



STRATEGIC REVIEW OF FOOD AND NUTRITION SECURITY IN LAO PEOPLE'S DEMOCRATIC REPUBLIC

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Foreword

In November 2015, the Ministry of Planning and Investment welcomed a proposal from WFP to commission a strategic review of food and nutrition security in the Lao People's Democratic Republic. As part of the process and dialogue on localizing the Sustainable Development Goals for the country, the proposed review aimed to promote progress on Sustainable Development Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable, adaptive agriculture within healthy ecosystems and biodiversity, building on the achievements of the Millennium Development Goal era.

Recognizing that progress on food and nutrition security will require interlinked, integrated efforts among multiple sectors simultaneously, the strategic review was envisaged to take an expansive and inclusive view of food and nutrition security in the country.

In order to capture the complexity and multi-sector elements of food and nutrition security, the review team facilitated extensive participatory consultations at both the national and provincial levels, meeting with a wide range of stakeholders across the country. The findings and recommendations resulting from these consultations were validated at the national level by additional consultations held in May 2016 with more than 80 participants, and in bilateral meetings with critical stakeholders.

The report that follows is a synthesis of the views and recommendations of stakeholders from national and provincial government, the United Nations, international finance institutions, NGOs, research institutes and other organizations. The review team, made up of experts with technical backgrounds in climate resilience, gender, social protection and food and nutrition security, provided analysis and recommendations on how to proceed over the next 15 years if the ambitious Sustainable Development Goal targets are to be met.

The report emphasizes the need for integrated government approaches across the three areas of sustainable human development – economic, social and environmental.

The report is a review of the strategic cornerstones required to make substantial progress towards achieving Sustainable Development Goal 2, but it is not a new strategy in itself. The insights gained through this review have a cross-sector orientation, underscoring how the 2030 Agenda requires a harmonized, consolidated approach facilitated by the Government of Lao People's Democratic Republic. While the country has made significant progress over the past 15 years during the Millennium Development Goal era, substantial challenges remain. These challenges will require both innovation and coordinated efforts from the Government, development partners and other stakeholders. The Ministry of Planning and Investment stands ready to play its part in attaining the Sustainable Development Goals, and welcomes the support and collaboration of all partners in meeting these goals.

We welcome feedback on this report from all readers and hope that it is seen as a meaningful contribution to the ongoing dialogue on the 2030 Agenda in the country. Our sincere thanks to all who supported and participated in developing this report.



Dr Kikeo Chanthaboury
Vice-Minister
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Executive summary

This report presents the findings of the strategic review on food and nutrition security in Lao People's Democratic Republic – a strategic assessment undertaken from January to June 2016. The strategic review does not comprise a new country strategy for food security, but rather a thorough investigation into strategic issues most important for achieving the Sustainable Development Goals.

Commissioned by WFP at the request of the Ministry of Planning and Investment, this strategic review involved a cross-sector, multi-stakeholder approach to better understand how the country can attain the bold targets of the Sustainable Development Goals, specifically Sustainable Development Goal 2: End hunger, achieve food security and improved nutrition, and promote adaptive, sustainable agriculture within healthy ecosystems and biodiversity.

Using a participatory, consultative methodology built upon bilateral discussions with 49 stakeholders in Vientiane, and consultations in 17 provinces across the country with more than 500 people, viewpoints of capital-based policymakers were combined with the experiences of province-based counterparts. The strategic review synthesises findings from both primary and secondary sources, and provides a summary of institutional arrangements and strategic recommendations in a form that is easily accessible to national stakeholders.

Formally known as the 2030 Agenda for Sustainable Development, the Sustainable Development Goals represent the overall global framework for development for the next 15 years. All these goals are interlinked and must be seen in an integrated manner. As the first review specific to a single Sustainable Development Goal, this strategic review is an important contribution to the process of localizing the 2030 Agenda for Sustainable Development in the national context. Sustainable Development Goal 2 is the centrepiece of a joint endeavour, underscoring the Lao Government's commitment to address food and nutrition security, as demonstrated at the 2015 roundtable meetings (Ministry of Planning and Investment, 2015a). The five individual goals within Sustainable Development Goal 2 (plus three additional targets: 2a-2c) are challenging, complex and extraordinarily ambitious.

Based on the progress during 2000–2015, this review confirms positive gains related to food and nutrition security in a number of sectors including policy leadership, economic growth, poverty reduction, and overall food availability. However, challenges remain in terms of environmental policy and climate change adaptation, social protection, decentralized governance and chronic malnutrition. Emerging concerns include urbanization and migration, off-farm employment, food safety (for both producers and consumers), disaster risk and resilience, and institutional sustainability.

Based on an analysis of the present context and future trends, the review provides situation, response and gap analyses for Sustainable Development Goal 2 targets 2.1 to 2.5, assessing the pre-conditions for reaching the target by 2030.

2.1 Ensure access

In order for Sustainable Development Goal 2 to be achieved, access to food will need to be improved for both rural and urban populations. If the country's present rate of economic growth is sustained, there will be some improvements in access to food for those populations able to find employment. If the present trajectory is combined with increased commitments to social development, access to food will be more evenly distributed, and poor and vulnerable

households will have the financial means and basic social protection they require to secure the food they need.

2.2 End malnutrition

Malnutrition remains a major public health concern, with malnutrition a factor in one in three deaths of children under 5 (United Nations Children’s Fund, 2016). Chronic malnutrition (stunting) in the country stands at 44 percent, with a high prevalence of low birth weight, micronutrient deficiencies (notably anaemia), a low rate of exclusive breastfeeding and an acute malnutrition (wasting) rate of 5.9 percent (United Nations Children’s Fund, 2015). A study undertaken by the Ministry of Health in 2016 showed a chronic malnutrition rate of 35.6 percent. Based on historical rates of change recorded since 1990, a reduction in chronic malnutrition can be expected over the medium term, but it is likely to fall short of the World Health Organization’s 2025 target.

It has been recognized that stunting is not simply an index of height, but is an indicator of cognitive capability and life potential (World Bank, 2014a). In order for the country to build human capacity, improve educational performance and develop the workforce, stunting needs to be recognized as an economic and social shortfall, which will impede the country’s long-term development. With all malnutrition indicators higher in more geographically remote and underdeveloped areas, addressing malnutrition in all its forms has become a focus of efforts to promote inclusive and sustainable growth.

2.3 Improve productivity

The doubling of productivity, as measured by gross tonnage, required to meet this target will be difficult to achieve, and doubling productivity across the country will be even more of a challenge. Even so, the goal is worthy: enhancing the agricultural smallholder base of rural Lao households has a positive impact on economic and social development, and preserves the country’s rich social and cultural heritage. In order to increase food production, large- and small-scale farmers need equal opportunities to access resources and inputs. Current agriculture policy promotes the expansion of total production measured quantitatively by yields, and is not differentiated by mode of production or by degree of diversification (which improves the quality and nutritional content of food).

2.4 Climate-resilient agriculture and ecosystems

The magnitude of this goal requires an evolving set of flexible policies, strategies, guidelines and technologies, a clear cross-sector orientation and a solid strategy to plan, coordinate and implement the required activities. The Lao People’s Democratic Republic has a full spectrum of policies and strategies aimed at increasing agricultural productivity. Nonetheless, this goal will be very difficult – if not impossible – to achieve, especially in the context of doubling agricultural productivity and income (see Goal 2.3).

Progress on this target will entail acknowledging the services that ecosystems provide in order to protect them. This requires a policy orientation focused on the actual values of ecosystems – not only on their potential for commercial exploitation, but their non-monetary values for society.

2.5 Genetic protection and biodiversity

The timeframe for achieving Goal 2.5 (by 2020) is by no means realistic. The country's overall development approach does not sufficiently recognize protection and sustainable utilization of agro-biodiversity and non-timber forest products as a strategic approach to food and nutrition security. There is an enormous but unquantified potential for identifying varieties suitable for changing climatic conditions or with high nutritional value. Such varieties could provide smallholder farmers with significant opportunities to adapt to climate change.

Structural challenges

In analysing structural challenges to food and nutrition security, the review notes that established governance systems face difficulties in addressing complex, cross-sector and interdisciplinary issues. This is a global challenge and is not unique to the country. The question is how can the challenges arising from efforts to meet the Sustainable Development Goals be tackled within existing governance structures? This is the most important challenge when governance is considered as a strategic issue, which transcends sector-specific policies and plans.

The Lao Government has an extensive range of strategies, action plans and sectoral policies, but their implementation lags far behind the objectives and outcomes laid out in the policy documents. Core issues include the devolution of decision making and responsibilities from higher to lower levels, the means of conveying these strategies and plans to sub-national governments, and the resources provided to implement these policies at the sub-national level.

A second structural challenge is related the multi-sector outreach implicit in the Sustainable Development Goals. Meeting Goal 2 requires new ways of coordinating stakeholders in agriculture, public health (including mother-and-child health, nutrition, and water and sanitation), social protection, trade, environment, natural resources, agricultural research, climate change and resilience, disaster risk management, agricultural extension, rural finance, land tenure and governance. While existing coordination mechanisms are fit for purpose and work reasonably well, the question of how to guide and coordinate multi-sector strategies remains open.

This review considers the main institutions responsible for progress on Sustainable Development Goal 2 targets. It provides an overview of government bodies, policies, strategies and coordination mechanisms, and describes the roles of the private sector, academic and research institutions, civil society organizations and the media. It also summarizes available information on budgets and financial flows for food and nutrition security. The analysis indicates that the unprecedented cost of meeting the Sustainable Development Goals goes beyond existing development financing. An ambitious and clear plan for financing and implementing the post-2015 agenda is therefore required, with explicit roles and realistic commitments for all partners involved.

The final section of the report presents a series of recommendations for each of the sub-goals of Sustainable Development Goal 2, plus additional recommendations on coordination and governance, devolution and partnerships with international organizations and the private sector. The report concludes by recognizing the unique roles of the Ministry of Planning and Investment and the Ministry of Finance in advancing the 2030 Agenda. Based on guidance from stakeholders during the consultation process, recommendations are ranked by relevance in the short, medium and long term. The highest-priority recommendations are detailed below.

Goal 2.1: Create, support and expand economic and livelihood options, and improve basic social protection and working conditions within the country to: reduce out-country migration and dependency on natural resources; generate off-farm employment opportunities in rural areas; and increase access to local income generation, including private-sector employment and public-works programmes.

Goal 2.2: In the short term, fully fund and implement all elements of the Multi-sectoral Plan of Action 2016–2020. Support quality health service delivery to rural and non-Lao-speaking communities with the aim of improving nutrition services within the healthcare system. Provide direct technical assistance and strengthen the capacity of government health providers in nutrition, especially at the district level.

Goal 2.3: Support and subsidize inputs for small-scale food producers and family farmers along the value chain, including secure and equal access to land and natural resources. This support should cover technical inputs, access to land and water, post-harvest facilities, processing, veterinary care, pesticide and herbicide use, transport, market information and financing, ensuring that they are linked to the nutrition-sensitive production of high-quality foods in locally suitable agro-ecological conditions. This may require setting aside agricultural land exclusively for agricultural production and food security.

Goal 2.4: Allocate sufficient resources to support agro-ecology-based food production, which considers the effects of climate change on land, soil, water and forests, and provide advanced information through early warning systems.

Goal 2.5: The strict enforcement (and eventual amendment) of the 2013 Environmental Protection Law will go a long way towards protecting the country's biodiversity hotspots and assisting in the gradual transfer of varieties at the National Agriculture and Forestry Research Institute to ensure future availability of these genetic resources.

Recommendations for overall system adaptation include the following:

Step up the decentralization process and the engagement of sub-national governments in policy development. The national Government has initiated the Sam Sang (Three Builds) programme to enhance decentralization, but urgently requires technical and financial resources.

Coordination at the national level: Strengthen the capacity of the Secretariat of the National Nutrition Committee to coordinate implementation and monitoring of the National Nutrition Strategy to 2025, Plan of Action 2016–2020 and related strategies, clearly differentiating the operational work of the Centre for Nutrition.

Devolution at the sub-national level: Provide technical and institutional support to provincial nutrition committees to facilitate links among national, provincial and district planning and monitoring. Provide assistance in the development of tools to facilitate the effective functioning of these committees.

International agencies and the private sector: Expand dialogue around emerging issues such as food safety (at every stage from farm to plate), obesity and overweight, and linkages between migration and food and nutrition security. Expand partnerships around these issues on an inclusive basis.

Valuation of ecosystem services: The economic values of existing natural resources (e.g. forests functioning as a sink for greenhouse gases) must be quantified and recognized in all formal planning processes at all levels of governance.

Emphasize the crucial roles of the Ministry of Planning and Investment and the Ministry of Finance: Give the Ministry of Planning and Investment and the Ministry of Finance explicit responsibilities and build capacity for realistic planning, financing and implementation among the wide array of partners that are active in meeting the Sustainable Development Goals.



Introduction



1.1 Initiating the Sustainable Development Goals in Lao People's Democratic Republic

In 2012, as an outcome of the Rio+20 conference and building upon the Millennium Development Goals (MDGs), the United Nations Member States began developing a set of Sustainable Development Goals (SDGs), which would form the cornerstone of the post-2015 development agenda.

Following more than two years of consultations involving state and non-state participants, on 25 September 2015 the United Nations General Assembly formally adopted the transformative 2030 Agenda for Sustainable Development along with 17 SDGs and 169 associated targets. For Lao People's Democratic Republic (PDR), there is an extra goal that aims to reduce the impact of unexploded ordinance (there is no specific SDG target focusing on the issue of mines).

From a global perspective, agriculture, forestry and fisheries can provide nutritious food for all and generate decent incomes while supporting people-centred rural development and protecting the environment. However, soils, freshwater, oceans, forests and biodiversity are being rapidly degraded. Climate change is putting even more pressure on natural resources and increasing the risks associated with natural disasters such as droughts and floods. Many rural people can no longer make ends meet on their land and are migrating to cities in search of employment.

A profound change in the global food and agriculture system is needed to nourish the world's 795 million hungry people and the additional 2 billion expected by 2050. The food and agriculture sector offers critical

solutions for eradicating hunger and poverty. SDG 2 describes the ways, means and targets for achieving this in the context of people-centred development (United Nations, 2016). The SDGs are closely integrated development pathways, which can be analysed separately but are complementary objectives within a people-centred vision for development (United Nations, 2016).

Lao PDR has shown a strong commitment to achieving the 17 SDGs from early on, in line with the Government's determination to graduate from least-developed country (LDC) status by 2020. In late 2015, the Government began 'localizing' the SDG agenda to the national context. This process involved discussion papers exploring the transition from the MDGs to the SDGs (United Nations, 2015c) and adapting the SDGs to national planning and strategy processes such as the 8th National Socio-economic Development Plan (NSEDP). Throughout the first and second quarters of 2016, extensive consultations on the development of consolidated monitoring and evaluation indicators for the SDGs took place, with additional discussions continuing throughout the course of this review.

The United Nations system is dedicated to supporting the Lao Government in the extraordinary efforts that will be required to implement the 2030 Agenda. SDG 2 in particular has become a centrepiece of a joint endeavour underscoring the Government's commitment to addressing food and nutrition security, as demonstrated at the 2015 Roundtable Meetings (Ministry of Planning and Investment, 2015a).

Significantly expanding on the scope of the MDGs, the SDGs build upon the Zero Hunger Challenge, presenting a comprehensive approach to addressing the various dimensions of food and nutrition security, with specific targets on access, malnutrition, agricultural productivity and the resilience of food systems (WFP, 2015).

In view of SDG 2's ambitious targets its 15-

year timeframe (2015–2030), localizing the SDG approach requires a deep exploration of the country's institutions, policies and finances. This strategic review was launched by WFP and the Ministry of Planning and Investment as a means to investigate the preconditions for attaining SDG 2 in Lao PDR in order to guide future implementation of the most challenging human development agenda ever attempted.

The five main goals under SDG 2 (plus three additional targets, 2a-2c) are challenging, complex and extraordinarily ambitious. While Lao PDR is making gradual progress in policy development and support to the SDGs through a range of national and sectoral strategies, it remains uncertain whether the limited orientation of those strategies will be able to deliver the impact required to reach SDG 2 by 2030. Achieving the SDGs will be very difficult if exceptional steps are not taken to: fine-tune existing policies; build institutional and individual capacity; implement high-quality technical operations; and provide robust financing (including sufficient funding, fast and responsive financial allocation mechanisms, and enhanced accountability).

In this context, the strategic review identified gaps from a long-term perspective and explored the interlinkages between food and nutrition security, taking into account social protection, gender equality and climate resilience – the most important development themes for achieving SDG 2.

1.2 Strategic review planning and methodology

In the early stages of planning the strategic review, two important observations influenced the review's design. First, given the cross-sector nature of the SDG 2 targets, an approach that cut across policy portfolios (including agriculture, rural development, public health, social protection, gender equality and climate change) was required; this was to be an important factor in team composition. Second,

much of the previous strategy work around the SDGs had been centred on national-level policy discussions in the capital, with limited inputs from stakeholders at the sub-national level. This observation was decisive in developing the methodology, which centred on consultations across all provinces.

The review required expertise in a range of disciplines to promote cross-sector thinking, including food and nutrition security, gender equality, social protection and climate resilience. From the outset, the team included both international and national professionals, with the Lao team leader responsible for ensuring that the process remained firmly rooted in the country context.

The team aimed to look beyond existing data and focus on analysis, orienting their findings and recommendations to senior policy makers. This analysis was derived from the extensive provincial and bilateral consultations, which reflected local knowledge and practical experiences. The report represents a synthesis of findings from both primary and secondary sources, and a summary of institutional arrangements and strategic recommendations, presented in a form easily accessible for national stakeholders and policymakers. A detailed mapping of all SDG-related policies and strategies exceeds the strategic focus of this review, but would constitute a useful tool for developing an overall management structure for all SDGs in Lao PDR.

The review of existing materials from government, United Nations, international finance institutions (IFIs), NGOs and academic sources was conducted beginning in February 2016. With an extensive body of information on food and nutrition security now available, special attention was paid to: synthesis reports of existing data such as the MDG 2013 report (Government of Lao PDR and United Nations, 2013) and the Risk and Vulnerability Survey (Ministry of Finance and FAO, 2013); documents developed as part of the Zero Hunger Challenge Roadmap (National Food Security and Commodity Development

Committee, 2015); and the National Nutrition Strategy to 2025 and Plan of Action 2016–2020 (Government of Lao PDR, 2015a). Based on recommendations from respondents, this database was expanded throughout the review period and updated based on additional data provided by stakeholders. A complete bibliography of works reviewed is included in Section A3.

1.2.1 Consulting key resource persons

The review team met with 49 stakeholders from government agencies, financial and donor institutions, United Nations agencies and local civil-society organizations (CSOs). In addition to contacting well-established stakeholders in food and nutrition security, the review team explored a wider range of perspectives, seeking out stakeholders from the National Assembly, private-sector companies with interest in food and natural resource management, NGOs, IFIs, researchers and others. Bilateral discussions explored stakeholders' perceptions about food and nutrition security, the relationships between food and nutrition insecurity, institutional engagement and challenges with addressing food and nutrition security in Lao PDR. A semi-structured list of questions was



developed for each bilateral consultation and notes of these meetings were analysed by the team to identify trends and common issues.

