculture and Water (SAW) Related Program Design Document	MAFF/ MAFF/ MOWRAM	2009-2013 2006-2010 2010-2013
	Policy Paper on the Promotion of Paddy Production and Rice Export (Rice Policy)	MEF MAFF	2010
1. Food	Strategic Planning Framework for Livestock:	MAFF	2011 - 2020
Availability and Access	Animal Health Medium Term Priority Plan	MAFF	2011 -2015
and necess	Strategic Planning Framework for Fisheries	MAFF	2010 - 2019
	National Forest Program	MAFF	2010 - 2029
	Strategic Development Plan on Water Resources and Meteorology	MOWRAM	2009-2013
	Education Strategic Plan	MoEYS	2009-2013
	Land Policy Framework Land Law 2001	MLMUPC	2002 2001
	The Strategic Framework for Decentralization and Deconcentration as well as the National Program for Sub-National Democratic Development (NP-SNDD)	MoI	2010-2019
	Health Sector Strategic Plan (HSSP II)	МоН	2008-2015
2. Food Utilisation	National Nutrition Strategy (NNS) and Fast Track Road MAP for Improving Nutrition	MoH/NNP MoH/NNP	2009-2015 2014-2020
othisation	National Strategy for Rural Water Supply, Sanitation and Hygiene	MRD	2011-2025
	Food Safety Policy		
	National Social Protection Strategy (NSPS)	CARD	2009-2013
3. Food	Disaster Management Law National Action Plan (SNAP) for Disaster Risk Reduction	NCDM NCDM	2008-2013
Stability	Sub-Decree on the Establishment of Cambodian Food Reserve System	NCDM	June 2012
	National Adaptation Program of Action to Climate Change (NAPA)	МоЕ	2006
	Response Strategy to the Impact of Climate Change	MAFF	2014-2018
	Cambodian Climate Change Strategic Plan (CCCSP)	МоЕ	

The National Strategy on Rural Water Supply, Sanitation and Hygiene (RWSSHS 2011-2025) developed by MRD in 2012 outlines a long-term approach with the aim that by 2015 - 50% (2025 100%) of the rural population has access to improved water supply and 30% (2025 - 100%) has access to improved sanitation and practice basic safe hygiene behavior. The strategy focuses not only on the provision of hardware and facilities, but on associated behavior change and mechanisms that promote ownership and lead to proper use, operation and maintenance of the systems.

Some of the strategies are tackling several dimensions of FSN simultaneously and there are linked in this table to the dimension where their impact is likely the highest.

The NSFSN will in no way replace or compete with these strategies, but provide an instrument to advocate for additional funding and enhanced coordinated and integrated action to improve food security and nutrition in Cambodia.

Figure 26: Alignment of NSFSN with Other Existing Strategies and Plans



#### 3.3 National Programs and Projects on FSN

Programs and projects aimed at enhancing household food security and nutrition are not new and have been implemented in Cambodia for many years through ministries, (MAFF, MWORAM, MRD, MoH, MEF) international and local NGOs and the United Nations. Most of these programs were not explicitly designed to address FSN as a cross-cutting issue but as rural development projects to enhance livelihoods by supporting small holder agricultural production systems<sup>43</sup>, programs to support the pro-poor sustainable growth and equitable access to natural resources<sup>44</sup>, or to promote community health and nutrition<sup>45</sup>. Social safety nets for FSN (school feeding, scholarships for the poor, nutrition programs which include special nutritious food products for small children, targeted food distribution for disaster-affected households, and Food for Work (FFW)/Cash for Work (CFW) programs) were implemented through World Food Program (WFP) in cooperation with MoEYS, MRD and NGOs. Health sector nutrition focused interventions were coordinated and implemented through the NNP of MoH, and MoP in cooperation with MIH, MoC and NGOs coordinated the implementation of programs to enhance the fortification of food with micronutrients over many years.

As a response to high food and agricultural input prices in 2008, larger scale food security programs assisting the poor and food insecure to cope with the impact of the crisis were

Major examples for these were the EU-PRASAC and ECOSORN (Economic and Social Relaunch of Northwest Provinces in Cambodia) rural/agricultural development projects in the last decade. The "Helping Address Rural Vulnerabilities and Ecosystem Stability" (HARVEST) project financed by United States Agency for International Development (USAID) is currently implemented in provinces around Tonle Sap lake with high level of food insecurity intending to improve income and nutrition for 70.000 rural households (focusing on agriculture, aquaculture and fisheries, natural resource management and climate change, social inclusion and capacity development.)

Examples for these are the from Asian Development Bank (ADB) and (IFAD) supported projects within the Tonle Sap initiative like the Tonle Sap Sustainable Livelihoods Project (TSSLP) and the Tonle Sap Poverty Reduction and Smallholder Development Project.

<sup>&</sup>lt;sup>45</sup> Among others, the UNICEF supported "Seth Koma" program focusing on nutrition and sanitation (implemented the last decade) and the MDG-F "Joint Program for Children, Food Security and Nutrition in Cambodia" concentrating on improving child nutrition (by strengthening the coordination of nutrition interventions across line ministries and UN organizations.)

designed. This includes the EFAP,<sup>46</sup> the Food Facility from the European Union (EU-FF), and the Global Food Crisis Response Program Grant from the World Bank (WB). They had a more emergency response character and focused on immediate support to the poor and vulnerable through distribution of food and agricultural inputs, creation of temporarily income opportunities and strengthening of emergency response capacities. These interventions were short-term and developed rather independently from each other.

Also programs to enhance institutional capacities, and the policy environment for FSN (including monitoring and information management) were implemented as components of larger scale interventions or through smaller projects based in RGC institutions (MAFF, MoP, CARD, NCDM, MEF) over the last decade.<sup>47</sup> **Annex 2** of the NSFSN provides an **overview** on all on-going (or planned) major **programs and projects** related to FSN, their time-frame and targeted beneficiaries.

# 3.4 Institutional Set Up for FSN Related Coordination

To have maximum impact and results, improving FSN in Cambodia requires close cooperation and efficient coordination by a wide range of line ministries and government and non-government stakeholders so they can set priorities and take joint action. The RGC set up coordination structures for FSN to support government ministries and development partners in the design, implementation, monitoring and evaluation (M&E), information management and capacity building with regard to FSN.

The overall government mandate for facilitating policy development and inter-ministerial coordination with regard to the cross-cutting theme FSN lies with the CARD<sup>48</sup>. To improve sharing of information, knowledge, experiences and best practices among line ministries, development partners and NGOs, the National Food Security Forum **(NFSF)** was established in 2003. In 2004, the Technical Working Group on Food Security and Nutrition **(TWG-FSN)** comprising of all relevant government agencies, development partners and civil society organizations was set up to improve coordination, harmonization and alignment of development efforts, and a secretariat of the TWG-FSN co-chaired by CARD and the MoP was established.

CARD and the TWG-FSN coordinate the formulation of national policy frameworks for FSN (SFFSN 2008-2013 and NSFSN 2014-2018) and SP (NSPS 2011) and are supposed to organize its effective M&E. In early 2014, the TWG on FSN was merged with the Working Group on Social Protection to a new TWG SP&FSN chaired by the chairman of CARD to enhance synergies between these two important cross-cutting issues, enhance policy oversight and make best use of capacities within CARD.<sup>49</sup>

Since 2004, the Food Security and Nutrition Information System **(FSNIS)** in CARD has become the central web-based entry portal for FSN related information in Cambodia. In 2006, a Food Security and Nutrition Information Management Task Force **(FSNIMTF)** was established

Emergency Food Assistance Program (EFAP) supported by ADB was implemented from 2008-2011 as a large scale loan and grant project with three components: compensatory consumption support (food distribution, FFW), productivity enhancement (mainly subsidized seed and fertilizer distribution) and capacity development for emergency response. Regionally the project focused on provinces around the Tonle Sap. The project was assisting in the operationalization of the Cambodian Food Reserve. The extension phase (EFAP-AF) will be implemented during 2013-2015 through MEF with funds from GAFSP in ten targeted food insecure provinces to address structural problems related to food insecurity by increasing availability to, and awareness of, nutritious food and hygiene, access to improved agricultural inputs and technologies. EFAP intends further to improve capacities to mainstream FSN and to increase resilience of the poor and vulnerable to natural calamities.

Gesellschaft für Internationale Zusammenarbeit (GIZ) supported a food security and nutrition policy support project providing technical assistance to MoP and CARD (2003-2010). FAO assisted CARD in capacity building to mainstream FSN in national and decentralized development plans and FAO and WFP built up capacities for FSN related information management in MAFF and CARD over the last seven years. The ADB supported EFAP assisted MEF, CARD and NCDM in developing proposals for disaster preparedness and response and FSN monitoring.

<sup>&</sup>lt;sup>48</sup> This mandate is outlined in the Royal Decree from 1998 and specified in the sub-decree (No. 79 ANK/BK) and was recently reconfirmed during the 4<sup>th</sup> National Seminar on FSN in May 2012 by the Prime Minister of Cambodia.

See CARD, Decision on the establishment of TWG on Social Protection and Food Security and Nutrition, Jan 3, 2014.

as a substructure of the TWG-FSN to coordinate FSN related information management in Cambodia. In 2010 a Food Security and Nutrition Data Analysis Team **(FSNDAT)** comprising CARD, MAFF, MOWRAM, MoP, MoH and NCDM was installed to analyze the food security situation based on existing information from weather stations, administrative statistics and national survey data. **A quarterly FSN bulletin** is produced giving a regular overview of trends and emerging threats with regard to FSN in Cambodia for designing of policies and interventions as well as crisis response. Since 2004, CARD in collaboration with MAFF, MoH, MoWA and NGOs organized capacity building at the national, provincial and local levels to enhance the mainstreaming of FSN in national strategies and the decentralized planning process and the **National Trainer Pool for FSN** was formalized in December 2009.

In addition, various coordination structures for FSN related issues have been established and chaired by line ministries. The **Food Security Task Force** was established in the Ministry of Finance after the last financial and economic crisis to coordinate development and implementation of the RGC food security emergency operations and has become a more permanent structure overseeing the implementation of the Emergency Food Assistance Program (EFAP) and the establishment of the National Rice and Seed reserve. The **Nutrition Working Group (NWG)** of the National Nutrition Program (NNP) in the MoH coordinates health sector interventions to enhance maternal and child nutrition. The National Subcommittee for Iodine Deficiency Disorder (**NSCIDD**) and the National Sub-Committee for Food Fortification (**NSCFF**) chaired by the MoP and linked to its **National Council for Nutrition (NCN)**<sup>50</sup> is setting up national plans and guidelines, and coordinates the process to enhance fortification of food with micronutrients in Cambodia. All these structures are coordinating their work closely with the TWG-SP&FSN.

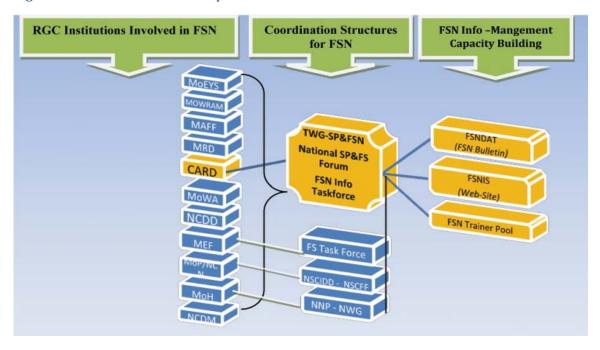


Figure 27: Institutional Landscape for the FSN in Cambodia

The institutional arrangements for FSN are well established in Cambodia but further enhancement of capacities, clarification of roles and functions and more involvement of decentralized government is required to ensure the effective implementation of the NSFSN. Priorities for improving FSN related coordination, monitoring and information management in Cambodia over the next five years will be laid out in chapter 7 of the document.

Under the NCN and its inter-ministerial technical committee a Cambodian Nutrition Investment Plan (CNIP 2002-2008) was developed previously.

# 4. Challenges, Gaps and Programmatic Priorities

To make the NSFSN more focused; this chapter of the strategy defines programmatic priority-areas for achieving significant progress in household food security and nutrition over the next five years in Cambodia. Although many sector and cross-sector issues are related to FSN the NSFSN tries to concentrate on those areas being currently most relevant in the Cambodian context.

## 4.1. Main Challenges and Existing Gaps Related to FSN in Cambodia

Figure 28 summarizes the main problems and challenges different population groups are currently facing with regard to FSN in Cambodia, the progress made through previous or current interventions as well as the most important remaining gaps. Challenges and gaps<sup>51</sup> are presented along the four dimensions of FSN. Specific actions (priority actions) to bridge these gaps in order to enhance FSN until 2018 will be outlined under each objective later on in chapter 6 of this document.

Figure 28: Overview on Challenges, Progress Made and Remaining Gaps

Challenges / Problems	Groups Concerned	Progress Made	Gaps and Challenges Remaining
1. Food Availability and Access			
Low productivity and high risks of rice based farming systems - limited access to affordable quality inputs (seeds and fertilizers) and agricultural support services, (extension services, storage and marketing).	Small scale food insecure farmers	Substantial increase of rice yields over the last decade. Food insecure are specifically addressed within programs based on SAW (FS-support program) through numerous NGO projects and other projects funded by the RGC	<ul> <li>Limited scale of rice intensification programs focusing on smallholders</li> <li>Storage, and marketing constraints (for food insecure farmer) for rice persist</li> <li>Limited funds for research (seeds and new techniques) and training on pre- and post- harvest management and for farmers demonstration</li> </ul>
Lack of diversification and market integration of farming systems limited access to affordable quality inputs (seeds and fertilizers) and agricultural support services, (extension services, storage and marketing).	Small scale food insecure farmer	Increased diversification (integration of vegetable production, small livestock, aquaculture, cash crops) through interventions implemented within the framework of the SAW (FS-support program), through NGO projects and other projects funded by the RGC	<ul> <li>Limited scale and insufficient coordination and monitoring of smallholder diversification programs</li> <li>Few farmer organization/ cooperatives for marketing and input supply</li> <li>Mechanisms for contract farming not established</li> <li>Limited participation of private sector</li> </ul>
<b>Limited access</b> of small holder farmer to <b>irrigation</b>	Small scale food insecure farmer	Large scale irrigation infrastructure is being implemented	- Limited benefits of large scale irrigation investment to food insecure small holder
Limited / unsecured access to agricultural land	Land poor / landless food - insecure households	Access of the poor to land and security of tenure is improving (systematic titling, social land concessions and implementation of the PM directive from 1.5.2012 aiming at securing land rights of 470.00 poor families)	lowlands (no land to distribute) - insufficient linkages (social land concession/ agricultural services)

Gaps can exist at different levels (absence or insufficient scale of interventions, knowledge/awareness gaps, implementation or committment or financial gaps, etc.). Not only the technical suitability of solution but also their appropriate targeting (to food insecure areas, households and groups) is essential to make a difference.

Challenges / Problems	Groups Concerned	Progress Made	Gaps and Challenges Remaining
Degradation of and limited access to common property fishery and forest resources	Poor households relying at least partly on fishery and forest resources	Policies to improve access of food insecure to fishery resources (closure of private fishing lots) and efforts to involve communities in sustainable management of fishery and forest resources	<ul> <li>Insufficient scale of community comanagement of fishery and forestry resources</li> <li>Encroaching of economic land concessions (ECL) on common property resources</li> <li>Threat from hydro-power projects on fish migration and harmful fishing practices</li> </ul>
Limited (off farm) employment and income opportunities in rural areas (formal and informal sector wage labor)	Specifically land less & land poor food insecure HH, youth	Increasing labor demand (garment, tourism and construction but also through commercialization of agriculture); TVET to increase skills (targeting the poor), growing urban/rural connectivity	<ul> <li>Skill shortages of food insecure to meet requirements for formal sector employment</li> <li>Limited absorption of rural work force through large scale agribusiness/concessions (ELC)</li> <li>Unregulated working conditions in informal wage labor sector specifically impacting women</li> </ul>
Microenterprises and SME providing employment and income (and stabilizing household purchasing power of food insecure over the year) lack recognition/support	Specifically land less & land poor food insecure HH,	SME sector is growing and regulations and policies are being formulated; Coverage of microcredit institutions is growing; projects supporting development of rural handicrafts and small businesses are implemented	<ul> <li>Constraints for micro-enterprises to get access to finance and market (high interest rates)</li> <li>Legal/regulatory framework for SME still incomplete and access to technology, credit and markets limited</li> <li>Scale of support to informal microenterprises/business not sufficient</li> </ul>
Insufficient road and market infrastructure is a constraint for creation of employment and marketing specifically in remote areas	Specifically land less & land poor food insecure HH, youth	Overall road network (also in rural areas) is significantly improving	<ul> <li>Remote areas (with high incidence of food insecurity)still lack sufficient connectivity</li> <li>Maintenance for tertiary road network not effective</li> </ul>
		2. Food Use and Utilization	
Overall: No improvement of child and maternal malnutrition between 2005 and 2010 and high incident of malnutrition specifically in rural areas -stunting <5: 39.8%, Female under-nutrition: 19,8%; High maternal and child anaemia prevalence (Some ) health sector nutrition interventions (with focus on 1000 days) not yet at scale; Nutrition education not sufficiently mainstreamed	mothers (specifically	Improved breastfeeding and existing sub-decree on regulating breast milk substitutes Increased access to ANC and coverage with Vit A supplementation and deworming Pathway to enhance child and maternal nutrition in Cambodia across sectors laid out (recommendations from 4th National Seminar on FSN 5/2012)	<ul> <li>Increase of bottle feeding</li> <li>Multiple micronutrient supplementation not at scale</li> <li>Inappropriate complementary feeding practices persists (76% of children)</li> <li>Severe child malnutrition often not identified and treated (insufficient treatment of diarrhea with zinc)</li> <li>Insufficient capacities for nutrition in health sector (-&gt; quality of services)</li> <li>Insufficient linkages within health sector and with other sectors and limited funding for nutrition</li> </ul>
Low access to improved sanitation and lack of basic hygiene practices specifically in rural areas (-> high prevalence of diarrhea)	Poor rural HH and urban settlements	Updated strategy on RWSSH exist; Increased awareness on importance of improving water, sanitation and hygiene at policy level	<ul> <li>Programs to improve sanitation and hygiene practices yet not at scale</li> <li>Low consciousness of importance of WSSH in public and few incentives</li> <li>Not sufficient linkages between WASH and nutrition programs</li> </ul>

