LAO PEOPLE’S DEMOCRATIC REPUBLIC
PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY

NATIONAL NUTRITION STRATEGY AND
PLAN OF ACTION
2010 - 2015
A commitment to make a reality the

Vision

of

a prosperous country, free from
malnutrition, food insecurity, and poverty
Foreword

Under the guidance of Lao People Revolutionary Party, the Government of Lao PDR issues the National Nutrition policy to substantially reduce levels of malnutrition, especially of vulnerable groups, and to mainstream nutrition in National Socio-economic Development Plans (NSEDPS) in line with the implementation of the National Growth and Poverty Eradication strategy (NGPES).

According to the National Nutrition Policy of Lao PDR, Prime Minister’s Decree (No: 248/PM from 01/12/2008) Article 2, the Ministry of Health is responsible to coordinate with other Ministries, concerned organizations, and local authorities at all levels in providing guidance and expanding the legislation, such as strategies, action plans, regulations and laws pertaining to nutrition, in order to implement effectively the National Nutrition Policy.

Acting on this decree, The Ministry of Health has developed in close collaboration with all relevant Ministries and concerned organizations the first National Nutrition Strategy (NNS) and National Plan of Action on Nutrition (NPAN). The Ministry of Health, in collaboration with the National Science Council/Prime Minister’s Office, will continue to fulfill its lead responsibility to reduce malnutrition in Lao PDR. As stated in article 3 of the National Nutrition Policy, all ministries, equivalent agencies, and local authorities at all levels as well as all concerned organizations should be aware of, coordinate and jointly implement the National Nutrition Policy. In an effective and efficient implementation of NNS and NPAN, we recognize the significant challenge ahead and are aware of the need for community collaboration, close cross-sectoral/multi-stakeholder coordination, collaboration, and partnership by commits itself to immediate, decisive, and integrated action in order to break the current trends in malnutrition and to achieve the priority development goals of the government including the MDGs.

Vientiane Capital, 26 NOV 2009
Minister of Health

Dr. Ponmek DALALOV
Acknowledgements

The Ministry of Health acknowledges to all officials in health sector, relevant ministries and concerned organizations as well as development partners in active contributions to the development of National Nutrition Strategy and National plan of Action on Nutrition. The institutions involved were as follow:

Government of Lao PDR

Lao Front for National Reconstruction
Mass Organizations
- Lao Federation of Trade Unions
- Lao People’s Revolutionary Youth Union
- Lao Women’s Union
Ministry of Agriculture and Forestry
Ministry of Defense
Ministry of Energy and Mining
- National Energy Committee
- Lao National Mekong Committee
Ministry of Education
Ministry of Finance
Ministry of Foreign Affairs

Development Partners

ADB
Burnet Institute
Concern Worldwide
Danish Red Cross
European Commission
FAO
French Red Cross
GTZ
Health Unlimited

JICA
Lao Red Cross
Oxfam Australia
PSI
Save the Children Australia
The World Bank
UNFPA
UNICEF
WFP
# Table of Contents

Executive Summary

1. Introduction .................................................. 1

2. Nutrition and Food Situation in Lao PDR ................. 4

3. Vision, Mission, Overall Goal and Guiding Principles 12

4. Core Strategies ............................................. 15

5. Resource Mobilization, Implementation, and Monitoring & Evaluation ........................................ 30

Appendix: Definitions & List of Acronyms .................. 36
**EXECUTIVE SUMMARY**

Malnutrition is a major cause of millions of deaths each year worldwide. Lao PDR is one of the highly affected countries of this “chronic crisis”, where 23% of the population and 37% of children under five (CU5) remain undernourished despite impressive gains in economic growth over the past decade. According to the 2008 MDG progress report, reduction of malnutrition is 1 of 3 out of 18 Millennium Development Goal (MDG) target indicators measured that is seriously off track. It is increasingly clear that MDG 1 as well as other key MDGs will not be achieved without decisive and integrated action to address malnutrition.

As a response to this crisis, the Government of Lao PDR has issued the first National Nutrition Policy (NNP) in December 2008. Based on the NNP, a 10-year National Nutrition Strategy (NNS) has been formulated. This document forms the strategic guideline for all stakeholders in the field of nutrition and food security in Lao PDR. As such, it forms the basis for the National Plan of Action on Nutrition (NPAN) as well as for the nutrition and food security component of the MDG Costing and the 7th 5-year National Socio-Economic Development Plan (NSEDP).

The National Nutrition Strategy is based on a holistic causal analysis of the malnutrition situation in Lao PDR and forms a comprehensive approach to address the underlying problems from a ‘farm to table’ food chain perspective. On the basis of this analysis, strategic directions and objectives have been defined: To address the *immediate causes* (at the individual level), the focus will be on improving nutrient intake and reducing infectious diseases that affect the biological utilization of food. To address the *underlying causes* (mainly at the household and community level), there is a need to improve food availability and accessibility. Further, mother and child care practices, environment health and access to health services should be improved. Lastly, a number of strategies to address *basic causes* (mainly at the national level) have been identified. These include improving institutional and human capacity, the collection and dissemination of information, and investments in the field of nutrition and food security. The breadth and depth of the NNS aims to fast track and break the current trends in malnutrition to achieve the priority development goals of the government including the MDGs.
An effective and efficient implementation of the NNS requires rigorous cross-sectoral coordination, collaboration, and partnership (including non-governmental organizations, civil society, private sector and the donors) at all levels.

Recognizing that the implementation may be constrained by available resources, priority will be given to proven interventions with a high benefit/cost ratio targeted to the population with the highest need, as well as human and institutional capacity building. Further, high priority will be given to advocacy and fundraising activities in order to ensure necessary resources. The critical role of evidence-based information from well-conducted research and a functioning nutrition information and surveillance system that can inform policy and program planning as well as implementation, monitoring and evaluation is also emphasized in the NNS.
CHAPTER 1

INTRODUCTION

Malnutrition is a major cause of millions of deaths each year worldwide. Approximately 1 billion people are undernourished with the majority living in developing countries. Young children and pregnant and lactating women are the most vulnerable groups and the most likely to be affected. Under-nutrition is the underlying cause of 3.5 million child deaths and of one-third of child diseases. Lack of access to nutritiously adequate food and health care undermines countries' development potential and threatens public health and security. It is increasingly clear that the various targets of the Millennium Development Goals (MDG) – most of all MDG 1 to reduce extreme poverty and hunger – will not be achieved without decisive and integrated action to address malnutrition as it underlies 6 of the 8 MDGs.

Several international declarations and conventions such as the International Declaration on Nutrition, the World Food Summit and World Food Summit +5 have recognized the need for countries to respect and uphold everyone’s individual right to adequate food, nutrition and health. In addition, the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) address the particular rights of the most vulnerable groups consisting of children and women. The World Food Summit in 1996 set the target to halve the number of undernourished people by 2015, based on the recorded number in 1992. Even though the number has declined slightly in 2002, overall the world is not making sufficient progress to achieve this goal.

The Government of Lao PDR (GoL), as one of the signatories to these international declarations pledged to contribute to the progressive reduction of food insecurity and malnutrition and its ill effects. In addition, the GoL ratified the International Covenant on Economic, Social and Cultural Rights (ICESCR) on February 2007. Article 11.1 of the ICESCR guarantees the “Right to Adequate Food” and has specifically sought to ensure “the right to an adequate standard of living”. Further, the Government of Lao PDR is highly committed to the Millennium Development Goals (MDGs), and has undertaken important measures to achieve the MDGs since the adoption of the Millennium Declaration in 2000. However, the 2008 mid-term MDG progress report showed that while Lao PDR is on track with many MDGs, this is not the case for MDG 1, Target 3 (Halve, between 1990 and 2015,
the proportion of people who suffer from hunger). Chronic malnutrition rates are still alarmingly high at 40% and there has been no observable decline for the past 10 years.

As a response to this crisis, the first Lao National Nutrition Policy (NNP) was approved on December 1st 2008 (No 248/PM). The purpose of the NNP is to provide the political framework for decisive action in order to address malnutrition and food insecurity. The NNP determines the overall scope, objectives, and priority interventions. Further, it defines concrete targets, principles, and roles and responsibilities within the government. To achieve the goals stated in the NNP, it is necessary to define an ambitious but realistic strategy and plan of action.

This document, the National Nutrition Strategy (NNS), is the strategic guideline to all stakeholders, including ministries, development partners, and the private sector on what should be undertaken why in order to address malnutrition and its determinants. As such, it forms the basis for the National Plan of Action on Nutrition (NPAN) and the MDG Costing on nutrition. Together with the NPAN and MDG costing, the NNS will provide the nutrition and food security component of the 7th 5 Year National Socio-Economic Development Plan (NSEDP), 2011 - 2015. The 7th 5 Year NSEDP will be the guideline for the annual plans of all stakeholders participating in the socio-economic development of Lao PDR.