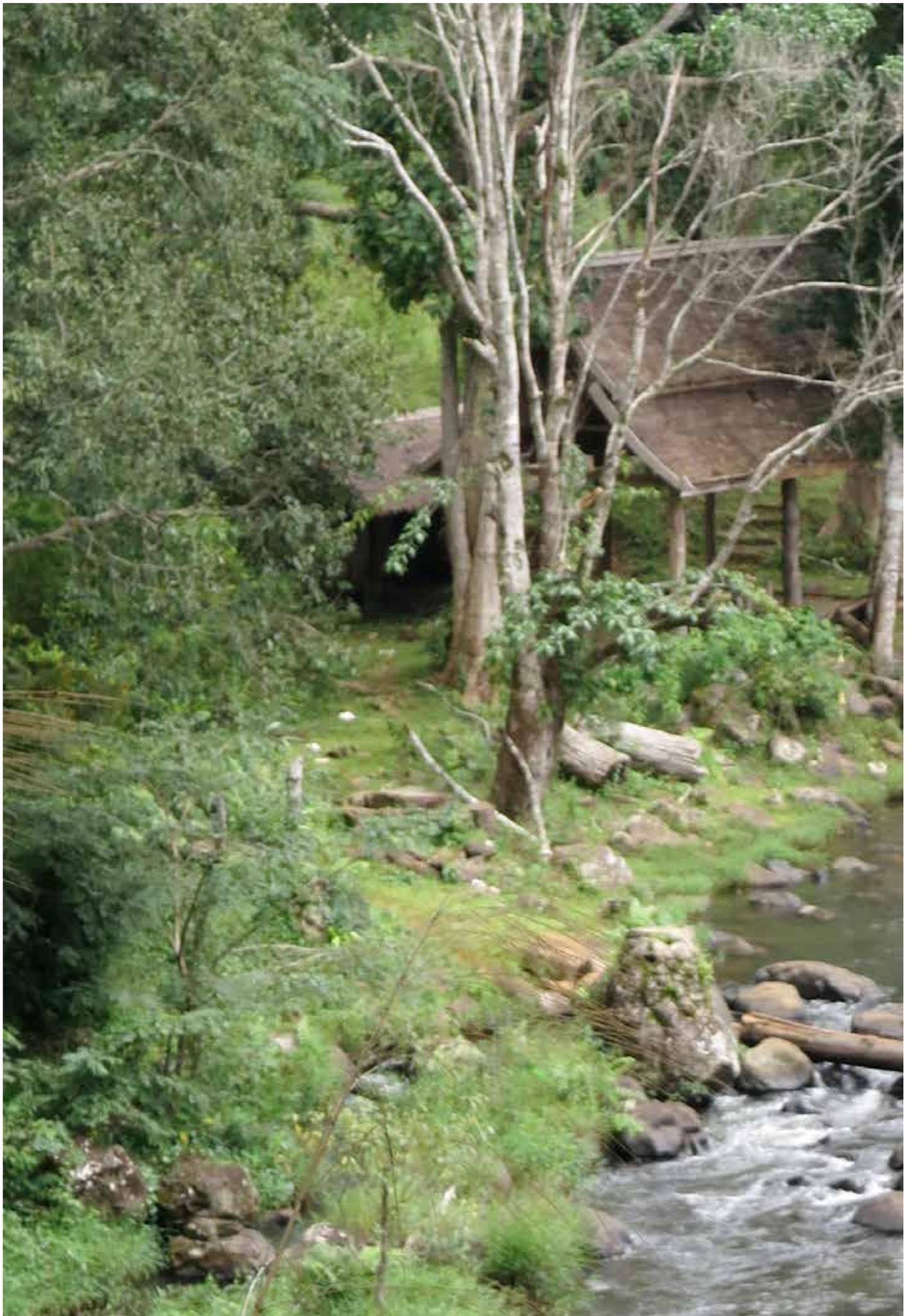
1.2.2 Provincial consultations

With support from the Ministry of Planning and Investment, stakeholder consultations were conducted in 17 provinces. These one-day sessions involving 30-50 participants (with over 500 in total) explored perceptions related to food and nutrition security in the provinces. Discussions centred on whether socio-economic development at the provincial level was moving in a direction that supported the objectives of SDG 2. Inputs from provincial governments, NGOs and private-sector participants were collected through bilateral and group discussions. In each consultation, participants were divided in four groups. Each group was asked to look at one of four issues: food and nutrition security; gender equality and development; social protection; and climate change and resilience.

Participants were asked to discuss the current situation and provincial-level challenges, and to suggest approaches for achieving SDG 2 in the local context.

The consultations indicated a high degree of unease with current trends in rural development. A wide range of land issues, limited options for income and employment, labour migration, conflicting agricultural approaches, social friction at the village level and environmental degradation related to unsustainable use and exploitation of natural resources were high on the agenda. The impacts of climate change were also raised as a concern, especially exposure to extreme events such as floods, droughts, extreme hot and cold, erosion and loss of forests.

The unique multi-level approach enabled insights into a wide range of information and perceptions about the rural development process in Lao PDR. Experiences of capital-based policy-makers and strategists were combined with the applied knowledge of province-based administrators, implementers and technicians.



Situation analysis



2.1 SDG 2 in global development discourse

Formally known as the 2030 Agenda for Sustainable Development, the SDGs represent the global framework for development for the next 15 years.

These goals push forward the development agenda “by building a sustainable world where environmental sustainability, social inclusion, and economic development are equally valued” (United Nations, 2016). The SDGs emphasize national ownership, multidimensionality, multi-stakeholder efforts and coordinated efforts from United Nations agencies.

The SDGs build upon the experience and impact of the MDGs, but are more ambitious in scope, comprising 17 goals and 169 targets. These goals and targets include qualitative as well as quantitative indicators. The SDGs are applicable to all states, with national

governments leading and implementing efforts in their countries.

In addition, the SDGs are distinguished from the MDGs in a number of ways:

- *The reduction of inequality is fundamental to the SDGs.* This emphasizes the need to focus on those furthest behind first, ensuring that no one is left behind and reducing disparities between women and men, girls and boys, rural and urban areas, and poor and better-off populations.
- *The 2030 Agenda is integrated, interdependent and indivisible.* Progress on one goal is only possible if it is achieved with associated progress on other goals, and to that end will require multi-sectoral strategies.

- *Three dimensions of sustainable development.* Whereas the MDGs focused on social indicators, the SDGs recognize that sustainability requires a consideration of social, economic and environmental factors (WFP, 2015).



The overall goal statement for SDG 2 is:

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

In keeping with the interconnected nature of the SDGs, progress on SDG 2 is linked to SDG 1 (No poverty). The Food and Agriculture Organization of the United Nations (FAO) has stated that “there is more than enough food produced today to feed everyone in the world, yet close to 800 million are chronically hungry.

As the affordability of food largely relates to income, ensuring access to food remains one of the key pillars of food security and the wider antipoverty agenda”. The key agents of change with regard to the SDGs include rural women, smallholder and family farmers, investors in roads, markets and infrastructure, vulnerable populations and policymakers (FAO, 2016b).

Achieving SDG 2 is also linked with SDG 3 (health), SDG 4 (education), SDG 5 (gender equality and empowerment), SDG 6 (water), SDG 7 (clean and affordable energy), SDG 10 (inequality), SDG 12 (sustainable consumption and production), SDG 13 (combatting climate change), SDG 14 (aquatic resources) and SDG 15 (life on land).

The Global Nutrition Report (IFPRI, 2016) identifies 56 targets across 12 of the 17 SDGs that are highly relevant for nutrition. Given the

multiple dimensions of the 169 SDG targets, it is beyond the scope of this review to provide a full accounting of all of the possible inter-linkages between SDG2 and the other goals.

For example, SDG 5 on gender equality and empowerment includes targets on domestic labour, early marriage and land ownership all of which are pertinent to SDG 2. It is hoped that these inter-linkages will be more fully elaborated through the SDG localization process.

SDG 2 includes five main targets and three additional targets:

2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children less than 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality.

2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild

species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.

2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.

2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives, and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility (United Nations Sustainable Development Goal Fund, 2016).

The 8th NSEDP offers a wide range of options to consolidate SDG targets. Based on priorities outlined in the 8th NSEDP and with additional guidance from the Ministry of Planning and Investment, this strategic review of SDG 2 in Lao PDR concentrates on the five main targets.

2.2 SDG 2 progress in Lao PDR: The situation in 2015

With the SDGs focused on the future, it is instructive to begin by summarizing the progress Lao PDR has made over the past 15 years (2000–2015). The next sections consider how the SDGs can be applied to the

Lao context based on the 2015 baseline and projected trends to 2030.

As the review was underway, the localization of the SDG goals and targets was already ongoing, with the United Nations Resident Coordinator's Office and the Ministry of Planning and Investment jointly incorporating SDG targets and indicators into the NSEDP, with the goal of graduation from LDC status. To date, 79 indicators have been harmonized across the NSEDP, with a further 24 recommended for inclusion in the NSEDP. Transitioning to the SDGs has also included summary reviews of the MDGs to highlight progress made and lessons learned (Government of Lao PDR, 2015b). The points below are drawn from these reviews and related documentation.

Policy leadership: The Government has positioned food and nutrition security at the forefront of the development policy agenda, making it a centrepiece of the 2015 roundtable meetings and identifying the multi-sector methodology of the National Nutrition Strategy and Plan of Action 2016–2020 as a good practice to be replicated in other sectors (Ministry of Planning and Investment, 2015a). This prioritization is also reflected in donor-led commitments to make funds available for food and nutrition security through 2020 and beyond. The NNC, under the leadership of the Deputy Prime Minister, has emerged as a strong and proactive coordinating body.

Economic growth and poverty reduction: Over the past decade, Lao PDR has consistently recorded GDP growth of 7 percent or higher. In 2011, the country moved up to 'lower middle-income status', with a per capita gross national income of USD 1,400 in 2014 (Government of Lao PDR, 2015b). This economic growth has mainly been built on infrastructure development, extractive industries, the utilization of natural resources and hydropower development. The MDG 1 target of halving poverty was met two years ahead of schedule, including a reduction in severity and overall prevalence declining to 23

percent (Government of Lao PDR, 2015b). This rate of economic growth has been offset by rising inequality since it has not corresponded to equitable distribution of benefits. The United Nations estimates overall human development losses as a result of inequality at 25.6 percent (UNDP, 2015). The sustainability of economic growth founded on the exploitation of finite natural resources is problematic over the long term.

Food security: At the national level, Lao PDR has attained food self-sufficiency as measured by kilocalories (the country has been self-sufficient in rice since 2000). Domestic production of major food and cash crops has increased since 1999 (Ministry of Agriculture and Forestry, and Lao Statistics Bureau, 2012). The country's food security situation is complex, with increasing levels of rural out-migration and gradual market integration of food and cash crops.

Nutrition: Substantial progress on reducing malnutrition has been made since the early 1990s. The MDG target of halving hunger and malnutrition has been achieved, but chronic malnutrition remains, with a stunting rate of 35.6 percent and underweight at 27 percent. One in three deaths of children under 5 is associated with malnutrition (UNICEF, 2016). Rates of anaemia and low birth weight are also high, and the rate of exclusive breastfeeding is low (Scaling Up Nutrition, 2016). Wasting rates between 5 percent and 7 percent (indicating acute malnutrition) have remained unchanged for over a decade. Preliminary indications from nutrition surveys conducted in 2015 by the Ministry of Health suggest that a substantial reduction in chronic malnutrition has been achieved since the 2011–2012 Lao Social Indicators Survey.

Environment: Progress on environmental sustainability has been limited. Unsustainable natural resource use and commercialization of unsustainable exploitation are increasing pressure on the environment. The frequency and severity of extreme weather events have increased along with CO₂ emissions; forest

cover has decreased. While the country has delivered promising achievements in climate policies, such as the National Strategy for Climate Change (Government of Lao PDR, 2010) it lacks the institutional framework needed to integrate climate change resilience into sectoral plans, decision making and policy processes.

Vulnerability: In both rural and urban contexts, vulnerability is a function of income, geography, gender norms and equality, ethnicity, disability, exposure to natural disasters, and access to natural resources. Gender norms that increase vulnerability include the difference in decision-making authority within extended families. In such cases, it is seniority and gender that matters most. Typically, the most senior male member of the family has the authority to make the final decision, followed by grown men and senior women. Often, men and boys are allowed to eat before women and girls. While Lao PDR has made progress in reducing vulnerability (the overall risk profile of the country is less severe than countries in maritime Southeast Asia), most provinces are vulnerable to more than one hazard, and four provinces are at risk of five or more hazards (WFP, 2013). The rural population is particularly vulnerable to climate change, with 77 percent of households – including women farmers, who represent 51 percent of the labour force – involved in some form of agricultural activity. Most of these depend on weather and are vulnerable to adverse climate conditions such as seasonal floods and droughts (Ministry of Agriculture and Forestry, and Lao Statistics Bureau, 2012).

Gender: According to the Government's MDG review (2015b), Lao PDR has reached gender equity at all levels of education. However, this parity is not reflected in the workplace, with women over-represented in lower-skilled labour markets (71.8 percent of the workforce within the service sector and 63.6 percent within the retail sector). Education and employment rates are influenced by early marriage, with one in five women giving birth by age 18 (Government of Lao PDR, 2015b).

Equity in rural agricultural households was demonstrated by the 2010/2011 Agricultural Census: although 91 percent of households were headed by men, 64 percent self-identified as joint-decision-making households, with women routinely involved in major decisions. The census also indicated no significant difference in the size of land parcels operated by women, which were only 0.07 ha smaller than men's. In addition, there was no gender bias in rural wages (Ministry of Agriculture and Forestry, 2014). In 2016, the country's first national report on violence against women was published (UNFPA, 2016). Poverty, ethnicity, language, education and geographic isolation have long been identified as factors in gender inequality. Women's traditional roles and work norms mean that income generation is seen as men's responsibility, whereas women are responsible for sourcing and preparing food for the household. As more women enter the workforce, these roles are in flux, especially in urban and peri-urban areas, where an increasing number of women are entering the workplace. Nevertheless, feeding the family is still seen as women's responsibility. In line with global trends, achieving gender equity is dependent on broader issues related to economics, wealth and power.

2.2.1 End hunger and ensure access

SDG 2.1: By 2030 end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

The proposed indicators for SDG target 2.1 include undernourishment – one of the indicators of the Human Asset Index criteria for LDC graduation. Attaining SDG 2.1 is therefore closely linked to this medium-term policy goal for the nation.

Food insecurity is rooted in limited and uneven access to food. Based on data on employment, livelihoods, and food consumption patterns, household-level income expectations are high

and rising. Wage labour (largely in agriculture and construction) is more available and better paid than in the past, but this corresponds to limited household agricultural productivity, underscoring the importance of local food markets for rural households engaged in part-time or full-time paid work. In addition, increased rural incomes may also be offset by increases in inflation and rising household living costs, with the consumer price index increasing by 50 percent between 2006 and 2012 (WFP, 2013).

Despite low population density in rural areas, physical access to productive land and natural resources (including water and forests) is increasingly constrained. Households with limited or no access to land – or access only to land of poor quality – are at high risk of food insecurity.

Physical existence of nutrition-related facilities does not necessarily translate into improved access to related services, with actual utilization influenced by language, the costs of these services, and their quality.

Decisions affecting household food and nutrition security are made on the basis of available income. Pressures on households to obtain money lead to livelihood strategies that generate the most income, even if this compromises household food consumption. The rural-urban transition brings food and nutrition security risks for urban populations too, including higher household expenditures on food, poor food quality (in terms of both nutritional content and food safety), and public health risks associated with urban living.

Feedback from provincial consultations emphasized the growing sense of disparity and inequality between rural and urban areas – a trend corroborated by secondary data (Warr et al., 2015). Provincial consultations also indicate that illegal drug use and trafficking are creating serious social problems, especially among adolescents and young adults. Capital and assets are often much more concentrated in urban areas than rural ones, reflecting

better access to infrastructure and services in urban areas (WFP, 2007).

Although the country's economic development has resulted in rapid infrastructure development, it has not led to commensurate social development, especially for smallholder households. Access to social protection programmes and safety nets is a major challenge, especially for households outside the formal economy, children, people with disabilities and the elderly.

Provincial consultations demonstrated that labour migration is an increasingly important source of income as adults migrate to cities or neighboring countries in search of employment, leaving behind children and the elderly. This has impeded rural agricultural investment and affected labour opportunities for rural populations in commercial agriculture. In-migrating populations from neighbouring countries are also competing with Lao citizens for jobs, especially in agriculture and construction. Remittance flows are sporadic and unpredictable, and often do not equate with increased expenditures on food.

An increasing number of women are entering the formal workforce, estimated at 34 percent in 2012 (Government of Lao PDR and United Nations, 2013). While women have the right to participate in the workplace, this has created a gap at the household level since their traditional role as primary caregiver is not taken up by men or other household members. Most families, especially in urban and peri-urban areas, become reliant on cheap, low-quality, ready-made food from streets or markets. This has particularly impacted girls and boys who do not receive essential micronutrients such as vitamin A and iron. These changes in traditional family dynamics expose children to unhealthy food that often contains chemicals.

For rural households, year-round physical access to food remains a challenge. Although historically uncommon, landless rural households are on the increase. The 2012 Lao

Agricultural Census (Ministry of Agriculture and Forestry, and Lao Statistics Bureau, 2012) recorded a threefold increase in the number of landless rural households over the past decade, totalling 49,000 families – 6 percent of the country's rural population.

For households relying on rain-fed agriculture, year-round access to food is constrained by seasonal fluctuations in rainfall, weather and climate, affecting the quantity and quality of local food and produce destined for markets. Even largely food-secure households can experience months-long periods in which the amount of available rice is not sufficient to meet their needs, especially during the late monsoon period. The most resilient households have assets, access to financial capital and land, highly diversified livelihoods and less reliance on rain-fed agriculture.

2.2.2 End all forms of malnutrition

SDG 2.2 By 2030, end all forms of malnutrition, including achieving by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons.

In 2015, Lao PDR was ranked 76th out of 104 countries in the Global Hunger Index, a composite rating based on undernourishment, underweight and child mortality data (IFPRI et al., 2015). Despite halving poverty and undernourishment, the target of reducing underweight and stunting among children was not achieved. Over the past decade, stunting has declined at a lower rate than the average population growth rate, and stands at 35.6 percent. The prevalence of stunting is higher in more remote, poorer areas, and among non-Lao-Tai ethnic groups (Ministry of Health, 2012).

Even among the highest income quintiles, stunting stands at 20 percent, suggesting that chronic malnutrition is not dependent on income; richer households often consume

higher-status foods rather than more nutritious foods. Across all income quintiles, low birth weight is near 15 percent. The rate of anaemia among women 15-49 is 31 percent and 53 percent of children under 2 are anaemic; 14.8 percent of babies are born with low birth weight (Scaling Up Nutrition, 2016). Micronutrient deficiencies contribute to stunting and wasting, and can lead to problems with motor and cognitive development, eyesight, immunity and mental ability. The wasting rate, which has remained between 5 percent and 7 percent over the past decade, is known to increase seasonally and as a result of shocks. Economic losses associated with malnutrition are estimated at USD 197 million annually, equivalent to 2.4 percent of GDP (National Economic Research Institute and UNICEF, 2013)

Direct causes of malnutrition include poor infant-and-young-child feeding practices, a low rate of exclusive breastfeeding in infants under 6 months and a lack of dietary diversity, which has led to micronutrient deficiencies among nearly 50 percent of young children. While progress has been made with salt iodization, anaemia and vitamin A deficiency affect more than 35 percent of women and children (Department of Statistics and UNICEF, 2008).

The underlying causes of malnutrition include poverty, low education, insufficient access to potable water, poor sanitary conditions, geographic isolation, lack of basic health care, disease treatment and prevention (including immunization), traditional taboos and practices around child weaning, maternal nutrition and work norms. Malnutrition is highest in the most geographically remote districts in the extreme north and south.

In rural and remote areas, girls and boys face challenges in accessing education, particularly beyond the primary level. According to the Lao PDR Expenditure and Consumption Survey, only 9.3 percent of women in rural areas with roads – and 3.8 percent in areas and without – have completed lower secondary school

compared to 15.3 percent of men in rural areas with roads and 8.4 percent in areas without. The lowest school attendance rate is for ethnic girls in remote areas who do not receive parental or community support to attend school, and who are expected to work within their households. Teenage pregnancy and early marriage are common, with 35 percent of women married, and one in five delivering a child before they turn 18 (Government of Lao PDR, 2015b; UNICEF, 2015).