Challenges / Problems	Groups Concerned	Progress Made	Gaps and Challenges Remaining
Fortification of staples and condiments (as most cost-effective way to eliminate micronutrient deficiencies) still limited in Cambodia. Enforcement of legislation and data of compliance of industry insufficient	All HH	Salt fortification (iodine) mandatory and at scale; Experiences from fish/soy sauce iron fortification pilots; Coordination structure for food fortification in place	<ul> <li>Comprehensive national policy and guidelines on food fortification lacking</li> <li>Iron fortification of fish/soy sauce yet not at scale (not mandatory, many small producer)</li> <li>Limited engagement of private sector in food fortification (low public awareness on benefits of fortified food)</li> <li>Limited enforcement of legislation and information on compliance of industry</li> </ul>
Community based, convergent approaches to improve nutrition are fragmented and not at scale	Children and mothers (specifically in poor rural and urban HH)	Experiences with (integrated) community based nutrition programs (CBNP) exists (in region and Cambodia); implementation structures as sub-national level exists; Commitment (from 4 <sup>th</sup> Nat. Seminar);	<ul> <li>Insufficient coordination across sectors</li> <li>A national large scale community based nutrition program is not formulated</li> <li>Weak capacities at decentralized level to implement community based approaches</li> </ul>
Limited <b>access</b> to (and demand for) nutrition services <b>from poor HH</b>		Preparation of a CCT program to enhance demand; HEF are being opened to cover nutrition services	<ul> <li>CCT outlined but not implemented</li> <li>Insufficient linkages between nutrition (health sector) and social protection (SP)-programs</li> </ul>
		3. Stability of Food Supply	
Vulnerable household react with negative coping mechanism to natural disaster, economic crisis or idiosyncratic shocks and often become chronically food insecure and malnourished; food security related social protection interventions are often projects based, ad hoc and not at scale	Food insecure (or almost) food insecure HH	Targeted food distribution to poor and vulnerable groups and FFW/CFW in place; NSPS outlines pathway for harmonized and improved FS SSN; effective HH targeting system (ID Poor); pilot on improved SSN integration	<ul> <li>Coverage of food insecure households and groups with SSN still limited</li> <li>Predictable income opportunities (PWP) to protect temporarily or chronic food insecure not in place</li> <li>Coordination/integration of FS- SSN programs still weak</li> <li>Private sector risk reduction (crop insurance) not developed and access to affordable credits limited</li> </ul>
Cambodia is prone to natural and economic crisis impacting stability of food supply and nutrition - capacities and mechanism for crisis prevention / preparedness and response are still weak	Food insecure (or almost) food insecure HH	Plans for disaster risk reduction (SNAP) and institutional structures for managing disaster preparedness and response (NCDM and substructures) exist; National grain reserve is being built up	<ul> <li>Limited capacities for disaster risk management and disaster/ crisis response and insufficient coordination</li> <li>Insufficient linkages between emergency and longer term development initiatives</li> <li>Procedures to deal with food price and economic crisis not fully developed</li> <li>Emergency info systems not sufficiently integrated and used to trigger actions</li> </ul>
Climate change will affect household food security over time (reduced yields and more floods and droughts and related crop failures, etc.)	Food insecure farmer, specifically in drought prone areas	Strategies (NAPA) and plans (CCCSP) for climate change mitigation and adaptation laid out and institutional arrangements for coordination (NCCC/CCTT) exist; issue has high political attention	<ul> <li>Limited capacities to deal with climate change adaptation</li> <li>Insufficient mainstreaming of climate change resilience through sectors</li> <li>Insufficient integration of efforts to promote disaster risk reduction, climate change adaptation and sustainable food security</li> </ul>

In addition to these gaps and challenges following **key institutional and implementation gaps and constraints** can be identified at a more general level:

- FSN-interventions often **reflect immediate priorities** (respond to natural disasters, food price crisis, etc.) rather than to follow a longer-term vision on how to improve FSN in a sustainable manner.
- Conceptional understanding and capacities to deal with FSN as a crucial cross-cutting issue is still limited. FSN training provided in the past had no sufficient coverage and depends on external support.
- **Scale and geographic coverage** of many existing FSN-interventions are limited.
- FSN-interventions are often **implemented on a project based approach** (and in parallel with the RGC structure), leading to high transaction costs and failing to build up the capacity in local government. Program based approaches (over sectors) for the cross-cutting theme FSN or for specific priority areas are not yet developed.
- **Limited coordination** of FSN-interventions (implemented through various RGC institutions, DPs and NGO's) leads to duplication of effort, reduces sustainability and their overall impact.
- RGC and DP coordination structures like the TWG-FSN were not systematically used to develop harmonized FSN-interventions and monitor their progress over sectors.
- **Involvement of decentralized level of government** in setting up and implementing and monitoring FSN-interventions started along with capacity building of these structures but is still at an early stage.
- Household targeting and area targeting of FSN-interventions has improved substantially during recent years (use of ID poor list). However, some programs still rely on *ad hoc* targeting procedures and area targeting of interventions are not efficiently coordinated among stakeholders.
- FSN Information-management in Cambodia has improved substantially (FSN information task force, FSNIS, Quarterly FSN-Bulletin) but still depends largely on external inputs and does not extend to sub-national levels.
- Monitoring and Evaluation of national FSN-policy frameworks (SFFSN) was insufficient. Indicators are not always specific, not fully harmonized with other existing indicator frameworks and defined along result (impact) chains to allow for corrective action. Procedures and responsibilities for M&E are not clearly defined and monitoring of FSN- related projects and programs are often only focusing on inputs and outputs which impairs the overall effectiveness and impact of these interventions.
- The overall budget for priority FSN-interventions, such as improvement of child and maternal nutrition, and well-targeted support to poor smallholders remains low, with the majority of funding provided by development partners and earmarked for interventions that are often implemented in parallel with the RGC system.

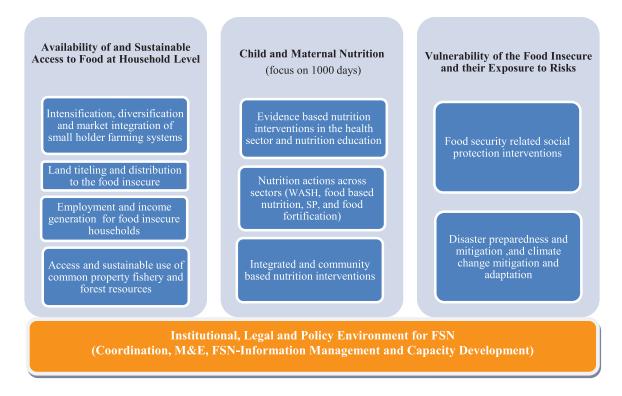
#### 4.2. Programmatic Priorities of the NSFSN 2014-2018

Food security and nutrition are complex issues requiring actions across many sectors to strengthen availability, access and use/utilization of food. As aggregated food availability at the national level in Cambodia is achieved, the focus of interventions will be on the household and individual level. Based on the FSN situation analysis (chapter 2) and the analysis of scope and coverage of existing interventions to enhance FSN (chapter 3) the NSFSN 2014-2018 addresses the following **three priority areas** which were identified through a consultative process in 2012 and 2013<sup>52</sup>:

However the selection of the priority areas (as wells of specific action in these areas was not based on scientific procedures (socio-economic and nutrition models) and no cost benefit analysis was applied, although where available existing information from Cambodia or evidence from comparable countries was used.

- 1. Food availability and food access at household level (specifically in rural areas)
- 2. Utilization and use of food resulting in improving child and maternal nutrition (Focus on 1000 days)
- 3. Vulnerability of the food insecure and their exposure to risks

Figure 29: Priority Areas to be Addressed by the NSFSN 2014-2018



The NSFSN builds on existing strategies and plans (chapter 3) and integrates elements of these strategies in one framework to enhance integration and synergies and thus to optimize outcome with regard to the improvement of FSN for the people of Cambodia. The SAW, NSPS and NNS are of specific relevance in this regard.<sup>53</sup>

Measures to enhance institutional arrangements for improving advocacy and coordination, M&E, FSN related information management and capacity building (which will be further outlined in chapter 7) are essential to ensure the effective implementation of the NSFSN.

In addition to the programmatic priority areas the process of implementing the strategy shall be enhanced by considering Food Security Governance as a cross-cutting layer. Improvement on how decisions are made that influence food security and nutrition action (including improvements of institutional and legal framework) as well as greater involvement of civil society and local stakeholders in the design, implementation and monitoring of food security action will be considered.

Women play a crucial role in the improvement of FSN in Cambodia and this is addressed across the entire strategy and through specific targeted actions.

The NSFSN will naturally overlap with these strategies and sector strategies, plans and programs. For example, parts of the SAW, the NNS as well as the NSPS already outline key interventions to improve household food security and nutrition in Cambodia, mainly through intensification and diversification of small holder farming systems (FS pillar of SAW), up-scaling of evidence based nutrition interventions for small children and mothers (NNS) and protection of the poor and vulnerable through social safety nets (NSPS.)

# 5. NSFSN 2014-2018 - Vision, Goal and Objectives (Overview)

The NSFSN 2014-2018 updates the Strategic Framework for Food Security and Nutrition (SFFSN 2008-2012). It is aligned with and further operationalizes priorities laid out in the Rectangular Strategy (2014-2018) and the National Strategic Development Plan (2014-2018) and complements other strategies and sector plans adopted by the RGC which relate directly or indirectly to food security and nutrition.

#### **NSFSN Vision**

The RGC's long-term vision is the achievement of food security and adequate nutrition in Cambodia. This is an important condition to ensure a high level of human and economic development, prosperity and equity for all Cambodians. This vision is also fully consistent with the Cambodia Millennium Development Goals:

All Cambodians will have physical, social and economic access to sufficient, safe, and nutritious food, at all times, to meet their dietary needs and food preferences and optimize the utilization of this food for a healthy and productive life.

An effective strategy to ensure food and nutrition security aims at 1) improving the availability of nutritious and healthy food for Cambodian households in a sustainable manner; 2) sufficient and stable access to food by reducing poverty and vulnerability of food insecure households; and, 3) optimization of utilization and use of food resulting in improved child and maternal nutrition.

#### Goal of the NSFSN

By 2018, Cambodians will have substantially improved physical, social and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences and optimize the utilization of this food to keep a healthy and productive life.

Achievement of the NFSN strategy goal needs to be measured by higher aggregated household food security and child malnutrition **indicators** combining the achievement of all three objectives of the NSFSN and reflecting the outcome of policies and actions across many sectors.<sup>54</sup>

- 1. Chronic malnutrition (stunting) of children under five will be reduced from 39.9% in 2010 to 25% in 2018 and underweight
- 2. Undernourishment of women (BMI <18.5kg/sq. meter) 17-47 years will be reduced from 19.1% (2010) to 8% in 2015 and 6% in 2018 and their overnutrition (BMI > 25kg/sq. meter) will not exceed 12% by 2018
- 3. Average food consumption (kcal/pers/day) among the poorest quintile will increase from 1690 kcal in 2009 to 1886 kcal in 2015 and 2060 kcal in 2018 and the quality of their food intake will significantly improve until 2018

Based on an analysis of gaps, strategic options and the consultative process in 2013, the NFSNS identifies three objectives, programmatic priorities as well as key actions (interventions and instruments) to achieve them. Most of these interventions were already recommended in the SFFSN 2008-2013 but will be scaled-up and their implementation better targeted, coordinated and monitored to increase impact. Other programmatic actions, new to Cambodia, will be

<sup>54</sup> These three indicators will be used to assess the overall achievement of the goal of the strategy, but other anthropometrics and food consumption indicators are included in the M&E framework.

piloted, evaluated and expanded based on proven effectiveness. Figure 30 outlines the three objectives of the NSFSN and summarizes medium-term programmatic priorities and a set of key actions. Some of the objectives are interrelated and the same intervention may contribute to several objectives. Indicators to track the progress against the objectives are summarized in the NSFSN indicator framework in <u>Annex 1</u> of this document.

Figure 30: Objectives, Programmatic Priorities and Priority Actions of the NSFSN

<u>Objective1</u>: Food-insecure households increase availability and access to food through more productive and diversified agriculture and livestock production, sustainable fisheries and forestry, and from non-agricultural employment and income opportunities.

Programmatic Priorities	Priority Actions (Key Activities and Instruments)		
(1). Intensify and diversify small holder farming systems and improve linkages to markets	<ul> <li>1.1. Enhance access of food insecure farmers to low cost, adaptable and replicable technological innovation for rice and other crops, aquaculture, small livestock and vegetable production, and farm storage and processing.</li> <li>1.2. Improve access of food-insecure farmer to small scale irrigation, specifically in drought-prone areas (Rehabilitate irrigation infrastructure, reservoirs, and strengthen farmer water user association in order to ensure the equity and sustainability use of water).</li> <li>1.3 Improve access and appropriate use of quality and safe inputs for food-insecure smallholder (and promote embedded services through private sector).</li> <li>1.4 Enhance access to credit and saving for smallholder (micro-finance)</li> <li>1.5 Promote mechanisms to link smallholders better to markets (contract farming, market information) and develop promising value chains.</li> <li>1.6 Support establishment of farmer organizations and agricultural cooperatives to promote food production and family income.</li> </ul>		
(2). Enhance sustainable and secure access to land for the poor and food-insecure	<ul> <li>2.1 Expand social land distribution to the poor and food-insecure.</li> <li>2.2 Scale-up distribution of communal land titles to indigenous minorities.</li> <li>2.3 Improve access of poor farmers who have received land titles to agricultural support services and markets.</li> <li>2.4 Improve conservation and management of (distributed) agricultural land in order to ensure sustainable and increased productivity of food production in Cambodia.</li> </ul>		
(3). Improve access to and sustainable use of common property fishery and forestry resources	<ul> <li>3.1 Further enhance aquaculture and rice field fishing to reduce pressure on wild freshwater fish.</li> <li>3.2 Strengthen sustainable community-based fisheries and forestry systems to enhance quality food intake and income for food-insecure households.</li> <li>3.3 Promote linkages between tourist markets in urban areas and forest dependant villagers with small enterprises and handicraft.</li> <li>3.4 Secure access of indigenous communities to common property resources and promote community- based land use and agro-forestry systems as well as RED+ and CDM programs.</li> <li>3.5 Balance economic benefits with the social and environmental costs of large scale infrastructure projects (hydro-power) to minimize negative impacts on common property resources.</li> <li>3.6 Prevent the incitement of local people from outsiders to continue deforestation and occupy state land as private property illegally (especially in conservation and natural protected areas.)</li> </ul>		
(4). Enhance employment and income opportunities for the food-insecure	<ul> <li>4.1 Enhance technical and vocational educational training for the poor and food-insecure in rural and urban areas to increase skills and employability.</li> <li>4.2 Specifically, enhance work skills needed for agro-processing enterprises, agro-economic concessions (and agribusiness contracting) for creating employment opportunities and increased income for food- insecure rural households.</li> <li>4.3 Enhance social protection in the informal wage sector specifically for women.</li> <li>4.4 Promote (specifically) women entrepreneurs engaged in micro-enterprises, handicrafts, etc. and improve access to capital and markets.</li> <li>4.5 Improve legal and regulatory framework and access to technology for SME and extend financial support to promote their integration into a global value chain.</li> <li>4.6 Further enhance road and market infrastructure specifically in food-insecure regions.</li> </ul>		

<u>Objective 2:</u> Cambodians improve their use and utilization of food resulting in reduced child and maternal malnutrition and enhanced human and economic development.

Programmatic Priorities	Priority Actions (Key Activities and Instruments)
(1). Scale-up health sector nutrition services and nutrition education	<ol> <li>1.1 Ensure greater coverage of essential nutrition care and counseling during the critical 1,000 days from pregnancy to a child's second birthday at health facilities (ANC, delivery, PNC, growth monitoring and promotion, malnutrition treatment).</li> <li>1.2 Carry out mass media campaigns to change attitudes, practices on key nutrition issues in Cambodia (continue efforts on early and exclusive BF, increase efforts to promote continued BF to 2 years, increase efforts on appropriate complementary feeding of children 6-23 months, inform on dangers of bottle feeding and use)</li> <li>1.3 Monitor bottle feeding and formula use and establish an oversight board to help enforcement of the Sub-decree 133 and regulate private sector health facilities to prevent use of breast milk substitutes and accelerate its implementation through concerned line ministries.</li> <li>1.4 To develop and implement a scale-up plan and ensure regular supply of multi-micronutrients supplementation for children 6-23 months and women (IFA and MNP) and develop other supplements (including Ready to Use Supplement Foods.)</li> <li>1.5 Update current guidelines on micronutrient supplementation according to international guidelines.</li> <li>1.6 Expand targeted food supplementation for pregnant/lactating women and children 6-23 months in poor and vulnerable households.</li> <li>1.7. Develop a communication strategy to enhance awareness on the rising problem and consequences of over-nutrition in Cambodia.</li> <li>1.8 Enhance human capacities for nutrition in the health and other sectors.</li> </ol>
(2) Improve domestic water supply, sanitation and hygiene practices	<ul> <li>2.1. To include safe water, sanitation and hygiene (WASH) aspects in all child and maternal nutrition programs and specifically in community-based nutrition programs.</li> <li>2.2 To focus on educational activities and implement BCC campaigns by linking WASH to maternal and child nutrition.</li> <li>2.3 To integrate national investment plan and strategic plan on WASH with national maternal and child nutrition programs.</li> <li>2.4 To improve access to safe water supply and sanitation and strengthen community-based management (operation and maintenance) at village level.</li> </ul>
(3) Expand fortification of food with micronutrients	<ul> <li>3.1.To promote the use of fortified food through awareness raising on the importance of food fortification with micronutrients in local areas and nationwide.</li> <li>3.2. To develop national policies, technical guidelines (national standards, on food fortification levels), and relevant regulation for food fortification with micronutrients and enhance implementation and effectiveness of existing regulations.</li> <li>3.3. Prepare legislation to manage micronutrients-fortified food for both domestic production and imports.</li> <li>3.4. To improve the quality control and quality assurance of fortified products (iodized salt, and iron fortified fish and soy sauces.)</li> <li>3.5. Strengthen the implementation of sub-decree No 69 on the management of exploitation of iodized salt to be effective.</li> <li>3.6. To scale-up iron fortification of fish and soy sauce and to prepare and implement legislation that makes iron fortification of fish and soy sauce mandatory for importation and for domestic production.</li> <li>3.7. To expand food fortification to other appropriate vehicles (for example rice and cooking oil) and ensure the quality, safety and appropriate quantity required.</li> <li>3.8. To further develop and promote appropriate locally produced fortified complementary feeding products and/or food supplements through private sector (not including breast milk substitutes and not including industry violating the code.)</li> </ul>
(4). Enhance availability and use of nutritious and safe food at household level	<ul> <li>4.1 Raise awareness on nutritional values of local agricultural products and mainstream nutrition in agriculture extension.</li> <li>4.2 Scale-up programs promoting diversified food production, storage and processing at household level, community and schools and link these programs to the health sector.</li> <li>4.3 Develop and reinforce implementation of laws and regulations to promote agricultural production and nutrition for better health and environment and improved food safety (including sanitary and phyto-sanitary standards) and increase public awareness on safe food.</li> </ul>

# (5) Use social protection instruments for enhancing nutrition

- 5.1 Ensure close coordination between a conditional cash transfer program (CCT) and other nutrition related social protection measures with the NNS and upcoming community-based nutrition interventions.
- 5.2 Reduce financial barriers to nutrition care at health facilities by expanding Health Equity Funds (HEFs) and covering all nutrition services and care.
- 5.3 Link public works programs (PWP) to improving water, sanitation and hygiene.
- 5.4 Increase nutrition-sensitivity of existing SSNs, e.g. school feeding

(6) Develop, and pilot an integrated community based nutrition program (CBNP) for Cambodia implemented through local authorities for rural and urban areas with high incidence of child malnutrition

<u>Objective 3:</u> Improved food security related social protection and enhanced capacities of poor and vulnerable households to cope with risks and shocks increase the stability of their food supply.