Figure 1 – Mainstreaming Nutrition into the 7th NSEDP
The National Nutrition Strategy consists of five Chapters: Chapter one is the introduction and provides the overall context of nutrition and the NNS. Chapter two gives the overview of the food and nutrition situation in Lao PDR. It presents the magnitude of the overall problem, identifies both acute and chronic problems, and provides a demographic and geographic overview. Further, it displays the main causes of malnutrition in Lao PDR. Chapter three states the vision, mission, and guiding principles of the Government of Lao PDR in achieving nutrition and food security. Chapter four provides the framework of the national nutrition strategy. It elaborates on concrete strategies to address the immediate causes, the underlying causes, and the basic causes of malnutrition. Lastly, chapter five presents an overview on resource mobilization and on how the national nutrition strategy will be implemented, monitored and evaluated.
2.1 Current Status

Despite impressive gains in economic growth, Lao PDR continues to face a significant development challenge to reduce the high levels of malnutrition and food insecurity which prevail across the country. This holds especially true for the most vulnerable group of children under five (CU5). At the national level, approximately 270,000 or 37% of CU5 remain underweight and over the past ten years, this rate has not declined (Figure 2)

Figure 2 – Comparing Economic Growth and Nutritional Status in Lao PDR (2002-07)

Chronic malnutrition remains the biggest problem in Lao PDR, with nearly 300,000 or 40% of CU5 stunted. There is a sharp increase in stunting and underweight between 6 and 24 months. Evidences from several countries suggest that the effects of chronic malnutrition in the first two years of a child’s life can only partially be reversed later in life and translate into smaller adult stature, limited capacity for physical and mental/cognitive work productivity, leading to lower wages, less resilience to social, economic, and natural shocks, and increased reproductive and maternal health risks. Because of this, those who survive malnutrition in
childhood are at a much higher risk of poverty later in life and may even impact the well-being of future generations.

Under nutrition also affects other vulnerable groups including pregnant and lactating women. Among Lao women, as measured by international cut off scores for body mass index (BMI)\(^1\), 14.4% were mild to severely thin for their height. This is important since low BMI in women is associated with higher risk of giving birth to babies with a low birth weight. About 10.8% of infants born in Laos were found to be low birth weight. Intergenerational malnutrition is obviously evident among Laotians. In 2006, National Nutrition Survey results also suggest that overweight among women are on the rise with 14.3 % of women having higher than normal range of BMI.

According to WHO standards and the most recent surveys, Lao PDR faces multiple health and nutrition related problems requiring urgent action. These include:

- Breastfeeding: Only 26%\(^2\) of children under 6 months are being exclusively breastfed
- Vitamin A deficiency: 45% of CU5 and 23%\(^3\) women between 12 and 49 years of age suffer from sub-clinical Vitamin A deficiency
- Anemia: 41%\(^4\) of children under five and 63.5% of children under 2 suffer from anemia
- Iron Deficiency: 22%\(^5\) of women between 15 and 49 years of age suffer from iron deficiency
- Parasitic infestation: 54%\(^6\) of children suffer from Soil Transmitted Helminthes (STH)
- Food security and diversification: 23%\(^7\) of the population is undernourished; 40%\(^8\) of CU5 are stunted

Progress, however, has been achieved via a continuing nutrition education on iodine deficiency elimination. Today, 84% of households in Lao PDR consume iodized salt.\(^9\) Both school children and women of reproductive age were found to be within the WHO range of

---

\(^1\) BMI=Body Mass Index (kg/m\(^2\)). BMI categories are defined according to the WHO guidelines (where BMI normal weight is ranged 18.5-24.9 kg/m\(^2\))

\(^2\) Based on the finding from National Nutrition Survey 2006

\(^3\) WHO 2000. Serum/plasma retinol concentration < 0.7 µmol/l

\(^4\) National Nutrition Survey 2006. Proportion of children < 5 with HB < 110 g / L

\(^5\) National Nutrition Survey 2006. % of non-pregnant women with Serum Ferritin < 15 µg/l

\(^6\) National Nutrition Survey 2006. % of children age 24-59 months with parasite detected in stool

\(^7\) LECS 2002/2003. % of population whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical activity with an acceptable min. body-weight for attained-height

\(^8\) MICS 2006. % of CU with -2SD and more from reference population height to age ratio

\(^9\) WHO 2000. Children 8-12 whose urinary iodine levels are below 100 µg/L
acceptable limits based on urinary iodine excretion. Significant progress have been made in scaling up Vitamin A supplementation, insecticide treated bed nets against malaria, and distribution of deworming tablets to children aged 12-59 months.

Surveys conducted also show that there are specific functional groupings where various forms of malnutrition were highest. These would include poor households, households with unskilled laborers or whose household heads have no or low education, households that live in villages with little or no access to key infrastructure and services like access to sanitation and safe water facilities. Specific ethnic groups were found to be at a higher risk of under-nutrition like the Sino-Tibetan and Hmong-Mien and Austro-Asiatic ethnic groups.\textsuperscript{10} These ethnic groups can be found living mostly in the Northern Central and Southern Highlands of the country.

\textbf{2.2 Causes of Malnutrition and Food Insecurity}

The National Nutrition Policy, based on the conceptual framework (UNICEF, 1990), identifies the main causes of malnutrition in children at the immediate, underlying, and basic levels in Lao PDR. The NNS is based on the causal analysis from the NNP. However, the underlying and basic causes have been slightly adjusted to acknowledge the progress that has been made since its inception and to consider new information (for details, please refer to the Appendix). While immediate causes are in general a function of individual behavior and circumstances, underlying causes are mostly associated with household and community behavior and circumstances. Basic causes are mainly due to problems at the national level.

\textsuperscript{10} Source: CFSVA (WFP, 2006)
2.2.1 Immediate Causes

Immediate causes of malnutrition are inadequate nutrient intake and food-, water-, vector-borne and infectious diseases. Adequate nutrient intake requires both sufficient quantity and quality of nutrients consumed. At the national level, diets have sufficient caloric intake on average, which is one indicator of quantity of intake. However, this hides geographic and seasonal disparities. In addition, the high prevalence of certain micronutrient deficiencies indicates that the quality of diets is insufficient – particularly, diets lack adequate diversity to ensure the necessary consumption of foods rich in essential micronutrients (vitamins and minerals). In addition to inadequate nutrient intake, a high prevalence of diseases further compromises the ability of the body to absorb nutrients.

Among various causes leading to inadequate nutrient intake the most prominent ones are:

- Sub-optimal infant and young child feeding practices. Although most mothers breastfeed their children, late initiation of breastfeeding and low rates of exclusive breastfeeding contribute to malnutrition in infants. Evidence also suggests that many young children are
not fed often enough nor do they receive enough food – both in term of quantity and quality (inadequate macro- and micronutrient intake) per feeding.

- Widespread practice of food restrictions or taboos affects health and nutrition of lactating mothers and their infants. The types of food restricted after delivery often deprive women, who are already highly likely to be anemic, of rich sources of iron.
- Lack of dietary diversity. Lao diets are highly staple-focused, with too low intake of fats and fruits. Food insecure households also have extremely low intake of proteins which contribute to low intake of micronutrients. Inadequate micronutrient intake leads to micronutrient deficiencies such as iron deficiency anemia, vitamin A deficiency, etc.

Evidences to support these analyses of determinants of malnutrition include data derived from 2002/2003 Lao Expenditure and Consumption Survey (LECS). The food consumption data from this survey showed that while the national average exceeded the daily energy recommended allowances, 23% of the population was food deprived with food consumption levels lower than the minimum daily recommended allowances. There was also a problem of lack of diversification. Lao diets were typically high in staples. Total energy intake was derived from 73% carbohydrates, 12% protein and 15% fat. In the 2006 National Nutrition Survey, similar patterns were observed. Lao diets were lacking in fats and oils and had low intake of animal proteins and of fruits which lead to inadequate micronutrient intake.

The synergistic relationship between infectious diseases and malnutrition are clearly evident in Lao PDR. Diarrhea, malaria and parasitic infections occur at alarming rates. Historically, malaria is one of the leading causes of morbidity and mortality and has been implicated in anemia. In recent years though, some progress has been achieved with significant reductions in malarial cases and deaths resulting from it. Incidence of diarrhea was recorded at 12.4% in the 2006 Multiple Indicator Cluster Survey (MICS3) and was found to be associated with poor sanitation. It was also found that diarrhea peaks at 12-23 months which coincided with the weaning period. Especially during this period, feeding children with safe food and clean water plays a vital role in avoiding food-or waterborne diseases. Nearly 54% of children between 24-59 months have parasitic infections making it a public health problem. Also acute respiratory infections (ARI), measles and dengue fever as well as several vaccine preventable infectious diseases impact children's appetites and impair absorption making them more prone to malnutrition.
2.2.2 Underlying Causes

The availability of adequate food strongly impacts the nutrition and food security status. The most significant constraint to the availability of food in Laos is the low level of domestic production of food items.