In many communities, traditional beliefs influence women's consumption patterns during pregnancy and after delivery. Restricting food items during pregnancy and while breastfeeding can impact the health and nutrition of mothers and their children, particularly when they are already nutritionally vulnerable. According to the 2006 Multiple Indicator Cluster National Nutrition Survey, 81 percent of women restricted their diets after delivery, with restrictions of iron-rich protein sources such as meat, eggs and fish exacerbating already high levels of anemia. The rate of exclusive breastfeeding was below national and international targets (Department of Statistics and UNICEF, 2008). As already mentioned in the context of SDG 2.1, the physical existence of nutrition facilities does not always translate into improved access: utilization is impacted by language issues and service quality. The utilization of nutrition services is especially low among non-Lao-speaking women.

In the consultations conducted for this review, malnutrition was linked to concerns about the quality and stability of water supply for cultivation, human consumption and sanitation. With many rural households dependent on rivers, lakes and natural springs for their water, inconsistent water availability and quality were tied to competing demands for water, changing rainfall patterns, weather fluctuations and fears about groundwater contamination.

Although greater attention is being paid to maternal nutrition, cultural taboos, social expectations and poor nutrition knowledge

create barriers to good nutrition practices during pregnancy and with infants. Life-cycle approaches to nutrition aimed at reducing preventable deaths among adults (including older persons) are not included in nutrition strategies, limiting the possibility of breaking the inter-generational cycle of malnutrition. Food insecurity and malnutrition continue to be viewed as rural issues, with limited data on urban and peri-urban areas. Obesity and overweight are becoming increasingly acknowledged as nutrition concerns, but little programming has been dedicated to these issues and they are not incorporated into national strategies on non-communicable disease control. Despite strong evidence linking community sanitation (specifically open defecation) and stunting (World Bank, 2014a) sanitation is not a high policy priority within the Multi-sectoral Plan of Action. With the exception of salt iodization, food fortification is not standard practice, and micronutrient supplementation is not universal or consistent. There are positive indications that change is underway however. The Government's 2015 Food Security and Nutrition Survey showed a 7 percent decline in child stunting in four of the five provinces surveyed. The same survey also showed a 4.4 percent decline in child anaemia (United Nations, 2016).

2.2.3 Double the productivity of small-scale food producers

SDG 2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

Doubling agricultural productivity, as measured by gross tonnage, will be difficult to achieve, but doubling productivity across the range of

populations included in SGD 2.3 is even more of a challenge. Even so, the goal is worthy: supporting smallholder rural Lao households will have a net positive impact on economic and social development, and will preserve the country's rich social and multi-ethnic cultural heritage.

Productivity increases are subject to demographic pressures on available land. From 1999 to 2011, the number of farming households increased by 17 percent from 668,000 to 783,000 and the number of land holdings increased 20 percent from 647,000 to 777,000. There were 51,000 land holdings operated entirely by women while two thirds of the land holdings were managed jointly by husbands and wives. At the same time, the number of non-farm households increased by 83 percent from 130,000 to 239,000. The average farming household size has remained stable at six persons (Ministry of Agriculture and Forestry, and Lao Statistics Bureau, 2012). These data indicate that while populations are migrating to urban areas, the overall number of households (both on- and off-farm) in rural areas is also increasing.

Agricultural production in terms of gross tonnage is growing, but the range of crops produced is narrowing as a result of a shift from food-crop farming to more commercially oriented agriculture. There is also greater engagement in monoculture production of cash crops like cassava, coffee, tea, maize, rubber and sugar cane for export. According to the 2010/2011 Agriculture Census, was a five-fold increase in the overall area planted with maize and 49,000 households were growing rubber on 66,500 hectares (Ministry of Agriculture and Forestry, and Lao Statistics Bureau, 2012).

As agricultural markets become more regionally connected, opportunities for increasing revenue are offset by significant market asymmetries. Lao producers have little control over purchase prices for their products and are increasingly subject to regional and global price fluctuations. The market structure for export-oriented commercial production in

Lao PDR often comprises direct links between smallholder producers or contract farmers and a single industrial entity or group of processors. This makes for volatile market conditions and a high level of insecurity for producers. For logistical and other reasons, many farmers are unable to seek alternative markets. Increased food production has not ensured food safety. Mechanisms to address food safety throughout the value chain are lacking and food safety standards for both domestic and imported foods are low. The use of chemical pesticides and fertilizers is widespread. Economies of scale for commercial production usually require the use of inorganic chemical inputs, but there are few regulatory or enforcement systems to ensure their safe use.

The unregulated use of herbicides, pesticides, fertilizers and other artificial inputs by both commercial and smallholder farmers has negatively impacted human health, soil and water quality, biodiversity and food quality. Provincial consultations suggest that households increase their use of chemical agricultural inputs in order to maximize their yields as quickly and cheaply as possible. This increase in herbicide and pesticide use was also noted by the Laos Upland Rural Advisory Service (2016).

Smallholder farming system diversification and off-farm employment are critical for building resilience to climate risks. Commercial agriculture for export coexists with subsistence farming and other livelihood strategies. Concessions, plantations and contract farming have increased pressures on available land and water resources, and overlapping land management and land tenure processes have become a major challenges for rural governments and communities alike (Land Issues Working Group, 2012).

NGOs have noted that ethnic-minority women in remote areas are among those most at risk of being left behind amid rapid socio-economic changes. Reliance on agriculture and natural resources for income and nutrition renders these women particularly vulnerable to the

impacts of climate change and the negative consequences of international market fluctuations and foreign direct investment (CARE, 2015).

Despite the fact a large quantity of food is produced in the country, there are very few options for food processing, with most produce sold or exported in the form of raw material. There are few processing inputs and little value addition along the agricultural value chain.

In the rural areas, women, assisted by young girls and boys, are responsible for collecting non-timber forest products (NTFPs) for family consumption. NTFPs and the wild capture of fish have long been the cornerstones of indigenous food systems; however, they have been significantly scaled back as a result of competing demands on land and water ecosystems. According to the Ministry of Agriculture and Finance, and the Lao Statistics Bureau (2012), more than 80 percent of households reported decreased access to forest resources in the last five years. Given the importance of NTFPs to food supply and dietary diversity, the declining availability of NTFPs has serious implications for rural villages.

As households produce less for their own use, source less from the wild and are more reliant on market purchases for their basic needs, concerns about food safety are growing. This point was reiterated during provincial consultations in every region. Imported food is labeled in languages that may not be understood by Lao consumers. Imported foods also tend to be low quality and high in sugars, salt and fats. Some supermarkets and local shops sell only preserved, pre-packaged food and drinks with a high preservative content; many 'junk foods' are specifically marketed to schoolchildren. Unhealthy eating patterns in urban areas correspond to increases in overweight and obesity.

Technologies suitable for adaptive, sustainable agriculture and food production are not being sufficiently promoted, and there is a lack of

local capacity developing these technologies (including technologies related to seed production, post-harvest handling, processing, storage and renewable energy). Technology transfer to Lao farmers, particularly women farmers, and understanding of technologies for a 'green economy' are at a very early stage.

Agriculture extension is one of the main entry points for influencing on-farm production practices. The Ministry of Agriculture and Forestry's Department of Agricultural Extension and Cooperatives, and the National Agriculture and Forestry Research Institute (NAFRI) offer some good extension packages, but they cannot be scaled up across all districts because of a lack of human and financial resources.

2.2.4 Ensure food production and resilient agriculture; maintain ecosystems for climate adaptation

SDG 2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality.

The phrasing of SDG 2.4 is complex and



proposes multiple targets to be attained in parallel. It implies a harmonious coexistence of food production systems within ecologically balanced habitats while promoting adaptation to climate change and resilience. Crucially, it assumes a clear understanding of 'sustainability' and 'resilience' – terms that are subject to ongoing debate. Further discussion is required to determine how this target can be reconciled with the doubling of productivity proposed in SDG 2.3.

At the policy level, models of economic growth emphasizing gross national product or GDP growth do not provide an adequate basis for complex valuation of natural resources, especially indirect and non-use values such as nutrient cycling, biodiversity, flood control, storm protection, culture and heritage (Barbier, 2003). For example, the Mekong river basin holds considerably more value than simply as a source of revenue from hydropower.

Transitions in land use, access and modes of agricultural production have severed long-established interdependencies between farming and ecosystems, reducing diversity in crop varieties and production techniques, increasing vulnerability to climate risks and diminishing smallholder farming households' capacity to cope with weather variations.

Extreme climate events, seasonal variability and long-term climactic shifts all pose serious risks. Climate risks affect women and men differently. For example, the extreme cold weather experienced in Lao PDR during the winter of 2016 resulted in the destruction of crops in the northern provinces. While the disaster created additional burdens on both men and women farmers, women and girls faced greater challenges since they are responsible for collecting firewood for cooking and heating while men and boys are responsible for bringing livestock from the forest to warmer areas near fire places.

Climate change impacts and natural disasters notwithstanding, the costs of ecological degradation resulting from unsustainable

farming practices (including water and soil contamination, decreased productivity, low food quality and decreased nutritional value) are not included in strategic plans or budgets. With multiple demands on the country's natural resource base, there is a need for greater recognition that these resources are finite and will be expended if they are not maintained.

Immediate and long-term climate risks are only partially integrated into rural and agricultural development policies. Agricultural extension services are not equipped to advise farmers on how to improve resilience in practical and cost effective ways. Information on climate risks is not readily available at the sub-national level. Furthermore, there is an insufficient understanding of the mechanisms for poor farmers to cope with climate risks or the nature of the support needed to reinforce these mechanisms. There is also a growing demand for national and local early warning systems related to reliable weather forecasting, flood, drought, agriculture adaptation and community engagement in disaster preparedness and response.

The United Nations Children's Fund (UNICEF) estimates the annual population growth rate in Lao PDR from 2012 to 2030 to be 1.6 percent (2015). Based upon a population of approximately 6.7 million in 2012, the total population estimate of 9 to 10 million between 2040 and 2050 appears to be realistic (World Population Review, 2016). This figure translates into an increase in population density from 18 persons per square kilometer in 1990 to 42 persons per square kilometer in 2045. Without economic changes, this will increase constraints on the environment, natural resources and food production systems. It will also accelerate the significant climatic alterations already affecting food and nutrition security.

Local food production systems have a number of advantages compared to more global approaches. Local systems are built directly upon the knowledge and experience of men and women farmers, and are directly associated

with families' livelihood needs. This usually leads to more diversified food production (although in smaller quantities) including chili, ginger, peanuts, sesame, beans, squash, pumpkins, cucumber and sweet potatoes. Women and girls are responsible for weeding and harvesting these products while men and boys are responsible for fencing plots and maintaining fences. Local produce also requires significantly less transportation: it is often carried home by women and girls for household consumption or to the market for income generation (in order to buy other essential foods).

When shocks occur, farmers can adapt much more easily than in farming systems in which the main aspects of production (inputs, maintenance, technology, trading, sales, etc.) are outside of their control.

2.2.5 Maintain genetic diversity and ensure the equitable sharing of benefits

SDG 2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and ensure access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge as internationally agreed.

The adaptive commercial potential of the country's genetic resources has not been fully researched, nor have intellectual property issues been fully considered. SDG 2.5 offers a stimulus to further protect and formally codify the country's biodiversity, promoting climate resilience through management of seed stocks with characteristics such as drought and pest resistance, short maturation periods, variable water requirements and extreme-temperature

resistance. However, with very little support for Lao PDR's genetic resources, this critical effort has been severely underfunded.

The country's geography, which includes the Annamite mountain range and Mekong river basin, is rich in agro-biodiversity. There is an enormous unquantified potential for identifying and propagating varieties suitable for changing climatic conditions and with high nutritional value, which could provide smallholders with critical opportunities to adapt to climate change. The country's native tree stocks have the potential to be the foundation of a nation-wide reforestation programme, re-establishing the country as a global sink for greenhouse gas emissions.

Little genetic material is maintained in seed banks. Research centres located within NAFRI maintain limited genetic source materials and data on different varieties of staple foods (rice, maize), small livestock (pigs, chickens), vegetables and fruits, NTFPs, fish and aquatic resources, and commercial and rare tree species. Smaller collections are available for maize, cassava, beans, sugarcane and sorghum.

Taking action on this SDG represents a new strategic area for the country. While Lao PDR has been diligent in reporting to the Convention on Biological Diversity (submitting its fifth report in 2016), many objectives have been left uncompleted. Objective 5: Ensure that the social and economic benefits from the use of genetic materials and products originating in Lao PDR accrue to the nation, is listed as 'Not achieved' (Ministry of National Resources and Environment, 2016).

Building on the proposed programme of work outlined in the 5th Report on the Convention on Biological Diversity, scientifically sound research based on international best practices for the establishment of seed banks and protection of in-situ diversity is required. Additional efforts will also be required to link the biodiversity protection aspects of genetic diversity with commercial interests. Based on experiences in Thailand, this presents an

opportunity for collaboration between national research institutes, international agricultural researchers from the Consultative Group on International Agricultural Research (CGIAR), academia and the private sector.

Links to international trade regimes regarding intellectual property rights may also emerge as the commercial potential of germplasm is better understood.

Finally, the issue of 'fair and equitable' access to genetically diverse seeds and related benefits has not been considered. This bears further examination, especially since these benefits are different at the community and household levels; for men and women; and for those engaged in different modes of biodiversity protection such as seed preservation, propagation and in-situ storage.

2.3 Structural challenges to food security governance

There is clear government commitment to address food and nutrition security in Lao PDR, as demonstrated by the formation of new coordination bodies, the inclusion of food and nutrition security in development portfolios, and the announcement of new funding streams to reinforce efforts on this issue. The details of the relevant policy frameworks are elaborated in Section 3 below.

In the lower Mekong region of Southeast Asia, governance is based on entrenched administrative structures. Established during the colonial period to facilitate industrialization, these structures may not be adequately responsive to present-day contexts. This is a global challenge and not unique to Lao PDR: existing governance systems face difficulties in addressing complex, cross-sector and interdisciplinary issues. The question of how the challenges related to meeting 9 SDGs can be met by these structures is of strategic relevance.

Lao PDR has an extensive range of strategies, action plans, sectoral policies and strategies. However, implementation of these policies and plans lags far behind the outcomes and objectives specified in the policy documents. At the core of this issue is the means by which these strategies and plans are conveyed to provincial-, district- kumban- (village cluster) and village-level governments, and the resources provided to implement them.

Because of a lack of management, financial, and human capacity, policies and strategies developed at the national level are not being applied at the sub-national level. Delegation of authority from the central to the sub-national level is not always clear, leaving provincial counterparts uncertain about whether they have the designated authority to act. Policy commitments at the national level are not matched by budget allocations to provincial- and district-level counterparts. In addition, some provincial- and district-level counterparts do not know how to access funds from the national level. This is the single most important gap in governance.

The disconnect between planning and implementation is common to many policies related to food and nutrition security, making it challenging to realize the SDGs, which require sub-national policy implementation. Efforts are underway to address this issue, including the Sam Sang decentralization policy, which has established a three-level policy process identifying the province as the strategic level, the district as the planning level, and the village as the implementation level (Laos-Australia Development Learning Facility, 2015).

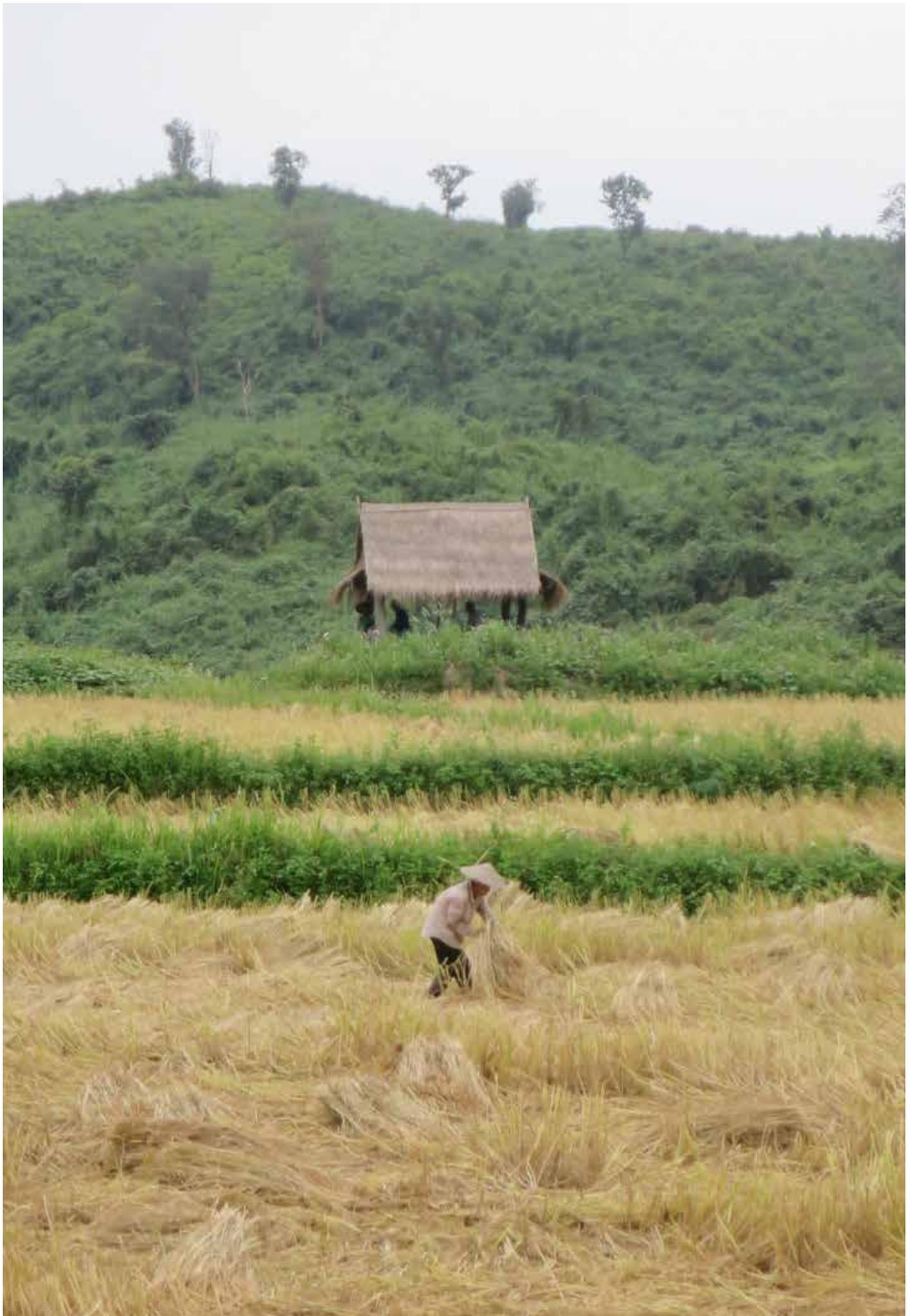
A second important aspect of governance is the need for a multi-sector approach to meet the SDGs. SDG 2 alone will require coordination among stakeholders in agriculture, public health (including mother-and-child health, nutrition and water and sanitation), social protection, trade, environment, gender equality, natural resources, agricultural research, climate change, disaster risk and

resilience, agricultural extension, rural finance and land governance. Considering the SDG agenda in its entirety, the list of potential stakeholders is even longer.

Despite the reinvigoration of the NNC as a coordination body for all nutrition stakeholders, the range of issues to be considered in order to meet the SDGs exceeds the mandate and expertise of the NNC, which is focused on the coordination of nutrition programmes. This is not a criticism of the NNC, but an illustration of the complex coordination challenges arising from the multidisciplinary nature of the SDGs. While existing coordination mechanisms (including the informal development partners group on food and nutrition security, the Sector Working Group on Agriculture and Rural Development, and other sectoral working groups) are fit for purpose, there are questions about how to coordinate multi-sector strategies without creating a new coordinating body. This question will be addressed in Section 5.4.

The provincial and bilateral consultations undertaken during this strategic review process confirm that food and nutrition security comprise a wide range of rural development issues.





Response analysis



This section outlines the institutional architecture for food and nutrition security, including institutions directly and indirectly responsible for progress on SDG 2 targets. It provides an overview of government ministries and institutions, policies and strategies, and coordination mechanisms, and summarizes the roles of the private sector, CSOs and the media. It also summarizes available information on budgets and financial flows for food and nutrition security. Taken together with the situation analysis (Section 2), it provides a basis for analysing the gaps, opportunities and recommendations in Section 4.