Programmatic Priorities	Priority Actions (Key Activities and Instruments)
(1). Scale-up food security related Social Protection Instruments	<ol> <li>1.1 Pilot and scale-up a national PWP to enhance predictable employment opportunities for the poor in food-insecure areas and communes, specifically during the agricultural lean season and provide livelihoods and income-generation support for the most vulnerable.</li> <li>1.2 Develop contingency plans and scale up labor based works during crisis and link PWP to disaster preparedness and climate change adaptation and mitigation plans.</li> <li>1.3 Continue and scale-up school meals in poor and food-insecure areas and targeted scholarships for poor students and increase government ownership in these programs.</li> <li>1.4 Implement and scale up a CCT pilot (as outlined in the NSPS) to smooth food consumption of poor households and enhance child and maternal nutrition.</li> <li>1.5 Enhance coordination of social safety net programs targeting food-insecure households between sectors and scale-up pilots to promote integration of social protection programs to enhance food security at local level.</li> </ol>
(2). Improve disaster preparedness and mitigation and enhance resilience of households against effects of climate change	<ul> <li>2.1 Create capacities for disaster risk management and climate change adaptation at national and sub-national level and incorporate these issues in sectorial strategies and regional plans to minimize negative impact of climate change and natural disasters on household food security.</li> <li>2.2 Strengthening capacities at national and sub-national level to respond adequately and timely to food crises (ensuring supply of food and other assistance) and improve coordination of emergency response between government institutions, civil society organisations and development partners.</li> <li>2.3. Streamline and integrate existing information, classification systems and tools on early warning and disaster impact assessments.</li> <li>2.4 Build-up and mange effectively the national food (and seed) reserve to provide timely supply of food and seeds to households affected by natural disasters or economic crisis and to counteract price increases.</li> <li>2.5. Maintain and rehabilitate canal, river, natural lakes for mitigated floods and droughts.</li> </ul>

# 6. NSFSN 2014-2018 Objectives and Priority Actions

The achievement of each of these objectives requires **programs**, **regulations** and **improved services** over various sectors. Although existing gaps in addressing food and nutrition insecurity will be addressed by new programs, **scaling-up evidence based existing interventions will be the main focus** of this strategy. Many of these programs are implemented by multiple development partners using project based approaches without much coordination within and between sectors. The sustainability of many of these programs is often questionable and transaction costs are high. In scaling-up these interventions, it will be crucial to set up harmonized mechanism for medium term financing, implementation modalities and optimal targeting and coverage.

Below for each of the three objectives, brief sector-specific situation analyses of the causes of malnutrition and food insecurity are included as a rationale to determine prioritized actions to improve FSN for the people of Cambodia.

#### 6.1. Objective1: Increased Food Availability and Food Access

Food-insecure households increase availability and access to food through more productive and diversified agriculture and livestock production, sustainable fisheries and forestry, and from non-agricultural employment and income opportunities.

This objective focuses on the enhancement of household food security in Cambodia. It integrates aspects of food availability and access over a variety of sectors like agriculture, fishery and forestry, water resources, land and employment and income generation.

More than 80% of Cambodians depend, at least in part, for their livelihoods on agriculture and most food-insecure households are rural smallholder farming households. They meet their food needs often through a combination of activities including crop cultivation, keeping livestock and harvesting common forests and fisheries for food. They also seek to get cash income from such activities to buy foods which they cannot produce to meet other basic purchasing needs. While these activities are critically important sources of food and income, rural Cambodians typically confront low productivity and high risks in their own efforts in food production and harvesting forests and fisheries.<sup>55</sup> Crop diversity is still limited and smallholders depend largely on subsistence-oriented rain fed rice production which only provides an income during part of the year.

Although more than 80% of Cambodians live in rural areas, an estimated 20% of the rural population are landless and a further 25% have less than 0.5 ha. of land (the estimated threshold for food self-sufficiency). Food availability from own production is, in real terms, shrinking as more than 40% of consumed food in rural areas is purchased. Both intensifying and diversifying smallholder farming systems for own food consumption and creating access to food through income (from market oriented agricultural production and from developing non-farming income sources) are essential to improve household food security and to enhance the resilience of food insecure rural populations to withstand economic and climatic shocks.

For the poor and food-insecure, employment in the formal or modern sector economy, notably in large garment sector enterprises, construction and tourism industry and, to a limited extent, in services and agricultural processing are important sources of income for more than

Eighty percent of the national agricultural cropping area depends on rain-fed cultivation under erratic wet season rainfall. Poor soil fertility characteristics also limit rice crop production in 50 percent of national agricultural lands.

300,000 mainly rural, poor women. However, for 85% of the Cambodian workforce informal sector casual wage labor and micro-enterprises are still an essential income source to sustain the livelihood of households.

The high level of dependency on purchased foods (the majority of rural households are net food buyers) and the high share on food expenditures from total household expenditures makes even rural households engaged in agriculture highly vulnerable to food price fluctuations.<sup>56</sup> Diversification of income sources<sup>57</sup> as well as strong urban-rural linkages helps to make Cambodian households more food secure and resilient to economic and climatic shocks.

#### Objective 1 of the NSFSN has four areas of focus:

- a) Intensification, diversification and market integration of small holder farming systems
- b) Land distribution and titling for poor and food-insecure households
- c) Promotion of access and sustainable use of common property fishery and forestry resources for the poor and food-insecure.
- d) Enhance wage employment and income opportunities for the poor and food-insecure

#### 6.1.1. Enhance Diversification and Market Integration of Small Holder Farming

The contribution of the agriculture sector to the GDP remained stable over the last decade (27.5% in 2012), but the growth rate of the sector varied between 2008 and 2012, in accordance with climatic conditions, between 5.7% (2008) and 3.3% (2011) and stood at 4.3% in 2012. The share of agricultural workers in the total workforce is still high (62% in 2011), but has been reducing rapidly over recent years, as in most low income countries with a high growth dynamic. Crop production contributed 54.8% to the agricultural GDP, followed by 25.4% for fisheries, 14.1% for livestock production and 5.7% for forestry.

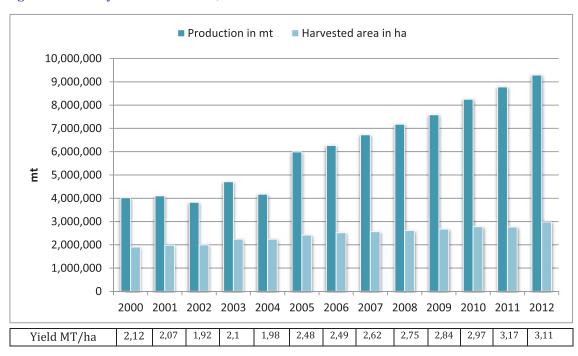


Figure 31: Paddy Rice Production, Harvested Area and Yields 2000-2012

Source: MAFF, Annual Report 2012/2013

<sup>&</sup>lt;sup>56</sup> Among the poorest two quintiles of rural households in 2009, the cash value share of home-produced food was 33-36 percent and the cash value share of purchased food was 64-67 percent.

In this context it is important that the portfolio of income sources at household level ensures also a continous flow of income over the year.

Based on continued efforts of the RGC to intensify and enhance production and marketing, the national **rice production** increased continuously and made Cambodia, not only rice self-sufficient since 1998, but an important rice exporter in the region. In 2012 and 2013 paddy rice production (rain and dry season) amounted to about 9.29 million metric tons of paddy rice with an average yield of 3.12 tons per hectare. Cambodia produced a surplus of 4.73 million metric tons of paddy rice accounting for about three million metric tons of milled rice. Production increase was determined by both increased harvested area and increased yields.

Due to population growth, arable land will become scarce and the further increase of rice production must mainly rely on higher productivity. There is still potential for increased production as current paddy yields are 3.117 t/ha in 2012 and 2013, far below yields in some neighboring countries. Further enhancement of rain fed rice productivity and expansion of irrigated rice production are therefore priorities as outlined in the SAW and the "Policy on the Promotion of Paddy Production and Rice Export." Increasing yields through improved rice husbandry techniques, improving access to quality seeds and fertilizers, enhancing milling and storage capacities and improved competiveness through quality standards allowing Cambodia's rice access to high-value export markets are main areas for development.

From a household food security perspective, it is essential to specifically target food-insecure small scale farmers in food-insecure areas to improve their access to high quality inputs and appropriate technologies,<sup>58</sup> improved storage facilities and marketing channels<sup>59</sup> so that they can gain maximum benefit from the implementation of the Paddy Production and Rice Export Strategy. Organization of small-scale farmers into farmer associations as well as improved linkages between farmers and the private sector; for example, through the provision of embedded extension services, and the development of contract farming for rice, are essential in this context. Improved rice productivity is often a prerequisite for subsistence oriented farmers to engage in planting other, higher value, crops on parts of their small landholdings.

Overall, the irrigated land area has substantially increased to 947,134 ha. or about 24.7% of the total cultivated land in September 2012 and the RGC have made considerable investments in recent years in building up and rehabilitating irrigation infrastructure<sup>60</sup>. However, there is a need to scale further up **irrigation and improve management of water resources** through establishment and strengthening of water user associations<sup>61</sup>, specifically for poor, food-insecure farmers in drought prone areas<sup>62</sup>, to reduce their dependency on rainfed farming and strengthen their resilience to natural disasters and the effects of climate change. Alongside paddy cultivation, an increasing number of smallholders engage in cash crop production, specifically in the more fertile uplands<sup>63</sup>. Also livestock production has great potential for expansion but is largely constrained by limited extension and veterinary services and weak marketing channels.

Beside chemical fertilizers and improved seed varieties the system of rice intensification (SRI), promoted through NGOs and MAFF for many years, the use of locally available organic inputs (manure, compost), and integrated pest management have proved to be successfull low input strategies to enhance productivity of small holder farms in a sustainable way.

Most food insecure households sell a large part of their paddy production at low prices after harvest to buy rice later on in the year from the market at much higher prices once their stock is depleted. Community rice banks as well as new rice contract farming arrangements can help to increase income from rice farming.

MOWRAM until recently, concentrated more on head works for irrigation systems but now support complete irrigation systems (until teriary canals) and pump interventions to ensure the regular flow of water. Smaller and medium scale systems better meet the irrigation needs of food insecure farmers and are often economically more viable.

<sup>&</sup>lt;sup>61</sup> 422 Farmer Warer User Communities were established in September 2012, see MAFF Annual Report 2012/2013.

Prioritizing irrigation systems for wet season crop and supplementary irrigation in those food-insecure areas growing only one rain-fed wet season crop per year.

<sup>63</sup> Beside rice many small hold farmers are involved in maize, cassava and soy- and mung bean production. Specifically cultivated area for cassava increased from 25.740 ha. in 2003 to 361.854 ha. in 2012.

**Diversification of small holder agriculture and better market integration** is required to enhance the availability of nutritious food for own consumption, to increase farm income and to make farming households more resilient against climatic and economic crisis. Small scale, diversified agricultural production systems have shown to be highly productive. As outlined in the food security support program of the SAW, promotion of horticulture, small livestock production and aquaculture, promotion of food processing as well as reduction of post-harvest losses through improved storage at farm level are priority measures. Specifically, the use of quality inputs and improved technologies on crop and animal husbandry techniques<sup>64</sup> need to be further promoted to enhance productivity of diversified smallholder farming systems.

Tailored solutions to address major concerns and needs specific to the agro-ecological and socio- economic environment (zoning) have to be developed and related investment in agro-ecological research increased. Better access of small-scale farmers to micro-finance, their organization in associations or cooperatives along promising value chains and their improved access to market information will help to ensure better market connection for their products. Linking small producers to the agricultural market chain through the development of "contract farming systems" will be a specific challenge for the near future to increase farm income and to make market-oriented production less risky. Women play a major and increasing of role in Cambodia's agriculture; their workload needs to be reduced and their access to resources (credit, training) and income increased to maximize the impact of agricultural intensification and diversification programs on household food security.

The priority actions under the 1st programmatic priority - enhance diversification and market integration of smallholder farming - of objective 1 of the NSFSN are:

- 1.1 Enhance access of food insecure farmers to low cost, adaptable and replicable technological innovation for rice and other crops, aquaculture, small livestock and vegetable production, and farm storage and processing.
- 1.2 Improve access of food-insecure farmer to small scale irrigation, specifically in drought prone areas (rehabilitate irrigation infrastructure, reservoirs, wells, extend land cultivation areas and strengthen famer water user association in order to ensure the equity and sustainability use of water.)
- 1.3 Improve access and appropriate use of quality and safe agricultural inputs for food-insecure smallholder (and promote embedded services through private sector.)
- 1.4 Enhance access to credit and saving for smallholder (micro-finance schemes.)
- 1.5 Promote mechanisms to link smallholders better to markets (contract farming, market information) and develop promising value chains.
- 1.6 Support establishment of farmer organizations and agricultural cooperatives to promote food production and family income.

Interventions to intensify and diversify smallholder farming in Cambodia are not new, but are currently implemented through numerous large and small projects and programs in the agricultural sector and food security emergency operations. Some important regulations and laws; for example, on contract farming, were outlined or approved by MAFF. However, there is a specific need to:

 Scale up these programs and ensure implementation through a better coordinated, program based approach.<sup>66</sup>

<sup>64</sup> As outlines in MAFFs Strategic Planning Framework for Livestock: 2011–2020. Improved access of livestock keeping farmers to animal health and production technologies and services as well as NGOs veterinarian farmer education/training systems are essential in this regard.

<sup>65</sup> A considerable part of households are female headed as urban and regional male migration augments.

The food security support program of the SAW was informing the design of some larger programs focusing on intensification and diversification of smallholder farming systems and could be used as a platform to scale-up and enhance coordination of interventions to strengthen livelihoods of food-insecure rural households through a more coordinated program based approach.

- Strengthen integration between different sectors where required, (for example, agriculture and nutrition.)
- Create policies and regulations enabling production and marketing for small scale farmers and support their connection to private sector service providers.
- Improve the orientation of programs towards food-insecure areas and farming households taking into consideration their specific resource endowment and constraints.
- Closely monitor the outcome of these programs with regard to household food security.

#### 6.1.2. Enhance Sustainable and Secure Access to Land for the Poor and Food-insecure

Improved access to and tenure security of agricultural land holdings are important conditions to support investment in agriculture and to protect the livelihoods of the poor and food-insecure. Land titling has made progress over the last years and in 2013, MLMUPC issued to 40% of farmer's land title certificates in the framework of systematic land titling (2,257,151 titles). The poor and food insecure have also benefitted from the social land concessions programs. Recently, the RGC accelerated and significantly expanded land distribution to the poor based on the Directive 001 of the RGC from May 2012. For around 1,8 million ha. of degraded forest and economic land concession land titles were issued to more than 380,000 poor families to legalize land occupation and to ensure tenure security in order to effectively develop this land, resolve existing land conflicts and maintain environmental sustainability of natural resources.

Land distribution is a major step towards enhancing household food security. Distribution of secure agricultural land needs to be continued and consolidated. In addition, farming on these holdings needs to be linked to agricultural support services. Strengthening of social and economic infrastructures in these new settlement areas is another requirement to build up sustainable livelihoods. So far, only eight indigenous communities have received collective land and communal land ownership in line with the Land Law of 2011 and distribution needs to be accelerated to enhance the sustainable development of these communities which currently have an extremely high prevalence of poverty and malnutrition.

The priority actions under the 2nd programmatic priority - enhance sustainable and secure access to land for the poor and food-insecure – of objective 1 of the NSFSN are:

- 2.1 Expand social land distribution to the poor and food-insecure.
- 2.2 Scale-up distribution of communal land titles to indigenous minorities.
- 2.3 Improve access of poor farmers who have received land titles to agricultural support services and markets.
- 2.4 Improve conservation and management of (distributed) agricultural land in order to ensure sustainable and increased productivity of food production in Cambodia.

## 6.1.3. Improve Access and Sustainable Use of Fishery and Forest Resources

Income from common property forest and fishery resources is a relevant source of livelihood for the poor and food-insecure and specifically helps them to cope in situations of transitory food insecurity caused by climate hazards or socio-economic crisis. **Fish** provide 37% of the total protein; 81.5% of animal protein intake; and, 37% of total iron intake<sup>69</sup> in the Cambodian

<sup>&</sup>lt;sup>67</sup> By early 2013, about 10,000 hectares of land have been distributed under Land Allocation for Social and Economic Development (LASED) and approximately 17,000 hectares within the national level social land concession program to former soldiers. Around 31,000 households received land under the various social land distribution programs.

The owners often resell titled land without going through MLMUPC registration to avoid high transaction costs. Governance in land registration needs to be strengthened to limit these costs to what is officially stipulated.

<sup>&</sup>lt;sup>69</sup> MAFF-Fishery Administration/IFREDI, Food and Nutrition Vulnerability to mainstream Hydropower Dam

diet, and is an essential source of vitamins and micro-nutrients. Total fresh-water fish catches in recent years have increased significantly and reached 509,000 metric tons in 2012. Marine fishery and aquaculture are also expanding and progressed to a total production of 99,000 metric tons and 74,000 metric tons respectively in 2012.<sup>70</sup>

The RGC decision to abolish the private fishing lots in 2011 has significantly improved access for the food-insecure to this common property resource, but overfishing and harmful fishing practices continue to remain a problem. The biggest challenge for inland fisheries is to manage the ecology of the Tonle Sap in a sustainable manner. Further enhancing community fishery systems<sup>71</sup>, diversification of livelihoods to reduce pressure on stocks as well as protection of the wetland ecosystem are all essential steps to sustain this important source of protein and income for the food-insecure. To meet the growing demand from population growth, rice field fisheries production, aquaculture and post-harvest fish processing need to be further enhanced. A specific challenge will be the threat from planned Mekong River mainstream dams on fish migration, fish catches and the livelihoods of the poor. The economic gains from hydro-power dams need therefore to be carefully balanced against their potential negative impacts. These actions are in line with the Strategic Planning Framework for Fisheries 2010-2019 –which details measures to enhance productivity and sustainable management of this resource.

Commons forest areas are an additional source of food and income for food-insecure rural households; collecting resin and other forest by-products and wood for fuel, specifically in periods following drought and flood damage to agricultural crops. For upland minority agricultural production systems, intact forests are a main component of their livelihoods which are threatened by enclosure of common forests and their severe degradation and over-exploitation. Forest cover in Cambodia has consistently decreased over the last years, from 61.15% in 2002 to 57.59% in 2010, in spite of the Government's commitment to conserve the forest through demarcation of "Protected Areas" community co-management and reforestation. To reverse this trend illegal logging and encroachment through economic concessions need to be more effectively controlled. Reducing Emissions from Deforestation (REDD+) and Clean Development Mechanism (CDM) can help to create economic incentives to effectively protect the forest cover and create income for local communities. There exists also an untapped potential to incorporate forest products into agro-forestry systems.

The priority actions under the 3rd programmatic priority- improve access and sustainable use of common property fishery and forest resources - of objective 1 of the NSFSN are:

- 3.1 Further enhance aquaculture and rice field fishing to reduce pressure on wild freshwater fish.
- 3.2 Strengthen sustainable community-based fisheries and forestry systems to enhance quality food intake and income for food-insecure households.
- 3.3 Promote linkages between tourist markets in urban areas and forest dependant villagers with small enterprises and handicraft.

Development in Cambodia, November 2012

<sup>&</sup>lt;sup>70</sup> MAFF, Annual Report 2012/2013

In total there were 516 community fisheries established and 328 officially registered in 2012, MAFF Annual Report 2012/2013

See MAFF-Fisheries Administration/IFREDI, November 2012. According to this study, the planned mainstream dams in Cambodia alone could lead to a reduction of 34,000 to 182,000 metric tons of inland fish and other aquatic resources.

The current protection system includes 23 natural protected areas totalling 3.1 million ha., roughly 18% of the Cambodia's total area as well as 115 (2012) community protected areas.

Forestry Communities (FC) increased from 264 FC in 2007 to 453 FC in 2012 with the forest areas managed by FC increased from 179,021 ha. in 2007 to 399,879 ha. in 2012, MAFF Annual Report 2012/2013.

