



**KINGDOM OF CAMBODIA  
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**Strategic Framework  
for  
Food Security and Nutrition in Cambodia 2008-2012  
(SFFSN)**

Prepared by the Council for Agricultural and Rural Development (CARD)  
in consultation with the Technical Working Group for Food Security and  
Nutrition (TWG-FSN)

Phnom Penh, May 2008

## FOREWORD

Improving food security and nutrition (FSN) is an important development priority of the Royal Government of Cambodia (RGC) and is essential for achieving the Cambodian Millennium Development Goals (CMDGs). Food security is addressed directly in CMDG 1, "Eradicate extreme poverty and hunger", but FSN is also crucial to achieving most of the other CMDGs. The National Strategic Development Plan (NSDP) 2006-2010 states that food security and nutrition is a key goal which is "to ensure that poor and food insecure Cambodians, by 2010, have substantially improved physical and economic access to sufficient, safe and nutritious food at all times to meet their dietary needs and food preferences for an active and healthy life". Food security is further recognised as a basic human right under the Universal Declaration on Human Rights and the International Covenant on Economic, Social and Cultural Rights, which have been ratified by Cambodia.

For the past decade, Cambodia has been largely food self-sufficient and could produce surpluses for export. However, there continue to be regional disparities and local food availability remains vulnerable to natural disasters. Widespread rural poverty still hampers access to adequate food for many households. In 2004, 23 percent of Cambodians consumed less than the minimum dietary energy requirement (MDER) of 1715 kcal/day. Spiralling staple food prices are an additional challenge for the access to sufficient and adequate food of poor households in Cambodia, as most of them are net food buyers and on average they spend more than 70 percent of their income on food.

Inadequate dietary and child feeding practices, poor hygiene and sanitation, and limited access to quality health care contribute to the malnutrition of many Cambodians. The nutrition status of children and women, which is the overall outcome indicator for FSN, has considerably improved in recent years, but further targeted investments are needed to sustain and accelerate these achievements. The 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.

Like other cross-cutting issues, FSN is related to many sectors and needs to be "mainstreamed" (specifically considered or reflected) in sector policies, strategies and plans to ensure food availability, food access and the adequate utilisation of food at national, regional and household levels. As a reference document, the Strategic Framework for Food Security and Nutrition (SFFSN) 2008-2012 should help this important aspect of development to be considered more systematically in national strategies and sector policies.

The SFFSN was developed by the Council for Agricultural and Rural Development (CARD) in a broad process of consultation involving various ministries and government agencies, development partners and Non-Governmental Organisations (NGOs), and especially the Technical Working Group on Food Security and Nutrition (TWG-FSN), which is co-chaired by CARD and the Ministry of Planning (MoP) and co-facilitated by the World Food Programme (WFP) and the Food and Agriculture

Organisation of the United Nation (FAO). In 2008, the Royal Government of Cambodia (RGC) through the National Council for Nutrition chaired by MoP will also develop a new Cambodian Nutrition Investment Plan (CNIP 2008-2012) to further operationalise some of the priority actions outlined in this document.

Significant progress in improving FSN in Cambodia has been achieved in the recent past, but much remains to be done to ensure food security and to eliminate malnutrition in Cambodia. The SFFSN will help to guide the efforts of the RGC and the development partners in this regard.



Phnom Penh, 20th May 2008

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## Table of Contents

|                                                                                        |           |
|----------------------------------------------------------------------------------------|-----------|
| <b>ABBREVIATIONS</b>                                                                   | <b>3</b>  |
| <b>TABLES and FIGURES</b>                                                              | <b>4</b>  |
| <b>EXECUTIVE SUMMARY</b>                                                               | <b>5</b>  |
| <b>1. INTRODUCTION</b>                                                                 | <b>9</b>  |
| 1.1 Food Security and Nutrition is an Important Cross-cutting Issue for Cambodia       | 9         |
| 1.2 FSN Policy Background                                                              | 11        |
| <b>2. ANALYSIS OF FSN SITUATION AND POLICY ENVIRONMENT</b>                             | <b>13</b> |
| 2.1 The FSN Situation in Cambodia - Progress and Trends                                | 13        |
| 2.1.1 Malnutrition and Mortality                                                       | 13        |
| 2.1.2 Overview of the Causes of Food Insecurity                                        | 16        |
| 2.2 The SFFSN's Policy and Institutional Context                                       | 19        |
| <b>3. THE SFFSN'S VISION, GOAL AND OBJECTIVES (OVERVIEW)</b>                           | <b>24</b> |
| <b>4. SFFSN 2008-2012 - OBJECTIVES AND PRIORITY ACTIONS</b>                            | <b>26</b> |
| 4.1 Increased Food Availability                                                        | 26        |
| 4.1.1 Enhancing Productivity and Diversification of Agriculture,                       | 26        |
| 4.1.2 Improving Management of Water Resources and Irrigation                           | 29        |
| 4.1.3 Accelerating Fisheries Reform                                                    | 30        |
| 4.1.4 Accelerating Forestry Reform                                                     | 31        |
| 4.2 Increased Food Access                                                              | 32        |
| 4.2.1 Increasing Wage Employment Opportunities                                         | 34        |
| 4.2.2 Increasing Micro-Enterprise Business Opportunities                               | 35        |
| 4.2.3 Developing Market Infrastructure and Services                                    | 37        |
| 4.2.4 Developing Transport Infrastructure and Services                                 | 37        |
| 4.3 Improved Use and Utilisation of Food                                               | 38        |
| 4.3.1 Reducing Child and Maternal Malnutrition and Mortality                           | 39        |
| 4.3.2 Improving Domestic Water Supply, Sanitation and Hygiene Practices                | 43        |
| 4.3.3 Improving Food Safety and Enhancing Food Fortification                           | 44        |
| 4.4 Increased Stability of Food Supply                                                 | 44        |
| 4.4.1 Improving Disaster Management Safety Nets                                        | 45        |
| 4.4.2 Establishing Social Safety Nets for Vulnerable Groups                            | 46        |
| 4.5 Enhanced Institutional and Policy Environment for FSN                              | 48        |
| 4.5.1 Strengthening Capacities and Improving Coordination for FSN                      | 49        |
| 4.5.2 Integrating FSN into the Decentralised Local Planning Process                    | 50        |
| 4.5.3 Improving FSN-related Information Management and Targeting of FSN Interventions. | 51        |
| <b>5. MONITORING AND EVALUATION OF SFFSN</b>                                           | <b>54</b> |
| ANNEX 1. REFERENCE DOCUMENTS                                                           | 57        |
| ANNEX 2. FOOD SECURITY MAPS CAMBODIA                                                   | 59        |

## **Abbreviations**

|                 |                                                                     |
|-----------------|---------------------------------------------------------------------|
| <b>A&amp;WR</b> | Agriculture and Water Resources                                     |
| <b>CARD</b>     | Council for Agricultural and Rural Development                      |
| <b>CCDM</b>     | Commune Committee for Disaster Management                           |
| <b>CDHS</b>     | Cambodia Demographic and Health Survey                              |
| <b>CMDGs</b>    | Cambodia Millennium Development Goals                               |
| <b>CNIP</b>     | Cambodia Nutrition Investment Plan                                  |
| <b>CPI</b>      | Consumer Price Index                                                |
| <b>CPRs</b>     | Common Property Resources                                           |
| <b>CSES</b>     | Cambodia Socio-economic Survey                                      |
| <b>FAO</b>      | Food and Agriculture Organization of the United Nations             |
| <b>FIVIMS</b>   | Food Insecurity and Vulnerability Information and Mapping System    |
| <b>FNPP</b>     | The FAO-Netherlands Partnership Programme                           |
| <b>FSN</b>      | Food Security and Nutrition                                         |
| <b>FSNIS</b>    | Food Security and Nutrition Information System                      |
| <b>GAP</b>      | Government Action Plan                                              |
| <b>GTZ</b>      | Gesellschaft für Technische Zusammenarbeit, GmbH                    |
| <b>IO</b>       | International Organisation                                          |
| <b>IPM</b>      | Integrated Pest Management                                          |
| <b>LMAP</b>     | Land Management and Administration Project                          |
| <b>MAFF</b>     | Ministry of Agriculture, Forestry and Fisheries                     |
| <b>MDER</b>     | Minimum Dietary Energy Requirement                                  |
| <b>MDGs</b>     | Millennium Development Goals                                        |
| <b>MEF</b>      | Ministry of Economy and Finance                                     |
| <b>MIME</b>     | Ministry of Industry, Mines and Energy                              |
| <b>MoC</b>      | Ministry of Commerce                                                |
| <b>MoE</b>      | Ministry of Environment                                             |
| <b>MoEYS</b>    | Ministry of Education, Youth and Sports                             |
| <b>MoH</b>      | Ministry of Health                                                  |
| <b>MoI</b>      | Ministry of Interior                                                |
| <b>MLMUPC</b>   | Ministry of Land Management, Urbanisation Planning and Construction |
| <b>MLVT</b>     | Ministry of Labour and Vocational Training                          |
| <b>MoSAVYR</b>  | Ministry of Social Affairs, Veterans and Youth Rehabilitation       |
| <b>MoP</b>      | Ministry of Planning                                                |
| <b>MoWA</b>     | Ministry of Women's Affairs                                         |
| <b>MOWRAM</b>   | Ministry of Water Resources and Meteorology                         |

|                |                                                                      |
|----------------|----------------------------------------------------------------------|
| <b>MPWT</b>    | Ministry of Public Works and Transportation                          |
| <b>MRD</b>     | Ministry of Rural Development                                        |
| <b>NAPA</b>    | National Adaptation Programme of Action to Climate Change            |
| <b>NCDM</b>    | National Committee for Disaster Management                           |
| <b>NGO</b>     | Non-Governmental Organisation                                        |
| <b>NNP</b>     | National Nutrition Programme                                         |
| <b>NSDP</b>    | National Strategic Development Plan                                  |
| <b>NPFSPR</b>  | National Programme for Household Food Security and Poverty Reduction |
| <b>PCDM</b>    | Provincial Committee for Disaster Management                         |
| <b>PNCC</b>    | Provincial Nutritional Coordination Committee                        |
| <b>RGC</b>     | Royal Government of Cambodia                                         |
| <b>RS</b>      | Rectangular Strategy of the Royal Government of Cambodia             |
| <b>SAW</b>     | Strategy on Agriculture and Water 2006-2010                          |
| <b>SFFSN</b>   | Strategic Framework for Food Security and Nutrition in Cambodia      |
| <b>TWGAW</b>   | Technical Working Group for Agriculture and Water                    |
| <b>TWG-FSN</b> | Technical Working Group for Food Security and Nutrition              |
| <b>WFP</b>     | UN World Food Programme                                              |
| <b>WHO</b>     | World Health Organisation                                            |

## Tables

|                                                                                                                         |    |
|-------------------------------------------------------------------------------------------------------------------------|----|
| Table 1: Child Protein-Energy Malnutrition Rates Cambodia 2000 and 2005                                                 | 13 |
| Table 2: Child Micronutrient Malnutrition Rates Cambodia 2000 and 2005                                                  | 14 |
| Table 3: Infant and Under 5 year Mortality Rates Cambodia 2000 and 2005                                                 | 14 |
| Table 4: Regional Comparison of Child Malnutrition and Mortality Rates in Cambodia 2005 with Neighbouring Countries     | 14 |
| Table 5: Estimated Numbers of Cambodian Children Affected by Child Malnutrition and Mortality in Cambodia 2000 and 2005 | 15 |
| Table 6: Causal Dimensions of Food Insecurity                                                                           | 17 |
| Table 7: The role of improving FSN in achieving the CMDGs                                                               | 20 |
| Table 8: Current Cross-cutting Policies/Strategies and Institutions related to FSN under the NSDP Framework             | 21 |
| Table 9: Major Current Sector Policies/Strategies and Ministries related to FSN                                         | 22 |
| Table 10: Overview Existing Framework/Data Sources for SFFSN Monitoring                                                 | 55 |
| Table 11: SFFSN Monitoring Framework                                                                                    | 56 |

## Figures

|                                               |    |
|-----------------------------------------------|----|
| Figure 1: Food Security and Nutrition Concept | 16 |
|-----------------------------------------------|----|

## Maps

|                                                                                                                 |    |
|-----------------------------------------------------------------------------------------------------------------|----|
| Map 1: Children aged <5 years stunted: percent by Province in year 2005                                         | 59 |
| Map 2: Children aged <5 years underweight: percent by Province in year 2005                                     | 60 |
| Map 3: Children aged <5 years wasted: percent by Province in year 2005                                          | 61 |
| Map 4: Children aged <5 years Mortality: percent by Province in year 2005                                       | 62 |
| Map 5: WFP, Integrated Food Security and Humanitarian Phase Classification (IPC) in Cambodia (as of 26.02.2007) | 63 |

## Executive Summary

The Strategic Framework for Food Security and Nutrition in Cambodia 2008-2012 (SFFSN) is a reference document on the cross-cutting issue of food security and nutrition. It was written by the Council for Agricultural and Rural Development (CARD) in consultation with the Technical Working Group on Food Security and Nutrition (TWG-FSN) in 2007. Improving food security and nutrition (FSN) is a development priority of the Royal Government of Cambodia (RGC), as is apparent from its current national strategic frameworks, including the Cambodia Millennium Goals (CMDGs), the Rectangular Strategy and the National Strategic Development Plan (NSDP) 2006-2010. It is also a priority recognised in a broad range of sector policies, from agriculture and water resources to economic development and health and education sectors.

These development priorities reflect the concern that many Cambodians confront malnutrition and food insecurity in their daily lives, despite self-sufficiency in national rice production and considerable improvements in overall nutritional status in recent years.

In 2004, 34.7 percent of Cambodians were below the poverty line and 90 percent of these poor were located in rural areas. Nationally, 23 percent of the Cambodian population, or 3 million people, were food-deprived in 2003-2004, consuming less than the minimum daily energy requirement of 1715kcal/day. In 2005, more than 630,000 or 37 percent of Cambodian children aged under five were suffering chronic malnutrition (stunting) and 7 percent of children were acutely malnourished (wasted). More than 60 percent of children under two suffered from anaemia. Malnutrition is also a major cause of the high level of maternal and infant mortality.

A wide range of constraints are faced by poor and food-insecure Cambodians striving to improve their food security. The situation analysis in this SFFSN identifies constraints found in agriculture, forestry and fisheries, poverty and lack of household income, maternal health, mother-child caring practices, access to quality health services, and access to domestic clean water and sanitation, as well as instability in food supply due to shocks such as flood, drought and socio-economic vulnerability. Spiralling staple food prices are an additional challenge for the access to sufficient and adequate food of poor households in Cambodia, as most of them are net food buyers and on average they spend more than 70 percent of their income on food.

The social and economic costs of prevalent malnutrition in the Cambodian population are high. Meanwhile, investments to improve the FSN situation have been shown to provide high returns and benefits for national social and economic development. These investments are estimated to have a cost-benefit ratio of 1:8.

Improving FSN in Cambodia requires cooperation and efficient coordination mechanisms linking a wide range of ministerial and non-governmental stakeholders. The FSN Strategic Framework 2008-2012 (SFFSN) is intended to serve as a holistic cross-cutting reference frame for the formulation and review of sector strategies, and to guide the design and planning of programmes and projects for improved food security and nutrition for all Cambodians.



The SFFSN 2008-2012 consists of a Vision, a Goal and five Objectives.

**The SFFSN long-term Vision** is the achievement of food security and adequate nutrition for the people of Cambodia. This Vision is consistent with the globally agreed Millennium Development Goals (MDGs) and the Cambodia Millennium Development Goals (CMDGs) and can be formulated as follows:

*“All Cambodians have physical and economic access to sufficient, safe, and nutritious food, at all times, to meet their dietary needs and food preferences for an active and healthy life.”*

**The SFFSN Goal** focuses on the achievement of substantial progress toward improved FSN in Cambodia. This FSN Goal is already incorporated into the National Strategic Development Plan 2006-2010 (NSDP) and is consistent with progress toward meeting the CMDGs over the medium term. The SFFSN Goal is therefore:

*“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.”*

### **The SFFSN Objectives for 2008-2012**

The SFFSN 2008-2012 has five Objectives. Each has defined areas for interventions and a range of Priority Actions to be implemented. Each will require investment in services and infrastructure and the development of capacities in various sectors by a number of government ministries and coordination bodies.

SFFSN Objective 1: Food-insecure households **increase food availability** from their own agriculture and livestock production and from common property forests and fisheries.

SFFSN Objective 2: Food-insecure households **increase their food access** by increasing household income.

SFFSN Objective 3: Food-insecure households **improve the use and utilisation of their food** resulting in reduced malnutrition, morbidity and mortality, particularly among women and children.

SFFSN Objective 4: Improved social safety nets and enhanced capacities of food-insecure households to cope with risks and shocks **increase the stability of their food supply**.

SFFSN Objective 5: The **institutional and policy environment** for achieving improved food security and nutrition in Cambodia is **enhanced**.

The content of the SFFSN 2008-2012 is organised in five sections:

Section 1 introduces the importance of FSN for development in Cambodia today and presents the FSN policy background. Section 2 provides a general FSN Situation Analysis documenting FSN outcomes in terms of malnutrition and mortality and examines the current policy and institutional contexts. Section 3 expands on the

SFFSN vision, goals and objectives. Section 4 describes each of the five FSN objectives. The description consists of sector-specific situation analyses of the causes of malnutrition and food insecurity and provides a rationale for specific sector priority actions. A direct link is made between constraints and actions at the sector level. Section 5 outlines the monitoring framework designed to track the progress made in achieving the SFFSN objectives.

Real progress has been achieved in improving FSN in Cambodia in the recent past. But much remains to be done to overcome the human suffering imposed by a lack of food security in the daily lives of many Cambodians. While the challenges are many, the FSN Goal of substantially improving food security and nutrition among poor and food-insecure Cambodians by the year 2012 is achievable through vigorous and coordinated efforts pursuing the five SFFSN objectives.

# 1. Introduction

## *1.1 Food Security and Nutrition is an Important Cross-cutting Issue for Cambodia*

Food security is recognised world-wide as a fundamental dimension of national development, good governance and basic human rights. The generally accepted definition of food security is:

“Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food, enabling them to meet their dietary needs and food preferences for an active and healthy life”<sup>1</sup>.

Food security is recognised as a basic human right under international law. Specifically, the Convention on the Right to Food comes under the jurisdiction of the UN High Commissioner on Human Rights. The Right to Food is also recognised under the Universal Declaration on Human Rights and the International Covenant on Economic, Social and Cultural Rights<sup>2</sup>.

The importance of attaining food security is clearly reflected in the global United Nations Millennium Development Goals (MDGs) and specifically in MDG 1 “Eradicate extreme poverty and hunger”. In the localised Cambodia Millennium Development Goals (CMDGs) for 2015, agreed by the Royal Government of Cambodia in 2003, CMDG 1 is also to “Eradicate extreme poverty and hunger”. Moreover, improving FSN is crucial to achieving most of the other MDGs. The role of improved FSN in this respect is shown in Section 2, Table 7.

The CMDGs are to be achieved through the framework of the Royal Government of Cambodia’s Rectangular Strategy (RS)<sup>3</sup>. The RS is operationalised in the National Strategic Development Plan (NSDP) 2006-2010. All sector policies, strategies and plans are to be aligned to this overarching development strategy. As stated in the NSDP, “Poverty Reduction in the fastest possible manner is RGC’s foremost priority”<sup>4</sup>. But the NSDP also explicitly recognises the need for further progress in FSN as a key action to meet the NSDP priorities<sup>5</sup>.

This concern reflects the poverty and hunger that many Cambodians confront in their daily lives. In spite of considerable improvements in recent years, malnutrition and food insecurity are still widespread in Cambodia.