The low level production is mainly the result of low levels of productivity and high risks in the agricultural sector. The main causes of this include: small size of land holdings – with some 50% of the farming households owning less than 1.0 ha of land; prevalent absence of secure land tenure; high percentage of cropping area that is dependent on often erratic rainfall in the wet season, with little possibility of dry season cultivation; proneness to natural disasters brought by climate change, including flooding, landslides, drought, etc; lack of affordable good quality inputs such as fertilizers, seed and tools and machinery; inadequate agro-processing and storage technologies to reduce post-harvest losses; lack of appropriate agricultural marketing infrastructure and services; and insufficient knowledge and skills that decrease productivity and impose food security risks. In addition, Laos is becoming increasingly inter-linked with regional and global economies. Under such open economy conditions, the country’s food supply as well as its ability to access food markets will become the subject of exogenous shocks. Such disruptions can leave significant proportions of the population facing severe food shortages and compromised nutritional status, including hunger and starvation.

People must have access to adequate food in order to meet their dietary needs and to sustain their health and nutrition status. A number of factors influence access to food. From the physical point of view infrastructures such as roads, river transport and markets are needed to ensure that food is available in the right places, at the right time for utilization. Often, it is also essential to process the food seasonally so that the consumer can access it in a form that facilitates its utilization and addresses seasonal availability. From an economic point of view, the consumer requires adequate income and financial resources required to access and utilize the food that is available. In the Lao context, improvements are still needed in the physical facilities as well as in the income and financial conditions in order to ensure that the population can access food in the right place, at the right time and in the right form. In many areas, wild meat, insects and non-timber forest products are an important component of the diet. Therefore, the preservation and sustainable management and utilization of natural resources are important for assured food and nutrition security.
Poor mother and child care practices were also identified as an underlying cause of undernutrition. Caring practices for children and mothers, including food taboos and the intra-household allocation of resources, mediate the effects of access to food and health services, as well as the environment, on nutritional status. Care is manifested in the ways a child is fed, nurtured, taught and guided. It is the expression by individuals and families of the domestic and cultural values that guide them and the extent to which they can practice them. Mothers still lack knowledge on proper eating practices during and after pregnancy. Food restrictions/taboos are frequently practiced by women across all ethnic groups during pregnancy and after childbirth which had negative effects on their nutritional status and on pregnancy outcomes. Protein rich foods such as meat, fish and eggs are oftentimes omitted from the diets which predispose mothers to iron-deficiency anemia among other forms of malnutrition. There is also evidence that shows that many mothers do not know how to properly feed their infants and young children as shown by late initiation of breastfeeding, low rate of exclusive breastfeeding, and early introduction of water and inappropriate complementary foods.

Poor environmental health in terms of unsafe water, poor sanitation and hygiene practices as well as inadequate access to health services are also identified as one of the underlying causes of malnutrition. Although progress has been made in improving access to safe water, the 2005-2006 survey still showed that 60% of rural households used water with high levels of fecal contamination, both at source and at home. The latter is associated with unsafe storage practices. Washing of hands after using the toilet was also not widely practiced with only around 21% of rural households practicing it. It is also very likely that only a small percentage of women wash their hands before cooking and feeding the young children. Significant disparities also exist in terms of sanitary latrines. More than two-thirds of the first priority districts still do not have proper waste disposal systems. The low coverage of routine immunizations during pre- and post-natal care contributes to the high level of infectious diseases in mothers and children.

2.2.3 Basic Causes
The basic causes of the nutrition problems in Lao PDR were found to be deeply rooted in a number of factors. Food security and nutrition objectives have not yet been incorporated in national development policies and plans which consequently resulted in limited investments
made for nutrition and related actions. Knowledge/information systems, targeted initiatives and programmes supported by consistent, coherent and effective actions at all levels of government are required to ensure a sustainable, effectively integrated and holistic nutrition strategy and action plan. Timely and forward looking assessments are needed for the design and implementation of appropriate policies, prioritized investment programmes and interventions to address nutrition and food security challenges also need to be put in place. This underscores the need for capacity-building and development in the areas of formulating development policies and plans with nutrition consideration as well as translating plans into specific programs and interventions that will ultimately result in improvements in individual’s nutrition and health status.
CHAPTER 3
VISION, MISSION, OVERALL GOAL AND GUIDING PRINCIPLES

3.1 Vision

A prosperous country free from malnutrition, food insecurity, and poverty

3.2 Mission

Establish effective overall mechanisms through which policies, strategies, programmes, and activities can be identified, prioritized, coordinated, implemented, monitored, and evaluated for the attainment of nutrition and food security in Lao PDR

3.3 Overall Goal

Since there is no single measure of nutritional status and food security, the overall goal has been translated into a number discrete, empirically observable and measurable targets by the Year 2015 (attainment year of MDGs) and the Year 2020 (year for exiting Less Developed Country status and entering Medium Income Country status):

Table 1 – Overall Goal Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2006 Baseline</th>
<th>2015 Target</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Malnutrition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate of stunting among CU5 (NCHS standard)</td>
<td>40</td>
<td>34</td>
<td>28</td>
</tr>
<tr>
<td>Rate of wasting among under CU5 (NCHS standard)</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Rate of underweight among CU5 (NCHS standard)*</td>
<td>37</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>Rate of thinness of women among reproductive aged (WRA) (BMI&lt;18.5kgm⁻²)</td>
<td>14</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Rate of anemia among CU5 (Hemoglobin &lt;11g/dL)</td>
<td>41</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Rate of Anemia among women of reproductive age (WRA) (Hemoglobin &lt;12g/dL)</td>
<td>36</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Iodine deficiency among school age children (urinary iodine excretion &lt;100µg/L)</td>
<td>27</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Iodine deficiency among women of reproductive age (WRA) (urinary iodine excretion &lt;100µg/L)</td>
<td>13</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Vitamin A deficiency among CU5 (serum retinol &lt;0.7)</td>
<td>45</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Percentage of households with low &lt;1800 KC energy intake*</td>
<td>TBD</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant mortality rate (IMR)</td>
<td>70/1,000</td>
<td>49/1,000</td>
<td>30/1,000</td>
</tr>
<tr>
<td>Under 5-years old child mortality rate (CU5 MR)</td>
<td>98/1,000</td>
<td>80/1,000</td>
<td>40/1,000</td>
</tr>
<tr>
<td>Maternal mortality rate (MMR)</td>
<td>405/100,000</td>
<td>260/100,000</td>
<td>100/100,000</td>
</tr>
<tr>
<td><strong>Poverty</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty Head Count Ration (HCR)</td>
<td>TBD</td>
<td>24%</td>
<td>8%</td>
</tr>
</tbody>
</table>

* MDG Goal indicators. MDG Goal Indicators will be used as key proxy indicators to measure progress towards MDG 1
3.4 Guiding Principles

The National Nutrition Strategy is based on four principles, which are aligned with the National Nutrition Policy (NNP). The Principles are also in line with the overarching national socio-economic development goals of accelerated and sustainable growth, the Millennium Development Goals, the goal of achieving Medium Income Country (MIC) status by 2020, as well as with the Vientiane Declaration on Aid Effectiveness.

3.4.1) Define a Realistic, But Bold Strategy

- **National concern:** Address entire problem for the entire population
- **Step-change:** Define a strategy that enables achievement of ambitious goals and a step-change in the field of malnutrition

3.4.2) Promote Good Governance

- **Transparency:** Provide full transparency on roles and responsibilities as well as on progress, input, output, and outcome
- **Accountability:** Define strategies that are discrete, concrete, measurable, and have clear responsibilities
- **Harmonization:** Vertical and horizontal integration as well as convergence of multi-stakeholder actions will guide planning, implementation and monitoring and evaluation

3.4.3) Achieve Short-term Measurable Impact and Sustainability

- **Immediate impact:** Achieve significant immediate impact via scaling up proven interventions
- **Measurable impact:** Achieve measurable impact within the next 2-5 years
- **Integration:** Ensure National Nutrition Strategy forms basis for nutrition and food security component of the 7th NSEDP and annual plans of ministries and development partners
- **Institutionalization:** Establish government-led coordination mechanisms for planning, implementation, management and monitoring/surveillance and evaluation of the national nutrition program
- **Capacity building:** Whenever feasible, choose in-country capacities over external / unsustainable solutions
• **Decentralization:** Use bottom-up planning supported by increased implementation at provincial and district levels

• **Local empowerment:** Ensure local communities, women and vulnerable groups play an active decision-making role in the planning and implementation of nutrition and food security interventions

• **Cultural sensitivity:** Acknowledge and ensure cultural heritage and identity

• **Environmental sustainability:** Ensure that all interventions strike a balance between the nutritional status and food security of the country and the long-term environmental sustainability. Control for adverse impacts on nutrition from other development sectors

3.4.4) Maximize Impact and Cost Effectiveness

• **Intervention focus:** Focus on interventions that are able to have a fast impact on the overall goal indicators (for details, please refer to chapter 3 of the NPAN).