- 3.4 Secure access of indigenous communities to common property resources and promote community-based land use and agro-forestry systems as well as REDD+ and CDM programs.
- 3.5 Balance economic benefits with the social and environmental costs of large scale infrastructure projects (hydro-power) to minimize negative impacts on livelihoods of the poor and food-insecure.
- 3.6 Prevent the incitement of local people from outsiders to continue deforestation and occupy state land as private property illegally (especially in conservation and natural protected areas.)

Improved "**Food Security Governance**" is specifically crucial in Cambodia with regard to access and sustainable use of common fishery and forestry resources. It demands capacity-building at national and decentralized level for both Government and the private sector and consequent reinforcement of existing laws and regulations.<sup>75</sup>

#### 6.1.4. Enhance Employment and Income Opportunities for the Food-Insecure

As laid out in chapter 2, even in rural areas, food intake of Cambodians depends to a considerable degree (43% in 2009) on food purchases. Increasing opportunities to generate household income through wage employment as well as maintaining stable food prices are essential to improve household food access in both urban and rural areas.

Less than one third<sup>76</sup> of the entire Cambodian labor force earns **income from regularly paid wage employment** mainly from the garment industry, tourism, construction and services. Formal sector employments are important sources for income in urban areas but remittance is equally important to sustain the livelihoods of many poor rural households. Salaries, labor standards (and their enforcement) as well as basic social security schemes in the formal sector have improved over the last two years. Employment figures have increased considerably after the recovery from the last financial-economic crisis in 2008/9. However, the formal sector which is concentrated around Phnom Penh and a few regional centers, is limited and shows little diversification making it vulnerable to global economic shocks. Development of more competitive farms and agri-business enterprises are essential to absorb the increasing rural labor force and to create jobs and incomes for the rural poor.

Casual wage labor employment in the informal sector is, for a large proportion of urban and rural households, a major source of their income. For poor urban and rural, landless households, this income is frequently the only source of cash to buy food. Informal-sector casual labor in rural areas is mostly related to crop production, housing construction and service sectors such as transport and agro-processing. Casual wage employment can involve short-term rural-rural or rural-urban migration and also includes international migration, principally to Thailand and Vietnam<sup>77</sup>. Daily wages for unskilled work in the informal sector are low at around 16,000 Riels per day, although this represents an improvement over the last years specifically in rural areas (see chapter 2). Informal-sector casual wage labor activities

Two sets of voluntary guidelines may guide RGC's approach to fisheries and forest resources: The Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Poverty Eradication and Food Security, currently under development by the Committee on World Food Security (CFS), and the Voluntary Guidelines on the Responsible Governance of Land Tenure, Fisheries and Forestry in the Context of National Food Security, adopted in 2012 by the CFS.

Employment shares by occupational categories in Cambodia for 2011: - 30.3% paid employee, 50.7% own account worker and 19% unpaid family worker. See World Bank, Poverty Assessment 2013, November 2013.

Temporal and seasonal Migration is often an essential component of the livelihood strategy of rural Cambodian households and specifically important to cope with shocks and crises, but also has its own risks and potential negative consequences (like scarcity of dynamic and qualified young people in rural areas). Average remittance from migration is about 23 US\$ per month/migrant with higher amounts for Phnom Penh and from migrants working abroad; see MoP December 2012.

are mostly unregulated and laborers do not have recourse to the law in terms of contract, working conditions or worker's rights. Limited possibilities are available to them to improve their skills, and there is no support for periods of unemployment. Women who participate in casual wage employment along with men face a number of gender-based handicaps, including lower rates of pay and limited mobility. Child labor has declined considerably over the last years<sup>78</sup> but more efforts are required to totally eliminate at least the worst forms of child labor. The role of casual wage labor for agricultural productivity improvements have to be considered more in planning interventions. Collaboration between sectors and ministries MAFF, MLVT and MoC needs to be enhanced to promote rural employment.

Growing urbanization and\_connectivity between rural communities and urban growth centers in Cambodia can expand opportunities for food-insecure households in both urban and rural areas. Urban-rural linkages have historically provided raw materials to industry and food to the urban population, taxes to support development, safety net during crises and increased gender equity. Improvements in productivity and enhanced commercialization of agriculture and livestock have increased demand for casual wage labor in these sectors<sup>79</sup> and rural communities will ultimately benefit from improved access to markets and social services.

A total of 89,580 business and industrial establishments, of which 20% were in Phnom Penh, were set up in Cambodia between January 2009 and March 2010 with the majority (86.1%) being micro- establishments engaging only one to two workers.<sup>80</sup> **Development** of small and medium enterprises (SME) is still facing many challenges, with regard to legal and regulatory frameworks, financing, access to technology and their integration into a global value chain.

Skills shortages in Cambodia negatively affect the process of economic development in urban and rural areas. **Skill development** will help agricultural diversification and increase added value at the farm level and further down the value chain. It will translate to more sustainable management of land and natural resources and create the transfer of labor from agriculture to industry and services with higher returns. Education in general and specifically technical and vocational education and training needs to be promoted to create sustainable employment opportunities in rural and urban areas. As a response to the financial and economic crisis, the government, in 2009, initiated short term vocational training courses to upgrade skills of workers and to improve employment chances for the youth. However, the scale of these initiatives is small and targeting the youth, specifically from poor households, to meet the demand from labour markets remains a challenge.

Creation of employment opportunities and income in rural areas also demands better **infrastructure**. In spite of progress made in recent years with construction and rehabilitation of rural roads, the nation's road network is limited in rural areas specifically with regard to tertiary rural roads linking villages with the main road network. Inadequate road and transport infrastructure and services leads to high costs for transport of products and people and specifically affects poor and food-insecure households in remote areas. Profits from trade are often low for rural households, partly due to poorly developed **market infrastructure** (e.g. absence of market buildings, bulk storage facilities, cold storage, market electricity and water supply) and minimal access to market information services.

Child labor as a proportion of total children was reduced form 20.4% in 2009 to 13.8% in 2011, see MoP December 2012.

<sup>&</sup>lt;sup>79</sup> However, the absorption of rural work force by Economic Land Concessions (ELC) was until now rather limited.

<sup>80</sup> See NSDP-MTR report, MoP, 2011.

The priority actions under the 4th programmatic priority - *enhance income from employment opportunities in the formal and informal sectors* – of objective 1 of the NSFSN are:

- 4.1 Enhance technical and vocational educational training for the poor and food-insecure in rural and urban areas to increase skills and employability.
- 4.2 Specifically, enhance work skills needed for agro-processing enterprises, agro-economic concessions and agribusiness contracting for creating employment opportunities and increased income for food-insecure rural households.
- 4.3 Enhance social protection in the informal wage sector, especially for women.
- 4.4 Promote (specifically women) entrepreneurs engaged in micro-enterprises, handicrafts, etc. and promote their access to capital and markets.
- 4.5 Improve legal and regulatory frameworks and access to technology for SME and extend financial support to promote their integration into a global value chain.
- 4.6 Further enhance secondary road improvements and market infrastructure specifically in food-insecure regions and enable Commune Councils to scale-up and maintain tertiary rural roads network in food-insecure communities.

In order that new employment opportunities and increased household income translate into improved household food purchasing power and food intake, a positive development in the terms of trade for wages (for unskilled labor) to food prices is essential. Although the price of staples are, to a large extent, following global markets, further promotion of existing policies to increase national food supply (rice and other staples), as well as strengthening of the social safety nets to cushion the adverse effects of food price increases remain essential.

# 6.2. Objective 2: Improving Use and Utilization of Food

Cambodians improve the use and utilization of their food resulting in reduced child and maternal malnutrition and enhanced human and economic development.

In spite of impressive economic growth, reduction of poverty rates and improvement of key health indicators, like under-five and maternal mortality, Cambodia still has one of the highest prevalence of child and maternal malnutrition in the region. The CDHS 2010 showed that 40%, 28% and 11% of children were stunted, underweighted and wasted, respectively. There has been no improvement of these three anthropometric indicators since 2005 and acute malnutrition of children under five years of age has even worsened. The CDHS 2010 also revealed that 55% of children under five and 53% of pregnant women were anaemic and almost 20% of women of child-bearing age had low body mass index, impacting the birth weight and early child development of their children.

**Undernutrition** during early childhood is affecting not only child health and mortality but has consequences for the entire life of an individual. Undernutrition leads to poorer cognitive development and educational outcomes and thus seriously hampers the human capital formation, productivity and economic growth of a country. Recently a study carried out under the supervision of CARD estimated that Cambodia loses over US\$ 400 million in GDP annually to malnutrition throughout the life cycle and micronutrient deficits alone represents a national burden of more than US\$ 200 million annually<sup>81</sup>. Contrary to the high economic cost of child malnutrition, investment in nutrition has considerable social and economic returns. Globally the basic benefit to cost ratio of investment in child nutrition is 15.8 to 1, very high compared to other development investments<sup>82</sup>.

<sup>81</sup> CARD/UNICEF/WFP, The Economic Consequences of Malnutrition In Cambodia, November 2013.

<sup>82</sup> See road map for Scaling-Up Nutrition (SUN), September 2010.

**Malnutrition** has also inter-generational effects (maternal malnutrition leads to child malnutrition) and investing in early childhood nutrition, especially in girls<sup>83</sup> is crucial to break this vicious cycle. Child malnutrition and its negative long term consequences can be reversed. However, the critical window for effectively preventing or addressing malnutrition is during the first 1,000 days, from conception until two years of age.

**Child and maternal malnutrition rates** are highest among the poor. However, malnutrition affects all income levels in Cambodia. One in every five children in the richest wealth quintile are underweight and one in every three women in the richest wealth quintile are anaemic (CDHS 2010). These statistics provide evidence that solid economic growth and poverty reduction alone are not sufficient to eradicate malnutrition in Cambodia and that nutrition specific and nutrition sensitive programs are required.

Analysis of the CDHS 2010 data show that malnutrition rates increase sharply in the first two years of life and 6-23 months is the critical age for stunting and underweight. Growth faltering is most pronounced from the age of six months when complementary foods are traditionally introduced. Significant improvements in early and exclusive breastfeeding over the last decade were achieved but prevailing inappropriate child feeding practices and lack of access to affordable, nutritious complementary foods must be addressed to see further improvement. The gap between child malnutrition in the rural and urban area is growing. This is likely, in part, a result of improved access to clean water and toilets in urban areas. However, lack of clean water, proper sanitation and poor hygiene remain major barriers to improving child nutrition in the rural zones.

The constraints on improving the use and utilization of food are well understood globally and a clear set of evidence based priority actions have been already developed to address them. The main challenges here are to compile priority interventions involving several sectors, to define implementation modalities and to provide adequate funding for investments and capacity development so that the packages and intervention can be implemented on a broadscale.

Enhancing child and maternal nutrition in Cambodia was reemphasized as a high development priority for Cambodia during the  $4^{\rm th}$  National Seminar on Food Security and Nutrition organized under the theme "Child and Maternal Nutrition" in May 2012 through CARD. This high level seminar presided over by the Prime Minister of Cambodia laid out the road-map for further actions and concluded in key recommendations which inspired the formulation of this chapter of the NSFSN<sup>84</sup>.

**Objective 2** of the NSFSN aims primarily at improving of the nutrition status of women and children. The focus is on the "window of opportunity" during pregnancy and the first two years of life when child malnutrition does the most harm and investments yield the highest social and economic returns. The objective has **five priority areas** for interventions. In addition, a community-based nutrition program<sup>85</sup> will be develop and piloted as an instrument to enhance, coordinated and integrated action at local level. To enhance nutrition programs empowerment of women not only through interventions to protect their nutritional wellbeing and health but to increase their social-economic status and ability to manage time and resources and to enhance their decision-making power regarding intra-familial allocation of food, and expenditures for health and care is essential.<sup>86</sup> As nutrition is in itself a crosscutting issue, the RGC will establish mechanisms to strengthen coordination between relevant sectors and stakeholders and enhance more integrated planning and monitoring.

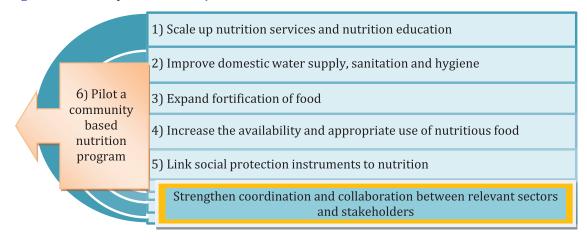
<sup>&</sup>lt;sup>83</sup> Uneducated mothers are more likely to have malnourished children.

See Report on 4<sup>th</sup> National Seminar for Food Security and Nutrition, Theme: Child and Maternal Nutrition, 21-22 May 2012, Phnom Penh.

Nutrition focused community-based programs can address the multiple causes of malnutrition by bringing a range of services to the whole community. Strengthening collaboration among key players (sector ministries, development partners as well as private sector) at national and sub-national levels has shown to be a successful path in many countries to tackle the issue of under-nutrition in an effective manner.

International research findings provided broad empirical evidence that there is a direct linkages between womens status and care for women and children and empowering women leads to greater household food and nutrition security.

Figure 32: Priority Areas for Objective 2



Each of these priority areas is now described in more detail with a set of priority actions to be implemented before 2018.

#### 6.2.1. Scale-up Nutrition Services and Nutrition Education

The extent to which women and their children are targeted during the first 1000 days (continuum of care during pregnancy, birth, neo-natal, infancy and through to the child's second birthday) will be increased through strengthening existing delivery mechanism and improving the quality of nutrition care and counselling in the health system. Complementary strategies like cash transfers to the poor to stimulate demand for ante- and post-natal care, food transfers to the poor to promote access to nutritious complementary foods, and growth monitoring and promotion until two years of age and nutrition education campaigns will be applied.

Anaemia in women of reproductive age, an underlying cause for maternal mortality and low birth weight, decreased only marginally from 46.6 % in 2005 to 44.1 in 2010 (CDHS 2005, 2010). A large part of anaemia is related to iron deficiency and needs to be addressed already before pregnancy specifically through scaling-up food fortification activities (e.g. iron fortification of fish and soy sauces), micronutrient supplementation (e.g., weekly iron folic acid supplementation) and balanced protein/energy food supplements for pregnant/lactating women. The health needs of women of reproductive age are currently not systematically covered through the existing services of the health system and an appropriate focal point needs to be identified.

Initiation and exclusive breast feeding are essential, as breast milk contains all the nutrients needed by the newborn during the first six month of life. Antibodies in the mother's breast milk protect the baby from infections and breastfeeding avoids contamination and infection from unsafe water and dirty bottles. The increase in exclusive breastfeeding, from 60 to 74%, and early initiation of breastfeeding, from 35% to 66%, between 2005 and 2010 (CDHS) contributed to the decreases in infant and under five year mortality in Cambodia<sup>87</sup>. This achievement reflects the efforts by the NNP and development partners to change behavior through improved midwifery care, and through media campaigns and community education. However, there is a need to sustain and improve on these achievements as, according to the CDHS 2010, there is a decrease of continued breastfeeding after six months of age and a strong increase in bottle-feeding specifically in urban areas. Only 43% of children were still breastfeeding at 20-23 months. These trends are related to the promotion of infant formula by doctors, midwives and nurses specifically in private clinics, continued advertising

<sup>&</sup>lt;sup>87</sup> Early initiation and exclusive breastfeeding is also the main reason that malnutrition rates in infants are relatively low (malnutriation rates increase when breastfeeding is phased out and inappropriate complementary feeding starts.)

of breast milk substitutes and bottles for children under two years of age by formula milk companies contrary to Sub-decree 133 as well as the lack of understanding of the importance of continued breastfeeding until at least two years of age for optimal child health, nutrition and development.

The CDHS 2010 also indicates that 76% of children did not receive a minimum acceptable diet. For the general population inappropriate complementary feeding practices will therefore be addressed through improved nutrition care and counselling at health facilities, mass media campaigns and multi-sectorial community-based nutrition activities to stimulate improvements in child nutrition in Cambodia; for poor and vulnerable populations additional measures are necessary, such as cash and/or food transfers.

Complementary feeding of infants and young children with high nutrient and energy-dense food is not only hampered by insufficient access to this food but also needs behavioral changes. Analysis of the CDHS 2010 data show that malnutrition increases sharply between 6-23 months, the critical age for stunting and underweight. The CDHS 2010 also indicates that 76% of children did not receive a minimum acceptable diet. Inappropriate complementary feeding practices will therefore be addressed through improved nutrition care and counselling at health facilities, mass media campaigns and multi-sectorial community-based nutrition activities to stimulate improvements in child nutrition in Cambodia for poor and vulnerable populations additional measures are necessary, such as cash and/or food transfers.

According to the CDHS 2010, 2.5% of children under five years of age suffer from **severe acute malnutrition** (SAM = weight for height % below -3SD) and 8.4% of children under five years of age suffer from moderate acute malnutrition (MAM = weight for height % below -2SD and above -3SD). The vast majority of these malnourished children lack adequate care and treatment. National guidelines and training modules for the treatment of acute malnutrition were developed. However, only 2% of the estimated 66,000 to 83,000 cases of SAM currently receive appropriate treatment. Improved identification of acute malnutrition at the health center and community levels along with expansion of treatment of SAM to at least one provincial hospital in each province will be a priority for the future.

Micronutrient deficiencies<sup>88</sup> contribute to malnutrition among children under five years and women of reproductive age, as well as to high child and maternal morbidity and mortality rates. Vitamin A supplementation to children 6-59 months together with de-worming has increased greatly. According to the CDHS 2010, 71% of children in this age group received Vitamin A supplementation compared with only 35% in 2005. However, anaemia of women and children remain severe public health problems<sup>89</sup> with rates of 44% in women of reproductive age, 53% in pregnant women and 55% in children under five years of age (CDHS 2010). Coverage of iron and folic acid supplementation for pregnant women has increased over the last five years, with 57% of women now receiving and taking the current recommended regime of 90 tablets during pregnancy, and with post-partum iron/folic acid reaching about half of the target population. However, to lower anaemia rates in populations with a severe problem of anaemia, international recommendations call for 180 days of supplementation during pregnancy and three additional months of supplementation post-partum. Anaemia prevalence in children under five years of age declined only slightly from 62.9% in 2005 to 55.1% in 2010 as no interventions are yet at scale; nutrition care and counselling at health facilities is not reaching these children, multiple micronutrient supplementation for children only has about 10% coverage, and iron fortification of staples is at an early scaling-up stage. As shown in the nutrition trend analysis in chapter 2, over nutrition (specifically in urban

An anemia rate of equal to or greater than 40% is considered a severe public health problem. However, anemia can be also caused by other factors than iron deficiency, such as thalassemia.

These deficiencies include mainly iodine deficiency disorders (IDD), Vitamin A deficiency disorders (VADD), and iron deficiency anemia (IDA) but calcium, vitamin D, folate and zinc deficiencies are also a concern in the Cambodian context. Micronutrient deficiency can be addressed through a) supplementation, b) food fortification and c) food based approaches.

women) is relatively new, but a fast growing challenge for Cambodia that needs to be addressed at an early stage to avoid adverse effects on health status and related high social and economic costs in the future. More detailed analysis will therefore be carried out over the next years and a communication strategy to prevent over nutrition and obesity developed.