3.1 Institutional framework

The **Ministry of Agriculture and Forestry** is government entity responsible for all aspects of food production. Since 1975, the ministry's mandate and structure have been repeatedly revised. The ministry is present in all provinces

through provincial agriculture and forestry offices, and in all districts through district agriculture and forestry offices. At the national level, it includes NAFRI and agriculture and forestry colleges. At the sub-national level, there are several research centres with varying capacities.

The legal foundations for the ministry's operations include the Agriculture Law, the Forestry Law, the Law on Aquatic Resources and Wildlife, the Law on Livestock and Veterinary Services, the Plant Protection Act, the Fisheries Act and the Irrigation Law. The ministry's core strategic planning document, the Agricultural Development Strategy 2016–2020 and Vision to 2030 (Ministry of Agriculture and Forestry, 2015a) is discussed below.

In support of the Agricultural Development Strategy, NAFRI's research strategy focuses on six thematic areas, with the intention for

research to support and guide applied field interventions in the future. The six themes include: sustainable agro-biodiversity; improved agriculture productivity; agricultural adaptation to climate change; agriculture and forestry policy research; capacity building; and information and communication.

Agricultural extension provided by the former National Agricultural Field Extension Service and the Department of Agricultural Extension and Cooperatives has accrued useful experience and good practices, but does not have the capacity or funding required to scale up nationally as required for servicing all smallholder and family farmers in the country.

The **Ministry of Education and Sports** plays a central role in human resource development, providing the people of Lao PDR with knowledge and skills, and promoting good health. In 2014, the Minister issued a school lunch policy (Order 1679/MoES), which aimed to promote the consumption of nutritious foods, increase enrolment and exam pass rates, and reduce dropout and grade-repetition rates of students from preschool to lower-secondary level. The policy targets poor, remote rural areas, with high concentrations of ethnic minority groups and children with special needs, malnutrition and drop-out and repetition rates, and low incomes, enrolment and gender equality.

The Department of Preschool and Primary Education is responsible for implementing the National School Meal Programme aimed at providing good nutrition, promoting cognitive and physical development, and improving the health of school children. Within this programme, children are instructed to wash their hands before meals and after using the toilet, and school administrators are encouraged to provide safe water and clean toilet facilities. Volunteer cooks from the Lao Women's Union (LWU) are taught about the nutritional value of different types of food and how to prepare nutritious, clean and varied meals. Vegetables and fruits are cultivated, and animals raised in schools and communities. The ratio of cooks (mostly

women) is 1 per 50 children; men help to set up school gardens. There is a steady supply of fresh food for school meals at 1,500 schools nationwide. The Ministry's current sector-development framework focuses on expanding equitable access to education, especially early childhood education, including community-based nutrition programmes for children under 5.

The **Ministry of Environment and Natural Resources** was created in 2011 by merging the Water Resource and Environment Administration with departments of the National Land Management Authority, the Geology Department, the Department of Forest Conservation, divisions of the Ministry of Agriculture and Forestry, and the Lao National Mekong Committee.

In its original form, the Water Resource and Environment Administration included the Department of Water Resources, the Department of Environment, the Department of Meteorology and Hydrology, the Water Resources and Environment Research Institute, the Secretariat of the Greater Mekong Subregion and the Department of Environmental and Social Impact Assessment. The National Land Management Authority consisted of the Cabinet, the Department of Land, the Department of Land Policy and Land Use Inspection, the Land and Natural Resources Information Research Centre, and the Land Use Planning and Development Department.

The current Ministry of Environment and Natural Resources includes the Department of Environment, which hosts the Climate Change Office that acts as the national focal point for the United Nations Framework Convention on Climate Change (UNFCCC). It communications to UNFCCC include the recent Intended Nationally Determined Contributions report, submitted in November 2015. This ministry is also responsible for the development and implementation of a number of policies, plans and guidelines related to the SDGs. In the context of SDG 2, they include land, water,

forest, environment, ecosystems, climate change and quality assurance. In addition, the ministry serves as national focal point for the Global Environment Facility (GEF) and the Green Climate Fund (GCF). The Department of Forest Resource Management was formed within the ministry in 2012.

The **Ministry of Health**, through the Department of Health and Sanitation Promotion (including the newly created Centre for Nutrition), and the National Institute of Public Health, is responsible for national nutrition policies, programming, monitoring and providing all critical data.

This ministry is involved in sector-specific, nutrition-relevant interventions including deworming, micronutrient supplementation, infant-and-young-child feeding, and mother-and-child health. The Ministry of Health co-chairs the Sector Working Group on Health with the Embassy of Japan and the World Health Organization (WHO), and hosts the secretariat of the NNC, playing a major role in organizing the annual National Nutrition Forum since 2015.

The **Ministry of Labour and Social Welfare** is responsible for safeguarding social welfare, employment benefits and disaster response. The ministry is small in terms of staff numbers and has limited financial capacity (ILO, 2015).

To date, its outreach and social protection activities are minimal. The 8th NSEDP aims to strengthen the ministry's performance and upgrade social protection legislation, including the Labour Law, Social Security Law and Decree on Minimum Wages. By 2020, a Decree on Social Welfare, a Decree on Disability and a modified Decree 343/PM (merged into Decree 272) are also proposed.

The ministry's vision for the formal employment sector is to improve the quality and size of the national workforce by 2020 in order to meet current labour demands and compete within the region. It aims to develop human capacity for quality domestic employment in agriculture,

industry and services, and establish a system for vocational education with multi-disciplinary and specialized expertise. However given the ministry's limited human and financial resources, and the fact that 2020 is only four years away, it will be a major challenge to achieve this ambitious vision.

The **Ministry of Planning and Investment** is responsible for managing macro-level investments and strategic planning, including preparation of socio-economic strategic plans and policies regarding economic governance, statistics, international economic cooperation and domestic and foreign investment. Beyond its coordination role among sectors and local and national planning, it is responsible for official development assistance (ODA), statistics and monitoring investment programmes and projects.

The ministry's core responsibility is to develop the country's five-year National Socio-economic Development Plans (NSEDPs). These plans constitute the most important blueprint for national development policy, interpreting the resolutions of the Lao People's Revolutionary Party. The present 8th NSEDP (2016–2020) sets out the social and economic development strategy aimed at graduating from LDC status in 2020. The NSEDP conforms to sector-specific and local development plans to ensure harmonized implementation based on funding from development assistance, loans, domestic and foreign private investment, and other sources. The 8th NSEDP contains seven strategies, which are integrated with the targets for SDG2:

1. Quality, balanced, continuous, sustainable and green economic development
2. Graduating from LDC status by 2020 and meeting SDGs
3. Human resource development
4. Sustainable, secure, efficient and green protection and utilization of natural resources
5. Increased effectiveness of the state in governing society by law
6. Regional and international integration and connectivity

7. Industrialization and modernization

Food and nutrition security are included in the second target of the 8th NSEDP, to be achieved by 2020. It aims for sufficient food with comprehensive nutrition, increased agricultural productivity, rehabilitation of forests (with the target of 70 percent forest cover), support for agriculture based on the suitability of land and climate (agro-ecology), and the promotion of good agricultural practices.

As per the ministry's 2013 Guidelines on the District Socio-Economic Development Planning, the NSEDP socio-economic development plan combines both top-down and bottom-up approaches. A top-down approach is used to identify development strategies, goals and targets for annual and five-year plans; the government guides policy making and provides technical support. Policy direction is provided to provincial, municipal, and village governments as well as to ministries and other national authorities, and provincial and district departments.

Districts, provinces and ministries have their own annual and five-year social economic development plans. Villages are expected to develop participatory land-use plans and village development plans in areas with national government support. Certain regions and economic zones have their own development plans.

The bottom-up approach involves the submission of village development plans at the *kumban*, district, provincial, and national levels for approval by the National Assembly. The socio-economic development plans developed at lower administrative levels are consolidated into the NSEDP.

Within the planning processes outlined above, funding sources for sectoral and local plans are not necessarily linked since sectoral and local plans are approved prior to inclusion in the NSEDP. Inclusion of a given plan in the NSEDP does not mean that funding is available. The national apparatus for gender equality

and women's empowerment consists of three institutions:

The **Lao National Commission for the Advancement of Women** was established in 2003 to support the government in researching policies and strategies for women's advancement. It also coordinates the implementation of policies on gender equality and the elimination of discrimination against women with national and international stakeholders.

The commission's secretariat is mandated to: assist in research strategies, action plans, laws and projects on gender equality; implement the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW); promote women's empowerment; and carry out training. The commission also focuses on improving coordination with national and international organizations, monitoring and reporting. The secretariat contributes to communication on progress made towards equality between women and men, and the prevention of violence against women and children.

The **LWU** is present at the national, provincial, district and village levels. It receives technical and financial support to interpret policies and provide guidance to the Party as well as to implement government strategies aimed at protecting the rights of women and children. The LWU and the National Commission for the Advancement of Women complement each other's work, taking a comprehensive approach to gender issues.

The **Women's Caucus** is an organization for women parliamentarians under the direct supervision of the National Assembly Standing Committee. It assists the National Assembly in: mainstreaming gender into laws; overseeing the implementation of the Constitution and laws and policies related to gender equality, women's advancement and mother-and-child health; promoting development; and protecting the interests of women and children.

Consisting entirely of women parliamentarians, the Women Caucus is present in four of six national committees (it is not represented in the Committee for National Defence and Security or the Committee for Ethnic Affairs). The Caucus has set a good example in advocacy, mobilization and revision of legislation in sectors related to women and children.

The institutional capacities of all three of these institutions need to be strengthened and they require more funding.

3.1.1 National Nutrition Strategy and Plan of Action 2016–2020

Following the first National Nutrition Strategy and Plan of Action (2010–2015) drafted in 2008, the 2016–2020 National Nutrition Strategy and Plan of Action is the national strategic policy document for multi-sector efforts to improve nutrition in Lao PDR. It is implemented by the NNC (see the section on coordination mechanisms below) and was drafted in line within the NSEDP and SDG 2. The document is aimed at achieving SDG 2 and directly contributing to several other SDGs.

It is increasingly clear that the SDGs will not be achieved without decisive and integrated action among all stakeholders (Government of Lao PDR, 2015a).

The strategic objectives of the National Nutrition Strategy are to:

- tackle the immediate causes of hunger (at the individual level) and focus on sufficient food consumption and safety, emphasizing the first 1,000 days of life, and reduce the prevalence of diseases caused by contaminated food and indirectly transmitted infectious diseases, which impair the body's ability to absorb food consumed; and
- tackle the underlying causes (at the household and community levels), which requires improvements in the safety and diversity of food consumed so that people

have access to food at all times in all locations, focus on improving mother-and-child health practices, clean water systems and sanitation, and provide healthy environments and access to health services.

The strategy also emphasizes multi-sector efforts in 22 priority interventions across health, agriculture and education to be implemented in areas with high malnutrition and food insecurity. These 22 interventions (and an additional seven second-priority interventions) form the basis of the multi-sector plan of action currently being implemented in Luang Namtha, Oudomxai and Saravan provinces, with plans to expand nationwide in the next five years.

Target populations for the National Nutrition Strategy include children under 2, children under 5 and pregnant, postpartum and lactating women. This covers the first 1,000 days of life – a critical period for healthy physical and mental development. Priority is given to geographically remote upland areas where malnutrition rates are highest, urban populations with low education levels, recently relocated villages and disaster-affected populations (Government of Lao PDR, 2015a).

According to the Plan of Action (2016–2020), the cost of the National Nutrition Strategy is USD 411 million over four years. At the 2015 National Nutrition Forum, the funding gap to 2020 was estimated at USD 200 million, with 90 percent of funding coming from development partner pledges. The strategy has been extensively researched and assessed, notably in the Nutrition Stakeholder and Intervention Mapping Exercise (Ministry of Health, 2016) and the Ministry of Health/Ministry of Planning and Investment study on institutional constraints to nutrition governance (Wilkinson and Chanlivong, 2015).

3.1.2 Agriculture Development Strategy 2025 and Vision to 2030

The Agriculture Development Strategy 2025 and Vision to 2030 is the core strategy of the Ministry of Agriculture and Forestry, adopted by decree #53/GoL on 20 February 2015. This strategy aims to: ensure food security; produce competitive agricultural commodities; develop clean, safe and sustainable agriculture; and gradually shift to the modernization of a resilient and productive agriculture economy, with rural development contributing to the national economic base (Ministry of Agriculture and Forestry, 2015a).

Although the strategy is focused on expanding farming systems for commodity production and improving regional and global market linkages, its overall strategic orientation is on food and nutrition security. The strategy is flexible and responsive to innovative approaches and technologies that would help to achieve SDG 2. It provides a platform for: the integration of quality food production within agro-ecological zones; social protection for vulnerable producers (in the context of disaster risk reduction); gender equality (establishing gender balance targets for participation of 45 percent women farmers of in every activity); technical training and technology application; and climate-resilient agriculture through smallholder farmers. It also states that 50 percent of smallholders must have access to agricultural land and credit from the Poverty Reduction Fund or Village Development Fund.

The strategy remains open for modifications and will be reviewed and revised on regular basis in order to be consistent with Party policies and national development needs (Ministry of Agriculture and Forestry, 2015a). In addition to this strategy, a number of complementary strategies, guidelines, studies and plans have been produced by local and international stakeholders, and government agencies.

3.1.3 ASEAN Declaration on Social Protection 2013

While there is no single ministry tasked with social protection and no sectoral strategy on this issue has been developed, efforts to integrate social protection into public policy are underway. The Government is developing policy frameworks in line with national poverty eradication goals and its international commitments. The country's constitution and ratification of international human rights treaties reflect the Government's commitment to dignity and quality in employment and work place protection, including decent incomes and basic public services for all people.

In October 2013, together with other member states of the Association of Southeast Asian Nations (ASEAN), the Lao Government signed the ASEAN Declaration on Strengthening Social Protection. This declaration emphasizes equitable access to essential services and the gradual extension of equitable and sustainable social protection to all citizens of ASEAN member states. Social protection should be based on respect for fundamental freedoms, protection of human rights, social justice, solidarity, non-discrimination, accessibility, reasonable accommodation, gender equality, social inclusiveness, coherence and accountability in line with national legislation.

The declaration recognizes the importance of the International Labour Organization (ILO) recommendation on the 'social protection floor', a basic guarantee to protect people while reducing poverty, vulnerability and social exclusion. The social protection floor comprises a set of basic social guarantees that ensure access to essential health care and income security for children, elderly, disabled and unemployed people. In February 2016, the Ministry of Labour and Social Welfare submitted a draft social protection policy with assistance from ILO.

3.1.4 National Strategy for Gender Equality

The National Strategy for Gender Equality (2016–2025) was derived from the Second National Strategy for the Advancement of Women and approved by the Prime Minister in March 2016. It presents achievements and shortcomings in the implementation of the Second National Strategy for the Advancement of Women, and Five Year Plan of Action for Gender Equality (2016–2020), and provides a vision for 2030.

The vision outlined in the national strategy: ensures respect for women’s rights and gender equity, including eradication of all forms of discrimination against women in all sectors; and promotes women’s full participation in political, economic, cultural-social and family life. This includes the eradication of discrimination against women and girls with regard to food security and nutrition, particularly during and immediately after pregnancy, and opportunities for women and girls to have access the same quality of food as men and boys.

The strategy aims to ensure that all sectors promote women’s advancement and gender equity, and combat violence against women. It includes gender targets for a range of sectors and outlines how to translate political commitments in the context of CEDAW into practical actions, and integrate the principles of gender equality into national laws and policies. The strategy comprises of four strategic



areas, including two related to food and nutrition security: ensuring gender equality and women’s empowerment to participate in all fields; and ensuring the implementation of all obligations under CEDAW, the Beijing Declaration and Plan of Action and the SDGs. The strategy sets out the 2025 targets for reducing underweight among girls under 5 to 13 percent and for reducing stunting to 25 percent. Considering that the present rate of underweight is 27 percent and the stunting rate is 35.6 percent for children under 5, the Government needs to invest greater resources and more effectively coordinate nutrition stakeholders in order to reach these targets.

3.1.5 Strategy on Climate Change 2010 and National Adaptation Programme of Action 2009

The Lao PDR Strategy on Climate Change was launched in 2010 by the former Water Resources and Environment Administration. This strategy was formulated as part of a government effort to join the international community in the fight against climate change. At time of its launch, the head of the Water Resources and Environment Administration indicated that the strategy was necessary given the range of social and environmental challenges facing the country (Vientiane Times, 2010).

The national strategy is based on the overarching principles of shared responsibility and differentiated commitment, which have been stressed by the UNFCCC. Considering the urgent need to address these issues, the Government has committed to take action and participate in the Conferences of Parties to the UNFCCC.

The Strategy on Climate Change identifies adaptation and mitigation options for seven priority areas: agriculture and food security; forestry and land use; water resources; energy and transport; industry; urban development; and public health. The strategy refers to the

process of national communication to the UNFCCC, the National Adaptation Programme of Action and the urgent need for reliable early-warning systems.

The inter-agency National Steering Committee on Climate Change, chaired by the Deputy Prime Minister, provides insights and guidance on climate change policies and programmes. In addition, eight technical working groups were established in 2008 to assess the impacts of climate change and outline priority actions for adaptation and mitigation.

The National Adaptation Plan of Action, finalized in May 2009, contains 45 projects totalling USD 85 million within four priority sectors: agriculture; forestry; water and water resources; and health. The National Capacity Self-Assessment identifies needs and assesses capacity within the country to implement the Rio conventions, which the Government has ratified. These include the Convention on Biological Diversity, the UNFCCC and the United Nations Convention to Combat Desertification.

Similar to the Agricultural Development Strategy 2025 (see Section 3.1.2), the Strategy on Climate Change has multiple entry points for further action on climate resilience in the context of the country's new vision for food and nutrition security. The Government has expressed hope that the early consensus on financing commitments made during COP meetings (e.g. through the Green Climate Fund) will be forthcoming, especially to develop capacity for technology transfer, food security, forestry, energy efficiency and disaster risk management.

3.1.6 Other government strategies

ASEAN Strategic Plan of Action for Food Security: As a landlocked state surrounded by more populous neighbours, Lao PDR is highly engaged in regional integration efforts. Since

joining ASEAN in 1997, the Government has committed to supporting regional approaches to address common concerns. In 2009 at the ASEAN summit in Chiang Mai, Thailand, ASEAN leaders identified food security as a strategic priority. This was followed by the ASEAN Strategic Plan of Action for Food Security, which sought to increase food production, reduce post-harvest losses, promote functional markets and trade for agriculture commodities and inputs, ensure food stability, promote the availability and accessibility of agricultural inputs, and operationalize regional food emergency-relief arrangements.

In order to achieve this, the ASEAN Food Security Information System was introduced in 2009, followed by the ASEAN Plus Three Emergency Rice Reserve in 2010. ASEAN has been supported in this effort by the European Union, FAO and Japan's Ministry of Agriculture, Forestry and Fisheries. With the establishment of the ASEAN Economic Community in 2015, food security continues to be on the ASEAN agenda as a critical outcome for the food, agriculture and forestry sector in the ASEAN Vision 2025.

Lao PDR's engagement with ASEAN on food security is under the aegis of the Ministry of Agriculture and Forestry. Cooperation with ASEAN on a wide range of issues is noted in the Agriculture Development Strategy 2025 and Vision 2030.

The National Agricultural Biodiversity Programme: In December 2004, the Ministry of Agriculture and Forestry endorsed the National Agricultural Biodiversity Programme, which provides a framework and long-term strategy for the coordinated use, development and conservation of agricultural biodiversity. It was prepared in support of two development priorities: improving rural food security and livelihoods; and enhancing government capacity to manage the sustainable use of natural resources. The programme is consistent with implementation of the National Biodiversity Strategy to 2020 and Action Plan to 2010, the Government's Strategic Vision

for the Agricultural Sector and the National Growth and Poverty Eradication Strategy (IUCN, 2011). A review and update of the programme is currently in progress.