• **Demographic focus:** Focus on vulnerable and disadvantaged groups with the highest need and impact:
  - Priority 1: Children under two (CU2)
  - Priority 2: Children under five (CU5) and Pregnant & Lactating Women
  - Priority 3: Other vulnerable groups, such as school age children, individuals living with HIV / AIDS, in transition, or in emergency

• **Geographic focus:** Focus on the poorest districts / geographic areas with high absolute and high relative numbers of vulnerable and disadvantaged groups (incl. ethnic minorities, groups living in remote upland areas, groups that have been relocated / resettled)

• **Sequencing:** Ensure simultaneous short-term impact activities and long-term development activities based on priority setting. Sequence activities based on intervention, demographic, and geographic focus (see above)

• **Cooperation and synergies:** Ensure efficient cooperation, collaboration, and partnership between all relevant stakeholders. Maximize synergies between stakeholders, interventions, and delivery channels

• **Build on existing capacities:** Leverage on existing capacities as much as possible
CHAPTER 4
CORE STRATEGIES AND PRIORITY AREAS OF INTERVENTION

Guided by the Vision, Mission, Goal and Guiding Principles, the Lao PDR NNS provides the strategic framework to address the different Causal Dimensions of malnutrition and food insecurity:

Figure 4 - Strategic Framework

Each of the three strategic directions has a number of Strategic Objectives (SO), one for every cause of malnutrition that has been elaborated in Section 2. In turn, each Strategic Objective has a number of priority interventions that should be taken in order to achieve the vision of food and nutrition security in Lao PDR.

4.1 Strategic Direction 1 – Addressing Immediate Causes
This strategy deals with ways in which dietary intake can be improved and also how food, water, and vector borne diseases as well as infectious diseases can be controlled and eliminated to ensure that there is optimal biological utilization of food.
The strategic direction has two main strategic objectives (SO):

1. Improve Nutrient Intake
2. Prevent food-, water- vector-borne, and infectious diseases that undermine nutritional status

4.1.1 SO1: Improve Nutrient Intake

Inadequate intake of calories, proteins and fats often lead to stunting (chronic malnutrition), wasting (acute malnutrition), and underweight (chronic/acute malnutrition) among CU5, as well as unacceptable levels of chronic energy deficiency (CED) among women of reproductive age (WRA). At the other extreme, i.e. high energy intake, there are a few reported cases of overweight or obesity, leading to potential increases in non-communicable nutrition-related disorders like diabetes, hypertension and cardio-vascular diseases. A significant lack of dietary diversity leads to micronutrient deficiencies. The most serious deficiencies relate to the low intake of iron, folate, Vitamins A and B, iodine and zinc, which are especially significant public health problem among young children and WRA.

Action Areas

This strategic objective is especially targeted at CU5 and WRA. The following action areas are proposed in the NNS in order to promote adequate and appropriate macro- and micronutrient intake for better nutritional outcomes.

a) Promote Early Initiation of Exclusive Breastfeeding and Prolonged Breastfeeding and Complementary Feeding as Part of Positive Caring Practices

Breastfeeding is the unequalled way in which to provide ideal food for the healthy growth and development of infants, and as an integral process of the reproductive system that also contributes to the health of mothers. Programmes will promote early initiation and exclusive breastfeeding for the first six months as well as provision of nutritionally adequate and safe complementary foods thereafter while encouraging continued breastfeeding up to two years or beyond. Revitalization of mother-baby-friendly hospitals and establishments of mother-baby friendly workplaces and community-based initiatives to support lactating mothers as well as legislations in support of Infant and Young Child Feeding (IYCF) will also be pursued.
b) Provision of Essential Macro and Micronutrients
Targeted food and nutrient supplementation as well as the production and consumption of nutrient-rich foods including fortified products will be promoted in order to ensure children 6-59 months and WRA receive adequate amounts of micronutrients, including Vitamin A, Vitamin B, Iron and Iodine. In addition home fortification through the use of micronutrient powders (sprinkles) will be implemented. Necessary legislations and private-public partnerships will be put in place to ensure adequate and sustained supply of micronutrients.

c) Promote Supplementary Feeding, Screening and Treatment of Acute Malnutrition and Other Diet Related Disorders
Geographically specific supplementary feeding programmes will be established for emergency situations, and for better targeting of children under five, pregnant women (especially toward the second trimester for improved birth-weight) and lactating women, and school children. This will provide a valuable safety net for poor households with malnourished children. Screening programmes will be implemented to identify those at immediate and higher risk of malnutrition, as well as those at risk and/or in need of treatment for nutrition-related illnesses such as diabetes. Children under five-years, mothers and other WRAs will especially be targeted for identification and treatment.

d) Promote Nutrition Education
Education and training programmes, including guidelines on how to access objective, consistent and accurate information about appropriate feeding practices, will be implemented. In particular, knowledge and good practices will be provided on the importance of nutrition for a healthy life, recommended periods of exclusive breastfeeding and complementary feeding; timing of complementary foods, types and quantity of food to give; how to prepare these foods safely; awareness of healthy lifestyles; and how to obtain more and better food supplies – for example through home gardens and increased use of indigenous plants and animal husbandry (for animal proteins). Integration of nutrition into the school curriculum will also be undertaken.

4.1.2 SO2: Prevent and Reduce Food-, Water-, Vector-borne, and Infectious Diseases
Food, water and vector-borne diseases, including acute respiratory infections (ARI), diarrhea, measles, parasitic infections and HIV/AIDS and related conditions are identified as the main causes of severe malnutrition, illnesses and death especially among children and mothers that
the NNS targets. This strategic objective recognizes that the nutritional status of the Lao PDR population is highly dependent on the prevailing situation of infectious diseases and the way in which these diseases affect the health and hence the intake, retention and utilization of food. It outlines measures that need to be taken in order to address disease-related issues to bring about desired nutritional status.

Action Areas
The following Action Areas focus on improving sanitation and hygiene services for children and mothers.

a) Promote De-worming
The de-worming programme will be rolled out to help thousands of school children and mothers to get rid of parasites. Children 1 to 11 years old will be given de-worming tablets, and health workers will teach children and parents about intestinal parasites, explain the importance of basic hygiene practices like washing hands, and collect stool samples to determine the proportion of children infected by worms.

b) Promote Malaria and Dengue Fever Prevention
Malaria prevention and treatment measures will include public awareness on the causes of malaria, provision of bed nets, diagnosis and treatment of uncomplicated and severe malaria, the provision of alternative treatments for pregnant women and children with malaria, reporting, epidemiology and evaluation.

Prevention of dengue is the most appropriate method of addressing this disease as existing treatments are inadequate. A community education and clean-up program will be promoted to teach residents about the importance of throwing away unused buckets and other containers which could stagnant water and become potential breeding grounds for the vector.

c) Promote Prevention and Management of Malnutrition Associated to HIV / AIDS
Guidelines will be developed for nutrition support for HIV-infected people/AIDS patients and for infants of HIV infected mothers in order to promote Prevention of Mother to Child Transmission (PMCT).
d) Promote Immunization
Childhood immunizations will be expanded to prevent diseases like measles, diphtheria, pertussis and tuberculosis that are associated with increased malnutrition. In future, consideration will be given to the inclusion in the national immunization program of vaccines against rotavirus (a significant cause of severe diarrhea and dehydration) and pneumonia as both of these diseases adversely affect the nutritional status of the Lao people.

e) Promote IMCI11 Including Diarrhea Prevention and Control
Attention will be given to Integrated Management of Childhood Illness (IMCI), a hospital and community based programme for management of pneumonia, acute otitis media, diarrhea, and malaria. IMCI is based on an integrated approach involving a consultation process that allows the identification and treatment of these and other febrile conditions as well as undernutrition. Under the IMCI, Oral Rehydration Therapy (ORT), Oral Rehydration Solution, and home treatment and prevention of ARI will be promoted, and use of zinc for diarrhea treatment will be undertaken.

4.2 Strategic Direction 2 – Addressing Underlying Causes
This strategic direction deals with ways in which sufficient quantities of nutritionally adequate food can be made available and accessible at the right places, at the right times and in the right forms throughout the country; and also deals with issues related to knowledge and practice of appropriate nutrition and health practices, as well as those of food quality and safety.
Four strategic objectives have been formulated to guide the choice Strategic Interventions in these regards:
1. Increase and Diversify Domestic Food Production
2. Improving Access to Food
3. Improving Mother and Child (M&C) Care Practices
4. Improve Environmental Health and Food Safety/Access to nutrition and health services

11 Integrated Management of Childhood Illness
4.2.1 SO3: Increase and Diversify Domestic Food Production

The low agricultural productivity and the risky nature of farming are the main constraints to increased food production and availability at household level. In order to achieve nutrition and food security, Laos needs to increase the amount and diversity of food that are available to the population. Under this Strategic Objective, there are three broad categories of Strategic Interventions that are suggested for achieving the objective. They cover activities related to increasing and stabilizing domestic production (including home food production), policies and programmes regarding imports and exports, food reserves and the management of food distribution channels.