**Priority actions** under the 1st programmatic priority – *scaling-up nutrition services and nutrition education* - of objective 2 of the NSFSN are<sup>90</sup>:

- 1.1 Ensure greater coverage of essential nutrition care and counselling during the critical 1,000 days from pregnancy to a child's second birthday at health facilities (antenatal care, delivery, postnatal care, growth monitoring and promotion for under two years, malnutrition treatment and nutrition as part of Integrated Management of Childhood Illness (IMCI) (MoH/NNP).<sup>91</sup>
- 1.2 Carry out mass media campaigns to change attitudes, practices on key nutrition issues in Cambodia (continue efforts on early and exclusive breast feeding, increase efforts for continued breastfeeding to two years, increase efforts on appropriate complementary feeding of children 6-23 months, dangers of bottle feeding and the importance of safe water and sanitation for improved nutrition (MoH/NNP, Ministry of Information).
- 1.3 Monitor closely the increasing trend for bottle feeding and formula use and establish an oversight board to help enforcement of the Sub-decree 133 on Marketing of Products for Infant and Young Child Feeding to prevent use of breast milk substitutes and accelerate its implementation through concerned line ministries (NNP/MoH, MoC, and Ministry of Information) and regulate private sector health facilities.
- 1.4 To develop and implement a scale-up plan and ensure regular supply of multimicronutrients for children 6-23 months and women and develop other supplements (including Ready to Use Supplement Foods) (MoH/NNP).
- 1.5 Update current guidelines on micronutrient supplementation according to international guidelines.
- 1.6 Expand targeted food supplementation for pregnant/lactating women and children 6-23 months in poor and vulnerable households.
- 1.7 Develop a communication strategy to enhance awareness on the rising problem and consequences of over-nutrition in Cambodia.
- 1.8 Enhance human capacities for nutrition in the health and other sectors.

Beside these priority actions, human capacities for nutrition in the health and other sectors need to be increased through the recently established Master's degree program in Science in Nutrition as well as development of nutrition modules to be integrated in various curricula. The establishment of a National Nutrition Institute for Cambodia as a central body for nutrition related research, programming, monitoring and capacity development will be further examined. (MoH, MoEYS, CARD).

The National Nutrition Program (NNP) in MoH is formulating a prioritized nutrition action and investment plan outlining more in detail the health sector related priorities summarized in this strategy.

To consider more specifically in this context: - promotion of weight gains during pregnancy - quality improvement of early antenatal care and compliance to daily IFA supplementation; scale-up Weekly IFA supplementation for poor women; treatment of diarrhea with zinc, - through distribution during outreach by health center staff and VHSG in the community - improved identification of severe malnutrition at the health center, and community level and expansion of treatment to all hospitals.

Child and maternal malnutrition is associated with the **education level of parents and specifically mothers** (see chapter 2.) Improved general education goes along with improved female nutrition and impacts on child care, feeding practices, health seeking behavior and hygiene practices. Improvements in educational outcome, specifically for girls are an important frame condition to enhance child and maternal nutrition over time.

Also the integration of nutrition, hygiene, and sanitation aspects in school curricula and addressing children in schools with nutrition focused campaigns will help to improve relevant knowledge and practices. Coordinated actions between the health sector and the MoEYS school health department are important in this regard.

## 6.2.2. Improve Domestic Water Supply, Sanitation and Hygiene Practices

Lack of access to safe water and specifically sanitation, and poor hygiene practices increases diarrhea and parasite prevalence which in turn causes loss in nutrients and poor assimilation of food. In 2010, 66% of the population defecates in the open and only 53% of households had access to portable water in the dry season in Cambodia. Approximately 25% of child deaths are attributed to diarrhea and secondary analysis of the CDHS 2010 data showed that children are more likely to be stunted or underweight if open defecation is common practice. As the annual economic loss due to poor sanitation and hygiene in Cambodia are estimated to be very high (US\$ 448 million) access to improved sanitation and basic hygiene behaviors need to be significantly increased. 92

Improving access of rural population to safe water, sanitation and hygiene (by increasing investments in related infrastructure as well as raising awareness on appropriate water use, sanitation and hygienic practices) is therefore a high priority intervention within the NSFSN. A National Rural Water Supply, Sanitation and Hygiene Strategy (RWSSHS 2010-2025) was approved by MRD in 2011. Creation of demand for better sanitation and hygiene behaviors, support to the private sector to deliver sanitation services, decentralization of service provision and improvement of the capacity of the sub-national government as well as promotion of community-based operation and maintenance are all guiding principles of this strategy. To create synergies, its implementation has to be more linked to on-going and up-coming child and maternal nutrition interventions and specifically the community-based, integrated nutrition program. Integration of sanitation into public work programs as well as subsidized provision of toilets for the poorest will help to increase the coverage of sanitation in rural areas.

**Priority actions** under the 2nd programmatic priority - *improve domestic water supply, sanitation and hygiene practices* - of objective 2 of the NSFSN are:

- 2.1 To include safe water, sanitation and hygiene (WASH) aspects in all child and maternal nutrition programs and specifically in community based nutrition programs (MoH and DPs).
- 2.2 To focus on educational activities and implement BCC campaigns by linking WASH to maternal and child nutrition (MRD, MoH, MoEYS).
- 2.3 To integrate national investment plan and strategic plan on WASH with national maternal and child nutrition programs.
- 2.4 To improve access to safe water supply and sanitation and strengthen community based management (operation and maintenance) at village level (MRD, local authorities).

National Strategy for Rural Water Supply Sanitation and Hygiene 2011-2015, MRD, December 2012.

#### 6.2.3. Expand Fortification of Food with Micronutrients

Fortification of staples has been internationally shown to be one of the most cost-effective and sustainable solutions to prevent micronutrient deficiencies. Fortification of food started in Cambodia with salt iodization more than 10 years ago and since 2003 the sub decree on management of exploitation of iodized salt requires that all locally produced and imported salt be iodized. Its implementation was successfully enforced and in 2010, 83% of households were consuming iodized salt compared to 72.5% in 2005 and 14% in 2000. In 2005, a national sub-committee for food fortification (NSCFF) was established as a sub-committee of the National Nutrition Council of the MoP to develop and implement an overall policy on micronutrient fortification in cooperation with the private sector. Preparatory steps to formulate a national policy for food fortification (analysis of food consumption, compilation of biochemical data) are on-going and guidelines for various vehicles to be fortified are developed such as salt fish, soy sauces and vegetable cooking oil.

Based on a five year grant from GAIN (2011-2015) MoP supported by a local NGO, Reproductive and Child Health Alliance (RACHA) is scaling-up production and marketing of iron fortified fish and soy sauces<sup>93</sup>. The MoP is targeting 80 out of the 84 registered fish sauce producers in Cambodia by the end of the program. Oil fortification with Vitamin A is under discussion and MoP and development partners (WFP, PATH and IRD) are collaborating in a rice fortification project. Fortified food is also used by WFP (fortified vegetable oil, iodized salt, fortified blended foods) and NGOs in school feeding and targeted food distribution programs for children under two years and pregnant and lactating women in several provinces. The NGO GRET has produced and fortified complementary food for social marketing. Other initiatives to locally produce fortified complementary foods include Winfood and So! Nutritious.

To enhance more broadly the availability of fortified food in Cambodia, the RGC will also support to set up regulations and mechanisms on food fortification within the component "sustainable food trade development" of the ASEAN Food Security Framework.

# **The priority actions** under the 3rd programmatic priority – *expansion of food fortification with micronutrients* - of objective 2 of the NSFSN are:

- To promote the use of fortified food through awareness raising on the importance of food fortification with micronutrients in local areas and nationwide (NSCFF/MoP)
- 3.2 To develop national policies, technical guidelines (national standards, on food fortification levels), and relevant regulation for food fortification with micronutrients and enhance implementation and effectiveness of existing regulations (MoP, MIH, MOC.)
- 3.3 Prepare legislation to manage micronutrients-fortified food for both domestic production and imports.
- 3.4 To improve the quality control and quality assurance of fortified products (iodized salt, iron fortified fish and soy sauces.)
- 3.5 Strengthen the implementation of Sub-decree No 69 on the management of exploitation of iodized salt to be effective.
- 3.6 To scale-up iron fortification of fish and soy sauce and to prepare and implement legislation that makes iron fortification of fish and soy sauce mandatory for importation and for domestic production (NSCFF/MoP, NGOs and private sector.)
- 3.7 To expand food fortification to other appropriate vehicles (for example, rice and cooking oil) and ensure the quality, safety and appropriate quantity required (NSCFF/MoP and private sector.) 94
- 3.8 To further develop and promote appropriate locally produced fortified complementary feeding products and/or food supplements through private sector (not including breast milk substitutes and not including industry violating the code); (NSCFF, NGOs.)

<sup>93</sup> Between 2007 and April 2011, 469.200 liters of fish sauce and 181,000 liters of soy sauce were fortified.

<sup>94</sup> In this context fortification of rice and other food items used by the RGC for targeted food distribution as well as the fortification of the national rice reserve will be considered.

#### 6.2.4 Increase Availability and Appropriate Use of Food at Household Level

Programs enhancing the availability of nutritious and safe foods at household level through promotion of smallholder food production systems (integrating vegetable/fruit gardens, livestock development and aquaculture) as well as the promotion of nutrition knowledge in communities to use and prepare locally available nutritious food have been implemented for several years through MAFF and numerous NGOs and have proved their effectiveness. These intervention needs to be scaled-up and better coordinated among sectors (agriculture and health) and knowledge on child and maternal nutrition among agricultural service providers needs to be enhanced to increase impact. Food based approaches to improve nutrition will be considered as an important element in multi-sector and integrated community-based nutrition programs implemented through local authorities.

**The priority actions** under the 4th programmatic priority – *increase the availability and appropriate use of nutritious and safe foods* at household level - of objective 2 of the NSFSN are:

- 4.1 Raise awareness on nutritional values of local agricultural products and mainstream nutrition in agriculture extension.
- 4.2 Scale up programs promoting diversified food production, storage and processing at household level, community and schools and link these programs to the health sector (MAFF, NNP/MoH, MWA, & MoYES.)
- 4.3 Develop and reinforce implementation of laws and regulations to promote agricultural production and nutrition for better health and environment, and improved food safety including Sanitary and Phyto-Sanitary Standards (SPS) and increase public awareness on safe food.

#### 6.2.5. Use Social Protection Instruments to Enhance Nutrition

Enhancing human capital by improving child and maternal nutrition is directly addressed by the National Social Protection Strategy (NSPS). Poverty is impacting on child malnutrition and a Conditional Cash Transfer Program (CCT) smoothening consumption and stimulating demand for nutrition, health services and sanitation was therefore prioritized as a new activity within the NSPS. A pilot program targeting small children, pregnant women and lactating mothers in the rural areas of two districts was prepared to be implemented in cooperation with various Ministries through local government. Experiences from other countries show that CCT, if well-designed, targeted and linked to improved nutrition and health services, can improve nutrition outcomes. In addition, other programs and interventions outlined in the NSPS such as Health Equity Funds (HEF), Public Works Program and targeted distribution of fortified food connect directly or indirectly to nutrition outcomes. There is therefore a need to closely coordinate the implementation of the CCT Program with other community-based nutrition activities outlined in the NSFSN.

**The priority actions** under the 5th programmatic priority – *linking social protection instruments to nutrition* - of objective 2 of the NSFSN are:

- 5.1 Ensure close coordination between a conditional cash transfer program (CCT) and other nutrition related social protection measures with the NNP and upcoming community based nutrition interventions.
- 5.2 Reduce financial barriers to nutrition care at health facilities by expanding Health Equity Funds (HEFs) and covering all nutrition services and care.
- 5.3 Link public works programs (PWP) to improving water, sanitation and hygiene.
- 5.4 Increase nutrition-sensitivity of existing SSNs, e.g. school feeding and develop and promote a list of nutritious foods for targeted interventions.

#### 6.2.6 Develop and Implement a Community-Based Nutrition Program (CBNP)

As recommended during the high level seminar on nutrition in May 2012 by the Prime Minister of Cambodia, piloting and implementing a CBNP across several sectors through convergent actions and involvement of local authorities will be a key instrument to promote appropriate use and utilization of food to improve nutrition outcomes in Cambodia.

Examples from other countries show that for the success of CBNPs it was essential that there was national commitment and good integration at local level with sufficient community mobilization. In addition, close M&E, applied research and capacity development have all been shown to be further requirements to support successful community-based nutrition programs. Experiences from the MDG Fund – Joint Program on Children Food Security and Nutrition, and various on-going and up-coming pilots on community-based nutrition, will be used to design the intervention. CBNPs will be specifically developed for rural areas with high incidence of malnutrition and also for specific urban locations (poor urban areas and urban settlements around Phnom Penh) involving several sectors and implementing evidence based nutrition interventions through convergent actions of sector ministries coordinated by local government structures.

CARD was mandated to ensure the overall coordination and to set up the appropriate structure for community-based nutrition programs in Cambodia. Roles and functions of involved institutions will be defined and sufficient resources mobilized. A nutrition surveillance system will be developed to regularly monitor the impact of interventions and respective capacities at district expanded. The CCT pilot focusing on pregnant women, lactating mothers and small children implemented within the NSPS will be closely interlinked with the CBNP.

**The priority action** under the 6th programmatic priority – of objective 2 of the NSFSN is:

6.1 Develop, and pilot an integrated community based nutrition program (CBNP) for Cambodia implemented through local authorities for rural and urban areas with high incidence of child malnutrition.

Achievement of the target for Objective 2 of the NSFSN requires a set of nutrition specific actions as well as nutrition sensitive developments over various sectors. Strong coordination is therefore a key for success. Implementation arrangements for this objective are outlined in chapter 7 of the NSFSN. Following the recommendation of the high level National Seminar on Nutrition from May 2012 it will be essential to make sure that nutrition is adequately reflected and budgeted in overarching national strategic development plans (NSDP). CARD will also facilitate the development of a **joint planning and investment framework** for nutrition (nutrition action and investment plan over multiple sectors) to further operationalize the priorities for nutrition outlined in this strategy and to ensure its financing by RGC and development partners through a program based approach.

# 6.3. Objective 3: Increasing Stability of Food Supply

Improve food security related social protection and capacities of poor and vulnerable households to cope with risks and shocks to increase the stability of their food supply.

Natural disasters (floods and droughts), socio-economic shocks (like sudden food price increases) or individual crisis (unemployment or sickness) can seriously affect the stability

<sup>95</sup> A cost efficient nutrition surveillance could be established through the regular growth monitoring program linked to immunization.

of food access<sup>96</sup> for poor households and often trigger risky coping strategies<sup>97</sup>, which may render households chronically food insecure.

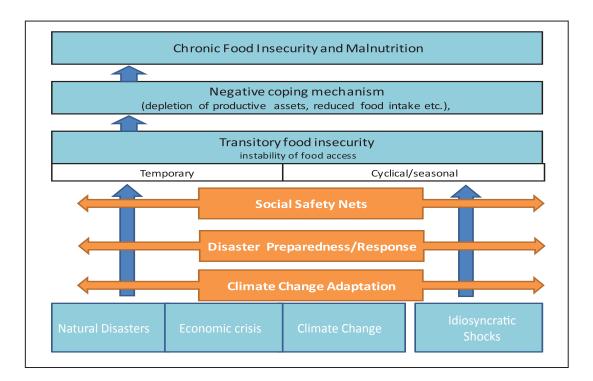


Figure 33: Stability of FSN - Strategic Interventions to Risk Reduction

# **6.3.1** Scale up Food Security Related Social Protection Instruments

Targeted social transfers play an increasingly important<sup>98</sup> role in enabling food-insecure households to ensure stable access to food. They are targeted to households with chronic or temporary (seasonal) food-insecurity in normal times and may be developed or scaled up during times of natural disasters and economic shocks.

CARD, in cooperation with relevant line ministries, civil society organizations and development partners, developed a strategy for a comprehensive and systematic social safety net for the poor and vulnerable which was recommended as a priority action in the SFFSN 2008-2013. The NSPS was approved in March 2011 and guidelines and procedures for coordination, implementation and monitoring of the strategy and plans to enhance capacities for its implementation were recently outlined (NSPS chapter 3.) Considerable progress has been made since 2008, with the extension of social safety net development, harmonization and targeting. Successful SSN interventions like HEFs, school feeding, FFW/CFW and targeted intervention for specific vulnerable groups were scaled-up. New interventions such as cash transfers to improve child nutrition or public work schemes are currently being prepared in the framework of the NSPS. Targeting of social transfers was also improved, specifically through increasing the coverage of the MoP's Identification of Poor Households (ID Poor) national system to identify poor households (for more details see chapter 7.)

<sup>&</sup>lt;sup>96</sup> Food supply in this context refers to availability, access and use/utilisation of food.

Surveys carried out during the last food price crisis revealed that 98% of households contracted new debts and around 50% of household reported cutting back food consumption as a way of negative coping (see CDRI, Impact of High Food Prices in Cambodia, 2008). High interest rates from informal money lender often lead to land sales and loss of productive assets and chronic food insecurity.

<sup>98</sup> Along with overall economic development traditional (family, friendship and community-based) social safety nets are becoming weaker.

**Food for work /cash for work** were instruments frequently utilized in Cambodia to address seasonal food insecurity or provide food during post-disaster recovery. They serve a double purpose: smoothing household food consumption by creating additional income and improving productive assets through creating or maintaining local infrastructure through labor intensive works. Cash for work programs<sup>99</sup> were implemented over many years on an ad hoc basis and recently scaled-up in the framework of food emergency operations following the 2008/2009 food price and economic crisis.<sup>100</sup> To address cyclical (seasonal) unemployment in rural areas and provide regular income for chronically food-insecure households, more predictable work opportunities needs to be developed on a larger scale with a focus on tertiary road maintenance, small-scale irrigation, rehabilitation of village infrastructure and works related to climate change adaptation and mitigation (reforestation etc.). <sup>101</sup> A national PWP needs to be linked to emergency contingency planning to expand its coverage in times of crisis. Within the NSPS key elements for a harmonized national PWP were laid out and stakeholder consultations took place. A program based approach to fund and implement a larger scale PWP based on the agreed guiding principles has still to be developed.<sup>102</sup>

In Cambodia, unforeseen health expenditure leading to indebtedness and depletion of productive assets are often a major cause of rendering poor households chronically foodinsecure. Over the last decade, the RGC has successfully developed **HEFs and piloted community- based health insurance (CBHI) schemes.** And HEFs are now on the way to achieving universal coverage. However, there is still a need to streamline benefit packages (including cost for emergency transportation etc.) and to fully cover child and maternal nutrition related services by HEFs.

Cash and food based safety net for food-insecure households and groups with no ability to work have been implemented for many years to ensure stability of their food access and enhance nutrition (school feeding programs/ fortified take-home rations, free or subsidized fortified food distribution, supplementary food distribution to small children, pregnant women and lactating mothers as well as for specific vulnerable groups.) Against the background of the last food price crisis, a Conditional Cash Transfer Program (CCT) was developed and will be piloted in two districts to enhance food consumption of poor households with small children, pregnant women and lactating mothers and to stimulate demand for nutrition services. Also free or subsidized farm inputs were delivered to poor smallholders through various programs to help them to enhance food production in times of economic or climatic crisis.

Many actions outlined in the NSPS are directly enhancing stability of food access and resilience of food-insecure households to cope better with risk and crisis. With a few exceptions food security safety nets were until now mostly ad hoc or project based interventions which need to be developed as more long-term, fully Government owned programs and scaled-

<sup>&</sup>lt;sup>99</sup> Over the past years, there is a clear shift from food to cash as food is locally available all over Cambodia and transfer efficiency of cash-based programs is generally higher.

<sup>&</sup>lt;sup>100</sup> EFAP-AF foresees large scale CFW activities (\$US 5.5 Million, \$2013-2015) focusing on rehabilitation of roads and dikes and irrigation to benefit food insecure population with a priority for ID poor I and II houseolds, female headed households and landless households.