In 2004, 34.7 percent of Cambodians were still poor, with 90 percent of these poor located in rural areas<sup>6</sup>. In 2005, over 630,000 or 37 percent of Cambodian children

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<sup>1</sup> World Food Summit Plan of Action (Rome Italy 13 November 1996)

<sup>2</sup> <http://www.righttofood.org>; UNHCHR 2002, The Right to Food: Achievements and Challenges, Report by Mary Robinson, United Nations High Commissioner for Human Rights, World Food Summit Five Years Later

<sup>3</sup> RGC 2004 Rectangular Strategy of the Royal Government of Cambodia

<sup>4</sup> RGC 2006 National Strategic Development Plan p29

<sup>5</sup> RGC 2006 NSDP p47 Section 4.46

<sup>6</sup> NIS 2004 Cambodia Socio-Economic Survey, 2003/04 (CSES 2004), National Institute of Statistics, Ministry of Planning

aged under five years were suffering chronic protein-energy malnutrition (stunting). Rates of micronutrient malnutrition were also high, even compared to neighbouring countries. Malnutrition has been connected to 54 percent of the premature deaths of Cambodian children (one in eight Cambodian children dies before the age of five years)<sup>7</sup>.

Nationally, 23 percent of the Cambodian population, or three million people, were food deprived in 2003/2004, consuming less than the minimum dietary energy requirement (MDER) of 1715 kcal/day and 80 percent of the population lacked a balanced diet. The prevalence of critical food poverty, defined as the proportion of population living on less than the cost of a balanced diet equivalent to the MDER was 21.4 percent<sup>8</sup>.

The social and economic costs of malnutrition in the Cambodian population are high. Social costs include damage to individual health and physiological development, which limit the overall human potential of the malnourished, and high levels of suffering, debilitation and premature death. Economic costs include limitations on the development of the economy resulting from lower educational achievements, higher health costs, lower labour force quality and increased vulnerability to the impacts of natural hazards.

Meanwhile, investments in FSN have been shown to provide high returns for national social and economic development. These include improved health and education, resulting in a better quality labour force with people in a better position to fully develop their human potential<sup>9</sup>. Investments in FSN are estimated to have a cost-benefit ratio of 1:8<sup>10</sup>. Other social benefits include progress toward gender equity, decreasing rural-urban migration, improved environmental sustainability and better livelihoods for youth<sup>11</sup>.

Because the outcomes of food insecurity (malnutrition and mortality) are caused by a number of interacting factors, it is recognised world-wide, as in Cambodia, that improving FSN should be approached as a cross-cutting issue in terms of policy and programme interventions. Causal factors for food insecurity and malnutrition include the inability to produce enough food from agriculture and common property resources, insufficient cash income to buy food on the market and a lack of knowledge or services to support good nutrition and health. A further causal factor is the instability in flows of food resulting from natural hazards that lead to changes in food prices or income.

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<sup>7</sup> Cambodian Demographic and Health Survey Report (CDHS 2005). Estimate of number of children affected from WFP Food Security Web Atlas v 1.0.

<sup>8</sup> NIS/FAO/EU, Summary report on the Food Insecurity Assessment in Cambodia, September 2007

<sup>9</sup> MOP 2003 Cambodia Nutrition Investment Plan (CNIP) 2003-2007; World Bank, 2006 Repositioning Nutrition as Central for Development – A Strategy for Large Scale Actions. These aims are also aims of the RGC National Population Policy 2003.

<sup>10</sup> CNIP 2003-2007

<sup>11</sup> RGC 2003 National Population Policy

It is further recognised that improved FSN outcomes do not automatically result from the reduction of income poverty, but require specifically planned and designed interventions to complement poverty alleviation strategies<sup>12</sup>.

## *1.2 FSN Policy Background*

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. These included the 1994 National Programme to Rehabilitate and Develop Cambodia (NPRD), the first five-year Socio-Economic Development Plan (SEDP I, 1996-2000), the SEDP II for the period 2001-2005 and the National Poverty Reduction Strategy (NPRS) for the period 2003-2005.

A consistent theme in all national government policy frameworks has been the priority given to the alleviation of poverty, including hunger.

Further important cross-sectoral policy initiatives by the government during this period were the issue of the Prime Minister's Circulars on Food Security of 1999 and 2003<sup>13</sup>. These emphasised the importance of improving FSN and specified a range of measures to be implemented by all levels of government. Within the ambit of good governance reforms, the RGC approved its Governance Action Plan (GAP I) in March 2001. This was followed by an updated GAP II, 2005-2008. GAP II covers nine inter-related critical areas of governance that impact directly on poverty reduction and food security<sup>14</sup>.

While these policy frameworks were an achievement, they frequently suffered from insufficient coordination and institutional capacity for implementation. In terms of FSN, their impact was limited by insufficient specification of the nature and prevalence of food insecurity and malnutrition and their causes, and the lack of a comprehensive strategy to address these problems. It should be recognised that while these national policy frameworks and relevant sector policies<sup>15</sup> were being developed, a number of programmes aiming to increase food security were already under way, with some of them dating from the 1980s<sup>16</sup>.

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<sup>12</sup> World Bank, 2006 Repositioning Nutrition as Central for Development – A Strategy for Large Scale Actions

<sup>13</sup> RGC, 1999, Circular No 5 on Food Security and Nutrition in the Kingdom of Cambodia; RGC, 2003, Circular No 3 on Food Security and Nutrition in the Kingdom of Cambodia

<sup>14</sup> As an offshoot of the TWG-FSN participation in NSDP formulation in 2005, the government sought and was provided with an FSN update submission for GAP II through CARD.

<sup>15</sup> In relation to food availability, successive agricultural policies have maintained an emphasis on improving food security as a key priority of agricultural development. Policy papers on Common Property Resources (forests and fisheries) have recognised the important role of CPRs in food security. In relation to food access, almost all sector policies have recognised the existence of widespread income poverty and the need to raise incomes of the poor so that they can meet their basic needs, including food. In relation to food use and nutrition, an initial National Nutrition Plan of Action was implemented in 1995-1996 and a National Nutrition Programme (NNP) to develop a national nutrition policy and implement nutrition programmes has been operating under the Ministry of Health (MoH). The first Cambodia Nutrition Investment Plan (CNIP) was implemented in 1998-2002 but lacked funding. A second Cambodia Nutrition Investment Plan (CNIP) was implemented in 2003-2007.

<sup>16</sup> Notable among these were the emergency relief activities of ICRC, WFP, UNICEF and many NGOs. From the 1980s these programmes typically evolved into more hybrid operations, addressing both acute and chronic

Several other large scale programmes with FSN-related components and activities were implemented from 1996 onwards<sup>17</sup>. However, these programmes lacked the support of a strategic and holistic cross-cutting reference frame that an SFFSN could have provided.

The SEDP II (2001-2005) and the NPRS (2003-2005) specifically addressed the cross-cutting issue of FSN and its mainstreaming in national and sector strategies. Projects focusing on FSN policy support, capacity development, improvement of information management and creation/strengthening of coordination structures<sup>18</sup> were developed. In 2005 the Technical Working Group (TWG) on FSN chaired by CARD participated in the NSDP 2006-2010 consultation process to provide inputs with regard to the cross-cutting issue of FSN. A strategy paper<sup>19</sup> which forms the basis of this SFFSN was developed in 2006.

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food insecurity as well as other poverty and rural development issues. A good example from the early 1990s is the UNOPS CARERE project in the northwest provinces. Another notable project was the Cambodia-IRRI-Australia Project (CIAP) which in partnership with the MAFF Department of Agronomy from the mid-1980s was engaged in improving Cambodia's rice production and development of the agricultural sector.

<sup>17</sup> These included new broader-scale rural development programs which included improving food security among their aims or activities. Example were the EU PRASAC rural development projects in the southeast provinces, and a range of smaller scale NGO rural development projects (e.g. the USAID- funded Partners for Development Project in the northeast provinces and the GTZ Integrated Food Security Project in Kampot province). Another example related to mother-child health and nutrition from this period was the UNICEF CASD Programme. For many more examples see the CNIP 2002-2007.

<sup>18</sup> e.g. the GTZ Food Security and Nutrition Policy Support Project (2003-2005) in the Ministry of Planning and the FAO FNPP project in CARD (2006-2007)

<sup>19</sup> The Strategy for Improving Food Security and Nutrition under the National Strategic Development Plan (NSDP) 2006-2010. Submission to the NSDP Secretariat on behalf of the TWG-FSN by CARD,, 2005

## 2. Analysis of FSN Situation and Policy Environment

### 2.1 The FSN Situation in Cambodia - Progress and Trends

#### 2.1.1 Malnutrition and Mortality

**The nutritional status, specifically that of children under five, is the aggregated outcome indicator for the food insecurity situation at national, regional or local level.**

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<sup>20</sup>. Under-nutrition also has negative effects on children's physical and mental growth and development and therefore on their human potential.

The two Cambodia Demographic and Health surveys provide the trends of malnutrition in children (aged under five years) between 2000 and 2005. These include rates for protein-energy malnutrition and micronutrient deficiencies.

The rate of stunting (low height for age) indicates the proportion of children exposed to chronic or long-term malnutrition. The rate of underweight (low weight for age) indicates the proportion of children exposed to a combination of chronic and acute malnutrition. The rate of wasting (low weight for height) indicates the proportion of children with acute malnutrition. The malnutrition results for 2000 and 2005 are shown and compared with the CMDG targets for 2015 in Table 1.

**Table 1: Child Protein-Energy Malnutrition Rates Cambodia 2000 and 2005**

| Indicator                                    | CDHS 2000<br>(%) | CDHS 2005<br>(%) | CMDG 2015 Target<br>(%) |
|----------------------------------------------|------------------|------------------|-------------------------|
| Stunted children (under 5 years < -2 SD)     | 45               | 37               | 22                      |
| Underweight children (under 5 years < -2 SD) | 45               | 36               | 22                      |
| Wasted children (under 5 years < -2 SD)      | 15               | 7                | 9                       |

Source: CDHS 2005 Report, CMDG Report 2003

This shows that in 2000 almost half of Cambodia's children were suffering from chronic or a combination of chronic and acute protein-energy malnutrition. By 2005 the situation had improved noticeably as the prevalence of acute protein-energy malnutrition decreased by more than half. It should however be noted that wasting rates are volatile and subject to short-term changes in child nutrition status. Overall these results show important progress towards meeting the CMDG Targets for 2015.

Table 2 indicates a high prevalence of micronutrient deficiency. There have been very large improvements in the use of iodised salt and moderate improvements with regard to coverage of Vitamin A supplementation. However, among Cambodian children aged 6-59 months old, 62 percent are still anaemic (including 29 percent mildly anaemic, 32 percent moderately anaemic, and 1 percent severely anaemic). Anaemia has remained about the same as in the year 2000 and the current prevalence rates are a critical public health problem in Cambodia.

<sup>20</sup> MoH 2005 National Maternal and Child Health Center National Nutrition Program; WHO Cambodia

**Table 2: Child Micronutrient Malnutrition Rates Cambodia 2000 and 2005**

| Indicator                                                              | CDHS 2000 (%) | CDHS 2005 (%) | CMDG 2015 Target (%) |
|------------------------------------------------------------------------|---------------|---------------|----------------------|
| Anaemia of children 6-59 months                                        | 63            | 62            | -                    |
| Children 6-59 months receiving Vitamin A capsules in the last 6 months | 28            | 35            | 90                   |
| Households using iodised salt                                          | 12            | 73            | 90                   |

Source: CDHS 2005 Report, CMDG Report 2003

At the same time the CDHS 2005 revealed a significant improvement in exclusive breastfeeding up to six months of age. Rates went up from 5 percent in 2000 to 31 percent in 2005<sup>21</sup>.

Table 3 shows that there has been important progress in reducing infant and under-five mortality. Rates declined by 30 percent between 2000 and 2005. Despite this remarkable achievement, in 2005 one in every 12 Cambodian children still died before reaching its fifth birthday.

**Table 3: Infant and Under 5 year Mortality Rates Cambodia 2000 and 2005**

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

Source: CDHS 2005 Full Report, CMDG Report 2003

Child malnutrition and mortality rates in 2005 remained above those of most of Cambodia's nine neighbours, with the exception of Lao PDR and Myanmar, as can be seen in Table 4.

**Table 4: Regional Comparison of Child Malnutrition and Mortality Rates in Cambodia 2005 with Neighbouring Countries**

| Country                | Stunting Rate (%) | Underweight Rate (%) | Wasting Rate (%) | Under 5 Mortality Rate per 1,000 live births |
|------------------------|-------------------|----------------------|------------------|----------------------------------------------|
| <b>Cambodia (2005)</b> | <b>37</b>         | <b>36</b>            | <b>7</b>         | <b>83</b>                                    |
| China                  | 14                | 8                    | -                | 31                                           |
| Indonesia              | -                 | 28                   | -                | 38                                           |
| Lao PDR                | 42                | 40                   | 15               | 83                                           |
| Malaysia               | -                 | 11                   | -                | 12                                           |
| Myanmar                | -                 | -                    | -                | 106                                          |
| Philippines            | 30                | 28                   | 6                | 34                                           |
| Singapore              | 11                | 14                   | 4                | 3                                            |
| Thailand               | 16                | 19                   | 6                | 21                                           |
| Viet Nam               | 32                | 28                   | 7                | 23                                           |

Source: UNICEF State of the World's Children 2006. Rates for countries other than Cambodia are the latest available rates in the period 1998-2004

Another dimension of the FSN situation in Cambodia is the absolute numbers of Cambodian children affected by malnutrition and mortality. The total population of children aged under five in 2005 was estimated to be just under 1.7 million<sup>22</sup>. Translating Table 1 into absolute figures, as shown in Table 5, illustrates the substantial progress made but also highlights the magnitude of the problem.

<sup>21</sup> In the CDHS 2005 report exclusive breastfeeding was indicated with 61%. However this figure was later on corrected by the NNP/MoH (see NNS 2008-2015)

<sup>22</sup> First Revision Population Projections for Cambodia 1998-2020, NIS/Ministry of Planning, Phnom Penh, 2004



**Table 5: Estimated Numbers of Cambodian Children Affected by Child Malnutrition and Mortality in Cambodia 2000 and 2005**

| Indicator                                                            | Est. Number of Cambodian Children Affected 2000* | Est. Number of Cambodian Children Affected 2005* |
|----------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| Stunted children<br>(% under 5 years < -2 SD)                        | 761,591                                          | 631,000                                          |
| Underweight children<br>(% under 5 years < -2 SD)                    | 775,819                                          | 603,000                                          |
| Wasted children<br>(% under 5 years < -2 SD)                         | 262,796                                          | 124,000                                          |
| Under-five Mortality - U5MR (per 1,000 live births to age 59 months) | 208,154<br>(per 5 yr period)                     | 149,000<br>(per 5 yr period)                     |

Source: CDHS 2005 Report. \* Estimated Numbers from WFP Food Security Web Atlas of Cambodia 2006 based on CDHS 2005 and NIS 2004 (Total children 2005 = 1,694,990)

An important characteristic of the prevalence of child malnutrition and mortality in Cambodia is that it varies greatly according to geographical area and social group. This variability highlights the essential need to identify and target the malnourished and food-insecure by region and social group to provide the most effective assistance. The provincial variations are shown in the maps in Annex 2<sup>23</sup>. For example the national under-five stunting rate of children under five in 2005 is 37 percent nationally, but it is 22 percent in Phnom Penh, 62 percent in Pursat and 53 percent in Siem Reap and in the Mondulakiri/Rattanakiri cluster. Furthermore, wide variations in commune-level stunting rates are found within each province. At the commune level, the under-five stunting rate ranged from a low of 17 percent to a high of 75 percent of children in 2000.

There is also a wide variation in the absolute number of children affected by stunting resulting from different population concentrations: from a low of less than 2,000 children per municipality in Kep and Pailin municipalities to a high of over 60,000 children per province in Siem Reap and Kampong Cham provinces.

Similar large variations in child malnutrition rates exist between different socio-economic groups within Cambodia. The under-five stunting rate in 2005 varied from a low of 22 percent among children of mothers with at least some secondary level education to a high of 46 percent for children of mothers with no education. The under-five mortality rate varied from a low of 53 (per 1,000) for children of mothers with at least some secondary-level education to a high of 136 (per 1,000) for children of mothers with no education. In terms of differences in wealth, children whose mothers were in the lowest wealth quintile were at three times' greater risk of death before the age of five than children whose mothers were in the highest wealth quintile<sup>24</sup>. More generally, many socio-economic studies have identified that particular socio-economic groups have higher levels of food insecurity and vulnerability. These social groups include women, small hold farmers, those earning livelihoods based on common property resources, and socially vulnerable groups<sup>25</sup>.

<sup>23</sup> Geographical variations in malnutrition rates FSN for all provinces of Cambodia can be found in the WFP Food Security web Atlas of Cambodia and in the WFP Integrated Food Security and Humanitarian Phase Classification (IPC) analysis incorporated into the CARD FSNIS website (<http://www.foodsecurity.gov.kh>). Commune level estimates 2000 are based on WFP & Tomoko Fuji, Commune Level Poverty Estimates, Phnom Penh, 2003

<sup>24</sup> CDHS 2005

<sup>25</sup> These socio-economic groups are discussed in more detail in the Section 4 sector situation analyses in this document.

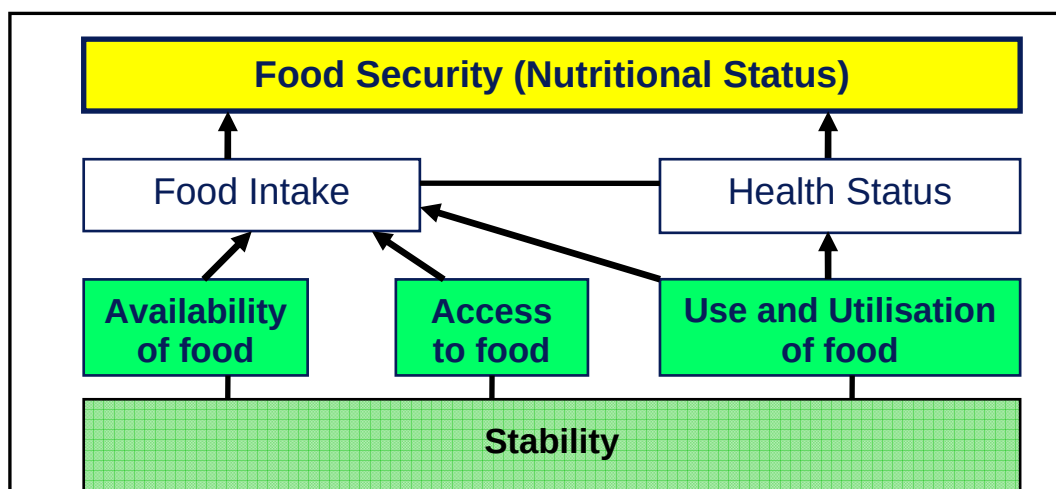
Recently an important food insecurity assessment of the general population of Cambodia based on new analysis of CSES 2004 food consumption data has become available<sup>26</sup>. Nationally 23 percent of the Cambodian population, or three million people, were food-deprived in 2003-2004, consuming less than the minimum dietary energy requirement (MDER) of 1715 kcal/person/day<sup>27</sup>, but 69 percent of the lowest income quintile was considered food-deprived. The food-deprived population would have to increase food consumption by 280 kcal/person/day to reach the average national level of food consumed.

In Cambodia only the fifth (wealthiest) quintile was found to have a balanced diet, with the proportion of proteins, fats and carbohydrates within FAO/WHO guidelines. The remaining 80 percent lacked a balanced diet, having a diet low in fats and proteins and high in carbohydrates, the latter sourced particularly from cereals, notably rice.