The programme includes work plans for each of its seven components: (i) crop and associated biodiversity; (ii) livestock development and management; (iii) NTFPs and other terrestrial biodiversity; (iv) the sustainable use and conservation of aquatic biodiversity; (v) household-based integrated agriculture production systems; (vi) management arrangements; and (vii) integrated participatory planning approaches.

The **Sam Sang Policy:** Resolution 03/ CPP/2012 aims to accelerate local economic development through: the targeted dissemination of Party resolutions and Government policies; decentralized public administration; and development of targeted villages. The Sam Sang (Three Builds) directive proposes provinces as the strategic unit, districts as the integration unit and villages as the development unit. In line with guidance from the National Assembly, the Prime Minister and the Guiding Committee for Sam Sang Pilot Projects, the Sam Sang Policy comprises a political vision, an approach to decentralize administration and a targeted national development programme.

Sam Sang was designed to be piloted and scaled-up based on lessons learned; the pilot was launched in October 2012 and completed in early 2015. In the process, many responsibilities and resources were delegated to local administrations, especially at the district level. Following the pilot, Sam Sang was scaled up nationwide in 109 villages under the administration of 51 districts (Laos-Australia Learning Development Facility, 2015).

Social Protection Policy: The Ministry of Labour and Social Welfare is improving access to social benefits by expanding social security coverage, including healthcare insurance, pensions, disability benefits and disaster

response activities. The 8th NSEDP includes a statement that social protection must be augmented in order to extend social benefits to all and enable access by all. It notes that social security systems have been established, but need to be strengthened and expanded to protect poor and vulnerable people, disaster victims, children and elderly people. Recent national workshops revealed that disabled women and children are the most vulnerable among all segments of Lao society. The 8th NSEDP includes the following social protection targets for 2020:

- Extend social security and healthcare to 80 percent of the total population.
- Provide benefits to those who served in the military during the revolutionary war.
- Establish a social welfare fund in all 18 provinces to improve the quality of life for vulnerable people, disaster victims and human trafficking victims.
- Provide protection networks to safeguard the rights and interests of children, and prevent and combat trafficking in 800 villages.

Education Development Strategy: The Ministry of Education and Sports has developed a Five Year Development Plan (2016–2020), a Ten Year Education Development Strategy (2016–2025) and a Vision for 2030, which state that all Lao citizens have equal access to quality education.

One of the objectives of the Five Year Education Development Plan (2016–2020) is to promote health, hygiene and nutrition in preschool and primary school with the objectives of improving children's nutrition and ensuring good physical and mental development, especially for poor children and those living in remote areas. Food and nutrition security activities related to the Five Year Education Development Plan include: the provision of supplementary food; promotion of food and nutrition in schools; school gardening and livestock raising; community mobilization to

promote hygiene; reproductive health and hygiene education in schools; and capacity building of school administrators and teachers to promote hygiene, reproductive health and good nutrition.

New efforts in curriculum development have led to the inclusion of climate resilience in schools' life-skills agendas.

Strategy for Gender Equality in Agriculture and Forestry Sector: The Ministry of Agriculture and Forestry's Strategy for Gender Equality in Agriculture and Forestry Sector (2016–2025) and Vision 2030 aims for equal access for men and women in all ethnic groups to natural resources, agricultural land, shelter, development funds and technical support (Ministry of Agriculture and Forestry, 2015b). It sets the target of a 45 percent participation of women farmers from poor households in all activities, including activities focused on technical training, access to new technologies, shelter and stable employment.

3.2 Development partners

Within the United Nations system, technical, financial, and implementation support for food and nutrition security is provided by the three Rome-based agencies, UNICEF and others, with coordination of the SDG agenda by the United Nations Resident Coordinator's Office.

WFP's operations in Lao PDR have five components, which employ a nutrition-focused approach: (i) emergency preparedness and response; (ii) mother-and-child health and nutrition; (iii) school meals; (iv) livelihood initiatives for nutrition; and (v) food fortification and marketing. Together, these operations support more than 1 million people. The strategic focus of the current country programme is to: (i) prevent and reduce wasting, (ii) reduce stunting; and (iii) address micronutrient deficiencies.

WFP also: supports capacity building for emergency response via the National

Disaster Management Office; implements joint mother-and-child health programming with other United Nations partners; provides school meals to 1,500 schools; implements food assistance for assets; and maintains a vulnerability assessment unit, which is an important source of integrated data on food and nutrition security and vulnerability. One example of WFP's role in generating valuable data is the 2016 Consolidated Livelihood Exercise for Analysing Resilience (Ministry of National Resources and Environment, and WFP, 2016).

Present in Lao PDR since 1975, **FAO** is globally mandated to promote food and nutrition security. Working closely with Ministry of Agriculture and Forestry, FAO provides policy, technical and financial support across a wide range of agricultural sectors, and was the government's primary partner in formulating the 2015 Zero Hunger Challenge Roadmap (National Food Security and Commodity Development Committee, 2015).

The International Fund for Agricultural Development (IFAD) is a United Nations agency that provides specialized technical assistance and financing for agriculture.

The United Nations Development Programme (UNDP) implements cross-sector projects focused on climate adaptation (in collaboration with the Ministry of National Resources and Environment) and food security, and is also engaged in the process of acceleration towards the SDGs.

UNICEF has long been an important advocate for nutrition policy and supporter of nutrition implementation. In addition to providing support to nutrition services and information via the public health sector, UNICEF partnered with the Ministry of Health on the Lao Social Indicators Survey and nutrition surveys, which provide definitive datasets on nutrition indicators in the country (Ministry of Health, 2012). In 2016, UNICEF took the lead in the forthcoming national behaviour change campaign, which aims to promote greater

public access to accurate nutrition information. Among the donor community, the **European Union** has taken a significant interest in food and nutrition security in Lao PDR, making nutrition the central component of its 2016–2020 programme cycle.

The Swiss Agency for Development and Cooperation (SDC) has funded research and other projects across a range of rural development issues, including the Agro-biodiversity Initiative, the Linking Agriculture, Nutrition and Natural Resources approach, the Laos Extension for Agriculture Project and the Laos Upland Rural Advisory Service.

Australian Aid (formerly AusAID) has assumed a convening role in education, providing important data linking nutrition and academic performance, and has historically provided funding to a range of integrated NGO activities related to food security, clearance of unexploded ordinance and improved livelihoods.

NGO partners in food and nutrition security at the project level include **CARE, Health Poverty Action, Helvetas, Oxfam, the Netherlands Development Organization (SNV), German Agro Action, World Vision** and the **World Wildlife Fund**. According to the International NGO Network, 24 NGOs implement 45 food security projects, and 19 NGOs implement 30 nutrition projects in the country.

Lao PDR joined the **Scaling Up Nutrition (SUN) movement** in 2011 – one of the first five countries in the world to do so. From



2008 to 2010, Lao PDR was one of two pilot countries participating in the Renewed Efforts Against Child Hunger and undernutrition (REACH) initiative, a global effort to combat child malnutrition. A global multi-stakeholder initiative under the United Nations umbrella, the SUN movement aims to build networks among stakeholders from civil society, government and the private sector in order to make sustainable progress in improving nutrition. SUN does not implement programmes directly but acts as a catalyst to generate momentum across the entire nutrition agenda.

Major accomplishments in 2015 included the establishment of the common results framework to support the national Plan of Action, a logical framework matrix and a monitoring and evaluation plan. The SUN Network also established a civil society alliance comprised of 56 NGOs and community development organizations, hosted by Plan International. A major milestone for 2016 will be the establishment of the SUN Business Network, a platform for sensitizing business interests to the National Nutrition Strategy and Plan of Action and exploring common approaches to addressing development challenges caused by poor nutrition.

3.2.1 Coordination mechanisms: the National Nutrition Committee and the Sector Working Group on Agriculture and Rural Development

The **National Nutrition Committee (NNC)** is the country's primary coordination mechanism for nutrition-related issues. Established in July 2013 by Prime Minister's Decision 73/PM, it is chaired by the Deputy Prime Minister and supported by senior staff from Ministries of Health, Planning and Investment, and Agriculture and Forestry, with high-level representation from other government institutions. A secretariat headed by the Deputy Minister of Health has been established to support the NNC. The secretariat is responsible for maintaining the momentum within the NNC, developing technical materials for committee members

and coordinating daily communication with development partners and other stakeholders. The NNC is responsible for the annual National Nutrition Forum, the first of which was held in November 2015. The Forum aims to provide a dedicated space for mobilizing government actors, provincial leaders and external development partners such as international organizations, academia and businesses focused on mother-and-child health and nutrition. The forum aims to make nutrition a long-term national priority reflected in government policies and budgets, donor support, business investment, scientific research and civic action (NNC, 2015).

Support is provided to the NNC by the Informal Development Partners Group co-chaired by the European Union and UNICEF, which meets on a quarterly basis. The group has proven to be a strong platform for information exchange and collaboration with development partners. The Sector Working Group for School Meals also assists with coordination, working with the National School Meal Programme.

The Sector Working Group on Agriculture and Rural Development (SWG-ARD) was established through the Government's Roundtable Meeting coordination process to sustain progress towards the goals outlined in the NSEDP and ensure that all stakeholders are aware of developments in the sector.

Chaired by the Vice-Minister of Agriculture and co-chaired by the Ambassador of France and the IFAD country director, the SWG-ARD meets three times each year, providing a forum for dialogue and coordination with the Government, development partners and other stakeholders in agriculture and rural development. It also promotes policy dialogue, joint priority setting, resource mobilization, results orientated management and monitoring, and facilitates the implementation of sectorrelated actions in the Vientiane Declaration's Country Action Plan.

In addition, the SWG-ARD oversees a number of sub-sector working groups on agribusiness,

uplands and agro-biodiversity. The sub-sector working group on agribusiness, established more than ten years ago, has conducted a substantial body of research on smallholders' experiences with agribusiness. A policy think tank at NAFRI provides the SWG-ARD with policy analysis and updated evidence to support better policy making, including the policy brief "Nutritional Status of children, Diversity of Food Consumption and Ethnicity in Lao PDR", published in March 2014.

3.2.2 Civil society organizations

There are currently 75 international NGOs, 140 Lao non-profit associations and nine national foundations registered in the country (Directory of International NGOs, 2014; Ministry of Home Affairs, 2013). Of the 140 associations, 43 have permission to operate nationally. These CSOs have a significant role in facilitating engagement on food and nutrition security among all stakeholders. CSOs' efforts to raise awareness and support are important forces for change that encourage public involvement in food and nutrition security.

Local CSOs often work close to beneficiaries and have the local knowledge to provide services efficiently and effectively. CSOs also make important contributions to equitable and sustainable development, enhancing the diversity and quality of development dialogue, and anticipating future development issues early on.

CSOs' presence and broad stakeholder support are significant for rural livelihoods because CSOs can provide services in remote areas where government services are difficult to access. However, their current level of collaboration with the Government is as not strong as it could be.

3.2.3 Acceleration under the United Nations/World Bank system

Support to food and nutrition security is a core mandate of several United Nations agencies and is integrated into the United Nations Development Assistance Framework (UNDAF) for Lao PDR and these agencies' plans of action. The World Bank also implements a range of income generation and food production activities that contribute to food security and nutrition in the Mekong region.

The MDG Acceleration Framework provides a systematic means for Lao PDR and other countries to develop national action plans and processes that pursue their MDG priorities. The framework builds upon existing country knowledge and experiences, and policy and planning processes. Its aim is to develop country-level partnerships (with mutual accountability for all partners) in order to reach the MDGs and accelerate those that are delayed.

In response to national demand, UNDP and other United Nations agencies are supporting the development of MDG acceleration action plans in Lao PDR.

3.2.4 Private-sector engagement in food and nutrition security

Over the past decade, Lao PDR has taken steps towards creating an enabling environment for trade, foreign direct investment and the free flow of goods and services within the region. The country joined the World Trade Organization in 2013 and has promoted itself as 'land linked' rather than land locked, and as 'the battery of Asia', encouraging investments in its infrastructure and energy sector.

Brokered by the Ministries of Public Investment and Industry and Commerce, the Government has made significant efforts to improve the investment climate by establishing legal, regulatory and tax frameworks favourable to

investors (Government of Lao PDR and United Nations, 2013). Given its central position in mainland Southeast Asia and its resource base, the country remains an attractive destination for foreign direct investment in agriculture and natural resources, and the Government has been opening up these sectors to foreign investment for more than a decade. It is therefore likely that the prevailing trends in Lao PDR will continue towards increased commercialization and consolidation, led by foreign direct investment.

Within food systems, private-sector actors are engaged at multiple stages of food production, processing, supply and consumption. Supermarkets are now found in major urban centres across the country, competing against traditional local markets; regionally integrated supply chains are able to offer economies of scale and lower retail prices. Outside of major urban centres, the majority of available imported foods tend to be low cost and low quality. Increased access to imported food has not resulted in improved nutrition.

The value of these formal retail and wholesale markets is outstripped by the country's extensive network of informal trade through which food enters Lao PDR from neighbouring countries, notably Thailand along the Mekong, the eastern border of Vietnam and the northern highlands of China. This cross-border trade is carried out by individual traders, including many women, who source products from neighbouring countries for sale in local markets, small shops and food stalls. With domestic availability of animal protein, fruits and vegetables dependent on seasonality, small-scale imports ensure the year-round availability of food and are an important component of the country's markets. The total value and volume of the informal food trade is unknown, but it certainly constitutes a vital source of both food and livelihoods.

During the course of the review, stakeholders noted that the founding of the SUN Business Network was highly anticipated. A wide range of potential collaboration exists, including

on behavioural change communication, nutritional fortification and pro-poor marketing strategies. Regarding agribusiness development, the Sub-Sector Working Group on Farmers and Agribusiness, established in 2006, has taken a proactive stance on many business development issues faced by smallholder farmers. This working group aims to identify opportunities for promoting agribusiness development in a way that empowers smallholders, including policy options and capacity-building priorities.

3.2.5 Academic and research institutions

The country's most important academic and research institutions include the National University of Laos, the National Economic Research Institute, NAFRI and the Institute of Natural Resources and the Environment (at the Ministry of Natural Resources and Environment). A National Research for Development Forum was organized by the National University, NAFRI and the National Economic Research Institute in 2014 and 2015. In addition, a regional forum on climate resilience, smallholder farming systems and food security was organized by NAFRI in 2013 and 2015.

As mentioned in section 3.2.1, the Ministry of Agriculture and Forestry, with support from development partners, established a policy think tank in 2013 focusing on food security and nutrition, commercial agriculture, market access and sustainable development of the northern uplands. At the sub-national level, it includes representatives of government institutions, research stations and other stakeholders throughout the country.

International and regional organizations supported by the CGIAR include the International Water Management Institute (IWMI) and the International Rice Research Institute (IRRI). In addition, regional research initiatives such as Mekong Institute, the

Mekong River Commission and other bilateral research organizations are active in both research and small development projects.

Efforts have been made to bring scientific and policy processes together. The most prominent of these is the CGIAR Water, Land and Ecosystems research initiative, which aims to improve the governance and management of water resources, and associated land and ecosystems in the Greater Mekong Region. This initiative has spawned several science-policy forums, bringing together researchers and senior-level policy makers such as Ministers, Vice Ministers and members of National Assembly committees.

Several meetings on topics relevant to food and nutrition security take place throughout the year, particularly in Vientiane. Related documentation, including numerous publications, presentations, conference and meeting minutes, abstracts and concept notes, offers a range of interesting insights. No systematic catalogue is available however, with the notable exception of the LaoFab document repository (www.laofab.org).

Research through private consultants is funded by many donors, development banks and United Nations agencies. Project-related research is often undertaken by international NGOs such as CARE, the International Union for Conservation of Nature (IUCN), Oxfam, Save the Children, the Wildlife Conservation Society, Plan International and other international organizations. Most research activities are driven by the commissioning stakeholders or directly support their operations. Integrated, cross-sector inter-disciplinary studies are rare.

Experience shows that these studies and meetings are important for capacity building and, if properly planned and coordinated, can positively influence evidence-based policy development and decision making. But there has been limited systematic assessment of the overall research climate to understand how research activities can be integrated into policy processes. Most importantly, statistical

data collection is insufficiently linked to contemporary scientific research. As a result, there is only limited engagement with the national and regional research communities on issues related to food and nutrition security, which are relevant for attaining the SDGs. Recently, new institutional arrangements have aimed to enhance the flow of information and research outcomes towards the Government's and the Party's – planning and decision making.

3.2.6 Media, communication and public information

In recent years, there have been significant changes in the media sector. The Ministry of Information and Culture has granted licenses for private organizations to operate television, radio stations print media, and to buy airtime on government television and radio channels. National radio and television broadcasters offer multiple-language programming, which is extremely popular.

Use of the Internet is growing in the capital and large towns of Luang Prabang, Savannakhet, Champassak and Vientiane. Social networks like Facebook and Twitter are becoming popular platforms, especially among young people in the cities. Blogs and YouTube have also become common venues for young people to search for information and express their ideas.

Government projects (with the support of donors and international NGOs) often include communication and advocacy materials including pamphlets and newsletters, and maintain websites for those with Internet access. National and international events and celebrations provide other opportunities for advocacy and information exchange.

The majority of the population in Lao PDR lives in remote areas and the country is characterized by a rich cultural and ethnic diversity, with 49 officially recognized ethnic

groups speaking dialects different from the national language. Effective food and nutrition security education must employ effective communication channels and techniques. Various communication packages will need to be developed and tested in urban and rural areas, with different ethnic groups and among vulnerable populations such as children and the elderly.

3.3 Financial background for SDG 2

Within the timeframe of Agenda 2030, the Government is planning to transition from a low-income to a middle-income country. While the exact timing of this graduation remains to be seen, barring major economic upheavals, the country will most likely attain this goal by 2024. Economic growth is expected to continue in the next few years, with the Asian Development Bank (ADB) projecting growth between 6.8 percent and 7 percent for 2016 and 2017, coupled with low inflation.

This economic growth will continue to build upon the expansion in hydropower, mining, and construction, and will be contingent upon natural resource exploitation. Major infrastructure projects such as a high-speed rail link from China to Thailand and infrastructure improvements by ADB, the Asian Infrastructure Investment Bank, the One Belt, One Road initiative, the Greater Mekong Sub-region Economic Corridor and other regional initiatives are likely to bear fruit by 2025. Lao PDR aims to continue taking advantage of its central position in the region to become a logistics hub (through improved infrastructure), a production base (through expanded special economic zones) and 'the battery of Asia' (through expanded hydropower).

As Lao PDR's economy becomes increasingly interlinked with larger regional economies (notably China, Thailand and Vietnam),

sustained economic growth will be contingent upon continued demand in those economies. Any global or regional economic slowdown is likely to effect the country's economy.

3.3.1 Official development assistance flows:

The total value of Official Development Assistance (ODA) flows has increased over the past ten years, but has declined as a proportion of GDP. ODA topped USD 700 million per annum in 2012, but declined to under ten percent of GDP during the same period (Government of Lao PDR and United Nations, 2013). Provided that the economy maintains its present growth, ODA as a share of GDP will continue to decline, indicating a need for the Government to plan for greater financial commitments.

More than 80 percent of ODA is provided as grants or on a concessionary basis, and two thirds are channelled via government ministries, which operate as implementing agencies providing the resources for sector-specific strategies. The Ministries of Health and Education and Sports have received 16 percent of ODA disbursements while the Ministry of Agriculture and Forestry has received 12 percent. In terms of ODA spending, the education and agriculture sectors have received 18 percent each while the health sector received 13.5 percent. More than 30 percent of all ODA is allocated to social spending, especially in health and education (Government of Lao PDR and United Nations, 2013).

In 2015, the United Nations Resident Coordinator's Office completed a review of United Nations funding in the country against UNDAF, NSEDP, and SDG targets, including: UNDAF Outcome 5 (Improved food security and nutrition); Priority Area 2.2 of the 8th NSEDP (Food security ensured and incidence of malnutrition reduced); and SDG 2 (End hunger, achieve food security and improved nutrition, and promote sustainable

agriculture). The review found that funding committed, pledged and projected for food and nutrition security outstripped that for all other sectors by a substantial margin. Funding for SDG 2 in 2015 (USD 37.3 million) and 2016 (USD 32.4 million) was greater than that for all the other SDGs combined.