A PWP implemented on a longer basis will have higher non-wage costs to ensure sustainability of the physical and social assets created and demand for community-based maintenance systems of the created infrastructure.

<sup>&</sup>lt;sup>102</sup> A Productive Assets and Livelihood Support (PALS) Program was developed and launched in 2013 by WFP and a national PWP can largely be build on the experiences from this program.

As by August 2011 58 operational districts (ODs) are covered by HEF leaving only 19 ODs without HEF and approximately 79% of the poor population is covered by HEF. National roll-out and integration of existing HEF schemes for the poor, is a priority of the RGC and by 2015 universal coverage with HEF should be achieved (see: MoH, Expansion plan and future sustainability direction for universal coverage of SHP for informal sector, 2011.)

up to extend coverage. The NSPS lays out a pathway to better integrate the development and implementation of social safety net programs at national and sub-national level and to enhance Governments ownership. 104 Exploiting synergies between SSN programs and linking them to complementary sector interventions is crucial. Interventions to be scaled-up under objective three of the NSFSN are aligned with interventions and programs already outlined in the NSPS. Close coordination between the NSPS and the NSFSN concerning the development of programs (and institutional arrangements for their implementation) are important to optimize synergies between these two cross-cutting strategies.

The priority actions under the 1st programmatic priority – scaling-up food security related social protection instruments - of objective 3 of the NSFSN are:

- 1.1 Pilot and scale-up a national PWP (as outlined in the NSPS) to enhance predictable employment opportunities for the poor in food-insecure areas and communes specifically during the agricultural lean season and provide livelihoods and incomegeneration support for the most vulnerable.
- 1.2 Develop contingency plans to scale-up labor based works during crisis and link PWP to disaster preparedness and climate change mitigation plans.
- 1.3 Implement and scale-up a CCT pilot (as outlined in the NSPS) to smooth food consumption of food-insecure households and enhance child and maternal nutrition.
- 1.4 Continue and scale-up school meals in poor and food-insecure areas and targeted scholarships for poor students and increase government ownership in these programs.
- 1.5 Enhance coordination of social safety net programs targeting food-insecure households between sectors and scale-up pilots to promote integration of social protection programs to enhance food security at local level.

# 6.3.2 Improve Resilience of Households against Disasters and Climate Change

In recent years, three major climatic hazards striking specifically the poor and vulnerable, Typhoon Ketsana in September 2009, the flooding in September/October 2011, and the flash-floods in 2013. In 2011, flooding affected 331,765 households (over 1.5 million people) in 18 out of 24 provinces in Cambodia and destroyed about 9.4 per cent of the total rice crop. In 2013, flooding affected 377,354 households in 21 provinces and destroyed around five per cent of cultivated area of wet season rice. The overall economic impact of the flood in 2011 was estimated at around 1% of GDP. In addition to the flooding, erratic rainfall and extended drought spells in some areas have affected rain fed rice agricultural production over the last decade. 105

Through enhanced coordination among implementing ministries and more integrated development and implementation of safety nets at decentralized level. In this context an "integrated social protection pilot for food security" (ISPP) was initiated recently in two districts in collaboration with development partners. Building up sufficient capacities at district and commune level is essential in this context.

Droughts are not causing fatalities but have the potential to affect large number of the population and have often a more lasting negative impact on the livelihoods of the poor than flooding. Floods have also a beneficial impact on agro-based livelihoods (increase of soil moisture/fertility, ecological benefits for fisheries.)

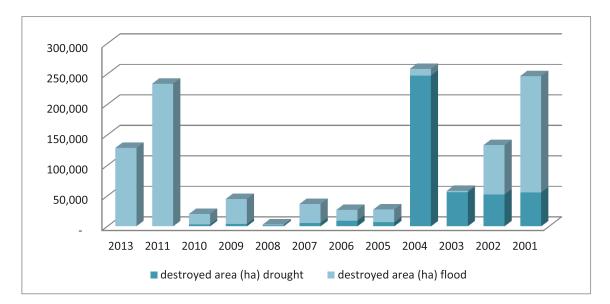


Figure 34: Wet Season Rice Areas in Cambodia Destroyed by Floods and Droughts 2001 to 2013

#### Source: MAFF

Climate changes will raise temperatures, affect rainfall patterns in Cambodia, and will lead over time to a decline in agricultural productivity, decreased fish catches and increase in water- borne diseases. Also the frequency and intensity of droughts and floods<sup>106</sup> are likely to increase. Both will specifically impact on poor and food-insecure households and may increase their number over time as drought and flood related crop failures lead often to negative coping strategies.

Climate change is therefore a long term factor to food-insecurity and malnutrition in Cambodia<sup>107</sup> and equally high food-insecurity and malnutrition make the country more vulnerable to the effects of climate change. Actions to improve climate change adaptation, disaster risk reduction and sustainable household food security as outlined in this strategy (under objective 1) are, to a certain extent, identical. Adaptation and mitigation strategies to reduce the effects of climate change on food security as well as disaster risk reduction comprise of: measures in the agricultural sector (expanded irrigation, water harvesting and storage systems, access to climate resilient crop varieties and husbandry techniques, more diversified farming and livelihood systems); health sector (strengthened malaria and dengue fever control and improved access to water, sanitation and hygiene); social protection interventions (crop insurance<sup>108</sup>, orientation of public work programs towards climate change relevant activities like reforestation, irrigation) as well as the promotion of sustainable community-based management of fishery and forest resources.

Beside natural disasters, the stability of food access of Cambodians was seriously affected by the impact of the global food prices and economic crises of 2008 and 2009 which led to significant job and income losses. Both disasters affected negatively the purchasing power of poor households and affected child nutrition, health and education (see chapter 2). Effective short- and medium-term policy measures were applied as a response and the RGC also developed long-term strategies (NSPS) and initiated mechanism for improved disaster

Climate change likely leads to more frequent drought spells/prolonged dry seasons, delayed rainy seasons with intense rainfall and flash floods as well as dry season river flow decrease and wet season flow increase.

Food security and climate change modeling for Southeast Asia carried out by IFPR came to the conclusion that climate change will decrease food availability and decrease the decline in childhood malnutrition, see CRI/CARD/IFPRI Food Security and Climate Change to 2050: Cambodia, a Policy Discussion Paper, March 2011.

Beside social safety nets like food and cash transfers and input-subsidies, privately provided (and weather indexed) harvest failure or livestock losses insurance schemes can play an increasing role in Cambodia to protect against the impact of climatic hazards.

preparedness and response. Among others, a **national food reserve system** is being build up in Cambodia. The physical food (and seed) stock will cover initial needs after emergencies and will be complemented by a monetary (cash) reserve to keep operating costs low. <sup>109</sup> A sub-decree outlines the functions and responsibilities of the different actors involved in the management of the food reserve NCDM and its decentralized structures, Green Trade, MEF, MAFF, CRC, private sector and CARD.)

NCDM has the mandate for emergency preparedness and response in case of natural calamities. The CRC, a number of NGOs and UN organizations deliver immediate assistance in situations of emergency (distribution of food, shelter, clothing, and medical supplies) and MAFF is supported by development partners to distribute agricultural inputs during recovery. The NCDM and its subnational structures (Provincial, District and particularly Commune Committees for Disaster Management), require support and capacity-building to effectively fulfil their functions. Disaster risk reduction is essential to minimize impact of natural calamities and a Strategic Action Plan for Disaster Risk Reduction was developed by NCDM and MoP in 2008 to strengthen the disaster risk management system and incorporating disaster risk reduction perspectives into other policies and plans. Efforts for linking disaster preparedness and management to longer-term development initiatives, and enhanced coordination between stakeholders are essential to progress disaster preparedness and mitigation.

The Cambodian Government is fully committed to global efforts to address climate change and has developed a National Adaptation Program of Action (NAPA) and established the National Climate Change Committee (NCCC). The MoE currently leads the development of the Cambodian Climate Change Strategic Plan (CCCSP), which will determine the pathway for climate change mitigation and adaptation across all relevant sectors.

Strengthening of community resilience against the effects of natural and economic shocks and adverse trends like climate change on household food security is crucial and existing schemes (like community-based saving and credit schemes, rice banks, small-scale irrigation and climate change adaptation community projects) needs to be further developed and upscaled.

Reliable information (early warning) on upcoming risks for food access and nutrition as well as information on the impact of climatic, economic crisis or epidemics are essential to prepare for timely and adequate responses. As already outlined in chapter 3, Cambodia has made considerable progress with regard to FSN information management. However, there is a need to streamline existing systems and tools and to enhance their ownership by the Government. Their use for decision-making in case of disasters and crises needs to be formalized (see chapter 7).

The priority actions under the 2nd programmatic priority – improve disaster preparedness and mitigation and enhance resilience of households against the effects of climate change of objective 3 of the NSFSN are:

2.1 Create capacities for disaster risk management and climate change adaptation at national and sub-national level and incorporate these issues in sectorial strategies and regional plans to minimize negative impact of climate change and natural

Within the EFAP it was proposed to install a food reserve of a total of 16,000 metric tons rice equivalent which would cover full food needs for 10% of the population during one month. 10,000 are planned to be physical reserve (7000 metric tons stored by Green Trade and 3000 by private traders) and 6000 metric tons monetary reserve under the control of MEF. 1,100 MT of rice seeds and 50 metric tons of vegetable and other crop seeds should complement the rice reserve.

- disasters on household food security.110
- 2.2 Strengthening capacities at national and sub-national level to respond adequately and timely to food crises (ensuring supply of food and other assistance<sup>111</sup>) and improve coordination of emergency response between government institutions, civil society organizations and development partners.
- 2.3 Enhance communities resilience with regard to disasters and economic shocks by promoting community-based saving and credit schemes (rice banks, microcredit), small scale irrigation and climate change adaptation community projects."
- 2.4 Streamline and integrate existing information and classification systems and tools on early warning and disaster impact assessment.
- 2.5 Build-up and mange effectively the national food (and seed) reserve to provide timely supply of food and seeds to households affected by natural disasters or economic crises and to counteract increase of food prices.
- 2.6 Maintain and rehabilitate canal, river, natural lakes for mitigating floods and droughts.

<sup>110</sup> Capacity building efforts in this respect outlined within the SNAP, the CCCSP and the NSFSN needs to be integrated.

Comprehensive packages of assistance, including food, water and sanitation, medical supplies, clothing, shelter as immediate relief as well as agricultural inputs during the recovery phase.

# 7. Institutional Arrangements for Implementing the NSFSN

Enhancing FSN in Cambodia is the responsibility of line ministries and decentralized government institutions. The NSFSN adds value by providing a comprehensive framework to assist ministries and sub-national authorities in designing and implementing prioritized food security and nutrition related interventions in an effective and efficient manner. Structures, systems and concepts for FSN-related coordination, M&E, information management, targeting and capacity development are essential and are already in place in Cambodia (see chapter 3), but need to be strengthened. Based on the findings of the review of the SFFSN this chapter outlines the guiding principles and priority actions to improve and further develop these institutional arrangements with regard to:

- Coordination and the policy oversight for FSN
- Monitoring and evaluation of the NSFSN and its programs
- FSN related knowledge and information management
- Capacity development at national and decentralized level
- Selection of beneficiaries and targeting of FSN interventions

### 7.1. Coordination and Policy Oversight for FSN

Coordination comprises of the regular review and promotion of harmonized efforts across programs and interventions to avoid geographical overlaps or gaps in coverage of beneficiaries, harmonization of targeting and implementation procedures as well as advocating for FSN and making best use of available funds. As already outlined in chapter 3, FSN is a cross-cutting task demanding effective coordination and collaboration of many government institutions as well as active dialog with civil society organizations, development partners and the private sector. By Royal Decree, CARD is mandated to facilitate effective coordination, policy guidance, monitoring and information management with regard to food security and nutrition. CARD's mandate as the overseeing body for FSN was reconfirmed during the high level 4<sup>th</sup> National Seminar on Food Security and Nutrition in May 2012.

<u>Action 1:</u> **Strengthen CARDs role** as the institution providing policy guidance and enhance coordination and integration of FSN related work among RGC institutions.

CARD will organize regular meetings at the higher level involving relevant line ministries and government institutions to decide on guiding principles for the implementation of the NSFSN, as well as for ensuring that FSN is adequately reflected in overarching national development plans (NSDP) and relevant sector strategies. Staff from the planning departments of relevant sector ministries will be nominated as focal points for CARD at a more operational level and their capacities improved. Work on cross-cutting issues under the mandate of CARD (e.g. social protection and FSN) will be more integrated to create synergies and make optimal use of the scarce personal resources within CARD.

A TWG-FSN, co-chaired by CARD and the MoP was established in 2004 to foster the official government–development partners' dialogue for cross-cutting themes and to ensure alignment and harmonization of interventions. The TWG meets on a regular basis and a secretariat of the TWG-FSN was established in CARD to facilitate the work. However, in the past larger projects and programs were often developed, but bypassed the TWG. To ensure the effective coordination of priority interventions outlined in the NSFSN, this structure needs to be revitalized, strengthened and more effectively used as a platform for government-development partners' dialogue. Recently the TWG on FSN was merged with the working group on Social Protection (SP) to the TWG SP&FSN under the chairmanship of the chairman of CARD to create synergies to enhance coordination and policy oversight for the two important and adjacent cross-cutting issues in Cambodia.<sup>112</sup>

See: Council of Ministers/CARD, Decision on the Establishment of Technical Working Group on Social Protection and Food Security and Nutrition, 3 January 2014.

<u>Action 2:</u> **Strengthen the TWG-SP&FSN** to effectively coordinate projects and programs based on the priorities outlined in the NSFSN across sectors and enhance harmonization and alignment of development partner's support for FSN in Cambodia.

The TWG-SP&FSN will engage to prepare and coordinate priority actions outlined in the NSFSN and, where appropriate, develop program based approaches as well as action and investment plans across sectors. This will reinforce integration and harmonization of interventions and reduce transaction costs (for example, for improving child and maternal nutrition.)

Relevant line ministries will ensure regular participation in the TWG-SP&FSN by assigning representatives at the right level of hierarchy mandated to officially report on sector activities and to follow-up discussion results of the TWG-SP&FSN within their ministries. The secretariat of the TWG-SP&FSN in CARD will be strengthened to facilitate effectively the work of this TWG and to participate actively in relevant sector-- TWG and other FSN/SP relevant coordination structures to ensure effective linkages for the implementation of the NSFSN and for creating synergies. Within CARD coordination, M & E and information management with regard to the NSFSN and the NSPS, two cross-cutting strategies under the oversight of the council, will be closely interlinked to make efficient use of the scarce capacities.

An assessment of the TWG-SP&FSN will be carried out end of 2014 to review the role and function of the TWG SP&FSN and its secretariat and to further enhance its effectiveness as an inter-ministerial coordination platform of Line Ministries of the Royal Government of Cambodia and Development Partners involved in social protection and food security and nutrition.

In 2001, Cambodia selected the path of decentralization and de-concentration with the first Commune Council Election being in 2002. With the enactment of the "organic law"<sup>113</sup> in 2008 and the first election of Councils at Province and District level in 2009, decentralization progressed further. Within the Nation Program for Sub National Democratic Development (NP-SNDD) capacities of decentralized level of Government are being improved so that they can effectively assume their roles, responsibilities and functions. For successful implementation of the NSFSN the involvement of sub-national structures of government, provincial, district and commune councils, is essential.

<u>Action 3:</u> Ensure **effective coordination of FSN** programs between departments of ministries, civil society organizations, development partners and the private sector **at province, district and commune level**. The commune councils will oversee targeting and implementation of food security and nutrition priority interventions at the local level.

Based on previous experiences from FSN projects,<sup>114</sup> procedures and mechanisms to incorporate more comprehensive FSN issues into the local planning processes will be developed and existing provincial and local structures for FSN coordination strengthened. At province level, the provincial facilitation committees will be supported to mainstream FSN in provincial development plans and to oversee implementation of FSN interventions. At the commune level, the Consultative Committee for Women and Children (CCWC) will be the focal point for the implementation of community based FSN interventions such as the community-based nutrition program.

Law on Administration and Management of Capital, Province, Municipality, District and Khan.

Since 2006, CARD implemented a pilot project in several districts to enhance mainstreaming of FSN in the local planning process, and to develop capacities for this task at provincial and local level.

To enhance long-term sustainability, larger scale FSN programs will have integrated components to increase local capacities for mainstreaming FSN in the commune development/investment plans (CDP/CIP.) Funds will also be directly allocated to Commune Councils (CC) for implementing identified local FSN priority interventions, to ensure effective participation and to enhance the motivation to consider FSN issues in local development processes.

Support to the private sector to deliver quality products and services to provinces, districts and communes to implement their FSN related projects are important.<sup>115</sup> Public Private Partnership arrangements will be promoted to foster appropriate service delivery.

## 7.2. Monitoring and Evaluation of the NSFSN

Results-based M&E of the NSFSN and the programs implemented under its umbrella are crucial requirements for effective dialogue on FSN in Cambodia and for the further development of the strategy. The NSFSN must be able to adjust to the changing environment and needs systematically to take into account lessons learned during implementation. An effective M&E system for the NSFSN comprises:

- 1) a consolidated results-based indicator framework
- 2) procedures for data collection and analysis outlining responsibilities of involved parties;
- 3) a mechanism to report on progress and to use collected evidence to inform decision-making and adjustments to the NSFSN.

The SFFSN, as a reference framework to mainstream FSN in Cambodia, contained only a M&E indicator list with a set of indicators at goal and objective level. No procedures for M&E were outlined and only one annual monitoring report was produced by CARD at the end of 2010. The NSFSN, as a more action based strategy, requires close M&E to track progress and inform decision-making. Principles for setting up a results-based M&E system are outlined in this chapter and a preliminary indicator framework is attached in Annex 1. However, further actions will be required during the first year of implementation of the NSFSN to consolidate the indicator framework and M&E system.

<u>Action 4:</u> Revise and **consolidate the indicator framework for the NSFSN** based on a set of indicators and realistic targets aligned with all relevant existing sector strategies and plans.

The following principles will be applied during the review and consolidation of the NSFSN indicator framework:

- Fully align the indicator formulations and targets of NSFSN indicator framework with NSDP 2014-2018 result framework, as well as indicator frameworks from other national strategies and plans;
- Specifically an indicator and targets to measure the quality (diversity) of food intake needs to be developed (for the NSFSN goal level) and a food consumption survey for Cambodia to capture and follow up dietary diversity of food intake prepared and implemented;
- Improve the logical hierarchy and consistency of the indicator framework and make sure that targets can be regularly verified based on available survey and administrative data;
- Formulate intermediate indicators to follow up achievements with regard to the priority actions under each of the NSFSN objectives. This is required to track progress on an annual basis and to allow for timely corrective actions;<sup>116</sup>

<sup>115</sup> For example, private sector can provide embedded advisory services and play a role in social marketing.

<sup>&</sup>lt;sup>116</sup> For highly aggregated impact and outcome indicators information is often only available every four or five years and progress needs to be followed-up by using indicators focusing on process and service delivery.

- Linking intermediate indicators to higher level outcome indicators by establishing coherent "chains of impact" from output to outcome and impact level to enhance results-based monitoring of the NSFSN;
- Consolidate process indicators to follow up achievements with regard to the policy and institutional environment of FSN (e.g. measuring the progress with regard to the institutional arrangements outlined in this chapter.)

<u>Action 5:</u> Establish appropriate **M&E procedures and reporting mechanism** in order to ensure effective implementation of the NSFSN and to provide evidence-based feedback for the further development of programs and interventions.