### 2.1.2 Overview of the Causes of Food Insecurity

Malnutrition and more broadly food insecurity are caused by a complex interaction of factors. The concept of food security identifies four causal dimensions of food insecurity (availability, access, use/utilisation and stability) to help unravel this complexity<sup>28</sup>. These are further described in Table 6.

**Figure 1: Concept of Food Security and Nutrition**



<sup>26</sup> NIS/FAO/EU, Summary report on the Food Insecurity Assessment in Cambodia, September 2007

<sup>27</sup> The MDER is defined as the minimum dietary energy requirement to maintain body weight while undertaking a sedentary level of activity.

<sup>28</sup> See: Rainer Gross, Hans Schoeneberger, Hans Pfeifer, Hans-Joachim A. Preuss, 2000, The Four Dimensions of Food and Nutrition Security: Definitions and Concepts, GTZ. This is available on the FSNIS website in Cambodia [www.foodsecurity.gov.kh.com](http://www.foodsecurity.gov.kh.com)

**Table 6: Causal Dimensions of Food Insecurity**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>1. Food Availability:</b> People lack the ability to directly produce sufficient food to meet their nutritional needs through their own efforts in agricultural production and through gathering from Common Property Resources (CPRs) including forests and fisheries.</p> <p><b>2. Food Access:</b> People have insufficient cash income to purchase sufficient food through the market. Markets themselves may lack infrastructure, services and capital to provide a sufficient stock to meet minimum food requirements. As well, there are insufficient social transfers or safety nets for people unable to produce or purchase their food needs.</p> <p><b>3. Food Use and Utilisation:</b> People may encounter problems in using and utilising food for adequate nutrition. Pregnant and lactating mothers 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 diarrhoea 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.</p> <p><b>4. Stability:</b> People need an adequate supply of nutritious food and clean water daily to provide adequate nutrition and food security. 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 CPRs, shifts in purchasing power for market foods, and political instability including wars and conflict. Some communities may be experiencing acute instability at one point in time and a broader range of communities may become more vulnerable to the impacts of instability in the future.</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

This section provides an overview of the causal dimensions of food insecurity in Cambodia. Further descriptions of these dimensions are found in the sector situation analyses specific to each of the FSN objectives in Section 4.

### **Food Availability**

Over 80 percent of the Cambodian population lives in rural areas and these people typically produce at least part of their food needs. An important achievement over recent years is that Cambodia has become self-sufficient in rice production and is now able to meet the minimum staple food needs of the population overall<sup>29</sup>. However, at the sub-national level, rice balances are uneven among different geographical areas and socio-economic groups. Yields of paddy rice increased from an average of 1,31 tons/ha in 1993 to 2.49 tons/ha in 2006-2007, which is still substantially below the yields reached in neighbouring countries<sup>30</sup>. Limited data exist on the production of other crops and livestock products necessary for an adequate diet, but there are also large variations in the intake of these other food groups, as indicated by the variable prevalence of protein-energy and micronutrient malnutrition discussed in Section 2.1.

It is recognised that rural Cambodians, especially small hold and landless farmers, face a wide range of constraints in their efforts to produce food from crop agriculture, livestock-raising, and the harvest of forestry and fisheries. In terms of crop agriculture, major constraints include small farm sizes, high dependency on rain-fed production, rising rates of landlessness, low crop yields, high production risks, the cost of credit and a lack of crop diversification. Livestock production is

<sup>29</sup> Between 1997 and 2006 Cambodia achieved a surplus in milled rice between 30,070 (in 1998) and 1,433,880 tons (in 2006) with an annual average of 486,224 tons. MAFF Agricultural Statistics 2007

<sup>30</sup> MAFF Agricultural Statistics 2007

limited by high livestock mortality and morbidity rates and the small number owned by each household<sup>31</sup>.

Common Property Resources (CPRs) such as forests, fisheries and commons agricultural areas are also an important food resource for Cambodian people, especially the rural poor<sup>32</sup>. Food availability from CPRs is limited by a number of factors, including degradation through (largely) commercial exploitation, and enclosure of areas by private interests, which limits access to CPRs and presents challenges for sustainable Common Property Resources management<sup>33</sup>.

## **Food Access**

Rural Cambodians typically are food producers engaged in agriculture. However, they are also highly dependent on buying some types of food, including rice, for some period every year. Many can produce only part of their basic food needs, and food security for them is therefore very much a matter of whether they can purchase the foods they need on the market.

Purchasing power to buy food on the market is limited in Cambodia and many poor rural households lack productive assets (such as land and livestock) to generate cash income. In all, 35 percent of households live below the consumption poverty line and 20 percent under the food poverty line<sup>34</sup>. Rapidly increasing food prices are likely to further limit the capacity of food-insecure households to buy sufficient food, that may lead to a switch to foods that have lower nutritional value and lack important micronutrients or other negative coping strategies.

Sources of income are often erratic and limited to insecure and unsafe economic activities within the informal sector of the economy<sup>35</sup>. Market systems in Cambodia, including markets for food, require further development of infrastructure, services and capital to provide an improved access to foods at the local level.

## **Food Use and Utilisation**

Inappropriate use and utilisation of food contributes significantly to the overall malnutrition in Cambodia. Causal factors here are poor nutrition knowledge and practices, insufficient access to maternal care services, inappropriate mother-child care practices, high prevalence of child illnesses including diarrhoea and respiratory infections, and child micronutrient malnutrition. The poor have insufficient access to affordable good quality health care due to high costs and a

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<sup>31</sup> Agrifood Consulting International/CamConsult 2006, Cambodia Agriculture Sector Diagnostic Report Prepared for AusAID (ACI 2006); MAFF, Agricultural Statistics 2004; World Bank, 2006, Halving Poverty by 2015: Cambodia Poverty Assessment; CSES 2004

<sup>32</sup> For a broad review of most major studies on rural livelihoods in Cambodia since 1994 and a synthesis of findings see World Bank, 2004, Final Report of the Sources of Income and Livelihood Strategies Study (Cambodia), by Helmers, Gibson & Wallgren; Chan and Acharya, 2002, Facing the Challenge of Rural Livelihoods: A Perspective from Nine Villages in Cambodia, Working Paper 25 Cambodia Development Resource Institute (CDRI)

<sup>33</sup> McKenney and Tola 2002, Natural Resources and Rural Livelihoods in Cambodia, A baseline assessment. Working Paper 23; CDRI; Baran 2003, Cambodian Inland Fisheries, Facts, Figures and Context, World Fish Center/MAFF Dept. of Fisheries

<sup>34</sup> RGC 2006 NSDP; World Bank, 2006 Cambodia Poverty Assessment

<sup>35</sup> World Bank, 2006, Halving Poverty by 2015: Cambodia Poverty Assessment; World Bank 2004, (Helmers, Gibson & Wallgren); Nuth 2005 The Informal Economy in Cambodia An Overview, Economic Institute of Cambodia (EIC) Volume 2 No 1 Phnom Penh

lack of services. Expenditure on care among the poor for serious health conditions has been shown to lead to indebtedness and asset disposal, resulting in further impoverishment and chronic food insecurity<sup>36</sup>. A further important underlying cause of child illnesses in Cambodia is the insufficient access of rural households to sanitation (16 percent) and to safe drinking water (42 percent).

## **Stability**

A final set of causes of food insecurity are found in the vulnerability of Cambodian rural people to shocks and stresses that can reduce their food supply, access to food or food utilisation to below-minimum needs. Agro-ecological vulnerabilities include high risks of flood or drought damaging crop production. Socio-economic vulnerabilities include dependency on low, erratic and insecure sources of cash income, illiteracy and a lack of education, and a broad range of factors related to security and human rights<sup>37</sup>.

Vulnerable groups in Cambodia are unable to produce or purchase their food needs either temporarily (e.g. due to flood or drought impacts) or permanently (e.g. the aged living alone, orphans, those living with chronic illnesses such as HIV/AIDS, the destitute, and the under-employed). Another non-market-based dimension of stability of food access is the inadequate provision of social transfers or safety nets to provide food and other basic needs to such vulnerable groups. While some important programmes are active in this area, further development of disaster risk reduction and social safety nets is required to meet the needs of these vulnerable groups in society.

## ***2.2 The SFFSN's Policy and Institutional Context***

This section examines the current policy and institutional context of the SFFSN.

This SFFSN is an additional stage in a process undertaken by some FSN stakeholders through the TWG-FSN<sup>38</sup> to promote the mainstreaming of FSN in national policies, strategies and programmes as well as in the decentralised planning process. Experience indicates that, to have maximum impact and results, improving FSN in Cambodia requires close cooperation and efficient coordination mechanisms for a joint effort by a wide range of line ministries and government and non-government stakeholders<sup>39</sup>. In this context, the rationale of this SFFSN for Cambodia is to serve as a holistic cross-cutting reference frame for the formulation and review of sector strategies and to guide the design and planning of programmes and projects for improved food security and nutrition for all Cambodians.

The SFFSN is needed because no comprehensive framework for FSN has yet been set by the RGC, even though FSN has been identified repeatedly as an important priority under existing national policy frameworks and sectoral policies. Furthermore, many development programmes in Cambodia identify improving FSN

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<sup>36</sup> CDHS 2005

<sup>37</sup> World Bank 2006, Managing Risk and Vulnerability in Cambodia: An Assessment and Strategy for Social Protection

<sup>38</sup> The Technical Working Group on Food Security and Nutrition (TWG-FSN) is one of 18 Technical Working Groups advising the government in their respective areas of expertise.

<sup>39</sup> CARD, 2006 Nutrition situation and nutrition-related behaviour in Cambodia significantly improved, CARD, Phnom Penh

(or its causal dimensions) as an objective, but lack the support of a strategic and cross-cutting reference frame that a SFFSN can provide.

The policy environment for the SFFSN is the Cambodia Millennium Development Goals (CMDGs) agreed in 2003. CMDG 1 is “Eradicate extreme poverty and hunger”<sup>40</sup>. Improving FSN also plays important roles in achieving many of the other eight CMDGs, as shown in Table 7.

**Table 7: The role of improving FSN in achieving the CMDGs**

| CMDG                                                 | Role of improving FSN in achieving the CMDGs                                                                                                                                                                                                                                                                   |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CMDG 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 labour force productivity.                                                                                  |
| CMDG2: 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.                                                                                                                                                 |
| CMDG 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.                                                                  |
| CMDG 4: Reduce child mortality.                      | WHO estimates that more than 50 percent of Cambodian children aged under five years who die prematurely are malnourished. Improving child nutrition and FSN will directly reduce child mortality.                                                                                                              |
| CMDG 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.                                                   |
| CMDG 6: Combat HIV/AIDS, malaria and other diseases. | Food insecurity triggers coping mechanisms such as migratory labour 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. |
| CMDG 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.                             |
| CMDG 8: Forge Global Partnerships for development.   | These partnerships need to include international donors and agencies with expertise in improving FSN and nutrition.                                                                                                                                                                                            |
| CMDG 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 CMDGs are to be achieved through the Rectangular Strategy (RS) of the RGC and its implementation instrument, the National Strategic Development Plan (NSDP 2006-2010).

During the consultative process that led to the formulation of the NSDP, the TWG-FSN provided policy recommendations and an FSN matrix of constraints and actions to the NSDP Secretariat of MoP.

As stated in the NSDP, “Poverty Reduction in the fastest possible manner is RGC's foremost priority”<sup>41</sup>. The NSDP recognises that FSN is an important cross-cutting

<sup>40</sup> RGC, CMDG Report, 2003. Readers can also refer to FAO/UNDP 2003 study on the assessment and localisation of the MDG Goal on Reducing Poverty and Hunger which contains a good situation analysis of FSN and the CMDGs in Cambodia for that period.

<sup>41</sup> RGC 2006 National Strategic Development Plan p29

issue and that achieving improvements in FSN is a priority of national development<sup>42</sup>. The FSN section of the NSDP is quoted below:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>NSDP Section 4.46: Food Security and Nutrition (FSN) are important cross-cutting issues and significant improvements in Food Security and Nutrition are crucial to reduce the persistent high levels of malnutrition and micronutrient deficiencies among women and children. The key goal is to ensure that "poor and food-insecure Cambodians, by 2010, have substantially improved physical and economic access to sufficient, safe, and nutritious food at all times to meet their dietary needs and food preferences for an active and healthy life". Achieving this goal requires concerted efforts in various sectors outlined in this NSDP, with focus on the following elements especially with regard to the poor and food-insecure:</p> <ul style="list-style-type: none"> <li>• Increasing and ensuring food availability.</li> <li>• Improving food accessibility (involving incomes and affordability).</li> <li>• Ensuring optimal food use and utilisation through health and nutrition education (including improvements in child-feeding practices and maternal nutrition), micronutrient supplementation and fortification programmes (iron, Vitamin A), further enforcement of universal iodisation and food safety standards, etc.</li> </ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The cross-cutting nature of FSN means that a range of sector policies and strategies as well as other cross-cutting policies and strategies further influence the policy context of the SFFSN. The relevant cross-cutting policies and strategies are listed in Table 8 below.

**Table 8: Current Cross-cutting Policies/Strategies and Institutions related to FSN under the NSDP Framework**

| Current Policy/Strategy                                          | Dimension/s of FSN                                                                                                                            | Major institutions and policy status                             |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Macro-economic Development Policy                                | Macro-economic development is the broad context of poverty alleviation and FSN improvements                                                   | NSDP framework Adopted                                           |
| Decentralisation and Deconcentration Policy                      | Decentralised FSN institutional reform and capacity building at the province and commune level                                                | Ministry of Interior Adopted                                     |
| The Rectangular Strategy 2004                                    | FSN improvements depend on good governance reforms                                                                                            | All Ministries                                                   |
| Gender Policy                                                    | There are important gender issues in all dimensions of FSN                                                                                    | All Ministries/MoWA Adopted                                      |
| Disaster management policy                                       | Food Stability (mitigation of flood and drought impacts on agricultural production).                                                          | NCDM<br>NSDP Sector strategy/policy not yet developed            |
| Environment Policy                                               | Food Availability (agro-ecosystems, forest and fisheries) Food Use and Utilisation. Food Stability (mitigation of flood and drought impacts). | MoE<br>NSDP Sector strategy/policy not yet developed             |
| National Adaptation Programme of Action to Climate Change (NAPA) | Food Availability (agro-ecosystems, forest and fisheries).                                                                                    | MoE Adopted                                                      |
| The National Population Policy 2003                              | Food Use and Utilisation (health care services, Maternal and Child health).                                                                   | National Committee for Population and Development (NCPD) Adopted |

The major types of sector policies and government ministries concerned with FSN are listed in Table 9, including the dimensions of FSN and explanatory notes on the status of each policy/strategy under the current NSDP framework.

<sup>42</sup> RGC 2006 NSDP p47 Section 4.46

**Table 9: Major Current Sector Policies/Strategies and Ministries related to FSN**

| Current Sectoral Policy/Strategy                                                       | Dimension/s of FSN                                                                                                                                                                                                                            | Major Institutions and Policy status                                                                                                                          |
|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Strategy on Agriculture and Water 2006-2010                                            | Food Availability (agriculture/irrigation); Food Access (increasing agricultural incomes), Integrated FSN improvement (National Programme for Household Food Security and Poverty Reduction). Food Use and Utilisation (safe drinking water). | MAFF and MOWRAM Adopted                                                                                                                                       |
| Ministry of Water Resources and Meteorology draft Strategic Development Plan 2006-2010 | Food Availability (agriculture/irrigation); Food Access (increasing agricultural incomes), Food Use and Utilisation (safe drinking water). Stability drought and flood water resources management.                                            | MOWRAM Drafted and adopted                                                                                                                                    |
| Land Management Policy/Land Law 2001                                                   | Food Availability (agricultural land titling, social land concessions/land reform. Land mine/UXO clearance).                                                                                                                                  | MCLMUP                                                                                                                                                        |
| Forestry Policy                                                                        | Food Availability and Food Access (access, productivity and sustainability of forest resources for food and income).                                                                                                                          | MAFF<br>NSDP sector strategy/policy not yet developed. Components including Community Forestry and Concession Management are covered by existing sub-decrees. |
| National Fisheries Sector Policy and draft Fisheries Law 2005                          | Food Availability and Food Access (access, productivity and sustainability of fisheries resources for food and income).                                                                                                                       | MAFF<br>NSDP sector strategy/policy statement developed.                                                                                                      |
| Rural Water Supply and Sanitation Sector (RWSS) 10 Year Sector Strategy: 2001-2011     | Food Use and Utilisation (improved access to safe drinking water and sanitation will reduce child malnutrition, morbidity and mortality)                                                                                                      | MRD. Basic draft with policy aim and objectives and log matrix only. Dating from 2001. Not yet adopted.                                                       |
| Food Safety Policy                                                                     | Food Use and Utilisation (food safety and quality standards).                                                                                                                                                                                 | MIME<br>NSDP sector strategy/policy not yet developed.                                                                                                        |
| Ministry of Health Sector Strategic Plan 2003-2007                                     | Food Use and Utilisation (health care services, National Nutrition Programme, Maternal and Child health, social health insurance)                                                                                                             | MoH<br>Adopted update under preparation                                                                                                                       |
| The Education Sector Strategic Plan 2006-2010                                          | Long term positive impact on improving all dimensions of FSN through improved education and literacy particularly for women.                                                                                                                  | MoEYS<br>Adopted                                                                                                                                              |

In relation to the development of current sectoral policies related to FSN under the NSDP framework, the TWG-FSN provided comments and suggested revisions to the draft of the Strategy on Agriculture and Water (SAW) 2006-2010. This led to revisions of the strategy, adding Food Security as a distinct Development Goal and a separate support programme of the strategy.

Coordination structures for FSN to support government ministries and partners in the implementation of policies and strategies have already been created by the RGC and form an additional important part of the policy and institutional context. These coordination structures for FSN require further development and support.

The overall government mandate for facilitating inter-ministerial networking and coordination on FSN issues lies with the Council for Agricultural and Rural Development (CARD). CARD organised the National Seminars on Food Security



chaired by the Prime Minister in 1999 and 2003. Also in 2003, CARD established the Food Security Forum to foster information exchange and knowledge management of stakeholders with regard to FSN in Cambodia. In late 2004 the RGC established a Technical Working Group on Food Security and Nutrition (TWG-FSN), chaired by CARD and MoP and facilitated by WFP and FAO. Its objectives are to provide technical advice to the RGC on behalf of FSN stakeholders, to enhance FSN mainstreaming in government policy and strategies and to improve stakeholder coordination. A permanent Secretariat was established within CARD to support the TWG-FSN.

In 1996, a National Council of Nutrition (NCN) was established in the Ministry of Planning (MoP). Under the direction of NCN, the Cambodia Nutrition Investment Plan (CNIP 2003-2007) was developed and an updated (CNIP 2008-2013) is projected. MoH recently developed a Nutrition Strategic Plan (2008-2015) to outline a long-term strategy for the National Nutrition Programme (NNP) as part of the health sector strategy.

In line with the government decentralisation and deconcentration policy, Provincial Nutritional Coordination Committees (PNCCs) were established under the Ministry of Planning in all provinces<sup>43</sup>. Further, through MoP and CARD in collaboration with various development projects, provincial staff and Commune Council members have been trained in food security concepts for mainstreaming FSN in commune development plans.

In 2004, the National Committee for Disaster Management (NCDM) established a Food Security sub-group under the Emergency Relief and Rehabilitation Team to be directed by MAFF with support by FAO and WFP. Though still to be activated, it offers the potential to address stability aspects of food insecurity with key input and leadership from the NCDM and other stakeholders.

This section has outlined the current rather complex policy and institutional context of FSN issues. The SFFSN can enhance the coordination between ministries and relevant sector policies by providing a relatively simple framework of a Vision, a Goal, and five Strategic Objectives with related priority actions.

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<sup>43</sup> The capacity and functionality of the PNCCs varies by province.