The projected budget for the National Nutrition Plan of Action anticipates a total cost of USD 411 million between 2016 and 2020, of which: USD 174 million will be allocated to health-sector interventions; USD 144 million to agriculture; USD 60 million to education; and USD 30 million to multi-sector approaches. As of early 2016, a funding gap of USD 200 million for 2016–2020 remained (Ministry of Health, 2016).

3.3.2 Financing from the private sector

Financial tracking of non-ODA investments in food and nutrition security has improved considerably in recent years, with the SWG-ARD providing important information on funding in its 2015 Annual Report (SWG-ARD, 2015). According to data from the Ministry of Agriculture and Forestry cited in that report, 64 projects were underway in the agriculture sector in 2015 with a total value of USD 417 million. Domestic and foreign private-sector investors include 624 registered companies with a total investment value of USD 2.32 billion, utilizing over 483,000 hectares of land. Of that investment, USD 1.2 billion comes from Vietnamese and Chinese companies. Government investments in agriculture through the public investment programme totaled USD 14 million. However, these figures only refer to formally declared legal investments. The value of the informal wholesale and retail (including both cross-border and internal) trade in food is unknown.

3.3.3 Financial framework for SDG 2

The SDGs are more ambitious than the MDGs and cover a broader range of interconnected issues, from economic growth to social issues and global public goods. To realize this vision, an equally ambitious plan for financing and implementation is needed. The magnitude of the required financing for the SDGs far exceeds any single organization's capacity and demands strong partnerships among governments, the private sector and development organizations (World Bank, 2014b).

"Business as usual will not get us where we need to be by 2030," said Wu Hongbo, the United Nations Under-Secretary-General for Economic and Social Affairs, addressing the international community in Addis Ababa, Ethiopia in 2015. This speech, delivered at a gathering to discuss financing for development, acknowledged the ambitious scale of the 17 SDGs and the significant increase in resources needed to achieve them. While an exact figure on the finances needed to achieve the SDGs – including SDG 1: End poverty in all its forms everywhere – remains elusive, it has been suggested that meeting the SDGs will require from trillions of dollars (The Guardian, 2016).

With the SDG targets interlinked and requiring multiple, simultaneous efforts, no costing has been included in the SDG localization process to date. However the review team attempted to provide some indications based on guidance received from stakeholders and financial data from the Multi-sectoral Nutrition Plan of Action and the Zero Hunger Challenge Roadmap.

Noting that the Nutrition Plan of Action covers a five-year programme cycle aiming to reduce chronic malnutrition by 10 percent through 29 interventions, the total estimated cost to 2020 is USD 411 million. To meet the WHO 2025 target of 25 percent prevalence of chronic malnutrition, approximately USD 820 million will be required. It must be noted however that all 18 provinces in Lao PDR have chronically malnourished populations, but not all of them are be evenly covered by the Plan

of Action. Further programming beyond 2025 will likely require additional costs, bringing the total cost of achieving SDG 2.2 alone to more than a USD 1 billion.

The Zero Hunger Challenge Roadmap, which applies a similar timeframe as the National Nutrition Strategy and Plan of Action (2016–2020), projects an estimated cost for the rice, livestock and fisheries sectors of USD 1.6 billion, corresponding to positive gains on SDG 2.1, and components of 2.3, and 2.4. To the review team's knowledge, no estimates for the costing of SDG 2.5 exist.

While these figures are only indicative, the costs of interventions planned for the next five years alone in pursuit of SDG 2 are unprecedented. With less than 10 percent of budgets for social spending drawn from the public sector, the assumption that development assistance will provide the funding required for achieving the SDGs needs to be re-examined.

Domestic resource mobilization and ODA constitute the foundations of development financing for SDG 2 in Lao PDR. Country leadership and ownership are fundamental to successfully financing the post-2015 agenda.

There are grounds for optimism: multilateral development banks and national banks are committed to working together to break new ground in financing for development issues. The Lao Agriculture Promotion Bank has 30,000 small loan groups as clients with potential for expansion and deeper engagement in the SDG process. Nevertheless, an ambitious and clear plan for financing and implementing the post-2015 agenda is required, with explicit roles and reliable commitments for all partners.

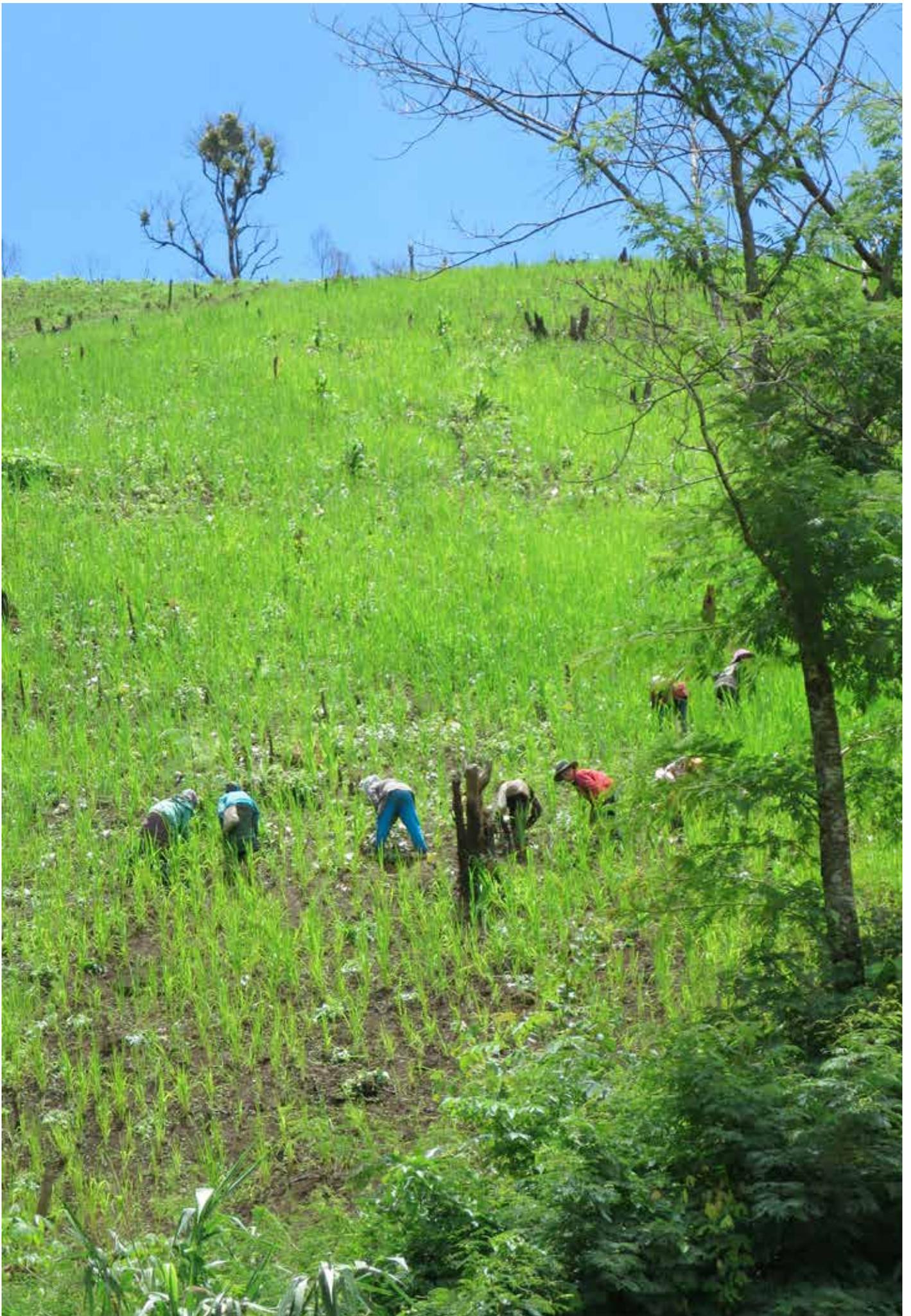


3.3.4 Sustainability of funding

Public funds need not form the bulk of funding for every sector-level strategy or the NSEDP (for example, 80 percent of the estimated funds required for the Agricultural Development Strategy will come from the private sector). Nevertheless, spending in social sectors (including health and education) remains heavily reliant on ODA. The 2016 stakeholder and institutional mapping of the National Nutrition Strategy and Plan of Action indicated that less than 10 percent of funds for implementing the Plan of Action came from the Government, and of all those funds came from a single ministry despite the engagement of three ministries in the Plan of Action.

As the Government's budgetary obligations increase over the next 15 years, there will not only be increased demand for social spending, but also for greater accountability and transparency regarding how funds are allocated and spent. With this in mind, available data underscore that: food and nutrition security programming is highly reliant on ODA; and there is a need for greater transparency with regard to government expenditure data. Without these data, it is difficult to make nuanced observations about the funding available for meeting the 17 multi-sector, interlinked SDG targets (and the additional target for Lao PDR on unexploded ordinance).





Gaps and recommendations



4.1 Ensuring access

SDG 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

In order for SDG 2.1 to be achieved, access to food will need to be improved for both rural and urban populations. If the present trend in economic growth is maintained, there will be some improvements in access to food for populations able to find employment. If this economic growth is combined with increased commitments to social development, access to food will be more evenly distributed, providing poor and vulnerable households – including women-headed households – with the financial means to secure the food they need.

Lao PDR's social and economic development is dominated by smallholder agriculture. There is clear evidence that food and nutrition insecurity are related to low agricultural productivity, rural poverty and farmers' vulnerability to external shocks, especially in areas with high a concentration of ethnic minority groups (International Work Group for Indigenous Affairs, 2015).

Food and nutrition insecurity are also the result of unequitable access to food, health care and other public services. The uneven distribution of food, nutrition services and other social benefits goes hand in hand with poor rural infrastructure in areas where lack of access to roads and infrastructure leads to high transportation costs. Barriers to the movement of food, especially during the rainy season, can cause acute malnutrition and micronutrient deficiencies. This is often the case for women and girls, who have restricted

access to food since their main responsibility is tending the rice fields while men and boys are fishing and hunting.

Periodic and seasonal impediments to the movement of food may not completely block physical access, but may reduce the available quantities, causing prices to rise. Some years, even households that are usually food secure can experience periods of inadequate rice availability lasting several months, especially during delayed or extended monsoon periods. To ensure year-round access, a greater emphasis on efficient infrastructure and supply logistics is needed. The most resilient households have assets and access to financial capital and land, highly diversified livelihoods and minimal reliance on rain-fed agriculture.

Lack of access to adequate food and nutrition is influenced by low education and income as well as poverty. Provincial consultations confirmed the clear links between access to nutritious food, education and employment. Low education levels and poor-quality education lead to limited employment options, low labour productivity and low income, which leads to reduced food access. Many women and men migrate to cities or neighbouring countries in search of employment, but are unable to obtain work because they cannot compete with people emigrating from other countries.

With more people engaging in formal employment, there is a need to address gender equality and women's empowerment.

This issue is not only related to income and social benefits, but to entrenched gender norms surrounding education, gender-based conflict and violence, and traditional family roles. Household decision making on earning and spending affects food consumption and nutrition security, including how much food is purchased, how much is sourced from households' own production, what kind of food is bought and how it is consumed.



Despite an increasing number of women entering the formal workforce, there are still traditional expectations about women as the primary household caregivers. This limits children's ability to access nutritious food, leading to undernutrition and micronutrient deficiencies. Nutritious, unprocessed vegetables, meat and fish require more preparation time and money than pre-packaged, processed, ready-to-eat foods.

Young children's ability to access nutritious foods depends on the adult caregivers (especially grandmothers), who take on this responsibility when parents are working.

There is a need to engage both women and men in the formal workforce without compromising children's ability to access food. Recommendations from the provincial consultations included quality childcare facilities and training and information for grandmothers and other caregivers on how to cook nutritious food.

While food and nutrition insecurity are closely related to poverty and vulnerability, Lao PDR has limited social protection and safety nets. Historically, social protection has been limited to civil servants, with very little social assistance targeting rural poor people and vulnerable groups. The majority of Lao citizens do not have access to social services such as health insurance and emergency assistance; many also lack employment. The absence of social protection prevents the benefits of economic growth from reaching the most vulnerable and disadvantaged populations, and prolongs insecurity and inequality.

Households with limited access to land, monoculture-based livelihoods, limited access to employment (such as households headed by women and children), and those with access to poor-quality land are at greater risk of food insecurity than households with highly diversified livelihoods. In addition, poorer populations often have less secure land tenure. This is a major challenge throughout the country and smallholder farmers have limited means to overcome it. Prime land is rapidly being acquired by competing commercial interests, compounding already limited access to productive land for small-scale farmers.

Another important gap is in access to high-quality nutritious food. As more people move to cities and compete for work, they have less time to prepare their own food, but more options for eating outside the home. With low incomes, consumption choices are made on the basis of what is most affordable. Much of the food available for immediate consumption is low in nutritional value and highly processed.

Concerns about access to safe food for consumption were expressed in consultations at both the provincial and national levels. Specific concerns were related to local food products, which are often produced using unregulated herbicides, pesticides and chemical fertilizers. Increased demand, especially during religious festivals and the New Year's celebration, encourages local food producers to add more chemical inputs in

order to maximize their yields as quickly and cheaply as possible.

Illegal drug dealing has recently become an issue in Lao PDR, contributing to school dropouts, the lack of skilled labour and unemployment. Illegal drugs used by workers to provide stamina during long working hours, especially for those involved in construction and long-distance transport.

For SDG 2.1, the strategic review team identified six strategic actions that will ensure access to food by all people:

- Create, support and expand economic and livelihood options, and improve working conditions within the country to reduce out-country migration. Reduce dependency on natural resources and promote and generate off-farm employment in rural areas, including private-sector opportunities and nationwide public works programmes.
- Ensure basic social benefits for poor and vulnerable people, and promote equal access to income and benefits in formal and informal employment.
- Conceptualize social protection as a strategic mechanism for vulnerable, disabled and disaster-affected populations. This includes conditional and unconditional cash and food transfers, and expanding social protection systems to reach all people, with a focus on poor family farmers.
- Promote investment and other activities related to natural resource management and environmental protection to ensure a sufficient supply of natural food, thereby promoting dietary diversity.
- Identify and respond to food safety risks in both production and consumption, and promote nutritious food through good agricultural practices and natural resource management.

- Strengthen rural communities' long-term resilience through increased resource allocation for formal and informal education, and scholarships.

4.2 Ending malnutrition

SDG 2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

The National Nutrition Strategy and Plan of Action to 2025 aims to reduce chronic malnutrition from 35.6 percent to 25 percent by 2025, and to reduce underweight to 12 percent. Similar reductions in the prevalence of anaemia and infant mortality are also expected. Based on historical rates of change recorded since 1990, incremental reductions in stunting and underweight consistent with trends noted from 1990 to 2015 can be expected over the medium term. If these trends continue, chronic malnutrition may be reduced 10 percent by 2025 – considerably short of the WHO target.

Recent progress in nutrition coordination, including the engagement of the Deputy Prime Minister's Office and Ministries of Health, Agriculture and Forestry, and Education and Sports in the NNC, is a positive development. The 22 interventions across nutrition, agriculture and education that form the foundation of the National Nutrition Strategy were initiated in 2015 and the SUN Network has been strengthened with the establishment of the SUN CSO Network. The informal development partners group on food and nutrition security, co-chaired by the European Union and UNICEF, has been a dynamic addition to these coordination mechanisms.

There is an immediate need to fully fund and implement the **Multi-sectoral Plan of Action** in order to maintain this momentum

and leverage additional support.

Populations of particular interest for the National Nutrition Strategy include children under 2, children under 5 and pregnant, postpartum and lactating women. While maternal nutrition is a focus of the policy, cultural taboos, social norms and poor nutrition knowledge are barriers to good nutritional practice during and after pregnancy. Nutrition and public health issues for adolescent girls are rarely included in nutrition strategies (35 percent of women are married and one in five women delivers a child before age 18). Other issues requiring further research include nutritional support for caregivers within households and food insecurity and nutrition among elderly people.

Food insecurity and malnutrition continue to be viewed as primarily rural issues, with very limited data on urban and peri-urban areas.

Since the country's nutrition challenges also include overweight and obesity, and non-communicable diseases, the focus of nutrition efforts on the first 1,000 days will need to be complemented by a broader life-cycle approach to nutrition, which focuses on reducing preventable deaths among adults. Because poor populations face a variety of risks over the course of their lives, reducing risk and vulnerability is a necessary step in breaking inter-generational cycle of malnutrition.

Nutrition knowledge is a persistent concern among rural and urban populations alike. As concerns over the provenance of both domestic and imported food rise, there is an increasing public interest in the contents of food, where it comes from, how it is produced and its effects on the body. With increasing quantities of processed and imported food being sourced from markets, women's traditional role in assuring household nutrition is no longer certain. Public interest in nutrition knowledge was noted throughout the consultations, indicating the desire for accurate information on exclusive breast feeding, complementary feeding and hygiene and sanitation practices.

Yet households searching for nutrition information are uncertain about where to find it.

Nutrition knowledge and skills can be enhanced by including nutrition information in national primary and secondary curricula. Cross-sector approaches to nutrition and general nutrition awareness can be promoted by training district-level education, agriculture and health department staff, as well as NGOs and community-based organizations. Nutrition knowledge is also important for farmers to understand which crops to grow for family consumption, diversify their farming systems and find crop varieties adapted to shifting climatic variations.

Given that some cultural taboos and traditions around maternal health and infant-and-young-child feeding are detrimental to good nutrition, there are opportunities for **improving access to nutrition information via state health facilities**, NGOs and the media. The health system also presents opportunities to link nutrition with agricultural practices and climate resilience. Since state health facilities are important sources of nutrition information and health care, there is a need to enhance the quality of these facilities' services and information by improving practitioners' nutrition knowledge. Finally, noting that utilization of nutrition services is lower for non-Lao speaking women, especially in remote areas, greater efforts are needed to provide services and information in local languages.

Poor dietary diversity contributes to micronutrient deficiencies. A report by the Ministry of Agriculture and Forestry and FAO (2013) noted that more than 55 percent of children under 5 consumed less than three food groups despite the availability diverse foods in the household. This highlights the importance of nutrition knowledge, especially regarding complementary feeding. In terms of consumption, **dietary diversity** in Lao PDR has traditionally been maintained by NTFPs, with rivers and forests providing a significant amount proteins, fats and micronutrients.

Foppes et al. (2011) identified 50 species of foods sourced from the wild, representing 15 percent of total household consumption.

While access to NTFPs is increasingly difficult, locally available nutrient-rich foods still play an important role in nutrition. For this reason, nutrition-promotion efforts should involve increasing productivity of the country's wide diversity of fruits, vegetables, meats, fish, aquatic animals and insects. This can be achieved through the: propagation and sustainable use of NTFPs; promotion of mixed smallholder agriculture; improved village-market arrangements; and other agricultural initiatives. While sourcing diverse foods from locally available sources continues to be a viable option for people with access to NTFPs, this access depends on seasonality, costs (including both monetary and opportunity costs), and sustainability.

Alternative strategies for accessing sources of fat, which can be limited in rural areas, may be required.

It is worth noting that chronic malnutrition and stunting is not simply an index of height, but is an indicator of cognitive capability and life potential (World Bank, 2014a). In order for the country to build human capacity, improve educational performance and develop its workforce, stunting needs to be recognized as an economic and social problem that can impede the country's development.

In line with SDG 2.2, the strategic review team identified four strategic actions:

- Fully resource and implement the Multi-sectoral Plan of Action.
- Incorporate information on nutrition, health and climate resilience into the national curricula for primary and secondary education, and into training for health, education, agriculture extension NGO and community-based organization staff to ensure that information is disseminated at the community and household levels.

- Support quality health service delivery for rural and non-Lao-speaking communities to improve nutrition services within the healthcare system; provide direct technical assistance; and strengthen the capacity of government health providers in nutrition, especially at the district level. Focus attention on disabled women and children.