The M&E system for the NSFSN needs to clearly define roles and functions for M&E as well as procedures on how best to use the information to facilitate regular adjustment of the strategy. The following arrangements and will be applied for developing an effective M&E system:

- Monitoring of specific interventions and programs will be carried out by the implementing agencies (ministries). They will follow up activities, outputs and outcomes in their respective area of responsibility based on administrative statistics, and they will report this information on a regular basis to CARD;
- CARD's role will be to follow-up with sector ministries, to compile and integrate the sector reports, and to assess the overall impact on the NSFSN goal and objectives. CARD will establish an annual M&E report for the NSFSN to summarize progress made;
- During an annual progress review workshop of the NSFSN, organized by CARD through the secretariat of the TWG-SP&FSN, stakeholders will discuss the annual M&E report to determine required adjustments to the implementation of priority actions and interventions of the strategy. Conclusions will be forwarded to policy-makers, implementers and development partners in the framework of the Cambodian Development Cooperation Forum (CDCF) process to influence the overall planning for FSN related interventions and future resource allocation;
- An independent mid-term review of the NSFSN will be carried out at the end of 2016 to support a more informed dialog on overall outcome and direct the further development of the strategy;
- Program implementation will be largely based on participatory M&E approaches (consultation with beneficiaries on design and results from implementation of programs) and commune councils will be supported to monitor and evaluate the FSN activities implemented within their CDP/CIP;
- In addition, financial process monitoring and cost-benefit analysis of specific programs and interventions will be carried out to manage fiduciary risks and maximize cost effectiveness of interventions.

To facilitate effecting planning of up-scale and coverage of FSN priority interventions outlined in the NSFSN an updated inventory of existing FSN relevant programs, with basic information concerning geographical coverage, types and number of beneficiaries, time schedule and budget, will be established by CARD and permanently up-dated to help understand gaps and overlaps. <sup>117</sup> The database and the database management for FSN and SP will be integrated to enhance effectiveness and to avoid overlaps.

To ensure the NSFSN continues to be a living document used for adjusting implementation and priorities according to experiences this strategy requires M&E to inform decision-making leading to an adjustment of implementation of the strategy on an annual basis. The following table outlines steps for result based M&E for the NSFSN in an annual cycle:

A list of larger scale programs and projects aiming at improving FSN in Cambodia is included as Annex 2 of the strategy. However this list needs to be consolidated in a data base and frequently up-dated.

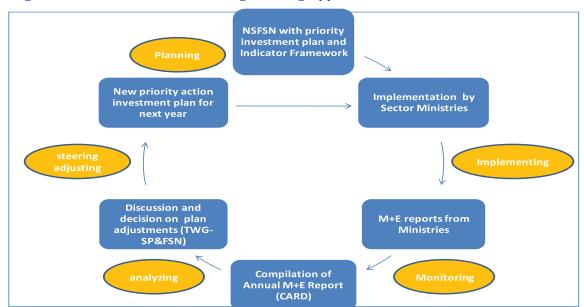


Figure 35: NSFSN – M&E and Rolling Planning Approach

## 7.3. Knowledge and Information Management for FSN

FSN information and knowledge management is central to enhance coordination and M&E of the NSFSN. Better knowledge and information management will improve linkages and information flows between all stakeholders. Information on the current state and trends of FSN, on innovations and lessons learned, as well as capacities to create and transfer information and knowledge, are important in order to design appropriate and effective shortand long-term interventions to enhance FSN in Cambodia.

FSN information and knowledge management has made considerable progress over the last decade. Based on recommendations from a national workshop on FSN information management in 2006, the FSNIMTF was set up by CARD as a substructure of the TWG-SP&FSN to coordinate and develop an integrated FSN related information network in Cambodia. A Food Security and Nutrition Data Analysis Team (FSNDAT) comprising of CARD, MAFF, MOWRAM, MoP, MoH and NCDM was tasked to analyze the food security situation regularly, based on information from weather stations, administrative statistics and recent national survey data. A quarterly **FSN Bulletin** giving a regular overview of trends and emerging threats with regard to FSN in Cambodia is produced to share information and inform the design of policies and interventions as well as response to crises. <sup>118</sup> In recent years, the <u>Food Security and Nutrition Information System (FSNIS) in CARD</u> has become the central webbased entry portal for FSN related information in Cambodia and is providing frequently updated information on FSN events, and contains a useful project and literature data base. In 2014, Information management on FSN and SP and the operation of web-based information systems will be integrated within CARD to create synergies and ensures their regular up-date.

During the meetings of the **National Food Security Forum**, organized on a regular basis by CARD since 2003, new information and data on the FSN situation, as well as experiences and lessons learned from on-going programs and innovative approaches are shared and discussed among sector ministries, development partners and civil society organizations. This forum taking place on a quarterly basis in the Office of the Council of Ministers will be extended to cover FSN and SP issues.

<sup>&</sup>lt;sup>118</sup> The Bulletin is in English and Khmer and until January 2013, 13 bulletins were produced.

In addition, various FSN related systems or tools were created by development partners in cooperation with CARD, the NIS and sector ministries for improving analysis and mapping of FSN information and used for program design or targeting:

- The **Cambodian Food Security Atlas** provided a national and sub-national situation analysis of FSN in Cambodia and was developed and updated by WFP in cooperation with CARD and integrated in the FSN web-site;
- FAO and WFP in cooperation with CARD and relevant ministries, preparing to apply to the **Integrated Food Security Phase Classification (IPC)** as a standardized tool for secondary data analysis and classification of the food security situation by severity in Cambodia; <sup>119</sup>
- NIS with support from WFP updated **small area estimates for poverty and child malnutrition** using survey (CDHS, CSES) and population census. This study provided sub-provincial information of poverty and malnutrition and can be used for area targeting;
- Commune data base and the ID-Poor data base of the MoP were further developed. These data bases comprise of a set of relevant indicators on household assets, availability and access to services and behavior changes;<sup>120</sup>
- A food consumption analysis based on the 2009 CSES data and showed trends in household food consumption since the CSES 2004, carried out by NIS with support from FAO in 2010/2011<sup>121</sup>;
- Surveys and analytical work on household food security and nutrition carried out by **civil society and research organizations** such as CDRI.

Despite considerable achievements in FSN information and knowledge management in Cambodia over the last decade, the coherence of systems and analytical work on FSN, sustainability and systematic use of information by decision-makers for designing interventions and adapting policies and programs needs to be further improved.

Action 6: Strengthen the integration and harmonization of SP&FSN information and knowledge management in Cambodia by reinforcing linkages between various systems, approaches and products (supported by different development partners) to present coherent and consolidated FSN information to decision-makers.

Agreements between ministries and FSN coordination structures to improve access to information (from administrative statistics) and a culture of sharing FSN information among institutions will be promoted. Initiatives from donor agencies with regard to FSN information will be more coordinated with the TWG-SP&FSN and the inter-ministerial task force on information management will be used as the entry point for all upcoming project support. A medium term plan outlining priorities will be developed to help align donor support in this regard. Roles and functions of the different institutions involved in FSN data collection, analysis, use and decision-making will be further discussed and agreed upon.<sup>122</sup>

<sup>&</sup>lt;sup>119</sup> An IPC pilot was conducted in Cambodia in 2007 and capacities to apply the approach for acute and chronic food insecurity are currently being developed.

Also coordination of FSN at provincial level and mainstreaming of the cross-cutting issue in the local planning process could benefit from using these sources on a more regular basis to identify needs and track progress for FSN at the decentralized level.

NIS, Food Security Trend Analysis Report, CSES 2004 and 2009, October 2010. There is still a need to integrate the food consumption analysis as a routine procedure in the CSES analysis carried out by NIS and to create more understanding and acceptance for this tool in Cambodia.

<sup>&</sup>lt;sup>122</sup> EFAP proposed in the report a design of a comprehensive system for M & E and early warning with regard to FSN laying out roles and functions; however, this proposal was never formally agreed upon.

<u>Action 7:</u> **Strengthen capacities for SP&FSN related data analysis** and presentation in CARD and relevant sector ministries and provide predictable resources for this task to enhance sustainability.

CARD will take over a more active role in data analysis and in the follow-up with data providers and data users. For this, a small core team for SP&FSN information analysis and presentation will be created within CARD and its capacities enhanced. Capacities for FSN data management and analysis within the relevant line ministries and specifically the FSNDAT will be further developed through training and exposure. Also provincial focal points for FSN information and knowledge management will be identified and trained. As information systems and products like the FSNIS and the FSN Quarterly Bulletin are dependent on project based donor funding, their long-term sustainability must be assured in the framework of the FSN investment plan.

<u>Action 8</u>: **Promote the use of FSN information products** for planning and decision-making at national and decentralized levels.

To improve dissemination of FSN information, use of the SP&FSNIS will be further promoted as a central display tool and capacities of the web-site team enhanced. <sup>125</sup> CARD will organize regular dissemination of the FSN Quarterly Bulletin to all FSN stakeholders in Cambodia at national and decentralized level in hard copy and via e-mail.

CARD will further organize and promoted the use of FSN information data for decision-making and action at national and decentralized level by presenting FSN quarterly bulletins or results from IPC exercises during the meetings of the National Food Security Forum and TWG meetings for discussion. A more formal approach on the use of available information (from FSN Bulletin, IPC, etc.) to outline emergency response measures in case of upcoming or acute crisis needs to be developed. 126

### 7.4. Capacity Development

Successful implementation of the NSFSN requires strengthened national and sub-national institutional capacities, (including resources and technical knowledge) to further develop, roll- out, coordinate and monitor the priority actions outlined in the strategy across sectors.

Capacities to analyze the FSN-situation and to design, target, monitor and adjust programs and interventions have already been developed by CARD and relevant line ministries over the last seven years. A **National Trainer Pool for FSN** comprising of trainers from CARD, MoH, MoWA, MAFF and NGOs was established in 2007 and formalized in 2011. Numerous training exercises on FSN have been conducted at national and sub-national level. Capacity development at decentralized levels with the objective to mainstream FSN in the local planning process started in Takeo province and was recently scaled-up to four more provinces. CARD

<sup>123</sup> Further assessment is needed to decide whether the existing FSNIS team in CARD can carry out this job or needs to be reinforced.

<sup>124</sup> Capacity gaps for FSN data analysis and monitoring can not only be filled through ad hoc initiatives from projects, but need to be also embedded in a long-term human resource development plan of the respective institution.

<sup>125</sup> Content management through the FSNIS team needs to become more proactive to ensure that all relevant information on FSN is timely placed on the web-site. Potential users will be regularly informed on important new content by e-mail to stimulate the use of the FSNIS. CARD will further revise sections in the FSNIS on FSN data and information management to better serve as a platform for M & E of the NSFS.

The primary purpose of the FSN bulletin is to show FSN trends and provide "early warning" information on crisis. However, quarterly editions may not be sufficient in times of droughts, floods or sudden increases of food prices demanding more frequent (and more disaggregated) information to inform emergency response.

organized sensitization workshops and training exercises for provincial and district level staff on FSN and assisted selected commune councils to better integrate FSN into their local planning process (CDP/CIP).

<u>Action 9:</u> Revise FSN training curricula for national and decentralized levels based on **impact assessment and scale-up training at decentralized level** through a cascade system.

National level trainers from the trainer pool managed by CARD cannot cover all provinces and therefore an effective and cost-efficient approach to scale-up sensitization and capacity development for FSN at decentralized level will be developed. The "cascade" training model using the trainer of trainers system will be used at decentralized level and FSN training exercises scaled-up to the most food-insecure provinces by 2018. The current FSN training curricula needs to be revised based on a capacity building impact assessment. A more systematic approach to follow up on the transfer of knowledge and to evaluate the impact of capacity development for mainstreaming FSN into the local planning process will be developed and training will more focus on project cycle management to allow local planners to design, implement and monitor FSN related projects.

<u>Action 10:</u> **Link capacity development for FSN** at decentralized level **with** existing capacity-building components in the context of the **NP-SNDD** as well as with respective activities foreseen in the context of other national strategies (NSPS) and programs.

CARD in discussions with NCDD will develop an effective and cost-efficient approach to scale-up sensitization and capacity development for FSN at decentralized levels and promote integration of capacity building for FSN into the D&D framework (NP-SNDD). Integration of the content of the FSN curricula in the core training curricula for CCs as well as linking FSN capacity building with training exercises for other cross-cutting issues are ways to improve sustainability and to scale-up mainstreaming of FSN in the local planning process.

The capacities required by local authorities to implement programs under the NSPS and the NSFSN are similar. As both NSPS and NSFSN are coordinated by CARD, training modules and exercises will be integrated to achieve synergies and avoid doubling of efforts.

<u>Action 11</u>: **Develop** and implement FSN **human resource development plan** for CARD (FSN Coordination Unit) and FSN focal points in relevant line ministries to enhance overall capacities for FSN coordination and policy oversight at national level.

To ensure effective, coordination, M&E, FSN information management during the implementation of the NSFSN it is crucial to strengthen capacities within CARD, the institution entrusted with the policy oversight for FSN. CARD will gain sufficient human resources to ensure effective coordination of the implementation of the NSFSN. CARD will provide sufficient human resources and develop a longer term human resource development plan to further increase capacities of the FSN coordination unit within CARD for these tasks. Development partners are requested to align their support for FSN capacity development in a more coordinated and project independent manner. FSN focal points in relevant ministries will be equally covered by this plan.

### 7.5. Beneficiary Selection and Targeting

Appropriate targeting mechanisms are crucial to the effective and cost-efficient implementation of programs and interventions outlined in the NSFNS. A range of approaches to selecting beneficiaries for FSN interventions, aimed at reducing chronic or acute food insecurity, will be adopted. According to the nature of the intervention, drawing on self-targeting, categorical targeting, geographic targeting or household targeting or any combinations of these targeting principles.

Pro-poor household targeting has improved considerably, specifically through increasing the coverage of the MoP's national Identification of Poor Households (ID Poor) Program. Lists of poor households indicating their poverty status are available for almost all of the rural population of Cambodia <sup>127</sup>, and the data will be updated on a regular basis <sup>128</sup>, With the adoption of the respective sub-decree, the use of ID Poor data as the primary data source for targeting households has become mandatory in 2010. ID Poor data is largely used for targeting beneficiaries of HEFs, and was used to target free food distribution, agricultural input transfers and FFW/CFW schemes in the framework of the food security emergency response programs (EFAP, EU-FF, EFAP2). However, ID Poor does not currently cover urban areas and there is some need to minimize rates of inclusion and exclusion. The long-term financial sustainability of the ID Poor system still has to be assured through increased funding from the national budget and augmented by funds from development partners. ID Poor poverty 1 and 2 lists will be used within the NSFSN as the principal instrument for household targeting of food security safety nets and emergency response interventions.

**Geographic targeting** gives priority to regions (provinces, districts and communes/villages) with a high incidence of malnutrition and food-insecurity and/or areas with a high number of food insecure people. For geographic targeting, maps for malnutrition and poverty based on small area estimates from 2008 population census, 2008 CAS, 2009 CSES and 2010 CDHS data can be used. <sup>129</sup> Also ID Poor data showing poverty levels at disaggregated level as well as information from the commune data base <sup>130</sup> can be consulted for targeting purposes. The application of the IPC, a standardized tool for secondary data analysis and classification of the food security situation by severity, can guide geographical targeting and could be integrated with the FSN-Bulletin. Integration and triangulation of different geographical targeting tools and improved spatial coordination of FSN interventions, based on area information, is crucial to achieve an appropriate and balanced coverage of food insecure areas and people.

The NSFSN will apply categorical targeting for specific food-insecure people (like households with small children and pregnant mothers, households having agricultural land, households impacted by flood or drought damages, etc.) to be targeted with appropriate interventions. Categorical targeting will normally be combined with poverty targeting (ID Poor lists) where appropriate. Information for post-identification mechanisms to crosscheck and fine-tune ID Poor household targeting can be found in the ID poor and commune database but may also require specific data collection like disaster impact surveys.

**Self-targeting** is one of the most cost-effective targeting mechanisms, whereby programs are designed so that only eligible households want to participate. This targeting principle will be applied for labor intensive cash for work schemes (PWP), by fixing remuneration at or near the market wage rate for unskilled rural labor. Also, self-targeting can be combined with geographic targeting or household targeting through the ID Poor system.

<sup>&</sup>lt;sup>127</sup> With the exception of parts of Kampong Cham province and outlying rural areas of Phnom Penh municipality.

<sup>&</sup>lt;sup>128</sup> Starting (2012) with Round 6, there will be a three-year cycle of IDPoor implementation. Eight provinces will be covered each year so that updated information for each province is available every three years.

NIS/WFP, Small Area Estimation of Poverty and Malnutrition in Cambodia, 2013

MoP/WFP, ID Poor Atlas, 2013

#### Action 12: Improve targeting of FSN interventions by:

- Developing procedures and criteria for a harmonized system to identify the urban poor and food insecure;
- Developing and identification system for poor urban households, improving the accuracy of ID Poor and continually refine its implementation procedures;
- Ensuring a long-term financing mechanism for ID Poor (allowing a regular threeyearly update of the ID Poor Lists of Poor Households;
- Enhancing integration and of different geographical targeting tools and improve spatial coordination of FSN interventions based on area information;
- Developing IPC as a harmonized classification system of food security and its integration with the FSN Quarterly Bulletin.

## 7.6. Further Steps to Prepare for NSFSN Implementation

The NFSNS will be shared in hard and soft copies<sup>131</sup> and **disseminated** over a couple of months through national and regional fora and thematic workshops. Discussions at decentralized level will create awareness about food security and nutrition as an important issue for enhanced human resources and regional economic development and to focus on priority programs and actions most relevant for the respective provinces and selected districts.

**Operationalizing** the strategy through national programs and projects needs to be based on a participatory and nationally owned process organized by CARD. The TWG-SP&FSN will involve relevant government institutions, decentralized levels of government, development partners, civil society and the private sector.

In 2014, CARD will complete and refine the NSFSN indicator framework (Annex 1 of the strategy) the inventory of existing and planned interventions with regard to FSN (Annex 2 of the strategy) and develop a **result based M & E system**.

CARD will further discuss and agree with the respective ministries on the next steps including resource requirements to scale-up existing or new programs and implement prioritized actions as outlined in the NSFSN. At the same time, **guiding principles** for improved coordination, M&E and FSN information management and capacity development listed in this chapter will be further specified.

As recommended by **Samdech Akka Moha Sena Padei Techo HUN SEN**, Prime Minister of the Kingdom of Cambodia, during the high level seminar on FSN in May 2012, **a nutrition action and investment plan** to improve child and maternal nutrition will be developed in 2014 across sectors to further operationalize the priority actions outlined for objective 2 of the NSFSN. A national consultative workshop involving relevant ministries, civil society, and development partners will be organized to begin work on the national planning document. Parallel to this, a **community based nutrition program** will be developed for piloting in 2014.

<sup>131</sup> The NSFSN will be placed on CARDs web-site, the FSNIS and web-sites of all FSN related ministries and RGC institutions. A leaflet containing the key messages of the NFSNS will be produced and distributed at national and sub-national levels.

#### ANNEX 1: NSFSN 2014 - 2018 Indicator Framework

The indicator framework lists a set of indicators for the NSFSN goal, each of the three objectives of the stratetgy as well as for the institutional arrangements for implementation. Indicators are grouped by sub-themes and list of outcome indicators before behavioral change/process- and service delivery indicators.