### **3. The SFFSN's Vision, Goal and Objectives (Overview)**

#### **The SFFSN Long-term Vision**

SFFSN's long-term Vision is the achievement of food security and adequate nutrition for the people of Cambodia. This Vision is consistent with the agreed aims of the Millennium Development Goals (MDGs) and the Cambodia Millennium Development Goals (CMDGs). The FSN Vision for Cambodia can therefore be formulated as follows:

*"All Cambodians have physical and economic access to sufficient, safe, and nutritious food, at all times, to meet their dietary needs and food preferences for an active and healthy life."*

#### **The SFFSN 2008-2012 Goal**

SFFSN's Goal focuses on the achievement of substantial progress toward improved food security and nutrition in Cambodia within the period of the current NSDP framework 2006-2010. This FSN Goal is already incorporated into the NSDP and is consistent with progress toward meeting the CMDGs over the medium term. The FSN Goal is therefore:

*"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."*

#### **The SFFSN 2008-2012 Objectives**

The SFFSN has five Objectives to reach its goal. Each FSN objective will require the funding and implementation of a range of priority actions requiring service and infrastructure investments over a range of sectors by a number of government ministries and coordination bodies. These government ministries and coordination bodies will also require development of their institutional capacities.

*SFFSN Objective 1: Food-insecure households increase food availability from their own agriculture and livestock production and from common property forests and fisheries resources.*

This objective will be achieved through progress in four areas:

1. Improving the productivity and diversification of agriculture.
2. Improving the management of water resources and irrigation.
3. Enhancing fisheries reforms.
4. Enhancing forestry reforms.

*SFFSN Objective 2: Food-insecure households increase their food access by increasing household income.*

This objective will be achieved through progress in four areas:

1. Increasing wage employment opportunities for the poor and food-insecure.
2. Increasing micro-enterprise opportunities for the poor and food-insecure.

3. Developing market infrastructure and services.
4. Developing transport infrastructure and services.

*SFFSN Objective 3: Food-insecure households improve their utilisation of food resulting in reduced malnutrition, morbidity and mortality, particularly among women and children*

This objective will be achieved through progress in three areas:

1. Reducing child and maternal malnutrition and mortality.
2. Improving domestic water supply and sanitation and hygiene practices.
3. Improving food safety and enhancing food fortification.

*SFFSN Objective 4: Improved social safety nets and enhanced capacities of food-insecure households to cope with risks and shocks increase the stability of their food supply.*

This objective will be achieved through progress in two areas:

1. Strengthening disaster management safety nets.
2. Establishing social safety nets for vulnerable groups.

*SFFSN Objective 5: The institutional and policy environment for achieving improved food security and nutrition in Cambodia is enhanced.*

This objective will be achieved through progress in three areas:

1. Strengthening capacities and improving coordination for FSN.
2. Integration of FSN into the decentralised local planning process.
3. Improved FSN-related information management and targeting of interventions.

## 4. SFFSN 2008-2012 - Objectives and Priority Actions

This section describes the SFFSN by objectives. For each objective, succinct, sector-specific situation analyses of the causes of malnutrition and food insecurity are included as a rationale for discrete actions to improve the FSN of the Cambodian people. They are adapted from the 2005 FSN Strategy Paper developed with the membership of the TWG-FSN and submitted as an NSDP input to the MoP.

### 4.1 Increased Food Availability

*SFFSN Objective 1: Food-insecure households increase food availability from their own agriculture and livestock production and from common property forests and fisheries.*

#### General Situation and Rationale

Most poor and food-insecure households in Cambodia are rural small hold farming households. They strive to produce as much of their food needs as possible. They typically do this through a combination of activities including crop cultivation, keeping livestock, and harvesting commons forests and fisheries for food. They also seek to get cash income from such activities to buy foods they cannot produce and to meet other basic 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>44</sup>.

This FSN Objective has four areas of focus. These are:

- Enhancing productivity and diversification of agriculture, land reform and the clearing of mines.
- Management of water resources and irrigation.
- Fisheries reform.
- Forestry reform.

#### 4.1.1 Enhancing Productivity and Diversification of Agriculture

##### Situation and Rationale

Crop and livestock production are very important activities to directly meet the food and income needs of most rural Cambodian households. Crop cultivation is a core food production activity, often focused on rice production, but also including non-rice crop and agricultural tree production. Livestock production is particularly important to small hold farmers as a source of food and income given their lack of crop land. Poultry are commonly raised for both food and income, pigs are an important source of household cash income, and cattle (or water buffalo) are raised as a store of wealth, as the primary means of agricultural draught power and for cash income from breeding<sup>45</sup>.

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<sup>44</sup> ACI 2006 Cambodia Agriculture Sector Diagnostic Report Prepared for AusAID; McKenney and Tola 2002; Chan and Acharya, 2002

<sup>45</sup> ACI; 2006; World Bank, 2006, Cambodia Poverty Assessment; World Bank 2004, (Helmert, Gibson & Wallgren)

Many constraints contribute to low productivity and high risks in crop production. Agricultural land holdings are limited in size, with 48 percent of those owning land having a total of less than 1.0 hectare<sup>46</sup> and often as little as less than 0.5 ha of crop land per household. The term “small hold” farming household is usually used in a Cambodian context to refer to those households with  $\leq 0.5$  hectares of crop land per household. These small hold farming households typically suffer from chronic food insecurity. The vast majority of farmers do still not have secure land tenure at law for their agricultural land, although systematic titling has started to make progress.

Eighty percent of the national agricultural cropping area depends on rain-fed cultivation under erratic wet season rainfall, and these areas do not have the possibility of growing crops in the dry season. Wet season crops are at risk of damage from flood, drought or pests. Poor soil fertility characteristics also limit rice crop production in 50 percent of national agricultural lands. In the rain-fed lowlands, where a majority of rural people live, there is very limited crop diversification with a heavy dependency on rice production. Upland agriculture, while more diversified, suffers from low productivity, is more exposed to drought risks, and is particularly vulnerable to land encroachment and deforestation.

A rapidly increasing proportion of rural households now have no agricultural land at all (from a base of virtually universal agricultural land possession among households in 1989 to an estimated 20 percent having no agricultural land by 2004)<sup>47</sup>. In mine-affected areas, landmine/UXO hazards continue to inflict casualties and to deny safe access to land and natural resources.

There are a range of other causes of low productivity and high risk in crop production, especially among poorer small hold farmers. These include a lack of affordable good quality inputs to improve agriculture (seed, fertiliser, machinery, implements); insufficient access to agricultural support services (agricultural extension, farmer education and training, credit, agricultural research); inadequate access to hazard information (meteorological data, rainfall forecasts, drought and flood warnings); inadequate agro-processing and storage technologies to reduce post-harvest losses; and basic deficiencies in agricultural marketing infrastructure and services.

Livestock production is also characterised by low productivity and high risks. Constraints include the small number of livestock heads owned per household; high livestock mortality rates from diseases; and high livestock morbidity rates associated with seasonal shortages of feed and water.

An overarching constraint on enhancing agriculture and livestock production for improved food security is that poor small hold farmers typically have insufficient knowledge and skills to increase productivity of crops and reduce risk through improved crop and livestock production technologies. Poor small hold farmers (including rural women) have only limited access to agricultural and livestock extension and farmer training services and do not have the financial resources or access to credit to apply new technologies or inputs such as quality seed, fertiliser or veterinary drugs.

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<sup>46</sup> MAFF Statistics 2004

<sup>47</sup> CSES 2004 results in the World Bank 2006 Cambodia Poverty Assessment. The MAFF 2004 Agricultural Statistics landlessness rate is slightly lower at 16 percent

## General Priority Actions

- Expand MAFF agricultural and livestock extension, farmer field-based education/training and field experiment services targeted at small hold farmers to all provinces and districts.
- Increase the capacity of extension workers to work with small hold farmers to increase rice productivity, crop diversification, and productivity of non-rice crops, upland agriculture systems and livestock.
- Improve available water supply for crop and livestock production through expanding irrigation and agricultural water supply, prioritising food-insecure communities.
- MAFF, MoC and CAMCONTROL to continue to develop, publicise and enforce regulations on agricultural input safety and quality standards.
- MAFF to advocate for NGOs and private sector interests to scale up access to affordable long-term credit for small hold farmers.
- MAFF and MRD to emphasise risk reduction and disaster management dimensions in their activities (management of drought and flood impacts on crops, livestock disease outbreaks and post-harvest storage techniques).
- MAFF to continue development of the new Crop Monitoring and Forecasting System linking crop production to weather variables.
- MOWRAM Department of Meteorology to seek increased funding and support from UN World Meteorology Organisation or other development partners to develop local rainfall forecasts, and drought and flood early warning systems, for regular broadcast by radio to farmers. Broadcasting services should include education components to enable farmers to interpret and use such services for risk reduction.
- Demining agencies to continue and, if possible, scale up eradication of landmine/UXO hazards.
- Allocate demined land to the rural poor and food-insecure.

### *Priority Actions to address land tenure constraints*

- MLMUPC to continue progress in land titling under the national LMAP project for land rights for the rural poor, including i) private land titling for agricultural land; ii) Social Concessions; iii) allocation of communal rights to land in upland minority communities; and iv) considering gender equity in the land titling process.
- MLMUPC to monitor progress and impact of land policy on poor/food-insecure households in cooperation with CARD and to take action to ensure the needs of these target groups are being specifically addressed by the land policy.

### *Priority Actions to address crop primary production constraints*

- MAFF and agricultural development partners to design and implement interventions to make quality agricultural input packages accessible for food-insecure farmers within the Strategy for Agriculture and Water (SAW) 2006-2010 (Food Security Support Programme).
- Expand low-cost, environmentally friendly rice intensification (SRI) for poor food-insecure farmers.
- Further develop and scale up the Cambodia National Integrated Pest Management programme (IPM).

- MAFF and agricultural development partners to scale up investments in homestead food production/home gardening projects, prioritising landless people, small holders and women.

#### *Priority Actions to address livestock primary production constraints*

- Expand MAFF Department of Animal Health and Production and NGOs livestock veterinarian farmer education/training and field experiment services, specifically targeting poorer small hold farmers.
- MAFF and partners to support the more widespread adoption of aquaculture among small hold farmers.
- MAFF to develop public radio-based livestock disease outbreak warning systems including advice on management/treatment measures for farmers.
- MAFF, MoH and other stakeholders to establish a comprehensive contingency plan and take measures to prepare for a possible Avian Influenza pandemic and related impacts on food security.

### **4.1.2 Improving Management of Water Resources and Irrigation**

Improvements in water resources management and irrigation are very important for increasing food security. The two basic issues for water resource management from an FSN perspective are irrigation development and water resource management for paddy field and river fishing. Fisheries issues are considered under the section on fisheries reform. The focus of this section is on irrigation development.

#### **Situation and Rationale**

The need for irrigation to increase crop production and to reduce crop damage has been described in the preceding discussion of constraints on agricultural productivity improvement. An important point from an FSN perspective is that irrigation investments need to be planned, targeted and implemented to more directly assist food-insecure communities in the country.

Priority food-insecure areas include those suffering most from drought (lowland plains and uplands) and flood (lowland plains within the flood zone, producing only one main wet/flood season crop). Social groups with priority as irrigation beneficiaries are small hold farmers and women. Irrigation design should be determined with these communities and should emphasise community-level schemes based on improved rainwater and groundwater harvesting, aiming initially at wet season crop supplementary irrigation.

The resources and capacities of MOWRAM and its partners are limited. MRD and local government partners are also involved in implementing such community-level irrigation schemes, but their resources and capacities are also restricted. Unless targeted investments occur and are sufficient for broad-scale implementation, food-insecure communities are unlikely to benefit much from irrigation investments.

Important progress in water resources policy has been achieved recently with the completion of the Ministry of Water Resources and Meteorology Strategy 2006-2010 and the Strategy for Agriculture and Water 2006-2010.

## Priority Actions

MOWRAM, MRD and MAFF to increase the access of food-insecure small hold farmers to irrigation through:

- Implementing the Strategy for Agriculture and Water 2006-2010.
- Implementing MOWRAM's strategic plan 2006-2010, which contains many useful measures to improve food security as well as increase economic growth.
- Targeting food-insecure areas and social groups (small hold farmers and women) in irrigation investments.
- Implementing irrigation projects in areas suffering most from drought (lowland plains and uplands) and flood (lowland plains within the flood zone with only one main wet/flood season crop).
- Planning irrigation projects with participation of food-insecure communities.
- Prioritising irrigation systems for wet season crop supplementary irrigation in those food-insecure areas growing only one rain-fed wet season crop per year to reduce drought and flood damage to existing crop production systems.

### 4.1.3 Accelerating Fisheries Reform

#### Situation and Rationale

The harvest of fisheries (both paddy field and riverine) is the major source of protein in the diet of rural Cambodians, accounting for up to 60-75 percent of total protein intake, and is thus a highly important activity for food security. Out of season, rural people depend on buying fresh and processed fish from these same wild fisheries<sup>48</sup>. Aquaculture, while expanding, is not yet a common alternative source of fish in Cambodia.

Concerning harvesting wild fisheries, rural people in many areas have had to face the arbitrary and often illegal enclosure of these commons areas and to witness the severe degradation through over-exploitation of the fisheries they used before, without effective recourse to the law. The main actors in the degradation of common property resources have been private commercial interests acting illegally. Over-exploitation of fisheries and destruction of fish breeding grounds has led to a decrease in fish stocks and in species diversity, reducing fish catches<sup>49</sup>.

The government has recently instituted a number of important policy measures to address these fisheries issues<sup>50</sup>. In 2005 the new National Fisheries Sector Policy and draft Fisheries Law were developed and the Royal Decree on The Establishment of Community Fisheries and the Sub-Decree on Community Fisheries Management were implemented. Community fisheries were to be established through the rescinding of commercial riverine fishing lot licenses and returning control of these fishing areas to communities<sup>51</sup>. A major regional government-donor partnership

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<sup>48</sup> Useful fisheries sector backgrounds are found in Baran E 2003 Cambodian Inland Fisheries Facts Figures and Context World Fish Center, and in McKenney and Tola 2002

<sup>49</sup> See McKenney and Tola 2002 and Seila/Danida 2005 Commune council's perception of its natural resource base and livelihoods options, Seila, Phnom Penh. This study was a national opinion poll of almost all rural communes in Cambodia and included fisheries issues.

<sup>50</sup> Latest Fisheries policy and legislation can be found at the Technical Working Group on Fisheries (TWGF) website <http://www.twgf.org/index.php?page=home>

<sup>51</sup> While a very progressive step in principle, there have been implementation problems in the transition and management of the community fisheries, as recognised in the 2005 Fisheries Sector Policy



project is the Tonle Sap Initiative (TSI) where fisheries livelihoods, activities and conservation are included in one conservation and sustainable livelihoods component. Other TSI components include poverty alleviation, sustainable livelihoods and natural resources conservation with a total budget of \$120 million<sup>52</sup>.

The Priority Actions to address these constraints focus on fisheries law development and enforcement, community rights to fisheries and better management of fisheries, including promoting aquaculture.

### **Priority Actions**

- The Royal Government of Cambodia to implement the 2005 National Fisheries Sector Policy, which has as its vision “Management, conservation, and development of sustainable fisheries resources to contribute to ensuring people’s food security and to socioeconomic development in order to enhance people’s livelihoods and the nation’s prosperity”<sup>53</sup>.
- MAFF Fisheries Administration to improve the planning and legal framework to improve fisheries management. This includes implementation of community control of riverine fisheries and the development of a national management plan for paddy field fisheries with participation of communities.
- MAFF Fisheries Administration and Forestry Administration to collaborate in conservation of fisheries breeding grounds.
- MAFF Department of Fisheries Administration extension system, in partnership with development partners and non-government fisheries projects, to increase the participation of small hold farmers in aquaculture.
- MAFF to utilise the expertise of the National IPM programme for improved management of agricultural pesticide and fertiliser use to reduce damage to fisheries.
- Government and donor partners to fully fund and support the implementation of all components of the Tonle Sap Initiative (TSI).

### **4.1.4 Accelerating Forestry Reform**

#### **Situation and Rationale**

Commons forests and scrub areas have always been an additional source of food, income and other basic needs for Cambodian rural people. For poor small hold farmers and for a broader range of the rural community in periods following drought and flood damage to agricultural crops, forest areas are an important alternative resource for harvesting food and products to sell for income. In addition, the vast majority of rural households use forest products for fuel wood and housing construction materials. In the case of upland minority agricultural production systems, agriculture itself is a component of forest-based activities, which underpin upland livelihood systems and food security<sup>54</sup>.

Rural people in many areas have had to face the arbitrary illegal enclosure of these commons forest areas and to witness severe degradation of the forest resources

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<sup>52</sup> [http://www.asiandevbank.org/Projects/Tonle\\_Sap/](http://www.asiandevbank.org/Projects/Tonle_Sap/)

<sup>53</sup> RGC, 2005, Statement of the Royal Government of Cambodia on the National Fisheries Sector Policy

<sup>54</sup> McKenney and Tola 2002; Hansen and Neth 2005 Natural Forest Benefits and Economic Analysis of Natural Forest Conversion in Cambodia Working Paper 33 CDRI

through over-exploitation, without effective recourse to the law. In the case of upland agriculture, forest degradation and land encroachment in forest areas have directly damaged upland agriculture systems which are integrated into forest systems. The main actors in the degradation of common property resources have been private commercial interests acting illegally<sup>55</sup>. A further issue has been the exclusion of the poor from large scale commercial Forest Concessions and the lack of implementation of the Strategic Forest Management Plans (SFMPs) that foresee, in accordance with the Forest Management Law, that community consultations should be undertaken<sup>56</sup>.

The government has recently instituted a number of important policy measures to address these forestry and environmental issues<sup>57</sup>. These measures address improving implementation of the Forest Law and improving Forest Concession and Community Forestry management.

The Priority Actions to address these constraints focus on enforcement of forestry law, community rights to forests, and potential activities to incorporate forest products into agro-forestry systems.

### **Priority Actions**

- MoE and MAFF Forestry Administration to effectively monitor and enforce the ban on illegal commercial logging to conserve forest resources.
- MoE, MAFF Department of Forestry Administration and forest communities to negotiate community access rights to state forests for non-timber products (plant foods, fibres, fuel wood, housing materials) and for community hunting and grazing rights.
- MAFF to expand community-owned and controlled forests under the Community Forestry Decree.
- MAFF Forestry Department, the Forestry Extension Unit and its partners to improve community forest management and productivity.
- MAFF Forestry Department and Forest Concessionaires to implement the Strategic Forest Management Plans (SFMPs) through community consultations as specified under the Forest Law.
- MAFF Forestry Administration to pilot cultivation of wild forest products within small hold agro-forestry systems (forest fruits, nuts, fibres, and resins), and scale up through community-level projects.
- Implement community-level projects for the cultivation of forest foods in agricultural commons areas and community forests.

## **4.2 Increased Food Access**

*SFFSN Objective 2: Food-insecure households increase their food access by increasing household income.*

<sup>55</sup> World Bank 2006 Cambodia Poverty Assessment; McKenney and Tola 2002; Seila/ Danida 2005

<sup>56</sup> World Bank/ Fichtenau J 2006 Assessment of Community Consultations carried out during the preparation of Strategic Forest Management Plans (SFMPs) in Cambodia - Working Paper, Phnom Penh

<sup>57</sup> Latest Forestry and environment policy and legislation can be found at The Technical Working Group on Forestry and Environment (TWG-F&E) website <http://www.twgfe.org/Aboutus.php>

## General Situation and Rationale

Improving the economic dimensions of food security is overwhelmingly dependent upon positive changes in the private sector to augment the capacity of the food-insecure to cope with food shortages and malnutrition. The private sector requires further investments in market services and infrastructure to function more efficiently and equitably.