Action Areas

a) **Expand and Intensify the Production of Nutritionally Enhanced Food**

Domestic, particularly, home food production will be increased and intensified through programmes that promote vegetable and animal food production in homes and communities through technology transfer, provision of seeds and planting materials, poultry, small animals and fish fingerlings. Sustainable and efficient use of productive resources – including improvement of production technologies and extension services; use of crop and livestock varieties that are more adaptable to pests, drought and flood; use of better machines and tools; more efficient use of irrigation and water resources will likewise be promoted.

b) **Promote Ecologically Sound Natural Resources and Land Utilization and Management, and Protection**

Improved management of forests and biodiversity, environmental protection and conservation, as well as improved land use planning (agricultural vs. non-agricultural uses) and management methods will help to ensure that the increase in and diversification of products are sustainable.

c) **Stabilize Food Supplies**

In order to counter negative fluctuations in the supply of food, there will be improvements initiated in the management of emergency food reserves, disaster preparedness and response, food storage, and food import and export, price policies and monitoring, and actions to promote market integration.
4.2.2 SO4: Improve Access to Nutritious Food

Even if food is available, people often lack access to it and thus cannot utilize it to improve or maintain their nutritional status. The barriers to access are often physical such as isolation and poor transport facilities. They can also be socio-economic ones, especially inadequate income. This strategic objective addresses those and other barriers to access to food.

Action Areas

a) Improve Physical Access to Food

In order to provide remote communities with easier access to markets and basic services, there is a need to develop the network of main and feeder roads, including rural roads and also footpaths that may be the only link that some very isolated areas have to the road network. Road construction will be based on needs assessments to ensure that they improve access to markets and basic services and are constructed only where they are most needed. In addition input and output markets, post harvest and storage facilities and the food distribution system will be developed.

b) Improve Economic Access to Food

The creation of small and medium enterprises and employment opportunities will be supported, with emphasis on rural areas with high levels of poverty and food and nutrition insecurity. In addition, improvements in access to credit and land by the poor will be supported. This will help them deal with acute food shortages and prevent malnutrition in the long-term. Special attention will be given to the creation of economic opportunities for women and increasing their access to resources, especially land and credit.

c) Improving Immediate Access to Food by Chronically Vulnerable Groups

Special programmes are required to ensure immediate as well as long-term access to food by the chronically poor, food insecure and nutritionally deficient households. The focus of these programmes will be on assisting such households to meet immediate food needs while enabling them to make investments in their own capital and livelihoods, which they would otherwise not be able to make because of their short term concern with meeting immediate food needs and also because of the high adversity to risks which their situation puts them in. The needs of women and children among chronically vulnerable groups will be highlighted and given special attention.
d) Improve Women’s Access to Food and Other Resources
Promoting gender equality in accessing resources (including intra-household food distribution) and opportunities is an important component of the NNS, and attention will be paid to ensuring that women have improved access to resources and are treated fairly when resources are allocated. Areas of focus in this regard include land entitlement, credit provision, entrepreneurship and income generating opportunities, and education. This is important in the field of nutrition and food security (NFS) as studies have shown that most incremental income obtained by women is spent on food and other needs of the family.

4.2.3 SO5: Improve Mother and Child Care Practices
Inadequate or inappropriate nutritional practices, particularly with regard to mother and child (M&C) care can hinder the proper utilization of food even if it is available and accessible. For example, there are some widely practiced food taboos such as food restrictions after child delivery, which are harmful to the nutritional status of the people. In addition, there is also the broad issue of people just not knowing enough about what the best nutrition and health practices are. Therefore, this strategic objective underscores the need to educate mothers about when to seek proper care and to identify early solutions to their health and nutrition problems. The suggested strategic interventions emphasize the strong need to impart knowledge and to encourage appropriate practical action through health and nutrition education (for strategy on nutrition education, please refer to strategic objective 1), as well as through influencing cultural practices. Special attention is paid to the needs of infant and young children, pregnant women, lactating mothers, adolescents, school children, and WRA.

Action Areas
a) Integrate Nutrition into Health Education
Nutrition education programmes will be made available to mothers and other caregivers of infants and young children and will focus on training in antenatal and postnatal nutritional care. In addition, the knowledge, skills and attitude components on nutrition and health will be integrated into the school curriculum. The aim is to enhance the quality of life of all people by improving the health status of individuals, families, communities, and the nation, and also reduce the economic and social costs of diseases and their consequences.
b) Promote Family Planning Practices / Responsible Parenthood

The promotion of family planning practices will address the interlinked areas of populations, the economy, health and nutrition. It recognizes that previous emphasis on improved family planning services have contributed to a decline in mortality rates. Giving women access to contraception and family planning resources will help to boost economic growth and hence increased means to access food. It will also reduce high birth rates and thus contribute to the reduction of endemic poverty, food insecurity and malnutrition, poor education, and high numbers of maternal and infant deaths.

4.2.4 SO6: Improve Environmental Health and Access to Nutrition and Health Services

There are high incidences of drinking and recreational water contamination, as well as food and feed poisoning. The main sources of these problems are chemical and drug residues; poor handling and processing practices; zoonotic diseases that are transmitted between people and animals. The NNS aims to promote a healthy, safe and hygienic environment and to facilitate the implementation of regulations and controls regarding food and feed quality and safety. This strategic objective addresses the need to build private and public sector capacity for assured environmental health and food safety, including facilities, institutions, laws and regulations.

Action Areas

a) Improved Access to Safe Water and Sanitation Facilities, Hygiene Behavior and Household Water Treatment and Safe Storage

The promotion of access to sufficient quantities of safe water and adequate facilities for sanitary disposal of excreta, and introduction of sound hygiene behaviors in household, community and public places will be of foremost importance to reducing the burden of disease caused by these risk factors.

The programme for community/household water treatment (HWT), also known as managing water at the point of use (POU), will include a wide array of treatment and storage techniques (e.g. boiling, filtration, chemical, solar, and UV lamp disinfection, and flocculation); safe storage (e.g. narrow-mouth, screened, and covered containers, and taps and spigots) to prevent recontamination. Education on a variety of water-related hygienic practices including
hand washing and controlling of home-originating pollution water practices will also be provided.

b) Promote Improved Food Quality and Food Safety
Efforts to improve food quality and safety will focus on enhancing the capacity to help protect the community from food safety hazards, anticipate and communicate emerging food safety threats, develop food processing and management tools that conform to international standards or guidelines such as CODEX Alimentarius, GHP, GMP, HACCP and GAP systems. Promoting food quality and safety will ensure the availability of safe and better quality nutritious foods and will also help to foster a regulatory system that is based on assessment of public health risks and science-based management. The system will include the enhancement of food safety awareness and compliance to food handling, water quality, hygiene, and sanitation standards of food establishment operators at various critical points in the farm to table food chain.

c) Improved Access to Nutrition and Health Services
Access to health services has always been a challenge for residents living in remote, rural areas of Laos. Promoting improved access to and the quality of health care services is both an important source of care for rural residents, and can also assist in the development of an adequate supply of community based services including the availability of adequate number of highly skilled, professional health workers at all operational levels. Other venues for outreach or providing health services like schools will also be improved. Private-public partnerships will also form part of this strategy.

Conditional cash transfers (CCT) are a widely used mechanism through which regular monetary transfers are provided to the poor on the condition that they comply with certain requirements with regard to same practices. MNCH interventions in Laos will employ such transfers to promote the uptake of a range of preventive services that include antenatal care, assisted deliveries, initiation of breastfeeding and other nutrition interventions, and immunization of mothers and infants. It will be imperative to ensure that when cash transfers are provided for the uptake of preventive services, the concerned services are effectively delivered, are of good quality, and are provided at minimal costs for the concerned poor.
One of the motivations for providing CCT is to ensure that increased budget availability goes hand-in-hand with improved efficiency in the provision of services, including increased output per health worker; locally appropriate cost-effective interventions are used; and there is a movement away from financing mechanisms that foster excessive diagnostic and treatment practices – such as revolving drug funds at secondary and tertiary facilities.

d) Promotion of Health Impact Assessment and Adaptation to Environmental Change
The health and well-being of people is determined by a wide range of economic, social and environmental influences and climate change. It will be necessary to promote, enhance and incorporate Health Impact Assessment (HIA) into environmental and planning impact assessment to ensure that proper consideration is given to health issues. Increasing awareness on health impacts and climate change will assist other sectors to better understand the rationale for HIA and the processes involved.