- Promote dietary diversity through the consumption of locally available nutrient rich foods; an extensive school meal programme should be funded in pursuit of this objective.

4.3 Improving productivity

SDG 2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

A doubling of productivity as measured by gross tonnage will be difficult to achieve, but doubling productivity across all target groups represents a major challenge given the scale and complexity of the required actions.

Large- and small-scale farmers need equal opportunities to access resources and inputs, with special emphasis on vulnerable smallholder producers and family farmers cultivating for their own production and consumption. Current agriculture policy promotes expansion of total production measured by volume and is not differentiated by mode of production.

Land concessions, plantations and contract farming systems have increased pressure on available land and water resources. Overlapping land management practices and land tenure have become a challenge throughout the country.

Although the Lao economy is based on agriculture, agriculture extension services are limited. Agricultural extension plays a critical role in disseminating knowledge, technologies and agricultural information, and linking farmers with other value-chain actors. It is one of the critical agents of change required for transforming farming in order to promote household food security, improve incomes and reduce poverty. However, extension staff is limited and under-resourced in Lao PDR.

Insufficient linkages among researchers, extensionists and farmers to facilitate demand-driven research and technologies constrain efforts agricultural productivity; farmers continue to have insufficient knowledge of alternative agriculture technologies.

There is limited implementation of standards for food safety and safe agriculture production along the value chain. As pests, weeds and diseases continue to cause losses for farmers, the use of unregulated chemicals will likely increase. Farmers' lack of information on how to handle these issues in a safe manner is impacting the health and wellbeing of farmers and consumers.

Small-scale farmers are highly dependent on volatile markets, which are affected by changing agricultural input and produce prices. Farmers lack bargaining power – especially those who do not speak the Lao language. Their engagement in producer organizations and farmer cooperatives is improving but still modest.

Striving to meet SDG 2.3 the strategic review team identified four strategic actions:

- Reinforce support systems for large-scale agriculture and smallholder producers. Supportive systems – advanced by strong and resourceful agricultural extension services should aim to build resilience, promote agricultural diversification and develop markets for smallholders in order to improve local-level food security. This will entail integrating existing policies and strategies

on climate change adaptation, irrigation, water management, agricultural extension, forest management and land management. The most productive, fertile lands should be reserved for agriculture that increases food and nutrition security.

- Introduce subsidies for inputs required by small-scale food producers and family farms along the value chain, including: agricultural technologies; information on crop production and markets; and financing. Other assistance to farmers may include: cooperative approaches to ensure that resources are properly targeted; secure and equal access to land and natural resources; veterinary services; small-scale irrigation; local processing and post-harvest handling; integrated pest management; access to market information; support to develop local markets for small producers; access to microfinance; and minimal borrowing conditions for farmers. Ensure that all these are linked to the nutrition-sensitive production of high-quality foods in locally suitable agro-ecological conditions.
- Acknowledge, promote and support the role that women play in smallholder production systems. Raise awareness of the different roles men and women play in agriculture production and design support programmes to increase gender-balanced access to, and control over, productive agricultural inputs, outputs and financial services.
- Strengthen guidelines for the safety of pest management by introducing labeling systems in the Lao language that include basic information on content and application. For fresh produce, enforce sanitary and phytosanitary inspection protocols during production and marketing. Strengthen this effort by raising awareness of the nutritional content of packaged and processed foods, especially sugar, fat and sodium.

4.4 Sustainable food production, ecosystem services and climate adaptation

SDG 2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality.

The magnitude of SDG 2.4 requires an evolving set of flexible policies, strategies, guidelines and technologies with a clear cross-sector orientation and management approach to planning, coordination and implementation. Moving towards SDG 2.4, conflicts between different economic, social and environmental interests must be anticipated.

Lao PDR has a comprehensive set of policies and strategies aimed at increasing agricultural productivity. A unique department for agriculture land management was established within the Ministry of Agriculture and Forestry three years ago to improve land use and soil management. There is also an evolving set of strategies and plans aimed at protecting the country's ecosystems. Guidelines to improve national responses to climate change, extreme weather, flooding and drought are being prepared.

Despite the existence of these strategies and plans, meeting SDG 2.4 will be very difficult if not impossible, especially in addition to doubling agricultural productivity and income (SDG 2.3). There is a risk of exacerbating conflicts over access and management of natural resources. Existing conflicts over access to land and forests were highlighted throughout the consultation process.

Working towards this goal, there is a critical need to build strategic, planning and technical capacity in order to integrate production systems, reduce environmental dependencies and assess the value of ecosystems. The socio-economic valuation of food production systems must include the actual costs of ecological degradation (including waste management) and the means for successful cost recovery; the 'polluter principle' may guide the way for policy making in this area.

Progress on this target will require acknowledgment and protection of the services that ecosystems provide: water, shelter, and food needs are all met by the rich diversity available in the country's multiple agro-ecological zones. This requires a policy orientation towards valuing ecosystems – not only regarding their potential for commercial exploitation, but their non-monetary value to local populations. Natural systems are part of heritage and uniqueness of the Mekong region, and are the basis for household-level food and nutrition security.

The country's most important agricultural production base – smallholder farmers and family farming systems – must be seen as a solid resource for a harmonized rural development. The financial, technical and institutional support provided to these families requires strengthening. In order to provide the appropriate support, the gender dimensions of smallholder farming need to be better understood.

The expansion of large-scale monoculture agriculture should be carefully analysed – including a critical analysis of the social and environmental impacts – and discussed in open dialogues with farmers, villagers and land owners. Adaptive agricultural practices need to be introduced together with alternate livelihood options for poor rural communities.

A broad analysis of what constitutes 'the market' is also required (not simply following the arguments of mainstream macro-economic theories).

The institutionalization of climate resilience in Lao PDR is still in an early phase compared to other countries. The risks of extreme climate events like floods, droughts, sudden heat waves and prolonged cold are increasing, but local early warning systems are not well developed; this is an urgent issue that needs to be addressed immediately. Climate change awareness-raising and adaptation activities must embrace food and nutrition security as an essential component of climate vulnerability.

The national strategy for climate change needs to be revised: its strategic guidance needs to be fine-tuned and transformed into appropriate sectoral strategies. The institutional framework indicated in the strategy should also be enhanced, especially through the cross-sector national committee and representation in all ministries and government agencies.

The responsibility for climate-related issues is currently focused within the Ministry of Natural Resources and Environment's Department of Disaster Management and Climate Change. This narrow focus should be broadened to involve a wider array of ministries and research institutions.

In the context of international commitments, the separate processes of preparing national communications and intended nationally determined contributions to the UNFCCC should be brought together under a single process with a solid monitoring and evaluation system.

For years, Lao PDR has had many debates on the benefits and disadvantages of shifting cultivation. With a growing population, basic environmental criteria (e.g. time periods for rotation and renewed land use) cannot be easily maintained. In the future, shifting cultivation may only be an option for small and targeted groups cultivating in certain geographical and agro-ecological conditions.

The strategic review team identified six actions that would significantly improve the chances of achieving SDG 2.4 in Lao PDR:

- Enhance implementation of the National Strategy on Climate Change, with a focus on agricultural diversification and smallholder farmers as the main target group.

- Allocate sufficient resources to support agro-ecology-based food production and supply, especially considering the effects on land, soil, water, and forest management. The use of insurance against disaster risks may be investigated further.

- Design and implement a nationwide, large-scale reforestation and carbon-sink programme to increase forest cover; ensure proper watershed management; conserve and sustainably use biodiversity; diversify smallholder farming systems; and generate local employment (e.g. through reforestation and small-scale processing).

- Utilize experience from this nationwide programme to develop a new concept and practical approach to rural development.

- Establish a new paradigm for food and nutrition security in Lao PDR that involves climate-adaptive, nutrition-sensitive local food production and supply, including the immediate institutionalization of early warning systems for producers and consumers (in both the short and long terms to ensure sufficient preparedness). This paradigm shift must be integrated into a comprehensive communication strategy for food and nutrition security in Lao PDR.

- Support curricula development, formal and informal education, and public awareness raising with targeted information on the links between climate adaptation and food security.



4.5 Genetic protection and biodiversity

SDG 2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.

The timeframe for achieving SDG 2.5 (by 2020) is by no means realistic for Lao PDR. Although the Government endorsed the National Agricultural Biodiversity Programme as a policy in 2004, established a National Biodiversity Strategy and implemented important activities through the Agro-biodiversity Initiative and other projects, the country's overall development approach does not sufficiently recognize protection and sustainable utilization of agro-biodiversity and NTFPs as important for food and nutrition security.

There is an enormous unquantified potential for identification of varieties suitable for changing climatic conditions or with high nutritional value, which could provide smallholder farmers with opportunities to adapt to climate change. The country's native tree stocks could be the foundation for a nationwide reforestation programme to: support the Government's forestry goals; help Lao PDR to become a global sink for greenhouse gas emissions; and support local income generation.

Similar to the National Strategy on Climate Change, the policies of the National Agricultural Biodiversity Programme remain highly relevant for achieving SDG 2. But neither strategy has gained the momentum required for achieving its strategic objectives. Despite the existence of these strategies and other policy guidance,

they are not strong enough to drive the achievement of SDGs 2.4 and 2.5.

With increasing risks to its indigenous genetic resources, the country is in danger of losing the potential benefits associated to its unique plants and animal species. Although NAFRI is making efforts to maintain seed and plant banks, its success has been limited because its operations are based upon insufficient research into: the potential for commercial use of conserved genetic resources; criteria and assets for climate adaptation; their actual value as a source of food and nutrition; and risks related to intellectual property rights stemming from global seed production and medicinal use of plants.

Lao PDR contains many traditional herbal medicines that are recognized to cure and prevent modern diseases. To date, information on herbal medicines is transferred verbally from older generations to younger ones. There is only limited documentation available on these herbal plants, and they are becoming increasingly difficult to access.

The review team made four recommendations in support of achieving SDG 2.5:

- Strictly apply and enforce (and eventually amend) the 2013 Environmental Protection Law to protect the country's hotspots of biodiversity and enable the gradual transfer of varieties in seed and plant banks at NAFRI to assure their future availability and analysis.
- Significantly expand national research on local genetic resources, especially related to climate adaptation for smallholder farmers and food and nutrition security. Research activities should engage the country's multiple sub-national research institutions to a much greater degree.
- The Ministry of Science and Technology should closely monitor international agreements on trading and patenting genetic resources, and enhance national participation in these international processes.

- The importance of effective agricultural extension has already been emphasized in this strategic review. It is important to equip extension services with the appropriate scientific knowledge gained from research. Research related to agriculture, livelihoods, food and nutrition security can easily be integrated into extension practice.

4.6 Overall system adaptation (highlighting gender equality, social protection and climate resilience)

This section describes gaps that are beyond the scope of SGD 2 but are pre-conditions for its achievement. Adaptation options are sketched out as recommendations: it is necessary to address these gaps in order to tackle challenges specific to SDG 2.

Gaps and related recommendations for overall system adaptation include the following:

Slow implementation of decentralization and engagement of sub-national bodies in policy processes: Throughout the consultation process, the review team noted a lack of government capacity to execute, implement and monitor strategies and policies across all sectors simultaneously. This issue is often compounded by local initiatives that operate beyond their mandates. The Government has initiated the Sam Sang (Three Builds) programme to enhance decentralization, but urgently requires additional technical and financial resources.

Limited engagement with civil society organizations, international NGOs, non-profit organizations, SUN and regional partners: Given the enormous scale of engagement required to improve food and nutrition security, increase climate resilience and facilitate sustainable rural development, government resources alone are insufficient. Engagement with civil society should

encompass organizations like the LWU, women's groups, youth organizations, national reconstruction committees, trade unions, farmer organizations and cooperatives.

Under-representation of women at the grassroots, district, provincial and national levels in extension services and decision-making positions: Since many Lao women lack higher education, particularly at the local level, it is not easy to promote them into decision-making positions. The capacities of the existing women extension officers, members of women's groups and women members of production groups require significant strengthening. The gender balance targets set in government strategies and policies must be monitored by the secretariat of the National Commission for the Advancement of Women in order to achieve gender equality.

The differing **socio-economic and age requirements for children** may have to be addressed through development of a specific strategy for children.

Policies must respond to demographic developments: Demographic developments like population growth and the large share of smallholder farmers, which form the socio-economic foundations of Lao society, are not sufficiently influencing strategies and policies. Systematic scenario development planning for local administrative units (i.e. districts and village clusters) could narrow this gap considerably. Local demographic and climate resilience scenarios and plans could provide important guidance in regards to land use and disaster preparedness. Initial steps in this direction have been undertaken by NAFRI, the Department of Disaster Management and Climate Change, the National Disaster Management Office and others. Supporting such processes, simplified geographic information systems for sub-national planning units would be useful.

Insufficient recognition of the value of ecosystem services: The economic and other values provided by the country's

natural resources (e.g. forests functioning as a sink for greenhouse gases) are not widely recognized. The socio-economic importance of subsistence farming and the informal food trade is grossly underestimated and not sufficiently cited in policies and strategies. Environmental degradation (including climate change impacts, natural disasters, erosion and reduced soil and water quality) has huge costs for the agriculture sector (such as reduced crop productivity and quality, and nutritional value of food), which are not afforded adequate importance as micro- or macro-economic parameters in the Lao socio-economic context (FAO, 2015).

An indistinct role and objectives for the private sector: Given the enormous scale of resources and financing required for climate adaptation and farming system diversification, a continuing collaboration with the private-sector should be initiated. Long-term 'green economy and 'low-carbon economy' strategies should be developed and discussed with the private sector. Ensuring a sustainable supply of climate-smart production inputs, including suppliers of renewable energy to production sectors, should be a priority. Other areas for consideration include the creation of an enabling environment, support to business in rural areas, tax incentives for appropriate technologies and creating links among supply chains that support smallholder farming. The roles and functions of local marketplaces in villages and village clusters need to be improved. Finally, a long-term investment plan covering all these aspects of private-sector collaboration should be initiated by Ministry of Planning and Investment.





Coordination and implementation framework



5.1 Coordination at the national level

The NNC and its secretariat was established in 2013 by decree 73/PM. The committee provides high-level support on multi-sector coordination and governance among sectors involved in nutrition at the national level. The NNC is chaired by the Deputy Prime Minister and includes representatives from the Ministries of Health, Education and Sports, Finance, Industry and Commerce, Planning and Investment, and Information, Culture and Tourism, as well as the National Commission for Women and Children and CSOs.

The NNC secretariat, chaired by the Ministry of Health and co-chaired by the Ministries of Agriculture and Forestry, Planning and Investment, and Education and Sports was formed in August 2013. Consisting of

21 members at the Director and Deputy Director levels, the secretariat is tasked with coordinating development of the Multi-Sectoral Food and Nutrition Security Action Plan. The Centre for Nutrition has been designated to support the secretariat and manage its daily activities. The Centre for Nutrition is assisted by the Department of Hygiene and Health Promotion under the Ministry of Health.

In addition to the NNC its secretariat and the Centre for Nutrition, the Technical Working Group on Food and Nutrition Security and the Food and Nutrition Security Government Core Group provide additional coordination related to SDG 2. The Technical Working Group consists of 33 members at the Director and Deputy Director levels, and is chaired by Deputy Minister of Ministry of Health. The Government Core Group comprises five members from the Ministries of Health, Agriculture and Forestry, Education and

Sports, and Planning and Investment, as well as the National Poverty Reduction Fund.

The present role, composition and authority of the Government Core Group and Technical Working Group are unclear and their functions overlap. Confusion and concerns among stakeholders were also reported as a result of the overlapping of functions of the NNC secretariat and Centre for Nutrition. Related ministries and departments are at different stages of engagement with the multi-sector approach and are making progress at different rates (Wilkinson and Niramonth, 2015). Even within sectors or sub-sectors, departments are not always well coordinated because of the multi-sector and multidisciplinary nature of food and nutrition security. In addition, there may be a need to expand the Technical Working Group's membership to other sectors relevant to food and nutrition security, including many of those indicated in this report.

Several development partners have been working towards a coordinated approach through the United Nations Task Team. Informal quarterly development partners' meetings bring together donors, United Nations agencies and NGOs; they are co-chaired by the European Union and UNICEF on a rotating basis. Coordination among development partners and donors is complicated by the fact that different development partners have: access to different ministries and decision makers; various levels of negotiating power; and differing influence on internal decision making. Thus far, there has been limited formal engagement of the Government Core Group by development partners, donors and NGOs. This is limiting opportunities for harmonized planning, implementation and monitoring.

The establishment of the Lao SUN Civil Society Alliance has created space for NGOs and civil society to engage with the Government on improving nutrition (Wilkinson and Niramonth, 2015).

The strategic review team offers the following recommendations for improving coordination at the national level:

- Reinforce the functioning of the Core Group and Technical Working Group on Food and Nutrition Security, including a review of participation by all stakeholders.
- Strengthen the role of the NNC secretariat to coordinate the implementation and monitoring of the National Nutrition Strategy to 2025 and Plan of Action 2016–2020, and related strategies, clearly differentiating the operational work of the Centre for Nutrition.
- Ensure representation of key ministries in the NNC secretariat.
- Provide necessary support to the secretariat so that it can operate autonomously and effectively, and collect and maintain data for regular monitoring and reporting on achievements and progress.
- Improve coordination within and among sectors in line with guidance from a recent directive by the Prime Minister on the delegation of work to technical working groups or secretariats for specific sectors.
- Reinforce coordination with development partners and donors through their participation in Core Group meetings, elicit their feedback and formulate a coordinated joint plan for technical assistance to the secretariat, related ministries and local governments.

5.2 Devolution at the sub national level

Programme coordination between the national and local levels is largely carried out through ministries and other institutions, and appears to operate effectively within sectoral mandates. The Government has sought to replicate the newly established NNC secretariat at the local level through the Provincial Nutrition Committees and their secretariats. These committees have already been established in Saravane, Oudomxay and Luang Namtha provinces. In Oudomxay the newly formed committee is chaired by the Provincial Deputy Governor and consists of 15

representatives from related departments nominated by the chair (Wilkinson and Niramoh, 2015); most work is handled by an informal secretariat of four or five people. Saravan and Luang Namtha provinces have opted to utilize their existing mother-and-child committees as Provincial Nutrition Committees, with an expanded mandate.

There are many challenges to multi-sectoral governance and coordination at the local level, and the functioning of the newly established Provincial Nutrition Committees and their secretariats is uneven. Committee members remain unclear about which activities to coordinate across sectors. Provincial authorities continue to engage with districts largely on a sectoral basis. Questions remain about how the committees can support districts in coordinating implementation at the sub-district and village levels. District-level engagement at the sub-district and village levels is reported to be sporadic (Wilkinson and Niramoh, 2015).

A number of development partners and NGOs are already active in nutrition-sensitive projects within targeted districts. While the United Nations provides important financial and technical support, United Nations agencies' footprint in provinces is limited. Civil society has offered significant resources to selected health, education and agriculture interventions in most provinces – often in remote and hard-to-reach areas (Wilkinson and Niramoh, 2015).

One of the goals of devolution is to enable communities to establish local food and nutrition security with their own resources and capacity. In line with this goal, the strategic review team offers the following recommendations for improving coordination at the sub-national level:

- Strengthen the roles and functions of the Provincial Nutrition Committees and the Provincial Core Group, assisting action-oriented research to ensure that lessons learned and dialogue lead to the development

of tools and guidelines.

- Provide technical and institutional support to Provincial Nutrition Committees to link national, provincial and district planning and monitoring, including assistance in the development of tools to facilitate their functioning.
- Reinforce governance and coordination at the district, sub-district and village levels.
- Increase local stakeholder participation in planning and monitoring.
- Promote and support research and implementation at the local level.