In economic terms, the rural poor and food-insecure are a numerically large component of the private sector, specifically in the informal sector<sup>58</sup>. Improving household incomes and employment of the food-insecure is also intrinsic to improving gender equity, poverty alleviation, youth incomes and employment (37 percent of the population is aged 10-24 years) and slowing down rural-urban migration<sup>59</sup>.

Sources of cash income to buy food do include crop and livestock production and the harvest of forest and fisheries. However, as indicated above, cash income is limited. It is broadly recognised that cash income from the formal or modern sector economy, notably employment in large garment sector enterprises, is an important source of income and remittances for more than 300,000 mainly rural and poorer women. What is often not sufficiently recognised is the significant role of informal sector casual wage labour and household micro-enterprises in producing cash to buy food among poor and food-insecure rural Cambodians<sup>60</sup>.

Among the poorest two quintiles of rural households in 2004, the cash value share of home-produced food was 33-36 percent and the cash value share of purchased food was 64-67 percent<sup>61</sup>. Another recent study<sup>62</sup> indicates that among rural households engaged in agriculture, 46 percent of dietary value comes from purchased food, 45 percent from own production and the balance from other sources. This reveals a high level of dependency on purchased foods for food security and a high vulnerability to food price fluctuations among rural households engaged in agriculture. Food prices increased by over 24 percent from January 2007 to January 2008 in Cambodia<sup>63</sup>. The current raise of food prices is therefore a serious challenge not only for the urban population but also for large parts of the rural poor.

The increase of food prices is probably a longer-term worldwide phenomenon linked to increased food demand of emerging economies, higher cost of fuel and agricultural inputs, alternative use of agricultural land (for bio-fuel production), adverse affects of climate change on production, and speculation on commodity markets. However, local policies and measures to counteract or mitigate effects of the global trend are addressed in the SFFSN<sup>64</sup>.

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<sup>58</sup> "In Cambodia, 'informal sector' has been also used to denote these unprotected and unregulated activities in the economy. Cambodia characterises the term 'informal sector' as (1) activities which do not have a firm, identifiable postal address, (2) where workers are self-employed such as road side vendors where census data is usually not available, (3) where operations are labour intensive and where there are quick turnovers, (4) where the use of energy inputs are from human or animal sources and take place in non-structured premises where there are no regulations, licenses, insurance and taxes are not paid." Nuth 2005 The Informal Economy in Cambodia: An Overview. Economic Institute of Cambodia (EIC) Volume 2 No 1 Phnom Penh

<sup>59</sup> RGC 2003 National Population Policy

<sup>60</sup> Nuth 2005; Acharya et. al. Off-farm and Non-farm Employment: A Perspective on Job Creation in Cambodia, Working Paper 26 CDRI; World Bank 2004 (Helmets, Gibson & Wallgren).

<sup>61</sup> World Bank 2006 Poverty Assessment p79

<sup>62</sup> NIS/FAO/EU, Food Insecurity Assessment in Cambodia, September 2007 p26

<sup>63</sup> See NIS 2008 CPI. Specifically rice prices have further been spiralling upwards during the first three months of 2008. However, measures rapidly undertaken by the Government to calm speculation have had a temporary effect.

<sup>64</sup> Longer-term sustainable strategies to counteract rising food price have to focus on increasing agricultural productivity specifically for small-holder farmers and priority action were listed in chapter 4.1. Targeted safety

Some measurements of the prevalence of food deprivation are based on income versus the cost of a food basket. The most severe classification of food deprivation is “critical food poverty”, defined as those households earning an income lower than the cost of a food basket corresponding to the minimum dietary energy requirement (MDER). Nationally the prevalence of critical food poverty was 21.4 percent of all households. There were large variations between social groups and between provinces.

A broader group of the food-insecure are those suffering from “food poverty”. This is a group earning an income lower than the cost of a food basket corresponding to the average dietary energy requirement (ADER) of 2120 kcal/person/day<sup>65</sup>. Nationally the prevalence of food poverty was 57 percent of all households. There were large variations between groups at the sub-national level. Those involved in agriculture had a food poverty rate of almost 70 percent of households.

This FSN Objective has four areas of focus. These are:

- Increasing wage employment opportunities for the poor and food-insecure.
- Increasing micro-enterprise opportunities for the poor and food-insecure.
- Developing market infrastructure and services.
- Developing transport infrastructure and services.

#### **4.2.1 Increasing Wage Employment Opportunities**

##### **Situation and Rationale**

A common and important economic activity with regard to the food security of the rural poor is informal-sector casual wage labour. Many rural households have members who undertake casual wage labour to earn income at various times of the year. For the poorest, this income can be the main and sometimes the only source of cash to buy food after they have consumed the food they have produced. People largely dependent on casual wage labour to buy food are among the most vulnerable to food insecurity. It needs to be highlighted that informal sector casual wage labour is a private sector activity. To place this in the context of wage employment in the whole economy, only an estimated 15 percent of the entire Cambodian labour force earns income from regularly paid wage employment. This includes all garment sector, tourism and government employees in the public sector. The remaining 85 percent of the labour force seeks employment in the informal casual labour markets when participating in off-farm wage employment.

Informal-sector casual labour in rural areas is mostly related to crop production, housing and construction, and service sectors such as transport and agro-processing. Casual wage employment can involve short-term rural-rural or rural-urban migration and include international migration, principally to Thailand and Vietnam. Among the urban poor, casual wage labour may be the only source of income to meet their food needs.

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nets for the most vulnerable households to avoid restriction of food intake and deterioration of nutritional status will be discussed in chapter 4.4. In this chapter the focus is on increasing wage employment and micro-business opportunities for the poor and food-insecure.

<sup>65</sup> The average dietary energy requirement (ADER) is defined as the energy required to maintain a healthy life while performing a moderate level of physical activity.

By nature, casual wage labour employment is short term and has no employment security. Daily wages for unskilled work in this sector are low (around 4,000-6,000 riel/day) in rural areas<sup>66</sup>. Thus, if fully employed for a day, a worker receives a wage that is barely enough to buy two meals for a family. Casual wage labourers are often not employed every day, and receive these low wages erratically.

Informal-sector casual wage labour activities are unregulated and receive only limited attention from authorities. Casual wage labourers do not have recourse to the law in terms of contract, working conditions or worker's rights. Few, if any, 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 also face a number of gender-based handicaps, including lower rates of pay and limited mobility.

The Priority Actions to address these constraints focus on improving recognition of the important role of informal-sector casual wage labour in Cambodia and support for increasing wage labour employment opportunities for the rural poor and food-insecure.

### **Priority Actions**

- MLVT, MoEYS to develop a strategy for improving employment and incomes, including casual wage labour within the informal sector.
- MAFF, MOWRAM and MRD efforts to improve the productivity of agriculture, livestock, and common property primary production will likely have benefits in terms of increasing the demand for casual wage labour in these sectors. The role of casual wage labour for agricultural productivity improvement should be considered in planning interventions. Greater collaboration between the three above-mentioned ministries and MLVT could be a means for better understanding these linkages in order to facilitate increased rural employment.
- MAFF, MoEYS, MLVT, MoC, MoP, MIME, MoWA to enable poor rural households to increase income from rural casual wage labour by increasing their work skills for employment in agro-processing enterprises (including SMEs, agro-economic concessions, and processing for agribusiness contracting).
- MLVT, MoEYS to provide vocational training in rural areas to increase employment skills and prospects for the rural poor.
- MLVT, MoWA, MoC and urban government authorities to scale up vocational and micro-enterprise training for the urban poor who are dependent on casual wage labour for income.

### **4.2.2 Increasing Micro-Enterprise Business Opportunities**

#### **Situation and Rationale**

Small and Medium enterprises (SMEs) can be defined as those establishments with fewer than 100 employees. There is a need to highlight the importance to household food security of the very small end of the private enterprise spectrum -

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<sup>66</sup> CDRI Economy Watch 2006 Vol 10 3. Wage rates are given in Table 8. Real Average Daily Earnings of Vulnerable Workers (at constant November 2000 prices i.e. USD=3,910 riel). Rice field workers real earnings 4,541 riels/day for May 2006.

the rural informal sector household micro-enterprises. These typically employ one or several family members for labour and have low capital investment<sup>67</sup>. Micro-enterprises are also very important to the food security of the growing numbers of poor households in urban areas.

These enterprises are mainly operated by women in rural villages (usually outside any designated “markets”). They cover a wide range of activities including trade in agricultural, forest or fisheries produce such as selling rice cakes, sweets, roof thatch, charcoal, firewood and processed fish, and small scale manufacturing or construction, such as earth moving, weaving kramas, producing agricultural equipment and house construction. A surprisingly large proportion is also involved in service sector activities such as trading in manufactured products at village stores, providing transport, traditional healing, catering, repair and maintenance services, beauticians and musicians.

Informal-sector household enterprises face many constraints on their operation. Their activities are unregulated and receive only limited attention from authorities. They do not have recourse to the law in terms of contracts or to support their rights as business operators and the security of their investments. Because profit margins are often low and risks high, they can easily fall into debt in high-interest informal credit markets. Little support is available in terms of low-interest credit and programmes to improve skills in operating these micro-enterprises. Women, as the most common owners of these businesses, face a number of gender-based constraints on increasing their income from their micro-enterprises.

Net incomes from informal sector household enterprises range from about 6,000 to 9,000 riels per day. For example, in May 2006, the average daily earnings of small vegetable sellers was 6,492 riels, cyclo drivers 8,546 riels, and motorcycle taxi drivers 8,790<sup>68</sup> riels.

The priority actions to address these constraints focus on improving recognition of and support for household micro-enterprises and their development within the SME sector.

### **Priority Actions**

- MoC, MEF, MLVT and MoWA and MRD to review and clarify line ministries' responsibilities and functions concerning the development of rural informal sector micro-enterprises, and to increase research and monitoring of the sector so that it can better be supported.
- MoC to establish a strategy for informal-sector household micro-enterprise development.
- MAFF, MoEYS, MLVT, MoC, MoP, MIME, MoWA and MEF to increase the net income of value-added processing of agricultural and natural resource products

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<sup>67</sup> Nuth 2005; Acharya et. al. Off-farm and Non-farm Employment: A Perspective on Job Creation in Cambodia, Working Paper 26 CDRI; CSES 2004; World Bank 2004 (Helmerts, Gibson & Wallgren)

<sup>68</sup> CDRI Economy Watch 2006 Vol 10 3. Table 8. Real Average Daily Earnings of Vulnerable Workers (at constant November 2000 prices i.e. USD=3,910 riel). May 2006.

by on-farm micro-enterprises through credit and agro-processing skills training, and through improving market access and information.

- MAFF, MoEYS, MLVT, MoC, MoP, MoWA and MEF to increase income from secondary and service sector household micro-enterprises through the provision of affordable credit and business skills training and improving market access and information.
- MLVT, MoWA, MoC and urban government authorities, in cooperation with development partners, to scale up vocational and micro-enterprise training for the urban poor.

### **4.2.3 Developing Market Infrastructure and Services**

#### **Situation and Rationale**

Here we focus on particular aspects of private sector economic development relevant to FSN issues. Profits from trade are low for rural households, partly due to poorly developed market infrastructure (e.g. absence of market buildings, bulk storage facilities, cold stores, market electricity and water supply) and minimal access to market information services (e.g. commodity prices, input prices, and commodity trade volumes). This affects agriculture and all other market activities in which rural people are engaged, including markets for sale of forest and fisheries products, labour markets and household micro-enterprises. The priority actions focus on strengthening the private sector.

#### **Priority Actions**

- MPWT, MRD, MIME and MoC, in partnership with the private sector, to improve market infrastructure in food-insecure areas including market buildings, bulk storage facilities, and market electricity and water supply.
- MAFF, Ministry of Information and the mass media to increase the regular flow of information on agricultural, livestock, forest and fisheries products and labour markets to small hold farmers by radio.

### **4.2.4 Developing Transport Infrastructure and Services**

#### **Situation and Rationale**

Over 60 percent of the nation's road network is in a poor state of repair and the road network itself is limited in rural areas. This proportion is higher in the case of tertiary rural roads linking villages with the main road network. Inadequate road and transport infrastructure specifically affect poor and food-insecure rural communities. People struggling to produce food on small farms, dependent on buying food from income generated by casual labour, and with a greater proportion of sick children in their communities have limited transport services with erratic schedules and high costs.

#### **Priority Actions**

- MRD and MOI to prioritise poor and food-insecure communes for investments in tertiary rural road improvements.

- MRD and MOI to advocate for more donor support and government resources for the Commune/Sangkat Fund to enable Commune Councils to improve tertiary rural roads in food-insecure communities at a faster rate.
- There is a continued need for upgrade and maintenance of rural secondary roads and the national network of highways. Major road network planning and implementation by the MPWT and its partners should prioritise developing road networks in food-insecure regions.

### ***4.3 Improved Use and Utilisation of Food***

*SFFSN Objective 3: Food-insecure households improve use and utilisation of their food resulting in reduced malnutrition, morbidity and mortality, particularly among women and children.*

#### **General Situation and Rationale**

This SFFSN Objective focuses primarily on improvement of the health and nutrition status of women and children. A general situation analysis of the health and nutrition aspects of food insecurity is presented in some detail in Section 2.1 of this document.

This FSN Objective has three areas of focus. These are:

- Reducing child and maternal malnutrition and mortality.
- Improving domestic water supply and sanitation and hygiene practices.
- Improving food safety and enhancing food fortification.

Improvements in these areas are critical to achieving progress in food security and nutrition under the NSDP, and for meeting the CMDGs' targets. They are also areas for improvement consistent with the Ministry of Health Sector Strategic Plan 2003-2007, the Cambodia Nutrition Investment Plan 2003-2007 (CNIP) and the measures recommended under the RGC National Population Policy 2003.

The constraints on improving the use and utilisation of food in Cambodia are well understood and a clear set of priority actions have been already developed to address them. The main challenges here are to get adequate funding for investments and capacity development so that the broad-scale needs, particularly among the poor and food-insecure, can be adequately addressed. With more adequate resourcing, a great deal can be achieved towards improved FSN.

In 2007 two important plans are due for review and updating. These are the Health Sector Strategic Plan 2003-2007 and the Cambodia Nutrition Investment Plan 2003-2007 (CNIP). A further policy initiative is the development of a National Nutrition Strategy by the MoH (NNS 2008-2015), which is now under way. The important National Nutrition Programme (NNP) in MoH will be revised accordingly. The relationship between the upcoming NNS 2008-2015 of MoH, the new CNIP 2008-2012 and this SFFSN needs to be reviewed to maximise synergies. This stakeholder dialogue can be facilitated through the TWG-FSN chaired by CARD and MoP and co-facilitated by WFP and FAO.



### **4.3.1 Reducing Child and Maternal Malnutrition and Mortality**

Reducing child and maternal malnutrition and mortality involves four areas of interventions:

- Reducing child protein-energy malnutrition.
- Reducing micronutrient malnutrition in children and women.
- Reducing maternal malnutrition.
- Improving children and women's health for better nutrition.

#### **4.3.1.1 Reducing Child Protein-Energy Malnutrition**

##### **Situation and Rationale**

Inadequacies in child feeding practices are contributing to the high rates of Protein-Energy Malnutrition (PEM) among children under five (37 percent stunted, 36 percent underweight and 7 percent wasted - CDHS 2005). Only 57 percent of young children are fed according to three recommended Infant and Young Child Feeding Practices (IYCF)<sup>69</sup>. There is a recognised linkage between child malnutrition and child mortality and it is estimated that malnutrition contributes to 54 percent of all child mortality. Although the nutritional status of children is the combined outcome of availability, access and utilisation of food, it seems that in Cambodia, poor feeding practices and frequent infections during the first two years are the factors impacting most negatively the nutritional status of children.

Exclusive breast feeding during the first six months and immediate initiation of breast feeding are central, as breast milk contains all nutrients needed by the newborn during the first six month of life. Antibodies from the mother protect from infections and no health risks through contamination by unsafe water or dirty bottles occur. Exclusive breast feeding rates have considerably improved between 2000 and 2005<sup>70</sup> but further efforts are still needed to increase the period as well as immediate initiation of breast feeding.

There is also a need for improvements in complementary feeding practices to counteract deterioration of nutritional status of small children on reduction and ending of breast feeding. 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 behavioural changes.

##### **Priority Actions**

MoH and MoP to promote appropriate infant and young child feeding and caring practices in the National Nutrition Strategy of MoH and the updated Cambodia Nutrition Investment Plan 2008-2012 (CNIP) as follows:

- Increase the rate of early initiation of breast feeding, including colostrum, within one hour of delivery.
- Increase the rate of exclusive breast feeding of infants in the first six months.

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<sup>69</sup> CDHS 2005

<sup>70</sup> From 11 percent in 2000 to 60 percent in 2005, CDSHS 2005

- Promote timely and adequate complementary feeding starting at six months of age with continued breastfeeding until at least two years of age.
- Expand the implementation of Baby-Friendly Hospitals and Baby-Friendly Community initiatives.
- Implement the 2005 Sub-decree on the Marketing of Products for Infant and Young Child Feeding.
- Provide appropriate care for sick and malnourished children, including timely referral and rehabilitation of the severely malnourished children.
- Develop and promote appropriate complementary food products for small children (not including breast milk substitutes).
- Provide de-worming for preschool and school children.
- Promote integrated community based nutrition programmes to improve nutritional knowledge and practices.
- MoEYS to introduce nutrition education in school curricula.
- MoH, MoP, MoWA and partners to provide nutrition education and education on breastfeeding and complementary feeding among community and mothers' groups.

#### **4.3.1.2 Reducing Micronutrient Malnutrition in Children and Women**

##### **Situation and Rationale**

Micronutrient deficiencies contribute to malnutrition among children under five and women of reproductive age, as well as to high child and maternal morbidity and mortality rates. These deficiencies include mainly iodine deficiency disorders (IDD), Vitamin A deficiency disorders (VADD), and iron deficiency anaemia (IDA)<sup>71</sup>.

The priority actions to address these constraints focus on implementing activities to combat micronutrient deficiencies outlined in the National Nutrition Programme (NNP) and the Cambodia Nutrition Investment Plan (CNIP). These measures include targeted supplementation, food fortification of staples and food-based approaches to improving dietary intake.

With 73 percent of households consuming iodised salt in 2005 (CDHS 2005), the implementation of the sub-decree on salt fortification shows good results and is expected to contribute to the elimination of IDD. However, IDA of children and women is still not adequately addressed, as iron supplementation for pregnant and postpartum women has a low coverage and the iron fortification of staples is still at a pilot level.

##### **Priority Actions**

MoH, MoP and development partners to implement the micronutrient nutrition measures in the Strategic Nutrition Plan/National Nutrition Programme (NNP) and the updated Cambodia Nutrition Investment Plan 2008-2012 (CNIP) as follows:

- Promote adequate diets for children and women, including micronutrient rich foods.
- MAFF and development partners to scale up homestead food production projects for their nutritional benefits (gardens, livestock and aquaculture).

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<sup>71</sup> CDHS 2005

- Increase coverage of Vitamin A supplementation for children 6-59 months and for post partum women within six weeks of delivery.
- Increase coverage of iron/folate supplementation for pregnant and post partum women.
- Formulate and implement a national programme for iron supplementation for preschool children and women of reproductive age.
- MoH to scale up programmes for targeted micronutrient supplementation (Vitamin A capsules, iron and multi-micronutrients).
- Provide micronutrient supplements (iron) and fortified food to primary school children.
- Provide de-worming to pregnant and postpartum women.
- Promote universal household use of iodised salt, enforcing the 2003 sub-decree on Management of Exploitation of Iodised Salt requiring that all salt be iodised.
- NCN/NSCIDA to develop and implement a national programme on iron fortification of staple food (based on ongoing pilot experiences).
- Establish a national subcommittee of NCN for food fortification (NSCFF) and develop and implement an overall national policy on micronutrient fortification of food in cooperation with the private sector.
- Ensure that targeted supplementary feeding programmes use fortified food products.