4.3 Strategic Direction 3 – Addressing Basic Causes
Inadequate institutional arrangements, coordination mechanisms, partnerships, planning, information, and investment play a large part in constraining availability of and access to food and its appropriate utilization at the various levels of the food chain. The third strategic direction addresses these concerns. The strategic objectives below are used to identify measures for strengthening the institutional arrangements and governance structures that shape the government’s nutrition and food security activities as well as enhancing the existing human resource capacity, information, and investment programmes that work in this area.

4.3.1 SO7: Improve Institutions and Coordination
At present, there is no effective coordination mechanism to integrate food security and nutrition interventions. As a result, there are several institutional constraints when it comes to addressing the implementation of nutrition and food security policies and programmes at all levels. It is, therefore, important to put in place institutional and legal frameworks, leadership structures, advocacy and coordination systems that can bring together the relevant Ministries, Departments and other institutions for cost-effective implementation of FNS activities. To achieve this goal requires significant efforts to enhance the existing mechanisms for intra-governmental coordination. Such efforts will help create an enabling environment to facilitate
the full participation of the mass organizations, private sector, civil society and NGOs, communities and Laos’s external development partners. This strategic objective thus recognizes the need to strengthen the existing governance of nutrition and food security.

Action Areas

a) Implement and Strengthen Institutions for NFS and Ensure Its Coordination

Enhancing the existing structures and practices of coordination, represent a critical step in the government’s on-going efforts to address malnutrition and food insecurity throughout the country. Here, coordination is defined as the systematic sharing of information and joint planning of interventions by partner organizations in such a way that duplication is avoided and cost-savings are realized. Gains from enhanced coordination become possible by jointly adjusting the content, sequence, and timing of planned activities. As such, coordination is the first step towards organized cooperation and joint-implementation of actions.

There is an urgent need to strengthen the existing institutional arrangements to guide the government’s work on nutrition and food security. The NNS will support this process by recognizing the productive roles played by a variety of ministries and various agencies/organizations identified in the NNP, as well as emphasizing the need for institutional innovation and renovation in the area of nutrition and food security. One of these institutional innovations is to create a new coordination mechanism for nutrition and food security, which seeks to learn from and further strengthen the existing experiences of inter-organizational coordination on other cross-cutting and interdisciplinary topics.

In order to implement the NNP, NNS, and NPAN effectively and efficiently, a mechanism for a sustainable coordinative, collaborative, cooperative, integrative, and communicative system between and among different line ministries, government institutions, mass organizations, the private sector, academia, local community, and international agencies at all levels will be formulated. Coordination throughout the management cycle will be carefully established. This will also ensure transparency and accountability in the use of resources from central level down to the village levels. These will exploit the synergies and leverage on the wealth of knowledge, experiences and skills of each stakeholder thereby, building sustainable partnerships toward achieving the NNS goals.
The coordination among these organizations will need to be strengthened in order to gain a common understanding of cross-cutting issues of NFS and for creating the conditions for cost-effective implementation of the NNP, NNS and NPAN. As stated in the NNP, the National Science Council (NSC) in the Prime Minister’s Office is responsible for facilitating the technical cooperation of all relevant Ministries and equivalent organizations on nutrition” (National Nutrition Policy, Section 3.2) To this end, the NSC is working with the representatives of MoH, MAF, MPI, MoE and NCMC, as the lead technical stakeholders on nutrition and food security, to produce a multi-sectoral consensus on the organization of a national coordination mechanism (referred to as the National Nutrition Council in the NNP). An Interim Coordination Task Force has been formed, consisting of these key stakeholders, in charge of developing a coordination structure as well as the composition and functions of the said coordination task force.

4.3.2 SO8: Improve Human Capacity

Today, there is a virtual absence of trained nutritionists in Lao PDR. Besides the need for well trained nutritionists, there is also great need for well-trained nutrition policy analysts, planners, program managers and advocates, including people with knowledge on community development processes. There is also need to build the capacity of professionals to be able to integrate nutrition and food security into key programs of other sectors such as health, agriculture, education and others. More emphasis on career development for the nutrition workforce is required to ensure a high attraction and retention rates of skilled professionals in nutrition and food security. This strategic objective takes into account the need to develop human capacity for nutrition and food security at all levels.

Action Areas

a) Build Capacity for Better Nutrition and Food Security

Capacity building at the national level will facilitate an integrated approach to improving the NFS of poor households and communities through a combination of food-based approaches, nutrition advocacy and education. Nutrition and food security related trainings will be provided to government staff of relevant ministries and institutions including NGOs and civil society organizations at national, provincial, district and village levels in order to make sure that investment on the identified activities in the NPAN are conducted. Additionally, capacity-building of those involved in the planning, implementation, monitoring and evaluation of the identified interventions of NPAN will also form an integral part of this SO.
Formal and non-formal capacity-building activities will be identified after a careful assessment of capacity-building needs.

b) Integrate Nutrition and Food Security into Academic study
At present there is no specific nutrition degree offered in Laos although it has been integrated in medical education. The development of national university curriculum and faculty positions for NFS will be supported to establish formal and non-formal NFS courses as well as the integration of nutrition and food security in relevant degree programs.

4.3.3  SO9: Increase Quantity and Quality of Information
The current data collection and information management system is not well coordinated, leading to duplication, omission, poor access to information that may be available, and inefficient use of resources. Some data are not wide in scope and depth, while some may be too wide and too detailed. In addition, the sharing and feedback mechanisms are not adequate to facilitate widespread utilization of information. Thus, there is a need for improvement in coordination of food and nutrition information systems, including data collection, analysis for planning and prioritization / targeting, documentation, packaging and dissemination.

Action Areas

a) Improve Nutrition Information and Surveillance System and M&E for NNS / NPAN
Nutrition information and surveillance system will be established, and serve as a central information storage/database to allow information sharing amongst various stakeholders. This will help fill the gap in knowledge and information generated and used by various government and donor sectors. This proposed system will enable the public to also have regular access to nutrition and related information which can help promote healthy lifestyles.

b) Scientific Research and Dissemination
Scientific research is very important for a deeper understanding and knowledge on nutrition and food security, and requires various types of research. A national research agenda will be developed and will guide research activities in the country. As much as possible intersectoral research activities will be promoted. Examples of research topics that may be undertaken include examining the use of non-timber forest products (NTFPs) as valuable food sources and assessing the impact of agro-biodiversity and climate change on food security and nutrition. Action-oriented research that can help improve program/project planning and
implementation such as efficacy and effectiveness studies, fortification technology development may also be undertaken among others.

Information dissemination mechanisms will be improved and strengthened utilizing different communication channels targeting individuals and communities. Science-based information will be disseminated in languages that are most appropriate for target audience to promote desirable actions. Mass media like radio, television, newspapers will be harnessed to ensure that timely, appropriate, accurate nutrition messages reach the intended targets. This will also include the translation of messages into specific languages of ethnic groups identified as nutritionally vulnerable and food insecure.

4.3.4 SO10: Increase Investments in Nutrition and Food Security

There appears to be limited awareness in the relevant sectors of the need to link nutrition and food security to the development planning and budgetary processes and to sources of financing and investment. This strategic objective addresses the need for increased and sustained investment that is dedicated to the improvement of nutrition and food security in Lao PDR. It is a principal aim of the NNS, therefore, to increase financing and budgetary awareness and commitment in order to ensure that adequate resources are allocated to NFS across the relevant sectors. The increase in investment is expected to be supported not only by the Government but by Lao PDR’s development partners, including bilateral and multilateral donors, NGOs and the private sector.

Action Area

a) Advocacy and Fundraising of Nutrition and Food Security

National strategies and plans of action on nutrition will be reviewed and approved, and incorporated into the 7th 5-year National Socio-Economic Development Plan. This is to ensure food security and nutrition is included in the national development agenda which will ensure adequate funding and political support.

Nutrition and Food Security programs will be promoted and allocated with an adequate fund from the national budgets and international development organizations and interested donors. Fund raising mechanisms will be developed to attract the donors. Policy makers and local chief executives will be targeted to increase investments on nutrition and related activities. Fund-raising activities will be also undertaken.
CHAPTER 5
RESOURCE MOBILIZATION, IMPLEMENTATION, AND MONITORING & EVALUATION

5.1 Resource Mobilization

To implement the strategic objectives outlined in chapter three, around $600M in total funds will be required between 2010 and 2014.\textsuperscript{12}

The government of Laos is fully committed to address this major challenge and will allocate own funds as much as possible. Given fiscal constraints, Lao PDR will nevertheless require major external support to achieve the goals of the NNS. Various measures promote donor support and will ensure that any internal and external resources will be used in the most effective and efficient way:

5.1.1 Close Alignment of Government and Donor Interests and Full Commitment by the Government of Laos

As a demonstration of its ongoing focus on sustainable development, the GoL will base the upcoming 7\textsuperscript{th} 5-year NSEDP on the MDGs. The government is fully committed to achieve these goals and will contribute own resources as much as possible towards this field.

The government further acknowledges that adequate nutrition and food security are a necessary prerequisite not only to reach MDG 1, but also for various other MDGs. Hence, nutrition and food security will be a government priority area.