This preliminary indicator framework takes over many of the indicators already formulated in the SFFSN 2008-2013 and considers also additional indicators for nutrition, proposed by a working group, into the NSDP 2014-2018 as well as some new food security specific indicators. As laid out in the chapter 7 of the NSFSN, the indicator framework is aligned with indicators (and as far as available) and the targets of the NSDP 2014-2018 result framework. Some of the indicators presented below (specifically for objective 3 and the "instititional arrangements" for implementation of the NSFSN needs to be consolidated and realistic targets formulated during the further establishment of the NSFSN Monitoring System.

Indicator	Aligned with	Data Source	Base-line <sup>132</sup>	Target 2014	Target 2015 <sup>133</sup>	Target 2016	Target 2017	Target 2018
<b>NSFSN Goal:</b> "By 2018, Cambod access to sufficient, safe, and nutroptimize the utilization of this foo	ritious fo	od to me	eet their d	ietary n	ieeds an			
Overall FSN Impact Indicators (	Anthrop	ometri	cs)					
% of children aged 0-59 month who are moderately or severely stunted (height for age < - 2SD)	NSDP NNS	CDHS	39.9 2010		24.5 CMDG			25
% of children aged 0-59 month who are moderately or severely underweight (weight for age < -2SD)	NNS	CDHS	28.3 2010		19.2 CMDG			19
% of children aged 0-59 month who are moderately or severely wasted (weight for height < -2SD)	NSDP NNS	CDHS	10.9 2010	10	10.1 CMDG	9	8	7
% of women aged 15-49 years with BMI<18.5kg/sq. meter	NNS	CDHS	19.1		8 CMDG	8	7	7
Overall FSN Impact Indicators (	Food Co	nsumpti	on)					
Proportion of population below the food poverty line (%)	NSDP	CSES 2011	3.8	<5	<5	<5	<5	<5
Average food consumption (Kcal/pers/day) among poorest quintile (according to household estimation)	new	CSES	1690		1886	1944	2002	2060
Objective1: "Food-insecure house productive and diversified agricultural emporation of the control of the contr	ture and loyment	livestock and inco	k production ome oppor	on, sust	ainable f			
Indicators on Household Povert	y and Pu	ırchasin	ng Power	ı			ı	
Poverty levels - % of population	NSDP	CSES	18.8 (2013)	17.8	16.8	15.8	14.8	13.8
Poverty levels % of rural population	NSDP	CSES	19.7 (2013)	18.7	17.7	16.7	15.7	14.7
Share of poorest quintile in national consumption (%)	NSDP	CSES	8.98 (2011)		10 CMDG			

Most baseline data are either from CDHS (2010) or CSES (2009 large or subsequent annual survey 2011), or from administrative statistics from 2011 or 2012. The baseline-reference for CDHS data is always the CDHS 2010. For other data sources the reference-year is indicated under the fugure.

For indicators included in the NSDP 2014-2018 result framework core and additional indicator and available targets are aligned. For some indicators targets from sector strategies could be used. However some targets—in yellow in the table - must be developed in line with the new NSDP and respective sector targets. For nutrition related indicators targets provided as Input to the NSDP 2014-2018 from NNP were inserted.

Gini coefficient of consumption inequality (%)	NSDP	CSES	0.32 (2013)	0.32	0.32	0.31	0.31	0.30
Rate of Food Price Inflation (year to year increase in %)	new	NIS	6.2% (2013)	<4	<4	<4	<4	<4
ToT Real wages unskilled labour to rural retail rice prices (lowest quality)	new	NIS MAFF	10.7	<10	<10	<10	<10	<10
Female share of wage employment - agriculture, industry, services (%)	NSDP		44, 56, 30		50, 50, 50			
Proportion of girls completed long term technical and vocational skills training and education (in %)	NSDP	MOLVT						
Indicator	Aligned with	Data Source	Base-line	Target 2014	Target 2015	Target 2016	Target 2017	Target 2018
Indicators on Food Availability (Pr	roduction	n) and Su	ıstainable	Manage	ement of	f Natural	Resour	ces
NSDP Paddy yield per hectare (tons)	NSDP	MAFF	3.12 2012/13	3.15	3.10	3.21	3.23	3.25
Crop Diversification Index (% of total sawn area)	NSDP	MAFF	31	32	35	35	35	35
Annual paddy rice surplus in million metric tons	new	MAFF	4.73 2012/13					
Forest Cover - % of total area	NSDP	MAFF	58.4 (2010)	60	60 CMDG	60	60	60
Number of forest communities	MAFF	MAFF	453	500	520	550	570	600
Community Protected Areas – CPA	NSDP	MoE	120	130	140	142	145	150
The average national availability of fish for consumption remains in 2007 (52.4 kg/ person/year)	SPF-FiA	MAFF FiA	52.4 (2007)	52.4	52.4	52.4	52.4	52.4
a) Rice field fish production and b) aquaculture production is increased by 15% annually to reach 500.000 tons and 185.000 tons per year by 2019	SPF-FiA	MAFF	168,000 tons (2011)	255,507	293,833	337,908	388,594	446,883
Number of registered and effectively operating community-based fisheries	SPF-FiA	MAFF	300 (2011)	450	465	480	495	510
Other Indicators Related to Obje	ective 1							
Total cumulated area cleared of mines/ERW (in ha)	NSDP	CMAA	8,708 (2013)	9,143	9,600	10,080	10,584	11,113
Social Land concessions for poor Households (No of HH)	NSDP	MLMUC		35,000	37,000	39,000	41,000	43,000
% of land title issued to people (% of total farm plots) -	NSDP	MLMUC	28% (2011)	52	57	62	66	70
Indigenous Land communities titling (No)	NSDP	MLMUC		18	28	38	48	58
Rural Roads rehabilitated – kms (out of total 40,000)	NSDP	MRD	22750	28,600	29,450	30,300	31,150	32,00
Objective 2: Cambodians improvematernal malnutrition and enhance						ng in red	duced c	hild and
Health Sector - Nutrition Impact ar	d Outcor	ne Indica	itors					
% of children aged 6-59 months with anaemia	NSDP NNS	CDHS,	55.1	44	42 (NNS)	40	38	36
% of women aged 15-49 years with anaemia	NSDP NNS	CDHS	44.4	38	36	34	32	30

% of pregnant women with anaemia	NNS HSP	CDHS	52.7	48	46 HSP	44	42	40
% of women being overweight (BMI>25kg/sq. meter)	new	CDHS	6 (2010)	<15	<15	<15	<15	<15
% of infants aged 0-6 months exclusively breastfed	NNS	CDHS	73.5	77	78	80	83	84
% of mothers who start breast- feeding newborn child within 1 hour of birth	NNS	CDHS HMIS	65.2	70	71	72	73	74
% of children aged 12-23 months who are breast-fed	new	CDHS	83.3	85	86	86	87	87
% of children 6-23 months of age who receive a minimum acceptable diet (fed with all 3 IYCF pract.)	NNS	CDHS	24	32	36	40	44	48
<b>Health Sector - Nutrition Service</b>	e Indicat	tors					•	
Number of children with severe acute malnutrition receiving adequate treatment	new	HMIS	1550 (2013)	2500	3000	9000	15000	20000
% of women attending ANC receive nutritional counseling	NNS	CDHS HMIS	81.5	84	86	88	90	92
% of children (6-23 months) receiving multiple micronutrient powder in the last month	new	CDHS HMIS	1.7 (2010)	25	30	35	40	45
% of postpartum women receiving at least 42 tablets of iron folic acid	NNS	HSI	79 (2012)	84	85	85	86	87
Indicator	Aligned with	Data Source	Base-line	Target 2014	Target 2015	Target 2016	Target 2017	Target 2018
Food Fortification, Sanitation ar	nd Other	Nutriti	on Relate	d Indic	ators			
% of households consuming iron fortified fish or soy sauce	new	MoP	15	25	35	45	55	65
% of households consuming iodized salt	NNS	MoP (CDHS)	82.7		90 CMDG	90	90	90
% of annual domestic consumption satisfied by domestic production of iron fortified fish & soy sauce	new	МоР	15	30	48	50	52	54
Number of staple foods and condiments with legislation for mandatory fortification	new	МоР	1	2	2	3	3	3
Basic Hygiene Practices (% of rural population)	RWSHS	CDHS			30% CMDG			
Access to improved water supply (% rural population)	RWSHS NSDP	MRD	44.2 (2013)	46.7	50	53	67	67
Access to improved sanitation (% rural population)	RWSHS NSDP	MRD	37,5 (2013)	42	46	50	55	60
Gross Enrolment rate in Lower Secondary Education Girls (%)	NSDP	MoEYS	57.7 (2013)	60.3	66.5	73.1	80.4	85.9
<b>Objective 3:</b> Improved social safe stability of food supply in Cambod		nd capac	ities to co	pe with	risks an	nd shock	s increa	se the
Disaster risk affection Index (DRAI) – scale from 0 to 100			51					
Coping strategy Indicator (CSI)	WFP							
Number of poor households involved	NSPS	CARD	TBD	TBD	TBD	TBD	TBD	TBD
in public works programs (PWP)								

% of households in debts (due to covariant or idiosyncratic shocks)	new		TBD	TBD	TBD	TBD	TBD	TBD
Number of people affected by flood requiring food assistance <sup>5</sup>		NCDM	TBD	TBD	TBD	TBD	TBD	TBD
Number of people affected by drought requiring food assistance		NCDM	TBD	TBD	TBD	TBD	TBD	TBD
Irrigated area for all crops (HA/M)	NSDP	MOWRAM	1,485,130	1,515,130	1,545,130	1,575,130	1,605,130	1,635,130
Indicators to follow up progress w	ith regar	d to_inst	titutional	arrang	ements	(priorit	y action	laid
out in chapter 7 of NSFSN)								
A comprehensive inventory and data	base on	CARD		06/14				
existing and planned FSN related inter	ventions							
is developed and regularly updated								
Monitoring system for NSFSN (con-	solidated	CARD		06/14				
indicator framework, procedures and i	reporting							
mechanisms) developed and approve	d							
A nutrition action and investment pla	an across	CARD		12/14				
sectors and based on priorities outlin	ed under							
objective 2 of the NSFSN is develo	ped and							
approved								
Community based nutrition program d	eveloped	CARD		12/14				
and funded for piloting								
Existing FSN information tools and pr	oducts	CARD		a)2014			b)2017	
(IPC, FSN Bulletin, FS Atlas, are a) be	tter							
integrated and b) operate on a sustain	able							
basis								
Number of FSN related projects and p	orograms	CARD	TBD	TBD	TBD	TBD	TBD	TBD
implemented through a coordinated a	approach							
(via the TWG SP&FSN) is increasing								
A human resource development	plan for	CARD		a)2014			b)2017	
CARD and FSN focal points in rele	vant line							
ministries to improve FSN related cap	acities is							
a)developed and approved b) implem	ented							
Capacities at decentralized level for	or main-	CARD		a)2014			b)2017	
streaming FSN issues into the sul		NCDD						
planning process are enhanced throu								
tegration of the topic in the NCDD co								
cula for CC and b) implementation of								
training concept in the 5 most food	insecure							
provinces								
Number of communes having been t		NCDD	TBD	TBD	TBD	TBD	TBD	TBD
mainstreaming FSN in their developm		CARD						
Number of communes included FSN		NCDD	TBD	TBD	TBD	TBD	TBD	TBD
actions (priority actions listed in the N	ISFSN) in	CARD						
their CDP/CIP								
% of commune budget spent on FSI		NCDD	TBD	TBD	TBD	TBD	TBD	TBD
actions (priority actions listed in the I								

ANNEX 2: Overview on Major FSN Related Programs and Projects in Cambodia (by Objective of NSFSN 2014-2018)

	Program or Project	RGC Institution	Supporting DP	Provinces	Estimated beneficiaries	Time- frame	Budget
Ob fisl	<b>Objective 1:</b> Food-insecure households increase and diversify food availability and food access from agriculture and livestock production, fisheries and forestry as well as from non agricultural employment and income opportunities	l diversify f al employm	ood availab ent and inc	ility and food access come opportunities	from agriculture and live	estock pro	duction,
	Emergency Food Assistance Project Additional Financing	MEF	ADB	BMC,KTM,OMC,SRP,KCM, KSP,PVG,PVH,SVG, TKE	ID Poor 1&2 in 100 communes	2012-15	\$24.5m
2	Tonle Sap Poverty Reduction and Smallholder Development Project	MAFF	ADB	BMC,KCM,KTM,SRP	Smallholders in 196 communes	2010-15	\$5.3m
$\omega$	Improving Market Access for the Poor in Central Cambodia	MOT	ADB	KTM	Households in 11 villages around Sambor Prei Kuk temple site	2012-2014	\$1.96m
4	Climate Resilient Rice Commercialization Sector Development Program	MEF with MAFF, MIME, MOWRAM	ADB	BTB,KTM,PVG	Households along the rice value chain	2013-2018	\$55.0m
S	Rural Roads Improvement Project	MRD	ADB	BTB,KCM,KCN,KSP ,KTM,PST,SRP	Households living along 500km of upgraded rural roads	2011-2016	\$35.0m
9	Strengthening Technical and Vocational Education and Training Project – Voucher Skills Training Program component	MLVT	ADB	All 23 Provinces	At least 210.000 participants of non-formal community based short courses in agriculture	2010-2015	\$24.5m
_	Improving food security and market linkages for smallholders in Oddar Meanchey and Preah Vihear Provinces	MAFF MoWA, MoH	EU	омс, рун	7,500 households	2012-2015	Euro 4 million
∞	Project for Agricultural Development and Economic Empowerment (PADEE)	MAFF	IFAD and FA0	KPP, KDP, PVG, SVRG and 12,500 households Takeo	12,500 households	2012-2018	USD 1.6 million
6	Fighting financial illiteracy among poor rural households	MAFF MoWA (and MoH	EU	ОМС, РVН	7,500 households	2012-2014	USD 0.3 million
10	Strengthening the adaptive capacity and resilience of rural communities using micro-watershed approaches to climate change and variability to attain sustainable food security in Cambodia	Ministry of Environment,	GEF- LDCF	SRP, Kampong Thom, Preah Vihear, and Ratanakiri	10,000 beneficiaries	2013 -	USD 5.6 million
=	Promoting appropriate technology for smallholders to increase food security among indigenous peoples in Cambodia and Lao PDR	MAFF	EU	Rattanakiri	80,000	2012-2015	USD 1.9 million
12	Strengthening Farmers' Organizations' Voices in Policy Dialogue on Food Security and Nutrition	MAFF	EU	Rattanakiri	900 households	2013-2015	USD 638,456

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13	Secure water to secure food and nutrition	MAFF, MWRM	EU	Oddar Meanchey	800 households	2012-2015	USD 1.28
							Million
41	Innovative approaches to food insecurity for urban and periurban poor in Siem Reap, Cambodia (INFOSE)	MAFF	EU	Siem Reap	1,800 households	2011-2015	USD 1.3 Million
15	Sustainable actions to Fight Poverty, Hunger and Malnutrition in Oddar Meanchey and Preah Vihear Provinces		EU	Oddar Meanchey and Siem Reap	4,093 households	2011-2014	USD 1.8 million
16	Reducing chronic food insecurity and vulnerability to shock among poor indigenous farmers and their communities in Mondulkiri and Ratanakiri	мағғ, мон	EU	Mondulkiri & Rattanakiri	5,224 beneficiaries	2011-2014	USD 1.05 million
17	Promote inclusive and sustainable growth in the Agriculture sector fisheries and livestock	MAFF	EU	All provinces		2014-2018	€20 million
18	Humanitarian Implementation Plan-Response to cyclones Wutip + Nari		EU (ECHO)	Affected provinces		2014	€ 3 mill.
19	DIPECHO HIP South East Asia-2014		EU (ECHO)	Notspecify		2014-2015	€ 0.5 million
Ok hu	<b>Objective</b> 2: Cambodians improve use and utilisatio human and economic development	on of their fo	od resultin	g in reduced child aı	n of their food resulting in reduced child and maternal malnutrition and enhanced	າ and enha	nced
<b>—</b>	Implementation of Sub-decree 133 on marketing breastmilk substitutes	NNP/ NMCHC/ MoH	МНО	Nationwide	All children	2014-15	77
7	Development of National Nutrition Plan of Action				All population with focus on children and women	u u	??
8	Mother Child Health and Nutrition (MCHN) program providing fortified blended food to children 6-23 months and pregnant lactating women (1,000 days) and health and nutrition education	МоН	WFP (in collaboration with NGOs)	PST, SRP	11,000 children under 2 and pregnant/lactating women per month	July 2011- June 2016	1.5 mill US\$ per year
4	Management of Acute Malnutrition – Treatment of children 6-59 months identified with Moderate Acute Malnutrition through provision of fortified blended food	Мон/РНД	WFP	KSP	350 children 6-59 months per month	December 2010-June 2016	see above
w	Second Rural Water Supply and Sanitation Project	MED	ADB	KCG, PST, BTB, BMC, SRP, KTM	377.000 people with access to safe water, 290.000 people with access to improved sanitation	2010-2015	\$21.0m

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9	Second Greater Mekong Sub-region Communicable Disease Control Project – (sanitation interventions under Model Healthy Villages Component sanitation interventions	МоН	ADB	90 villages in 18 border districts	5.400 HH (60 per village) have access to improved sanitation	2014-15	Not avail.
7	Management of Severe Acute Malnutrition at the hospital level	NNP/ NMCHC/ MoH	UNICEF	35 hospital in 25 provinces	All children screened as SAM	2014-2018	Not avail.
∞	Scale up distribution of micronutrient powders to children between 6-24 months	NNP/ NMCHC/ MoH	UNICEF/ HKI/WVC	National	All children between 6-23.9 months	2014-2018	Not avail.
6	Implement Infant and young child feeding campaign	NNP/ NMCHC/ MoH	UNICEF	National	All children between 6-23.9 months	2014-2018	Not avail.
10	Support Fortification initiatives in Cambodia	NSCFF/ NCIDD/ MOP/MOH	RACHA/ UNICEF	National	Population wide	2014-2018	Not avail.
11	Support Scaling Up Nutrition initiative in Cambodia	CARD	UN agencies	National	Population wide	2014-2018	Not avail.
12	Distribution of Mebendazole every 6 months for children 6-59 months	МОН					
O in	<b>Objective 3:</b> Improved social safety nets and capacities to cope with risks and shocks increase the stability of food supply for food insecure households	ies to cope	with risks	and shocks increase	the stability of food supp	ly for food	
-	School meals in primary schools and pre-schools	MoEYS	WFP	BMC, BTB, KCM, KCG, KSP, KTM, OMC, PVH, PVG, PST, SRP, STG	390,000 children in 20% of July 2011-primary schools and co-located June 2016 pre-schools per school year	July 2011- June 2016	10 mill US\$ per year
7	Scholarships (food or cash) for the poor in primary schools	MoEYS	WFP	BMC, BTB, KCM, KCG, KSP, KTM, KPT, KRT, OMC, PVH, PVG, PST, SRP, STG, SVG	96,500 children (and their July 2011-households) in 62% of primary June 2016 schools per school year	July 2011- June 2016	9 mill US\$ per year
က	Productive Assets and Livelihoods Support (PALS)	MRD/NCDD/ provincial administration	WFP	KCG, KSP, KTM, PVG, PST, SVG, SRP	14,000 food-insecure rural households per year	July 2011- June 2016	1.9 mill US\$
4	Emergency assistance to restore the livelihoods of vulnerable farming families affected by the floods in Banteay Meanchey and Battambang provinces	MAFF (GDA) and NCDM	FAO	Banteay Meanchey and Battambang	7,000 farming families for rice cultivation and 4,500 households for vegetable cultivation	2013-2014	USD 0.5 million

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