### **4.3.1.3 Reducing Maternal Malnutrition**

#### **Situation and Rationale**

Malnutrition in women is connected with high rates of maternal mortality in Cambodia. According to the 2005 CDHS, 20 percent of women of reproductive age (15-49 years) are classified as chronically energy deficient (CED), or “thin”, with a BMI < 18.5 kg/m<sup>2</sup>, and 6.2 percent are classified as either moderately or severely thin. Low birth weight of newborns is also prevalent in Cambodia (15%) and is an important factor in the high infant mortality rate<sup>72</sup>.

Many women lack access to family planning and birth spacing services. Antenatal care services (ANC) for pregnant women still require increased coverage. Only 69 percent make any ANC visits during pregnancy, most doing so only once. This is so notwithstanding the greatly improved levels of ANC service access since 2000 (when only 37 percent were making any ANC visits during pregnancy). Many pregnant and post partum women suffer from anaemia. There is a recognised need to improve knowledge of pregnant and post partum women on nutritionally adequate diets.

#### **Priority Actions**

MoH, MoP and development partners to implement and scale up measures against maternal malnutrition and mortality as outlined in the National Nutrition Strategy of and the updated Cambodia Nutrition Investment Plan 2008-2012 (CNIP) as follows:

- Educate women of all ages, and pregnant and post partum women in particular, on nutritionally adequate diets.

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<sup>72</sup> CDHS 2005

- Increase coverage of iron/folate for pregnant and post partum women.
- Increase coverage of Vitamin A supplementation for post partum women within six weeks of delivery.
- Reduce the low birth weight rates by improving maternal nutrition.
- MoH and development partners to increase the access of women to family planning services, including birth spacing and education/counselling.
- MoH to increase coverage and quality of ANC services for women through NNP and promote their expansion among health service providers in general.

#### **4.3.1.4 Improving Children's and Women's Health for Better Nutrition**

##### **Situation and Rationale**

Some mother-child health care practices contribute to higher rates of child morbidity and malnutrition, including Acute Respiratory Infections, diarrhoea, prevalence of intestinal parasites, and unhygienic food preparation practices.

High costs for often low-quality health services restrict their utilisation by the poor. Unforeseen health expenditures often lead to indebtedness and the forced sale of productive household assets including land, and thus to chronic food insecurity. To address this problem, health equity funds and affordable health insurance schemes for food-insecure people need to be developed. This issue is addressed under Section 4.4 of this Strategic Framework.

There is also a need for the development of clear and adequate product and service standards in the private sector medical and pharmaceutical industries and strict enforcement of those standards. Inadequacies in this area increase levels of mortality and malnutrition. These issues have been recognised in the MoH Health Sector Strategic Plan 2003-2007.

The Priority Actions to address these constraints focus on supporting services to improve mothers' knowledge and practices in relation to child health, nutrition and hygiene and sanitation, and on improving health and food safety support services for mothers and children.

##### **Priority Actions**

- Continue implementation of the MoH Health Sector Strategic Plan 2003-2007 to promote higher quality and more affordable health care services for the rural poor, to provide technical training for health care providers and to strengthen monitoring and regulation of public and private sector health care services.
- MoH and stakeholders to undertake training of health staff in all Provinces in MPA 10 (Minimum Package of Activities – Nutrition).
- MoH and other development partners to continue and expand programmes to improve mother-child health care practices.
- MoEYS to continue and expand mother-child health education as a component of nutrition training education curricula in schools.
- MoH and MoEYS to support mother-child health education and counselling at the community level and among mothers groups.
- MoH, MoC and CAMCONTROL to develop and comprehensively enforce safety and quality standards for pharmaceuticals; and to strengthen monitoring and

regulation of private sector health care services, in order to promote higher quality and more affordable health care services, especially for the rural poor.

### **4.3.2 Improving Domestic Water Supply, Sanitation and Hygiene Practices**

Access to safe water sources and hygienic toilets is insufficient in most villages. This situation has strong linkages to the use of food and is a basic obstacle to improved food security and nutrition and the achievement of the CMDGs.

According to national statistics, only 42 percent of rural households have access to safe water. However, a recent study found that safe water sources are not commonly defined and points to discrepancies among findings in national studies. The key issue is whether households have access to improved safe water sources throughout the year and this is likely to be a far lower proportion of Cambodian households than the 42 percent commonly cited<sup>73</sup>. In addition, only 16 percent of rural households have hygienic toilets<sup>74</sup>.

Lack of access to safe water and poor hygiene increase the incidence of diarrhoea and parasite prevalence, which in turn cause a loss of nutrients and poor assimilation of food. As a result, diarrhoea is a major cause of child mortality and child malnutrition in Cambodia.

In food-insecure communities the quantity and diversity of food intake is already below minimum needs. Lack of safe drinking water and sanitation reduces further the use of the limited food intake by the metabolism and affects mostly the already malnourished.

In 2001, MRD formulated a basic draft Rural Water Supply and Sanitation Sector (RWSS) 10 Year Sector Strategy: 2001-2011. This has not yet been developed into a full policy document.

#### **Priority Actions**

- MRD to transform the basic draft Rural Water Supply and Sanitation Sector (RWSS) 10 Year Sector Strategy: 2001-2011 into a full policy document.
- MOWRAM, MRD and NGOs to increase investments in safe water infrastructure at the basin and community level and establish sustainable systems for maintenance. Water quality/arsenic testing of wells needs to be expanded.
- MRD and development partners to increase investments in hygienic toilets in communities, and MoH to increase awareness-raising of good sanitation practices.
- MRD and MoH to increase awareness raising promotion and education to improve good water use and hygienic practices.
- MOWRAM, MRD and MAFF to investigate livestock-related sanitation practices and their impact on human health.
- MRD and development partners to target and prioritise food-insecure communities for these investments to maximise beneficial impacts on malnutrition and child morbidity rates.

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<sup>73</sup> MRD 2006, Levisay M. and Chea S., Measuring Water Supply Access: Findings from a Comparative Analysis of Cambodian National Surveys, MRD Water and Sanitation Program, Phnom Penh

<sup>74</sup> NSDP 2006-2010 results for 2005

### 4.3.3 Improving Food Safety and Enhancing Food Fortification

#### Situation and Rationale

There remains a deficiency in the area of food product safety and quality standards and the enforcement of existing food standards in the economy. Foods are often contaminated at point of sale. Remains of pesticides in food and chemicals used during processing, as well as unhygienic storage and food preparation, affect human health, notably of poorer people buying cheaper foods on the market.

Concerning the private sector food processing industry, there is a need for improved regulation and enforcement of standards and laws regarding production and sale of fortified processed foods for better nutrition.

#### Priority Actions

- MoC (CAMCONTROL), MIME and MAFF to develop and enforce food safety standards, initially prioritising key staple foods.
- MoH, MAFF, MoEYS to inform the public about harmful substances and their adverse impact on human health.
- NCN/National Subcommittee for Food Fortification (NSCFF) to prepare and enforce regulations with regard to food fortification in Cambodia.

### 4.4 Increased stability of food supply

*SFFSN Objective 4: Improved social safety nets and enhanced capacities of food-insecure households to cope with risks and shocks increase stability of their food supply.*

A 2006 report observed: “In post-conflict Cambodia, the problems of risk and vulnerability are pervasive and are compounded by the weakness of available safety nets”<sup>75</sup>. This is equally true in the more specific context of FSN issues. As observed in the same report “food insecurity is a dominant feature of poverty and vulnerability in Cambodia”.

While food-insecure households typically depend on both their agricultural and private sector activities to produce and buy food to meet their minimum needs, there will be circumstances where these efforts will fail on a wide scale. Natural disasters like floods and droughts, and also unforeseen individual crises due to severe sickness or other socio-economic shocks, can expose people to transitory food shortages. Risky coping strategies, like the depletion of productive assets (selling of farm equipment and land) or long term socio-economic disadvantages (chronic illness, HIV/AIDS, lack of remaining productive assets, poverty and lack of income) will often render them chronically food-insecure. This is where the importance of effective social safety nets to maintain stability in access to minimum food needs for these vulnerable groups becomes obvious.

In this broad area, two separate areas to promote food security stability are identified:

- Improving disaster management safety nets.
- Improving vulnerable group social safety nets.

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<sup>75</sup> World Bank 2006 Managing Risk And Vulnerability In Cambodia: An Assessment and Strategy for Social Protection, Phnom Penh

#### 4.4.1 Improving Disaster Management Safety Nets

##### Situation and Rationale

Cambodia faces disaster hazards that can threaten human lives and the food security of the population. People who are already poor and malnourished when disasters strike are particularly vulnerable to disaster impacts<sup>76</sup>. The most likely hazards in Cambodia are flood and drought disasters, which directly affect agriculture and result in food shortages. Floods are also a direct hazard to the lives of humans and livestock and human settlements themselves. Droughts, if severe, can threaten human lives through exhausting or degrading domestic water supplies for human and livestock consumption.

The potential impact of an Avian Influenza outbreak is a recently recognised potential threat to human life as well as to livestock. Another hazard now recognised in Cambodia is the issue of climate change. The Ministry of Environment in 2006 published a National Adaptation Programme of Action to Climate Change (NAPA). This study found Cambodia to be highly vulnerable to climate change and has provided a range of recommendations to address this issue.

A recent study has highlighted the potential socio-economic hazard of food price increases to food security in Cambodia<sup>77</sup>. It found that on average 70 percent of total household consumption expenditure was devoted to acquiring food.

As mentioned, 51 percent of dietary value comes from purchased food, 36 percent from own production and the balance from other sources. Among rural households engaged in agriculture 48 percent of dietary value came from purchased food, 42 percent from own production and the balance from other sources.

This reveals a high level of dependency on purchased foods for household food security, and a high vulnerability to food price fluctuations, even among rural households engaged in agriculture. In this context, there is a need to develop disaster management policies and procedures to cope with food price increases that may result from disaster impacts.

Disaster management safety nets for early warning, disaster preparedness, and risk reduction are weakly developed. A government institutional structure, the National Committee for Disaster Management (NCDM) and its provincial networks (Provincial Committees for Disaster Management, District Committees for Disaster Management and particularly Commune Council-level Commune Committees for Disaster Management), has been put in place, but requires much more support and capacity-building to fulfill its functions. The CCDMs came into existence by sub-decree only in June 2006.

Disaster response and recovery activities are implemented by a range of agencies but typically suffer from a lack of resources and coordination, and of an explicit or coherent strategy for linking to longer-term development initiatives and planning.

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<sup>76</sup> Helmers K. and Jegillos S., 2004, Linkages between flood and drought disasters and Cambodian rural livelihoods and food security: IFRC/CRC.

<sup>77</sup> NIS/FAO/EU 2007, Food Insecurity Assessment

Many non-government agencies (Red Cross agencies, IOs and NGOs) are also engaged in activities related to disaster safety nets including early warning systems, disaster preparedness, risk reduction. The safety nets' coverage and sustainability is often limited, particularly when they are implemented by NGOs.

### **Priority Actions**

- In relation to disaster management safety nets, NCDM should make existing programmes more effective, strengthen coordination with partners and further build partnerships with NGOs who have comparative advantages in delivery of Disaster Management safety net services.
- Further develop the institutional structure and capacity of the National Committee for Disaster Management (NCDM) and its provincial networks (PCDMs, DCDMs and particularly Commune Council CCDMs).
- MRD and development partners to increase seasonal employment on rural public works in flood-and drought-prone communities through food/cash for work schemes.
- Expand the disaster preparedness, mitigation, response and recovery activities of Red Cross agencies, other NGOs, and government/donor collaborative rural development projects which are already established and operating in the country.
- Increase training/extension/inputs to vulnerable communities on better flood, drought, pest and disease-resistant crops, through increased MAFF/Disaster Management agency collaboration.
- Promote diversification of households' livelihoods to include non-agricultural activities such as business and wage labour sources of income.
- Maintain or improve the productivity and level of access of rural communities to Common Property Resources, which are often very important to the poor for coping with shocks, stresses or disasters (see also FSN Objective 1 on CPR).
- Support the implementation of the priorities of National Adaptation Programme of Action to Climate Change (NAPA).
- NCDM and Disaster Management agencies need to develop disaster management policies and procedures to handle food price increases that may result from disaster impacts. These may include food price stabilisation measures during and after declared national disasters.

### **4.4.2 Establishing Social Safety Nets for Vulnerable Groups**

#### **Situation and Rationale**

In a country with widespread poverty and food insecurity, recovering from the legacies of war and in a period of economic transition, there is a great need for basic social safety nets for vulnerable groups in relation to health, welfare and basic needs including food and unemployment.

Commonly recognised specific vulnerable groups include those living with HIV/AIDS and severe chronic illnesses, the unsupported elderly, the physically disabled, war-affected groups (demobilised soldiers, former refugees, Internally Displaced Persons, Mine/UXO amputees), ethnic minorities (especially those of the upland areas) and the destitute. Some specific vulnerable groups, such as the mentally ill, lack recognition. Far larger social groups in the general population are also



vulnerable in real terms, including women and children, the poor and food-insecure, and the unemployed or under-employed and the urban poor<sup>78</sup>.

Food insecurity itself is a dimension of vulnerability which these social groups face in their daily lives. Illnesses or disabilities, social isolation or inequities and inability to generate income can lead very quickly to a lack of food. The resulting malnutrition reinforces the other dimensions of vulnerability that these disadvantaged groups must face. Therefore social transfers enabling vulnerable people to access food, or the means to buy food, are an important dimension of social safety nets for vulnerable groups. The current food price crisis is likely to further negatively affect food security of vulnerable groups and the need for the development or expansion of targeted safety nets is increasingly important.

Meanwhile, the government does not yet have sufficient internal resources to fund targeted social transfers of food, cash, credit and services to vulnerable groups on a large scale. Further, at local level, Commune Councils do not have the capacity and resources to target and implement vulnerable group social safety net interventions. The expected improvement of the revenue basis through upcoming state income from oil and natural resource exploitation, not to mention improved tax collection and increased tax revenue from the general dynamic growth of the economy, may increase the possibilities to finance social safety nets for vulnerable and food-insecure groups. Procedures and criteria to identify poor and vulnerable households in a participatory and standardised way are currently being developed and tested and may help to rationalise the use of funds and to increase the effectiveness of safety nets.

In practice, elements of social safety nets involving social transfers of food or the means to buy food for vulnerable groups exist, but only on an ad hoc basis. While they are important, they typically have only partial and limited coverage of beneficiaries, and rely on support of International Organisations and non-government agencies.

Safety nets supported by development partners already exist in various provinces for a limited number of beneficiaries related to health dimensions of food insecurity. Efforts are now under way by MoH,WHO, donors and NGO partners to develop and scale up health insurance and health equity fund schemes for the poor<sup>79</sup>.

Various rural development, community development and poverty alleviation projects benefit vulnerable groups by targeting them for assistance and increasing their capacity to produce food or earn more income. Food/Cash for Work schemes in poor and food-insecure communities boost local employment. School feeding programmes support school attendance by poor children, especially girls. The UN World Food Programme and its government and donor partners have relatively large scale projects in these areas in Cambodia<sup>80</sup>.

Over the long term, progress must be made in establishing more comprehensive and systematic social safety nets with widespread coverage for vulnerable groups,

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<sup>78</sup> Including those identified in World Bank 2006 Managing Risk and Vulnerability in Cambodia

<sup>79</sup> Health Equity Fund Forum Report of the HEF Forum 2006 Phnom Penh

<sup>80</sup> WFP programs of this type include those for people living with HIV/AIDS, TB patients, and a School Feeding Program. See Also WFP 2004, Concrete Steps towards a Millennium Free From Hunger

incorporating measures to increase their food security and nutrition. Over the short to medium term the focus should be on expanding coverage of more limited and specific safety net interventions.

### **Priority Actions**

- In relation to social safety nets, the government will work to make existing programmes more effective, strengthen coordination with partners and further build partnerships with NGOs which have comparative advantages in delivering social safety net services.
- Continue and scale up targeted social transfer systems in cooperation with international development agencies, NGOs and donors.
- MoH, WHO and NGO partners to continue to develop and scale up health insurance or health equity funds schemes for the poor and food-insecure.
- MRD to continue community level Food/Cash for Work schemes and continue to innovate on their application.
- MoEYS to scale up WFP-supported School Feeding Programme and other development partners school attendance support for poor children.
- Ministry of Interior to resource and train Commune Councils to develop local government food and cash for work schemes based on local public works projects.
- Expand HIV/AIDS home care and outreach services to support affected people with food and cash allowances and increase service coverage.
- MoP and development partners to further develop and implement a harmonised national system to identify poor and food-insecure households for targeting with social transfers and development assistance.

## ***4.5 Enhanced Institutional and Policy Environment for FSN***

*SFFSN Objective 5: The institutional and policy environment for achieving improved food security and nutrition in Cambodia is enhanced.*

### **Situation and Rationale**

Food shortages and malnutrition are a broadly recognised humanitarian concern for the government and civil society. Good Governance reforms from an FSN perspective concern enhancing the ability of the state to address and overcome food insecurity and malnutrition. The government has taken a number of important institutional and policy initiatives to improve FSN in Cambodia and the coordination of stakeholders, as described in Section 2.2.

However, an examination of the existing policy and institutional environment for achieving progress in food security and nutrition shows that a number of important limitations remain and need to be addressed to achieve progress towards the FSN aims of the NSDP and the CMDGs.

Three priority FSN issues are recognised within the areas of public administration reform and decentralisation:

- Capacity-building and improved coordination for FSN.
- Improving integration of FSN into the decentralised local planning process.

- Improved FSN-related information management for better targeting of FSN interventions to assist the poor and food-insecure at the national and community levels.

#### **4.5.1 Strengthening Capacities and Improving Coordination for FSN**

##### **Situation and Rationale**

While some progress has been made to date, there is limited awareness of food security and nutrition concepts and their application in the planning departments of line ministries, and weaknesses in institutional structures at the national level for improving food security and nutrition. This leads to limited recognition and capacity among relevant ministries to identify, prioritise and operationalise FSN interventions. A corollary issue is that there is no national set of laws, decrees, policies, regulatory instruments or guidelines to comprehensively address and mainstream FSN. The priority tasks for addressing these constraints focus on capacity-building in key line ministries and strengthening mechanisms for coordination at national and decentralised level.

In 2003, a National Food Security Forum under the chairmanship of CARD was established. It brings together stakeholders in FSN from government, donors and NGOs regularly and allows them to share information, knowledge, experiences, lessons learned and best practices in FSN. In 2004, the TWG-FSN was set up to ensure improved coordination, harmonisation and alignment of development efforts aiming at improved food security and nutrition in Cambodia. In 2005, the TWG-FSN, co-chaired by CARD and MoP and co-facilitated by WFP and FAO, was equipped with a permanent secretariat to better facilitate inter-ministerial networking and coordination on FSN issues.

##### **Priority Actions**

- Build capacity of the TWG-FSN Secretariat within the Council for Agricultural and Rural Development (CARD) to facilitate inter-ministerial networking and coordination on FSN issues.
- Build FSN planning capacity among line ministry staff: Scale up training of planning staff in ministries in basic FSN concepts and their applications to planning. Priority participants for this training are planning staff from MAFF, MRD, MOWRAM, MoH, MWA, MoP, MLMUPC, MoC and CARD.
- Establish, maintain and operate the FSN National Trainer Pool, Training of Trainers (FSN TOT) and the line ministry staff FSN training programme. This initiative is a key means of strengthening FSN capacity and has been adopted in principle by the RGC through CARD.
- Strengthen ministry planning structures to improve FSN: FSN planning sub-units should be established within the existing planning departments of line ministries with important roles in FSN, composed of MAFF, MRD, MOWRAM, MoH, MWA, MoP, MLMUPC, and MoC<sup>81</sup>.