5.1.2 Comprehensive Strategy and Plan of Action

Over the past years, an increased understanding of the malnutrition and food insecurity situation in Lao PDR and its root causes has been developed. Based on this, the GoL has formulated the NNS to adequately address all major causes and thereby allow for sustainable long-term development. While representing a comprehensive strategy, the NNS will ensure an effective allocation and use of funds by clearly prioritizing interventions with the highest benefit / cost ratio and groups with the highest need.

\textsuperscript{12} Rough estimate. The current cost calculation is based on the NPAN and only considers the time period until 2014

30
All relevant ministries as well as key development partners strongly endorse this strategy and are convinced that its implementation will lead to a step-change in the field of nutrition and food-security in Lao PDR.

5.1.3 Transparency and Accountability
As stated in the principles, transparency and accountability form key pillars of the NNS. This holds true both for the intended working and governance structure, as well as for the input, output, and impact of funds.

5.1.4 Coordinated Advocacy and Fundraising
It is acknowledged that no sector and no single agency can solve the problem of malnutrition and food insecurity in Lao PDR alone. Therefore, not only planning, implementation, monitoring, and evaluation but also advocacy and fundraising will be conducted in a coordinated manner. One important component of this is an envisioned national nutrition and food security trust fund which will allow determined collective fundraising to fill the overall gap and an efficient allocation of funds towards programmes and projects that demonstrate transparency and accountability combined with a high benefit / cost ratio.

5.2 Implementation
While the details on the implementation will be covered in the National Plan of Action on Nutrition (NPAN), the NNS provides high-level guidance on the implementation roadmap and the working and governance structure.

5.2.1. Implementation Roadmap
The NNS implementation roadmap is based on the prioritization and sequencing principles stated in chapter 3.2. The roadmap is classified in three time periods:

- **Short-term:** Implementation over the next 2 years (2010 – 2012)
- **Mid-term:** Implementation over the next 5 years (2010 – 2015)
- **Long-term:** Implementation over the next 10 years (2010 – 2020)

While there is not an exact match between the three strategic dimensions of the NNS and time periods mentioned above, the goal is to largely address all immediate causes in over the next two years. The underlying causes will be largely addressed over the next five years and the basic causes will be addressed over the next ten years.
a) **Short-term (2010-2012)**

To achieve immediate impact and set the foundations for sustainable long-term development, the Government of Laos has defined a set of high-priority interventions for short-term implementation. These interventions form a subset of the interventions of the 10 strategic objectives described in chapter 3 and fall within two categories:

**Existing Initiatives**

Most near-term high-priority interventions fall within existing GoL initiatives, Primary Health Care (PHC), most of the entire MNCH core package and the REACH initiative.

Primary Health Care (PHC) identified clearly the guidelines, principles, strategies, managements, implementations, and responsibilities that link to all levels of health management from villages to central such as villages, health centers, districts, provinces, and central levels. PHC consists of 9 basic components as following:

1. Improve and expand the health networks
2. Health educations
3. Water and sanitations
4. Immunizations
5. Maternal and child health
6. Nutrition
7. Control and prevent the common diseases (malaria, ARI, diarrheas etc.)
8. Treatment of no severe symptoms and common diseases
9. Essential drugs and drug revolving funds

The MNCH core Package is a government-led project facilitated by various development partners. It is an integrated approach for the care of mothers, newborns, and children, includes essential evidence based interventions likely to improve MNCH survival and nutrition through coordination all efforts and resources for MNCH and further for Primary Health Care (PHC) services. The package brings together promotive, preventive and curative interventions that are mutually beneficial and inextricably link to the goals of reducing maternal, neonatal and child mortality and the prevalence of malnutrition in children. It is a phased approach which is builds on the existing structure with focus on improving the delivery system.
The REACH initiative is a government-led inter-agency process that joins forces of all stakeholders (Government, UN, IFIs, INGOs, Donors, and Academia) to effectively address the near-term / high-priority causes of child undernutrition and food insecurity. The partnership was initiated by FAO, UNICEF, WFP, and WHO in July 2008. Based on a systematic situational and gap analysis and a consultative joint planning process, the REACH initiative in Lao PDR has identified a set of interventions in five action areas\textsuperscript{13} that define a package of highly-effective evidence-based solutions for rapid scale-up. Combined, these interventions have an efficacy rate of around 60%. Thus, achieving the goal of 80% target coverage for these interventions would reduce the nutrition-related burden of disease of the main target group, children under five, by around 50%. The REACH promoted interventions build upon current activities and structures but also realize new synergies to increase effectiveness and efficiency through coordinating the efforts of stakeholders across sectors.

**Additional Initiatives**

Additionally, there are a number of short-term interventions that are covered by above-mentioned existing nutrition programs, but are most important to be addressed in the short-term. These include a rapid institutionalization of nutrition, a solid base lining of the relevant coverage and outcome indicators, continuous implementation and progress monitoring and evaluation, natural resource management, and disaster preparedness.

For details of the short-term / high-priority interventions, please refer to the NPAN.


Medium term and long term interventions represent the remaining interventions listed in the strategy section. For the period of 2010-2015, these will be further detailed in the NPAN.

**5.2.5  Working and Governance Structure**

The working and governance structure for the implementation of the NNS builds on the National Nutrition Policy and considers existing structures as much as possible. As stated in the principles, the NNS is highly committed to establishing an efficient and effective governance structure. As outlined above in section 4.3 of the NNS, the National Science

\textsuperscript{13} Improve breastfeeding and complementary feeding, increase micronutrient intake, improve hygiene and parasite control, increase treatment of severe acute malnutrition, and improve household food security
Council is leading an Interim Coordination Task Force that will propose a workable and practical design for a coordinating the implementation of the NNS/NPAN. The goal of this task force is to establish a workable mechanism for the effective and efficient implementation of the NNS/NPAN. It is acknowledged that at the central level key ministries/organizations will be involved while at the sub-national levels local provincial government officials will be likewise involved in the implementation, monitoring and evaluation of the NNS and NPAN.

a) High-level Leadership
The institutional mechanism that provides high-level leadership will include the most senior representation from all relevant parties. The concerned institution will act as the high-level reporting and decision making body, take policy and major strategic decision, and ensure full commitment from all relevant stakeholders.

b) Inter-Ministerial / Inter-Agency Technical Coordination
Likewise, at the Inter-Ministry / inter-agency level a mechanism for the coordination of technical aspects of implementing the NNS/NPAN will be established. The technical decision / coordination body that is set up to perform this role will include senior technical staff members from all relevant institutions. Its purpose will be to monitor implementation and progress and effectively coordinate all cross-cutting issues related to nutrition and food security, ensure that food and nutrition security concerns are taken into account in development plans /programs and report to the high-level leadership body.

c) Ministry / Agency Level Coordination
Each of the Ministries / agencies involved in the implementation of the NNS/NPAN will outline arrangements for planning and implementation of the sector-specific interventions and for coordinating activities with actors within their respective organizations that participate in the promotion of improved nutrition and food security in Laos. Each ministry involved in the implementation of the NNS, will report on a regular basis to an inter-ministerial coordination body.

The final governance structure will be decided by the Government and communicated to all policy and implementing bodies. A list of the various ministries/agencies involved in the NNP/NNS is outlined in Appendix
5.3 Monitoring and Evaluation

To ensure a solid planning process, guide implementation and measure outcomes and impact, a solid baseline in terms of a National Survey on the key indicators is most urgent and important. This type of survey should take place also midway the implementation road map and at the end.

In addition, a National Monitoring and Evaluation (NME) system will be put in place but will build on existing information systems like LAO PDR FIVIMS, VAM of WFP, etc. Data on inputs (human, material, and financial etc), processes, outputs, outcome and impact will be collected from the village, district, provincial and central level. These data will consist of a set of key indicators agreed by all relevant ministries to be used on a sector-wide basis. Efforts to ensure that data generated are precise, accurate and timely will be made. The capacity of all those involved in data generation, analysis and reporting will also be prioritized.

Reports and other dissemination materials will be prepared based on the information generated by NME to inform and advocate among politicians, policy makers, and donors. Moreover, it will guide program planners and implementers and other stakeholders on the progress of the implementation of the NNS as well as the NPAN to ensure effective and efficient implementation of identified interventions.
APPENDIX

A) Explanation of Changes From the Causal Analysis in the NNP
The underlying cause of low and unstable levels of household food security has been specified with the subcomponents food unavailability and food inaccessibility to avoid confusion. The other two components usually associated with food security – food utilization and food stability – are covered by various other causes within the framework. The NNP states a lack of policy and legislation on nutrition as well as a lack of a national nutrition program as basic causes. With the implementation of the NNP, the NNS, and the NPAN these causes have been resolved. However, a need for mainstreaming nutrition and food security into the 7th NSEDP and in cross-sectoral strategies and plans is acknowledged under the cause of insufficient institutional capacity & coordination. Insufficient human capacity in nutrition has been added to acknowledge the urgent need for further capacity building in this field. Lack of scientific research has been replaced by insufficient information covering a) a lack of information collection, b) a lack of scientific research, and c) a lack of information dissemination

B) Definitions
- **Nutrition** is defined as the “consumption of nutritional, useful and safe food in order to enhance the physical growth, regulating and mental development of the body” (Food Law, Article 4).
- **Malnutrition** is a broad term commonly used as an alternative to undernutrition but technically it also refers to overnutrition. People are malnourished if their diet does not provide adequate calories, protein, and micronutrients for growth and maintenance or they are unable to fully utilize the food they eat due to illness (undernutrition). They are also malnourished if they consume too many calories (overnutrition).
- **Food Security** is achieved when adequate food (in term of quantity, quality, safety, socio-cultural acceptability) is available and accessible and satisfactorily used and utilized by all individuals in all regions, at all times to live a healthy and active life.

C) List of Lao Ministries and Organizations Involved in the NNP/NNS (Alphabetical order)
Lao Front for National Reconstruction
Mass Organizations
- Lao Federation of Trade Unions
- Lao People’s Revolutionary Youth Union
- Lao Women’s Union

Ministry of Agriculture and Forestry
Ministry of Defense
Ministry of Energy and Mining
  - National Energy Committee
  - Lao National Mekong Committee
Ministry of Education
Ministry of Finance
Ministry of Foreign Affairs
Ministry of Health
Ministry of Industry and Commerce
Ministry of Information and Culture
Ministry of Labour and Social Welfare
Ministry of Planning and Investment
Ministry of Public Security
National Commission for Mother and Child
National Land Management Authority
National Sciences Council
National Tourist Authority
Water Resources and Environment Agency
  - Committee for forest Conservation
  - Committee for Water and Natural Resources

The Ministries / organizations above, listed in alphabetical order, are mentioned in the NNP. However, given the special priority that is expected to be given in the 7th NSDP to food security and nutrition, the list may not be considered to be exhaustive. Other Ministries / organizations that are concerned with food security and nutrition may not be missing. This list will be updated as implementation of the NNP/NNS/NPAN gets under way. Also the list does not cover institutions at the Provincial / District / Cluster / Village levels which are critical to achievement of FSN goals.
### D) Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC</td>
<td>Ante Natal Care</td>
</tr>
<tr>
<td>ARI</td>
<td>Acute Respiratory Infection</td>
</tr>
<tr>
<td>BMI</td>
<td>Body Mass Index</td>
</tr>
<tr>
<td>BFHI</td>
<td>Baby Friendly Hospital Initiative</td>
</tr>
<tr>
<td>CCT</td>
<td>Conditional Cash Transfers</td>
</tr>
<tr>
<td>CED</td>
<td>Chronic Energy Deficiency</td>
</tr>
<tr>
<td>CMR</td>
<td>Child Mortality Rate</td>
</tr>
<tr>
<td>CFSVA</td>
<td>Comprehensive Food Security and Vulnerability Assessment</td>
</tr>
<tr>
<td>CU5</td>
<td>Children under Five Years</td>
</tr>
<tr>
<td>CRC</td>
<td>Convention on the Right of the Child</td>
</tr>
<tr>
<td>DHP</td>
<td>Department of Hygiene and Prevention</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EPI</td>
<td>Expanded Programme of Immunization</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FCT</td>
<td>Food Composition Tables</td>
</tr>
<tr>
<td>FIIVMS</td>
<td>Food Insecurity and Vulnerability Information and Mapping System</td>
</tr>
<tr>
<td>FP</td>
<td>Family Planning</td>
</tr>
<tr>
<td>GAP</td>
<td>Good Agricultural Practices</td>
</tr>
<tr>
<td>GHP</td>
<td>Good Hygiene Practices</td>
</tr>
<tr>
<td>GMP</td>
<td>Good Manufacturing Practices</td>
</tr>
<tr>
<td>GoL</td>
<td>Government of Laos</td>
</tr>
<tr>
<td>HACCP</td>
<td>Hazard Analysis and Critical Control Points</td>
</tr>
<tr>
<td>HIA</td>
<td>Health Impact Assessment</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human Immuno-deficiency Virus/Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>HWT</td>
<td>Household Water Treatment</td>
</tr>
<tr>
<td>ICESCR</td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
</tr>
<tr>
<td>IDA</td>
<td>Iron Deficiency Anemia</td>
</tr>
<tr>
<td>ID</td>
<td>Iodine Deficiency</td>
</tr>
<tr>
<td>IMR</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>IMCI</td>
<td>Integrated Management of Childhood Illness</td>
</tr>
<tr>
<td>IPM</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>IYCF</td>
<td>Infant and Young Child Feeding</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
</tr>
<tr>
<td>LECS</td>
<td>Lao Expenditure Consumption Survey</td>
</tr>
<tr>
<td>LNHS</td>
<td>Lao National Health Survey</td>
</tr>
<tr>
<td>LPDR</td>
<td>Lao People’s Democratic Republic</td>
</tr>
<tr>
<td>LRHS</td>
<td>Lao Reproductive Health Survey</td>
</tr>
<tr>
<td>LWU</td>
<td>Lao Women’s Union</td>
</tr>
<tr>
<td>MAF</td>
<td>Ministry of Agriculture and Forestry</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal and Child Health</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td>MIC</td>
<td>Ministry of Commerce and Industry</td>
</tr>
<tr>
<td>MMR</td>
<td>Maternal Mortality Rate</td>
</tr>
<tr>
<td>MNCH</td>
<td>Maternal, Neonatal and Child Health</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MPI</td>
<td>Ministry of Planning and Investment</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MR</td>
<td>Mortality Rate</td>
</tr>
<tr>
<td>NCNC</td>
<td>National Commission for Mother and Child</td>
</tr>
<tr>
<td>NCNRCD</td>
<td>Non Communicable Nutrition Related Chronic Diseases</td>
</tr>
<tr>
<td>NFS</td>
<td>Nutrition and Food Security</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health Survey</td>
</tr>
<tr>
<td>NIPH</td>
<td>National Institute of Public Health</td>
</tr>
<tr>
<td>NIEC</td>
<td>Nutrition Information, Education and Communication</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>NME</td>
<td>National Monitoring and Evaluation</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>NNP</td>
<td>National Nutrition Policy</td>
</tr>
<tr>
<td>NNS</td>
<td>National Nutrition Strategy</td>
</tr>
<tr>
<td>NPAN</td>
<td>National Plan of Action for Nutrition</td>
</tr>
<tr>
<td>NSEDP</td>
<td>National Socio-Economic Development Plan</td>
</tr>
<tr>
<td>NTFP</td>
<td>Non-Timber Forest Products</td>
</tr>
<tr>
<td>ORT</td>
<td>Oral Rehydration Therapy</td>
</tr>
<tr>
<td>PM</td>
<td>Prime Minister</td>
</tr>
<tr>
<td>PEM</td>
<td>Protein Energy Malnutrition</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
</tr>
<tr>
<td>PHCR</td>
<td>Poverty Head Count Ration</td>
</tr>
<tr>
<td>PMCT</td>
<td>Prevention of Mother to Child Transmission</td>
</tr>
<tr>
<td>POU</td>
<td>Point of Use</td>
</tr>
<tr>
<td>REACH</td>
<td>Renewed Effort Against Child Hunger and Undernutrition</td>
</tr>
<tr>
<td>RDA</td>
<td>Recommended Dietary Allowances</td>
</tr>
<tr>
<td>RH</td>
<td>Reproductive Health</td>
</tr>
<tr>
<td>SAC</td>
<td>School attendance children</td>
</tr>
<tr>
<td>CEFDAW</td>
<td>Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW)</td>
</tr>
<tr>
<td>SC</td>
<td>Steering Committee</td>
</tr>
<tr>
<td>SIA</td>
<td>Social Impact Assessment</td>
</tr>
<tr>
<td>SO</td>
<td>Strategic Objective</td>
</tr>
<tr>
<td>STH</td>
<td>Soil Transmitted Helminth</td>
</tr>
<tr>
<td>UIE</td>
<td>Urine Iodine Excretion</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>U5MR</td>
<td>Under-five Mortality Rate</td>
</tr>
<tr>
<td>USI</td>
<td>Universal Salt Iodization</td>
</tr>
<tr>
<td>VAD</td>
<td>Vitamin A Deficiency</td>
</tr>
<tr>
<td>VAM</td>
<td>Vulnerability Analysis and Mapping</td>
</tr>
<tr>
<td>VAS</td>
<td>Vitamin A Supplement</td>
</tr>
<tr>
<td>VHW</td>
<td>Village Health Worker</td>
</tr>
<tr>
<td>VNV</td>
<td>Village Nutrition Volunteer</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme</td>
</tr>
<tr>
<td>WRA</td>
<td>Women of Reproductive Age</td>
</tr>
</tbody>
</table>