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<sup>81</sup> This does not inherently involve increasing the number of planning staff, but rather involves the establishment of dedicated planning units with defined roles and responsibility for improving food security and nutrition within ministries. These units would i) Review ministry plans and provide inputs so that activities have a more direct impact on FSN; ii) Develop an FSN sub-plan for each ministry; iii) Assist ministries to target activities to food-insecure households; iv) Act as a permanent contact point for networking and coordination with FSN stakeholders; and v) Monitor ministry activities from an FSN perspective.

- Increase ministry collaboration to better mainstream gender issues in FSN interventions: CARD to facilitate collaboration between MWA and other CARD member ministries to better address gender dimensions of FSN.

#### **4.5.2 Integrating FSN into the Decentralised Local Planning Process**

##### **Situation and Rationale**

At the sub-national level, FSN issues are insufficiently integrated into the decentralised local planning process. Meanwhile, provincial governments and Commune Councils are often trying to address aspects of food insecurity and malnutrition in their communities (e.g. agricultural development, tertiary road construction, irrigation infrastructure repairs, and water and sanitation improvement). There is a need for further support to provincial government and Commune Councils to better assess and analyse food security issues in the Local Planning Process and to help guide the planning and implementation of FSN intervention.

There are several causes of insufficient integration of FSN issues into the decentralised local planning process: i) FSN problem analysis and planning capacities are limited at the province and commune levels of government; ii) procedures and mechanisms to more comprehensively incorporate FSN issues into the local government planning process are lacking; and iii) most Provincial Nutrition Coordination Committees (PNCCs) are inactive and lack a broad mandate to address all dimensions of FSN at the provincial level. The Priority Actions to address these constraints focus on developing capacities and mechanisms and increased support for provincial coordination structures to better integrate FSN issues in the local planning process.

##### **Priority Actions**

- Develop capacity, procedures and mechanisms to more comprehensively incorporate FSN issues into the local government planning process. This should be achieved through collaboration between the Ministry of Interior and Local Government (Provincial Office of Local Administration (POLA), Provincial ExComs and Department of Planning, Provincial Committees for Disaster Management (PCDMs) and Commune Councils), and support agencies with FSN expertise<sup>82</sup>.
- MoP to reactivate PNCCs throughout the country, giving them an expanded mandate to deal with all FSN issues (food availability, access, use and utilisation, and stability) for each province. To achieve effectiveness, the

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<sup>82</sup> Recent progress in FSN capacity-building support includes the CARD/FNPP Provincial Training Courses on Food Security and Nutrition in Takeo province and training of staff from line Ministries and NGOs for further capacity development at decentralised level. The main objective of the course is to provide the senior officers (planners, decision makers) from key departments and projects or programmes at provincial level with basic concept and knowledge by (i) creating awareness of FSN concepts and the importance of the cross-cutting issue for poverty reduction and development, (ii) Supporting decision makers in their capacity development and the mainstreaming efforts related to FSN in decentralised planning, and (iii) Preparing the ground for provincial coordination on FSN. Another useful resource is the a comprehensive distance learning course on Food Security by The European Union EC-FAO Food Security Programme.

capacity of the PNCC members will need to be enhanced through appropriate training measures<sup>83</sup>.

- Scale up provincial training on Food Security and Nutrition (based on training packages developed by CARD/FNPP) to cover more provinces and prioritise the most food-insecure provinces. Develop modules specifically for upland provinces with large upland minority populations and very poor food-security status, and facilitate access to the internet for provincial stakeholders in comprehensive distance learning courses on Food Security<sup>84</sup>.

### **4.5.3 Improving FSN-related Information Management and Targeting of FSN interventions**

#### **Situation and Rationale**

There is a lack of an operational and accepted government system for identifying food-insecure geographical areas and vulnerable groups at the national, provincial and community level. Such a system would facilitate targeting and planning FSN interventions. At the national level, there has been some progress in establishing the Food Insecurity and Vulnerability Information and Mapping System (FIVIMS). However, FIVIMS faces a number of constraints and has not yet produced FSN targeting outputs.

Meanwhile, government development interventions related to FSN are targeted using different targeting systems. There are internal, line ministry/sectoral targeting systems, often derived from basic analysis of limited government statistics. Often UN System identification and targeting system products (notably WFP Food Vulnerability and Assessment Mapping products) are used by ministries to assist national targeting to varying degrees. However, in some cases, ministries implement FSN-related interventions without systematically targeting the food-insecure.

At the sub-national and community levels, FSN targeting systems are underdeveloped in most areas of the country. This is an important aspect of the broader issue of the lack of integration of FSN issues in the decentralised planning process described above. It also raises the important issue of local civil society groups' participation in identification and targeting of efforts to improve FSN in their own communities.

The Priority Actions to address these constraints focus on further development of national-, sub-national and commune-level identification and targeting systems for food-insecure groups and associated support for Commune Councils and civil society at the local level.

Recent progress has included a national stakeholder workshop in 2006 dealing with FSN information management systems. This concluded that important tasks were to improve cooperation and coordination among FSN information stakeholders through the TWG-FSN, to utilise existing FSN information management systems for new products and to promote capacity-building<sup>85</sup>.

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<sup>83</sup> The European Union EC-FAO Food Security Programme distance learning course should complete the planned additional training module on targeting.

<sup>84</sup> e.g. EC/FAO

<sup>85</sup> Workshop participants included the Food Insecurity and Vulnerability Information and Mapping System (FIVIMS) in MAFF (currently supported under the EC/FAO "Food Security Information for Action" Programme); the WFP Vulnerability Analysis and Mapping Unit (VAM); The Food Security and Nutrition Information System (FSNIS) in CARD (currently supported by the FNPP/FAO); Cam-Info in the National Institute of Statistics/MoP (supported by UNICEF and GTZ).

There has also been recent progress in other areas towards improving targeting systems for FSN interventions at the sub-national and community levels. The Provincial Training Course on Food Security and Nutrition organised by CARD in collaboration with FAO under FNPP will raise awareness of identification and targeting issues for provincial government staff.

In relation to geographical targeting of the food-insecure at the province and commune level, there remains a need for more field research and primary data on food insecurity and malnutrition. At the Provincial level, the CDHS of 2000 and 2005, which are primarily national level surveys, provide reasonably representative and reliable data for densely populated provinces. However, as documented in the CDHS 2005 Report, the results for less populated provinces are of limited reliability with broader ranges of possible results<sup>86</sup>.

At the Commune level, the only information on the prevalence of malnutrition is from the WFP Commune Level Poverty Estimate of 2000. These are derived estimates of stunting and underweight rates<sup>87</sup>. There is a particular need for more information on commune-level malnutrition and food security in at least the most food-insecure communes.

In relation to social targeting, MoP has been developing a national approach to identify poor at the household level. Activities in capacity-building for Commune Councils and village representatives to implement harmonised criteria and procedures for identification of poor and food-insecure households were carried out since 2006. This standardised and participatory approach has already been implemented in communes in three provinces and needs to be scaled up to cover a broader range of poor and food-insecure communes in the country.

Further recent progress in FSN identification and classification at the province level has included the completion of the WFP Food Security web Atlas of Cambodia incorporated into the CARD FSNIS website in 2006 (<http://www.foodsecurity.gov.kh>) and the WFP Integrated Food Security and Humanitarian Phase Classification (IPC) analysis in Cambodia.

## **Priority Actions**

- Implement the agreed principles and concrete steps that were outcomes of the First National Stakeholder Workshop on Food Security and Nutrition (FSN) and Vulnerability Related Information and Mapping Systems 2006. Practically, this means collaborate in the development of improved FSN information systems. These measures included establishing a task force headed by CARD with the specific objective of enhancing coordination, building up analytical capacities for FSN data analysis and promoting the use of FSNIS as an existing web-based FSN information portal for informed action.
- Investigate methods and approaches for increasing the frequency and specificity of FSN primary data collection and increasing knowledge of variations in FSN outcomes and their causes by geographic area and socio-economic group within Cambodia.

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<sup>86</sup> This is due to small sample sizes for these provinces and the clustering of CDHS results into multi-province clusters. Further, from the indicative result available it seems that many of these low population/small sample provinces have the highest prevalence of malnutrition in the country. These provinces are mostly located in the upland and more remote areas of Cambodia and have a higher proportion of upland minority populations.

<sup>87</sup> World Food Programme & Tomoko Fuji 2003 Commune Level Poverty Estimates and Ground Truthing WFP Phnom Penh. Estimates are derived from CDHS 2000 and 1998 Census data using small area estimation techniques. Due to the SME method requirements, updates will not be possible until after the 2008 Census.

- The inter-ministerial FIVIMS Secretariat needs to address identified constraints for further development of the national FSN information system-FIVIMS described in the FIVIMS Manual 1.0.
- NIS to update commune poverty and malnutrition estimates from 2000 based on the new 2008 Census and CSES/CDHS data (small area estimates).
- NIS to provide analysis of household food consumption based on data of next CSES.
- Provide regular updates of the Cambodian Food Security Atlas (WFP) and promote its use for policy analysis and area targeting.
- Scale up MoP pilot on harmonised identification of poor households and use results for targeting social transfers and development assistance at household and community level.

## 5. Monitoring and Evaluation of SFFSN

A critical component of the SFFSN is to monitor the results that are achieved against the relevant targets and indicators. Given the cross-cutting nature of FSN issues, and the range of programmes that contribute to improving FSN in Cambodia, monitoring presents its challenges.

A monitoring framework, with key indicators for the overall food-security outcome and for each of the five SFFSN Objectives, is outlined in Table 11. Tracking progress with regard to FSN is thus simplified and results can be easily compiled into annual monitoring reports to be forwarded to relevant line ministries and TWGs and published on the national FSNIS website.

This SFFSN monitoring framework is compiled from existing monitoring frameworks including the CMDG Monitoring Framework, NSDP Macro-Goals and Critical Indicators, NSDP Sector Targets, specialist periodic NIS studies including the CDHS and the CSES and related sources of information (Table 10 gives an overview of this).

The monitoring framework indicators track changes at the national level and, to a lesser degree, at provincial level, which can give a picture of the overall progress of the Cambodian population in FSN. Further enhancement of SFFSN monitoring could be achieved by using available disaggregated data<sup>88</sup> and carrying out specific FSN-related data analysis within the framework of the FSN-related information systems (FIVIMS).

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<sup>88</sup> Few data for lower administrative levels are available and direct collecting of additional data at a lower administrative level would be more accurate but the costs are considerable. However, through combining CSES/CDHS data with census data (the method of "small area estimates"), information on the FSN situation down to commune level can be generated. Also the data base from the "Identification of Poor Households Project" in MoP could become a valuable data source for FSN monitoring at district and commune level in future.



**Table 10: Overview Existing Framework/Data Sources for SFFSN Monitoring**

| SFFSN Goal/Objective                                                                                                                                                                                                                                                             | Monitoring System                                                                                                                                                                                                                | Notes                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| FSN Strategic Framework Goal 2008: Poor and food-insecure Cambodians, by 2012, have substantially improved physical and economic access to sufficient, safe, and nutritious food, at all times, to meet their dietary needs and food preferences for an active and healthy life. | CMDG Monitoring Framework<br><br>CDHS 2000, 2005, 2010<br><br>NSDP Sector Targets - Health                                                                                                                                       | CMDGs 1-8<br><br><br>NSDP Table 4.5                                                                                                 |
| FSN Objective 1. Food-insecure households increase food availability from their own agriculture and livestock production and from common property forests and fisheries.                                                                                                         | CMDG Monitoring Framework<br><br>NSDP Macro-Goals and Critical Indicators<br><br>NSDP Sector Targets - Agriculture<br><br>MAFF Annual Agricultural Statistics<br><br>CSES 2004 and later surveys<br><br>Agricultural Census 2008 | CMDGs 1,2,7,8<br><br>NSDP Indicators: 4,5,6,24,40,41<br><br>NSDP Table 4.2<br><br>Including analysis of commune-level rice balances |
| FSN Objective 2. Food-insecure households increase their food access by increasing household employment and incomes to buy foods.                                                                                                                                                | CMDG Monitoring Framework<br><br>NSDP Macro-Goals and Critical Indicators<br><br>NSDP Sector Targets - Agriculture, Rural Development<br><br>CSES 2004 and later surveys<br><br>Agricultural Census 2008                         | CMDGs 1,3<br><br>NSDP Indicators: 1,2,3,21,32,33,34,42<br><br>NSDP Table 4.2, 4.3                                                   |
| FSN Objective 3. Food-insecure households improve their food use and utilisation, as a means to reduce malnutrition, morbidity and mortality, particularly among women and children.                                                                                             | CMDG Monitoring Framework<br><br>NSDP Macro-Goals and Critical Indicators<br><br>NSDP Sector Targets - Rural Development, Education, Health<br><br>CDHS 2000, 2005, and later.                                                   | CMDGs 2,3,4,5,6<br><br>NSDP Indicators: 7-15,22,23<br><br>NSDP Table 4.3, 4.4, 4.5                                                  |
| FSN Objective 4. Food-insecure households increase their capacities to cope with risks through reducing vulnerability to shocks, and thereby increase the stability of food supply.                                                                                              | CDHS 2000, 2005, and later<br><br>MAFF Annual Agricultural Statistics<br><br>NSDP Sector Targets-Agriculture<br><br>CSES 2004 and later<br><br>Agricultural Census 2008                                                          | CMDGs 1,6,7,8                                                                                                                       |
| FSN Objective 5. The institutional and policy environment for achieving improved food security and nutrition in Cambodia is enhanced.                                                                                                                                            |                                                                                                                                                                                                                                  |                                                                                                                                     |

**Table 11: SFFSN Monitoring Framework**

| SFFSN overall Outcome Indicators*                                                                                                                                                                                                                              | 2005                | 2010       | 2015<br>CMDG<br>Target |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|------------------------|
| SFFSN 2008 Goal: Poor and food-insecure Cambodians, by 2012, have substantially improved physical and economic access to sufficient, safe, and nutritious food, at all times, to meet their dietary needs and food preferences for an active and healthy life. |                     |            |                        |
| CMDG 1.6 Stunted (height for age < - 2SD children under 5 years of age) (%)                                                                                                                                                                                    | 37                  | 28         | 22                     |
| CMDG 1.4 Underweight (height for age < -2SD children under 5 years of age) (%)                                                                                                                                                                                 | 36                  | 29         | 22                     |
| CMDG 1.5 Proportion of population below the food poverty line                                                                                                                                                                                                  | 19.5                | 13         | 10                     |
| CMDG 1.7 Wasted (weight for height < -2SD) children under five years of age (%)                                                                                                                                                                                | 7                   | 10         | 9                      |
| CMDG 1.8 Households using iodised salt (%)                                                                                                                                                                                                                     | 73                  | 90         | 90                     |
| CMDG 4.4 Children 6-59 months receiving Vitamin A capsules in the last six months %)                                                                                                                                                                           | 35                  | 80         | 90                     |
| CMDG 4.6 Infants exclusively breast fed up to 6 months of age (%)                                                                                                                                                                                              | 31                  | 34         | 40                     |
| CMDG 5.7 Women, 15-49 yrs, with BMI<18.5kg/(metres squared) (%)                                                                                                                                                                                                | 20                  | 12         | 8                      |
| CMDG 5.8 Women, 15-49 yrs., with iron deficiency anaemia (%)                                                                                                                                                                                                   | 47                  | 32         | 19                     |
| NNP: Iron deficiency anaemia prevalence (% of children 6-59 months) *                                                                                                                                                                                          | 62                  | 52*        | 42*                    |
| SFFSN Objective 1. Food-insecure households increase food availability from their own agriculture and livestock production and from common property forests and fisheries.                                                                                     |                     |            |                        |
| NSDP Paddy yield per hectare (tonnes)                                                                                                                                                                                                                          | 1.97                | 2.4        |                        |
| NSDP Land Reforms: Land Titles to farmers - % of Total agri. land                                                                                                                                                                                              | 12                  | 24         |                        |
| NSDP Forest Cover - % of total area                                                                                                                                                                                                                            | 60                  | 58         | 60                     |
| NSDP Area affected cleared of mines and UXOs (%)                                                                                                                                                                                                               | 50.3                | 77         | 100                    |
| Cam Info % of rural households with no agricultural land                                                                                                                                                                                                       | 16                  |            |                        |
| CMDG 7.6 Fishing lots released to local communities (%)                                                                                                                                                                                                        | 56                  | 60         | 60                     |
| CMDG 7.7 Number of community-based fisheries                                                                                                                                                                                                                   | 375                 | 464        | 589                    |
| CMDG 7.8 Surface of fish sanctuaries - thousand hectares                                                                                                                                                                                                       | N/A                 | 581        | 581                    |
| SFFSN Objective 2. Food-insecure households increase their food access by increasing household employment and incomes to buy foods.                                                                                                                            |                     |            |                        |
| NSDP Poverty levels % of population – 2004<br>- in 59% of country covered by 1993/94 survey                                                                                                                                                                    | 34.7<br>(28.0)      | 25         | 19.5                   |
| NSDP Poverty levels % rural population<br>- in 59% of country covered by 1993-1994 survey                                                                                                                                                                      | 39.2<br>(33.7)      |            |                        |
| NSDP People below food poverty line % - 2004<br>- in areas covered by 1993-1994 survey                                                                                                                                                                         | 19.7<br>(14.2)      | 13         | 10                     |
| CMDG 1.2 Share of poorest quintile in national consumption (%)                                                                                                                                                                                                 | 7                   | 10         | 11                     |
| NSDP Female share of wage employment - agriculture, industry, services (%)                                                                                                                                                                                     | 52.5; 53.5;<br>27.0 | 50; 50; 37 | 50; 50; 50             |
| NSDP Rural Roads rehabilitated – kms (out of total 28,000)                                                                                                                                                                                                     | 22,700              | 25,000     | 28,000                 |
| NSDP Annual GDP Growth at constant prices (%)                                                                                                                                                                                                                  | 7.0                 | 6.0        |                        |
| NSDP Per Capita GDP at constant prices (1,000 riels)                                                                                                                                                                                                           | 1,400               | 2,243      |                        |
| NSDP Rate of Inflation (%)                                                                                                                                                                                                                                     | 6.2                 | 3.0        |                        |
| SFFSN Objective 3. Food-insecure households improve their food use and utilisation, as a means to reduce malnutrition, morbidity and mortality, particularly among women and children.                                                                         |                     |            |                        |
| NSDP Infant Mortality Rate per 1,000 live births                                                                                                                                                                                                               | 66                  | 60         | 50                     |
| NSDP < 5 Mortality Rate per 1,000 live births                                                                                                                                                                                                                  | 83                  | 75         | 65                     |
| NSDP Maternal Mortality Ratio per 100,000 live births                                                                                                                                                                                                          | 472                 | 243        | 140                    |
| NSDP Births attended by skilled health personnel (%)                                                                                                                                                                                                           | 44                  | 70         | 80                     |
| NSDP Net Enrolment: Lower Sec. Schools - Girls (%)                                                                                                                                                                                                             | 24.8                | 75         | 100                    |
| CMDG 5.5 Pregnant women with 2 or more ANC consultations with skilled health personnel (%) (Public Sector only)                                                                                                                                                | 60                  | 75         | 90                     |
| CMDG 5.6 Pregnant women with anaemia (%)                                                                                                                                                                                                                       | 57                  | 39         | 33                     |
| NSDP Safe drinking water access (% rural population)                                                                                                                                                                                                           | 41.6                | 45         | 50                     |
| NSDP Sanitation access (% rural population)                                                                                                                                                                                                                    | 16.4                | 25         | 30                     |
| SFFSN Objective 4. Food-insecure households increase their capacities to cope with risks through reducing vulnerability to shocks and thereby increase the stability of food supply.                                                                           |                     |            |                        |
| Number of people affected by flood requiring food assistance                                                                                                                                                                                                   |                     |            |                        |
| Number of people affected by drought requiring food assistance                                                                                                                                                                                                 |                     |            |                        |
| NSDP Irrigated area – including supplemental irrigation (% of rice area)                                                                                                                                                                                       | 20                  | 25         |                        |
| SFFSN Objective 5. The institutional and policy environment for achieving improved food security and nutrition in Cambodia is enhanced.                                                                                                                        |                     |            |                        |
| Task force on FSN information management is operational and various FSN information systems are more integrated and work efficiently by 2012.                                                                                                                  |                     |            |                        |
| SFFSN is increasingly used as a reference framework for this cross-cutting issue by relevant sector ministries and TWGs by 2012.                                                                                                                               |                     |            |                        |
| Increased coordination at provincial level and mainstream FSN in the decentralised planning process by 2012                                                                                                                                                    |                     |            |                        |

\* Note: Some NSDP indicators shown here are also CMDG indicators.

# **Annex 1. Reference documents**

## **1. Strategy and Policy Documents**

Achieving the Cambodia Millennium Development Goals, an Update, MoP, 2005

Cambodia Millennium Development Goals Report, MoP, 2003

Socio-Economic Development Plan (II) 2001-2005, RGC, 2001

National Poverty Reduction Strategy 2003-2005, December 2002. Council for Social Development, RGC

Rectangular Strategy of the Royal Government of Cambodia, RGC, 2004

National Strategic Development Plan 2006-2010, MoP, 2006

Circular No 5 on Food Security and Nutrition in the Kingdom of Cambodia, RGC, 1999

Circular No 3 on Food Security and Nutrition in the Kingdom of Cambodia, RGC, 2003

Strategy for Agriculture and Water 2006-2010, MAFF/MOWRAM, 2007

Ministry of Health Sector Strategic Plan 2003-2007, MoH, 2003

Ministry of Water Resources and Meteorology Draft Strategic Development Plan 2006-2010, MoWRM, 2006

National Adaptation Programme of Action to Climate Change, MoE, 2006

National Fisheries Sector Policy and Law on Fisheries 2006, MAFF

Strategy of Land Policy Framework, Council of Land Policy, RGC, 2002

The Education Sector Strategic Plan 2006-2010, MoEYS, 2006

Rural Water Supply and Sanitation Sector (RWSS) 10 Year Sector Strategy: 2001-2011, MRD, 2001

Strategic Framework for Decentralisation and Deconcentration Reform, RGC , 2005

The National Population Policy 2003, National Committee for Population and Development

## **2. Other Key Documents**

A Fair Share for Women: Cambodia Gender Assessment (CGA), MWA, 2004

Cambodia Agriculture Sector Diagnostic Report Prepared for AusAID, Agrifood Consulting International/CamConsult, 2006

Cambodia Socio-Economic Survey, 2003/04, NIS, 2004

Cambodia Demographic and Health Survey 2005, NIS/ORC Macro, 2007.

Cambodia Nutrition Investment Plan (CNIP) 2003-2007, MOH, 2003

Summary Report on the Food Insecurity Assessment in Cambodia, 2003/05  
Cambodia Socio-Economic Survey. September 2007, NIS/FAO/EU

Halving Poverty by 2015: Cambodia Poverty Assessment, World Bank, 2006

Study on the assessment and localisation of the MDG Goal on Reducing Poverty and Hunger, FAO/UNDP, 2003

The Strategy for Improving Food Security and Nutrition under the National Strategic Development Plan (NSDP) 2006-2010, Submission to the NSDP Secretariat from the Technical Working Group on Food Security and Nutrition (TWG-FSN), 2005

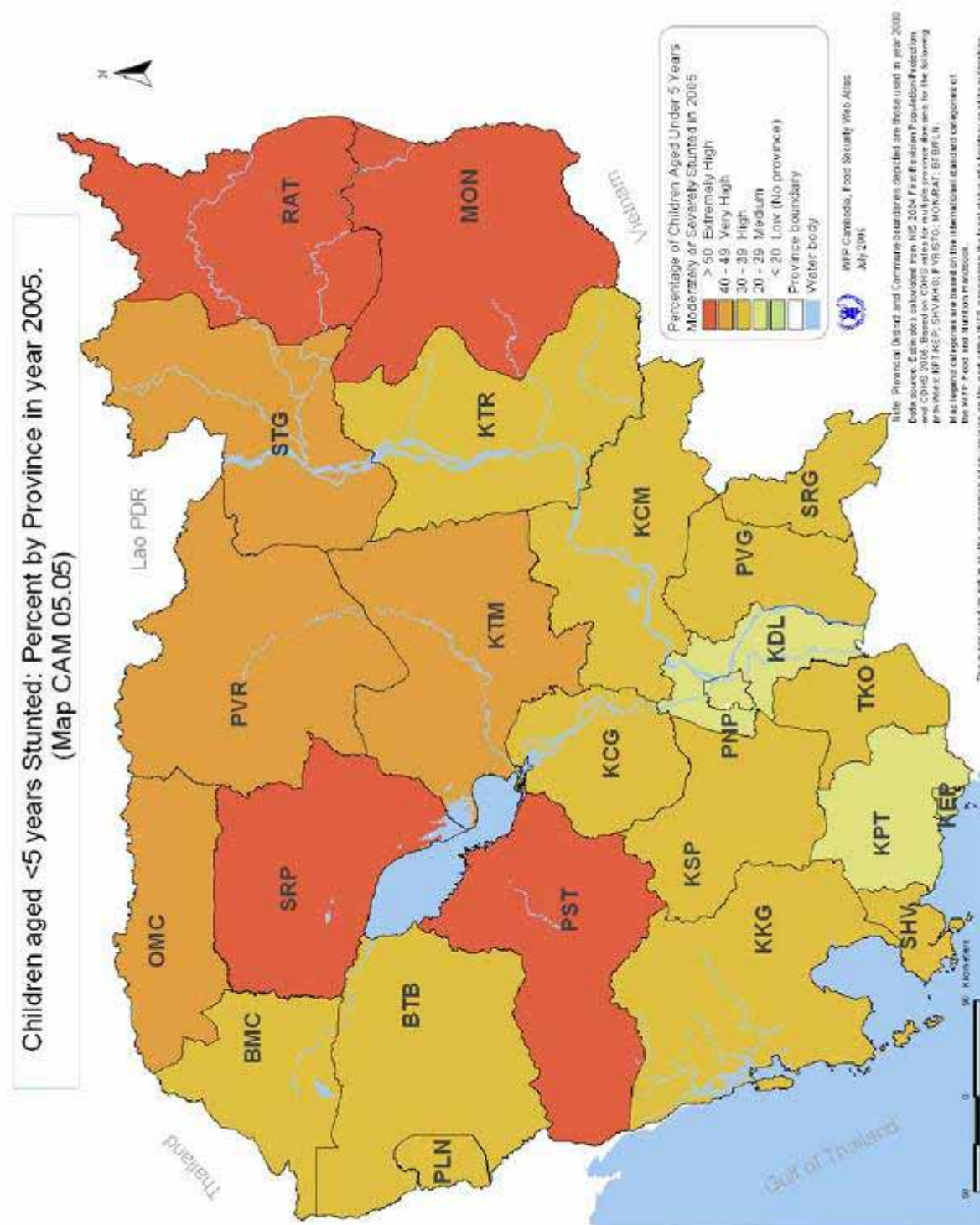
WFP Integrated Food Security and Humanitarian Phase Classification (IPC) for Cambodia, WFP 2007

Managing Risk and Vulnerability In Cambodia: An Assessment and Strategy for Social Protection Phnom Penh, World Bank, 2006

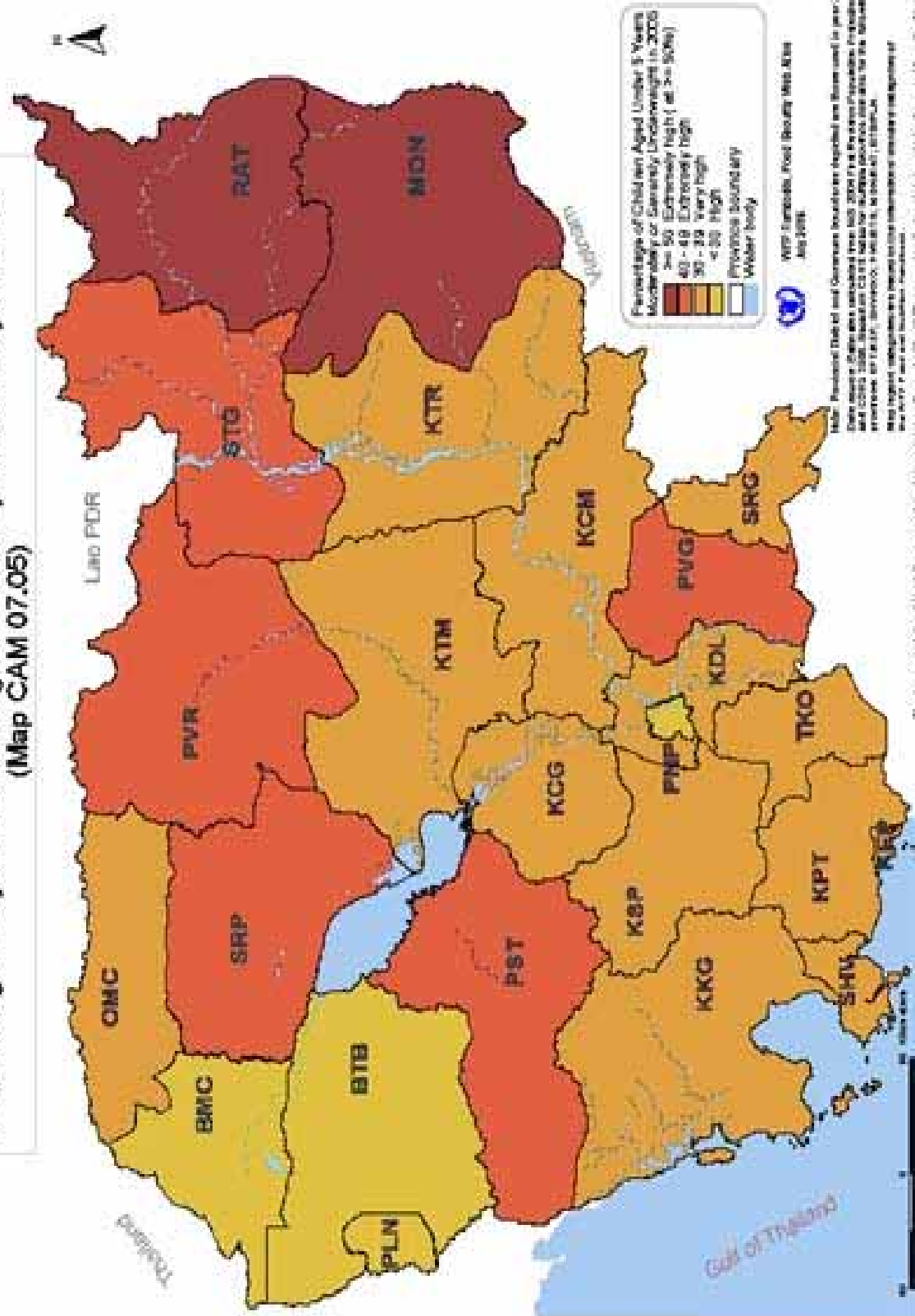
WFP Food Security web Atlas of Cambodia 2006 (<http://www.foodsecurity.gov.kh>).

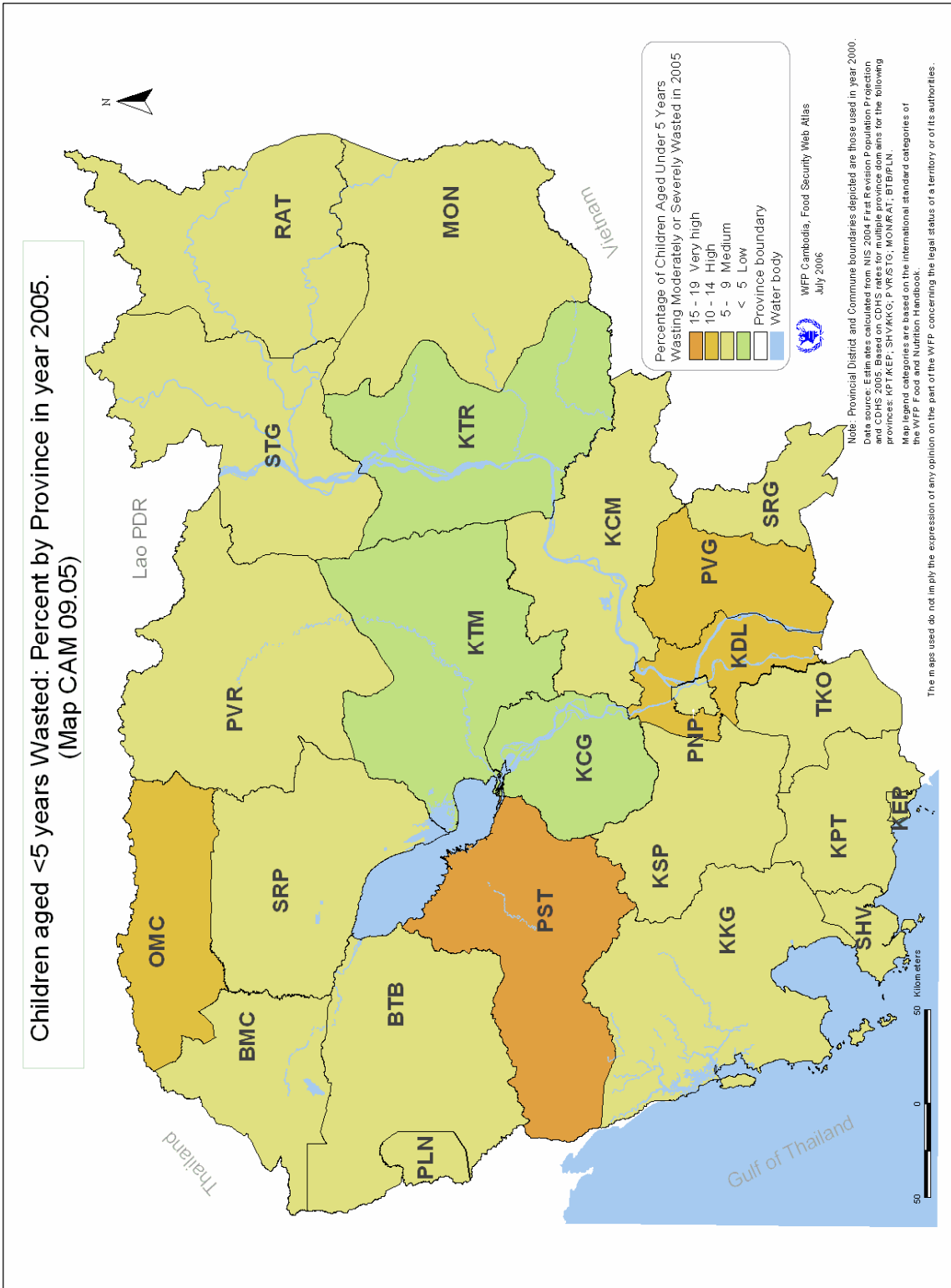
## Annex 2: Food Security Maps Cambodia

Note: The following maps are reproduced from the WFP Food Security web Atlas of Cambodia 2006, which also contains many more maps related to food security and which will be regularly updated. <http://www.foodsecurity.gov.kh>

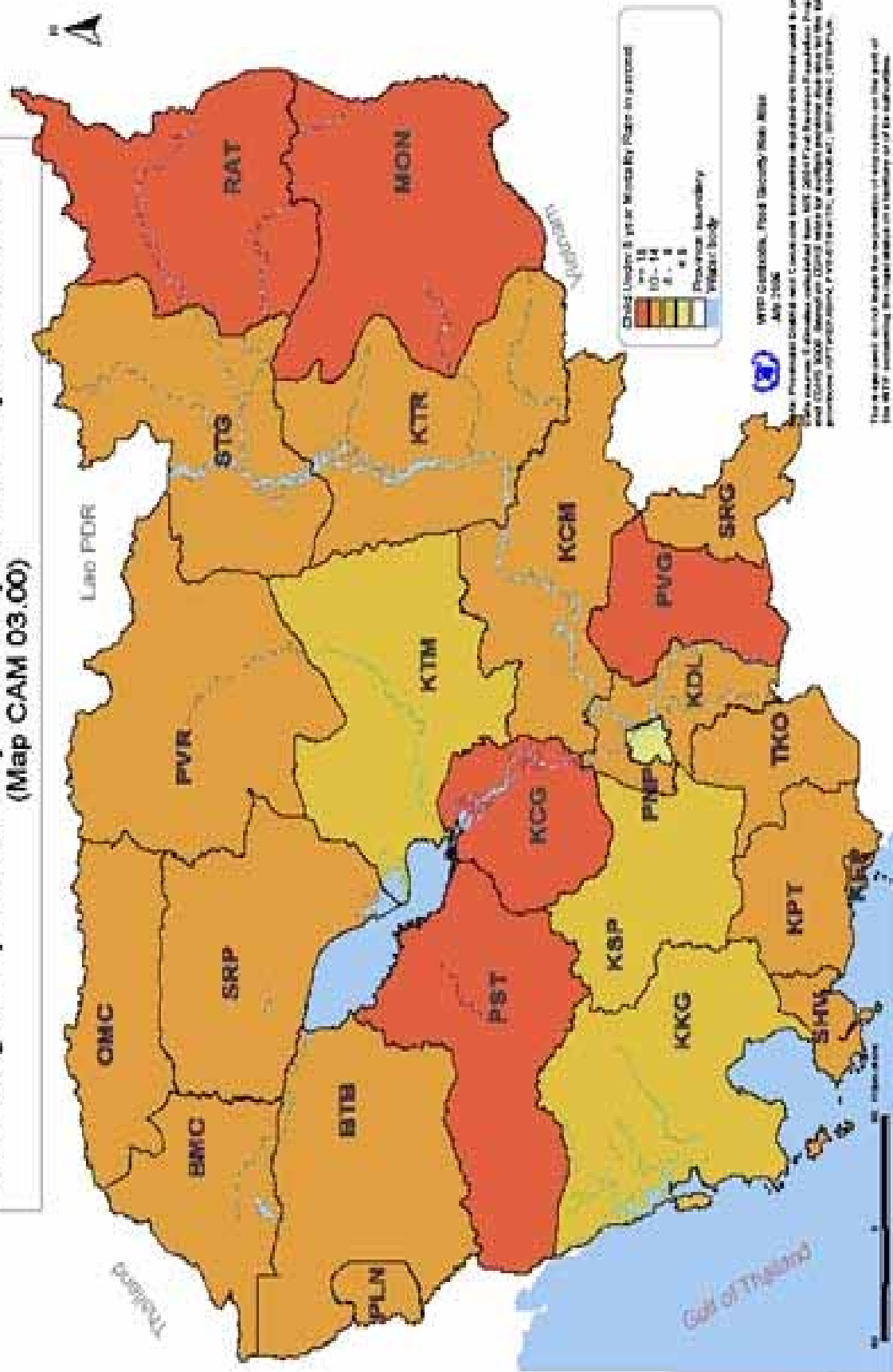


**Children aged <5 years Underweight: Percent by Province in year 2005.**  
(Map CAM 07.05)





Children aged <5 years Mortality: Percent by Province in years 1996-2000.  
(Map CAM 03.00)





**In Cambodia (As of 26.02.2007)**