5.3 International agencies and the private sector in food and nutrition security

The scope of issues to be considered within the context of SDG 2 far extends the mandate of the best resourced and most active national mechanism, the NNC. Given that this body is still in its first year of full operation, it would be difficult to expand it at this early stage. In the medium term however, the review team recommends that:

- The NNC should expand national dialogue around emerging issues such as food safety (for both producers and consumers), obesity and overweight, and the links between migration and food and nutrition security. Expanding inclusive partnerships around these issues is critical.
- Develop the SUN Business Network, drawing upon a wide range of stakeholders at every stage of food systems, from production to consumption. In the medium term, explore avenues of public-private-development-sector collaboration, building upon the unique advantages that the private and the public sectors bring topics for discussion may include fortification, behaviour change communication

and nutrition labeling.

- Regular biannual mid-term progress reviews should be conducted to ensure that the SDGs remain an active part of the development agenda.
- The absence of private-sector engagement in the ongoing discourse on food and nutrition security is a major shortfall, which requires immediate attention. With this in mind, a stakeholder mapping of private sector interests in food and nutrition security should be carried out. This will indicate how to best promote investment while addressing the SDGs.

5.4 Crucial strategic roles of the Ministries of Planning and Investment, and Finance

Recalling the Under-Secretary-General's remarks in Addis Ababa that business as usual will not get the country where it needs to be by 2030, and anticipating the magnitude of the challenges faced by Lao PDR in delivering SDG 2, it appears that the existing institutional arrangements are not sufficient to successfully meet this challenge.

Delegating strategic responsibilities for individual SDGs to selected ministries or related entities, or establishing cross-sectoral committees or working groups will not be enough to: provide the required momentum and strategic long-term guidance; assure appropriate and timely funding over the next 30 years; systematically monitor and document progress; and sustain progress over the long term.

To tackle these challenges, a project-like organizational structure is required with direct lines of communication, some degree of autonomy in decision making, the assurance of continued funding and qualified personnel with a multi-sector pool of expertise. Overall strategic oversight for meeting all the SDGs – and specifically SDG 2 – should rest on a strong institutional foundation with the highest possible level of planning and financial authority, and relevance.

The Ministries of Planning and Investment, and Finance are well placed to assume these strategic responsibilities and provide the wide array of partners currently active in implementing the SDGs with strategic guidance, assurance of realistic planning, financing and implementation coordination required to meet this ambitious goal.

Summary list of main recommendations

Based on guidance from the Ministry of Planning and Investment, and feedback from stakeholders during the review, the recommendations included in Sections 4 and 5 have been grouped according to their priority within each SDG target and sector. Recognizing that strategies, tactics and operational oversight are required to initiate, implement, monitor and improve processes, this exercise considered the strategic, tactical or operational implications of each recommendation, acknowledging that:

- strategic management provides overall direction;
- tactics involve the actual steps to achieve that overall direction (they are the practical steps for implementing a strategy); and
- operations relate to high-quality and timely delivery of outcomes and outputs for maximum impact.

Each recommendation was evaluated with one to three stars (***) – (** – *) according to the following criteria:

(S) Long-term strategic relevance: very high – high – medium

(T) Medium-term tactical importance: highly important – important – significant

(O) Short-term operational impact: high – medium – low

In the table below, the recommendations that received 8 or 9 stars are marked in bold; those should be given the highest priority.

4.1 Ensure access

SDG 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

<p>a. Create, support and expand economic and livelihood options, and improve working conditions within the country to reduce out-country migration, reduce dependency on natural resources, generate off-farm employment in rural areas and increase access to decent and productive employment, including private-sector employment and public-works programmes.</p>	<p>S *** T *** O ***</p>
<p>b. Ensure basic social benefits for poor and vulnerable people, and promote equal access to income and benefits in formal and non-formal employment.</p>	<p>S * T ** O ***</p>
<p>c. Conceptualize social protection as a strategic mechanism for vulnerable and disaster-affected populations. This includes promoting social protection measures such as conditional and non-conditional cash and food transfers to vulnerable poor people. It also includes the establishment of national social protection floors, the expansion of social protection systems to reach all people and regular and predictable social transfers to poor farmers.</p>	<p>S *** T ** O *</p>
<p>d. Promote investment and activities related to natural resource management and environmental protection to secure natural food sources and promote dietary diversity.</p>	<p>S ** T ** O **</p>
<p>e. Identify and respond to food safety risks in both production and consumption, and promote nutritious food through good agriculture practices and natural resource management.</p>	<p>S *** T *** O **</p>
<p>f. Strengthen long-term resilience from within communities through increased resource allocation to education.</p>	<p>S *** T ** O *</p>

4.2 End malnutrition

SDG 2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons.

<p>a. Fully resource and implement the Multi-sectoral Plan of Action.</p>	<p>S ** T *** O ***</p>
<p>b. Information on nutrition, health and climate resilience should be incorporated into national curricula for primary and secondary education, and training for government health, education and agriculture office, and district-level NGO and CSO staff to ensure that knowledge is disseminated at the community and household levels.</p>	<p>S *** T ** O ***</p>
<p>c. Support quality health service delivery to rural and non-Lao-speaking communities with the aim of improving nutrition services within the healthcare system. Provide direct technical assistance and strengthen the capacity of government health providers in nutrition, especially at the district level. Pay greater attention to the nutrition of disabled women and children.</p>	<p>S *** T *** O ***</p>
<p>d. Promote dietary diversity through the consumption of locally available nutrient-rich foods. An extensive school meal programme should be funded and established to this end.</p>	<p>S ** T *** O ***</p>

4.3 Improve productivity

SDG 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

<p>a. Reinforce support systems for both large-scale agriculture and smallholder producers. These support systems – accompanied by a strong and resourceful agricultural extension service – should aim to build resilience, promote agricultural diversification and develop markets for smallholders to provide local-level food security. This entails integrating existing policies and strategies on climate change adaptation, irrigation, water management, agricultural extension and forest and land management.</p>	<p>S *** T *** O *</p>
<p>b. Introduce meaningful subsidies for the inputs required by small-scale food producers and family farms along the value chain, including technology, agricultural techniques, knowledge, and financing. This may also entail cooperative approaches to ensure that resources are fairly allocated, and policies to provide secure and equal access to land and natural resources. Additional support should include veterinary services, small-scale irrigation, local processing and post-harvest handling, integrated pest management, access to market information, support in the development of local markets for small-scale producers, access to micro-finance and reduced borrowing conditions for farmers. All these forms of support should focus on the nutrition-sensitive production of high-quality foods within locally suitable agro-ecological conditions.</p>	<p>S *** T *** O ***</p>
<p>c. Acknowledge and support the role that women play in smallholder family production systems. Pay attention to different roles women and men play in agricultural production, and design support programmes that aim to increase women’s control over – and access to – productive agricultural inputs and financial services.</p>	<p>S ** T *** O ***</p>
<p>d. Strengthen guidelines on safety and sanitary inspection by introducing a labeling system and including basic information in the Lao language on packaging. For fresh produce, reinforce sanitary and phytosanitary inspection systems at every stage in the value chain. Buttress these efforts with awareness raising on the nutritional content of packaged and processed foods, especially sugar, fats and sodium.</p>	<p>S * T ** O **</p>

4.4 Sustainable food production, ecosystem services and climate adaptation

SDG 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality. needs of adolescent girls, pregnant and lactating women, and older persons.

<p>a. Enhance implementation of the National Strategy on Climate Change, with a focus on agricultural diversification and on smallholder farmers across agricultural sub-sectors.</p>	<p>S *** T *** O *</p>
<p>b. Allocate sufficient resources to support agro-ecology-based food production, especially considering its effects on land, soil, water and forest management</p>	<p>S *** T *** O ***</p>
<p>c. Design and implement a nationwide, large-scale reforestation and carbon-sink programme with a multi-sector strategic orientation focused on: increased forest cover; watershed management; expansion of footholds for biodiversity; diversification of smallholder farming systems; and local employment generation (including in reforestation and small-scale processing).</p>	<p>S ** T *** O ***</p>
<p>d. Establish a new paradigm for food and nutrition security in Lao PDR, which integrates climate-adaptive, nutrition-sensitive local food production and supply throughout the entire food chain and includes early warning systems for producers and consumers. This paradigm shift must be accompanied by a comprehensive communication strategy for food and nutrition security in the country.</p>	<p>S *** T *** O **</p>
<p>e. Support curricula development, formal and informal education, and public awareness raising with clear information on the links between climate adaptation and food and nutrition security. Civil society can play a central role in the wide dissemination of this information.</p>	<p>S*** T *** O ***</p>

<p>a. The strict enforcement (and eventual amendment) of the 2013 Environmental Protection Law could go a long way to protect existing hotspots of biodiversity and facilitate the gradual transfer of varieties in seed and plant banks at NAFRI to secure their future availability.</p>	<p>S *** T *** O ***</p>
<p>b. A massive expansion of national-level research on local genetic resources is urgently required, especially related to climate adaptation for smallholder farmers and increased food and nutrition security.</p>	<p>S ** T ** O *</p>
<p>c. The Ministry of Science and Technology should closely monitor international agreements on the trade and patenting of genetic resources, and enhance national participation in these international processes.</p>	<p>S *** T *** O *</p>
<p>d. The importance of an effective extension approach and extension services has already been emphasized in this strategic review. It is important to equip these extension services with scientific knowledge gained from research. Research related to agriculture, livelihoods, food and nutrition can easily be built into extension practice.</p>	<p>S ** T ** O ***</p>

4.6 Overall system adaptation (relevant to gender equality, social protection and climate resilience)

Specific gaps and related recommendations regarding overall system adaptation include the following: and associated traditional knowledge, as internationally agreed.

<p>a. Step up implementation of the national decentralization process and sub-national engagement in policy processes. The Government has initiated the Sam Sang (Three Builds) programme to enhance decentralization but urgently requires additional technical and financial resources</p>	<p>S *** T *** O ***</p>
<p>b. There has been limited engagement with civil society, NGOs, non-profit associations, SUN and regional partners. Cooperation and engagement with civil society in the country should include organizations like the LWU, youth groups, national reconstruction organizations, trade unions, farmer organizations and cooperatives.</p>	<p>S * T ** O ***</p>
<p>c. Policies need to respond better to demographic developments. With the help of systematic scenario development for local administrative units (i.e. districts and village clusters), the gap between policy and practice could be narrowed considerably. Local climate resilience scenarios and plans could provide important information regarding land use and disaster preparedness.</p>	<p>S *** T *** O *</p>
<p>d. There has been insufficient recognition of the value of ecosystem services. The economic and other values provided by existing natural resources (e.g. forests functioning as a sink for greenhouse gases) must be quantified in all formal planning across all institutions and levels of governance.</p>	<p>S *** T *** O *</p>
<p>e. Distinct roles and clear expectations for the private sector are required. This should entail a continuing series of well-planned interactions with private-sector organizations.</p>	<p>S *** T *** O **</p>

Coordination and implementation framework

5.1 Coordination at the national level

Coordination at the national level can be improved in the following ways:

<p>a. Reinforce the capacity of the Core Group and the Technical Working Group on Food and Nutrition Security, including through a review of participation by all involved stakeholders.</p>	<p>S * T ** O ***</p>
<p>b. Strengthen the role of the secretariat to coordinate the implementation and monitoring of the National Nutrition Strategy to 2025 and Plan of Action (2016–2020), and other related strategies, clearly differentiating the operational work of the Center for Nutrition.</p>	<p>S ** T *** O ***</p>
<p>c. Ensure the representation of all ministries involved in food and nutrition security in the secretariat.</p>	<p>S * T ** O *</p>
<p>d. Provide necessary support to the secretariat so that it can operate autonomously and effectively, and collect data for baseline measurement, regular monitoring and reporting on progress.</p>	<p>S * T ** O **</p>
<p>e. Promote improved coordination within and between sectors.</p>	<p>S * T ** O ***</p>
<p>f. Reinforce coordination with development partners and donors through: their participation in Core Group meetings; eliciting their feedback; and coordinated joint planning for technical assistance to the secretariat, related ministries and local institutions.</p>	<p>S * T ** O *</p>

5.2 Devolution at the sub-national level

Improving coordination at the sub-national level will involve the following:

<p>a. Strengthen the roles and functions of provincial nutrition committees and the Provincial Core Group, assisting in research to incorporate lessons learned through dialogue into the development of tools and guidelines</p>	<p>S *</p> <p>T **</p> <p>O *</p>
<p>b. Provide technical and institutional support to provincial nutrition committees to facilitate links between national, provincial and district planning and monitoring. Assist in the development of tools to facilitate the provincial nutrition committees' effective functioning.</p>	<p>S ***</p> <p>T ***</p> <p>O ***</p>
<p>c. Reinforce governance and coordination at the district, sub-district and village levels.</p>	<p>S **</p> <p>T **</p> <p>O *</p>
<p>d. Increase the participation of local-level stakeholders in planning and monitoring.</p>	<p>S **</p> <p>T **</p> <p>O **</p>

5.3 International agencies and the private sector in food and nutrition security

<p>a. In the medium term, expand dialogue around emerging issues such as food safety (for both producers and consumers), obesity and overweight, and the links between migration and food and nutrition security. Expand partnerships around these issues as necessary on an inclusive basis.</p>	<p>S *</p> <p>T **</p> <p>O *</p>
<p>b. In the short term, develop the SUN Business Network, drawing upon a wide range of stakeholders at every stage of food systems, from production to consumption. With the network established, explore avenues of public-private-development sector collaboration. In the medium term, build upon the unique advantages that the private and public sectors bring to the table.</p>	<p>S *</p> <p>T **</p> <p>O *</p>
<p>c. In the medium term, develop a stakeholder map of private-sector interests in food and nutrition security. Through this process, engage with private-sector stakeholders in order to determine how best to promote investment while meeting the SDGs.</p>	<p>S *</p> <p>T **</p> <p>O *</p>

5.4 Crucial role of the Ministries of Planning and Investment, and Finance

Build capacity within the Ministry of Planning and Investment, and Ministry of Finance to assume greater responsibilities and to provide the wide array of partners active in SDG implementation with strategic guidance in planning, financing and implementation.

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Bilateral and Provincial Consultations

Government of Lao PDR

National Assembly
Ministry of Agriculture and Forestry
Ministry of Education and Sports
Ministry of Finance
Ministry of Information, Culture and Tourism
Ministry of Labour and Social Welfare
Ministry of Natural Resources and Environment
Ministry of Planning and Investment
Ministry of Public Health

Lao Federation of Trade Unions
National Agriculture and Forestry Research Institute
National Commission for Mothers and Children
National Nutrition Committee
Lao Women's Union

United Nations and International Financial Institutions

Food and Agriculture Organization of the United Nations
International Labour Organisation
United Nations Children's Fund
United Nations Development Programme
United Nations Environment Programme
United Nations Resident Coordinator's Office
UN Women
World Food Programme

Asian Development Bank
International Finance Corporation
World Bank

Donors

Australian Department of Foreign Affairs and Trade (DFAT)
European Union
United States Agency for International Development (USAID)

Non-Governmental Organisations

Asian Disaster Preparedness Center
CARE
Child Fund
Groupe de Recherches et d'Echanges Technologiques (GRET)

Helvetas

Land Equity: Mekong Region Land Governance
Oxfam
Plan International
Save the Children
Scaling Up Nutrition Civil Society Alliance Laos
Village Focus

Research Institutions

CGIAR Consortium of International Agricultural Research Centers
International Water Management Institute
Land Issues Working Group
Mekong River Commission
National University of Laos
Water Land and Ecosystems

Private Sector

Agricultural Promotion Bank
Daoheng Industry (Xiamen) Imp. & Exp. Co. Mining Company

Provincial Consultations

Attapeu Province
Bokeo Province
Borikhamxay Province
Champasack province
Huaphanh Province
Khammuane Province
Luangnamtha Province
Luangprabang Province
Oudomxay Province
Phongsaly Province
Saravane Province
Savannakhet Province
Sekong Province
Vientiane Province
Xayaboury Province
Xiengkhuang Province

Definitions

Climate change/resilience: A change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods. Adverse effects of climate change include changes in the physical environment or animal and plant life, which have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems, socio-economic systems or human health and welfare. (United Nations Framework Convention on Climate Change, 1992)

Economic growth: An increase in the overall value of a nation's goods and services measured over time, usually based on gross domestic product (GDP). Economic growth increases the total wealth of the country but does not directly link to human development or environmental protection. Uneven distribution of economic growth can exacerbate inequality, overconsumption and depletion of natural resources. (World Bank, 2009a)

Food and nutrition security: Food and nutrition security exists when all people at all times have physical, social and economic access to food that is safe and consumed in sufficient quantity and quality to meet their dietary needs and food preferences, and is supported by an environment of adequate sanitation, health services and care, allowing for a healthy and active life. (Committee on World Food Security, 2012a)

Gender: The social attributes and opportunities associated with being male and female, and the relationships between women and men and girls and boys, as well as the relations between women and those between men. Many attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context/time-specific and changeable. Gender determines what is expected, allowed and valued in a woman or a man in a given context. In most societies, there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, and decision-making opportunities. Gender is part of the broader socio-cultural context. Other important criteria for socio-cultural analysis include class, race, poverty level, ethnic group and age. (UN Women, 2001)

Hunger: Nutritionists have estimated the amount of dietary energy that people of different ages, genders and activity levels require to maintain healthy and active lives. When people do not have access to the amount of dietary energy needed for their normal levels of activity, they feel hungry. If the situation persists over a longer time, it leads to undernutrition. Chronic energy deficiency can lead to a reduction in physical activity, weight loss or both. In its severe forms, chronic energy deficiency can lead to wasting and eventually death. Hunger is not synonymous with malnutrition or undernutrition, but there are overlaps between them. (Committee on World Food Security, 2012a)

Nutrition: Nutrition is the consequence of the intake of food and the utilization of nutrients by the body. Good nutrition produces a healthy physical and physiological condition. It is secured when food intake, absorption and utilization provide all essential nutrients in required amounts. Poor nutrition produces an unhealthy physiological condition and is caused by lack of physical, economic, social or physiological access to the right amounts of dietary energy and nutrients. Consequences of poor nutrition include impaired physical and mental development, reduced immunity, increased susceptibility to disease, decreased ability to work and reduced productivity. Since parasites, poor hygiene and diseases can compromise a person's ability to absorb and biologically utilize the nutrients consumed, a safe food supply, clean drinking water, a sanitary environment, adequate health, education and care are essential for good nutrition, along with

a balanced diet. Optimal nutrition supports development to obtain each individual's full genetic potential. (Committee on World Food Security, 2012a)

Poverty: According to internationally accepted criteria, poverty refers to all people living on less than USD 1.25 per day. Beyond the monetary indicator, poverty also refers to being unable to meet one's minimum requirements through either income or consumption. Poverty deprives individuals of the capability to fully function in society (World Bank, 2009a). In the Lao context, poverty is defined by Decree No. 309/PM dated 24 November 2013, which sets the standard on poverty for 2012–2015 (Prime Minister's Office, 2013). The national poverty line is defined as a monthly income of NK 180,000 (USD 22.05) or less per person in rural areas and NK 240,000 (USD 30) or less per person in urban areas. Because of the difference between national and international poverty lines, poverty in Lao People's Democratic Republic is measured against both government and United Nations indices (2013).

Social protection: All initiatives that: (i) provide income (cash) or consumption (food) transfers to poor people; (ii) protect vulnerable people against livelihood risks; (iii) and enhance the social status and rights of excluded and marginalized people (Devereux and Sabates-Wheeler, 2004, quoted in Committee on World Food Security, 2012b).

Sustainability: Human development that meets the needs of the present time without compromising the ability of future generations to meet their own needs. Sustainable development calls for a convergence of economic development, social equity, and environmental protection (United Nations, 2010)

Acronyms

ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CFS	Committee on World Food Security
CGIAR	Consultative Group on International Agricultural Research
COP	Conference of Parties
CSO	civil-society organization
DDG	Deputy Director General
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FNS	food and nutrition security
Lao PDR	Lao People's Democratic Republic
GCF	Green Climate Fund
GDP	gross domestic product
GEF	Global Environment Facility
GoL	Government of Lao PDR
IFAD	International Fund for Agricultural Development
IFI	international financial institution
IFPRI	International Food Policy Research Institute
ILO	International Labour Organization
IRRI	International Rice Research Institute
IUCN	International Union for Conservation of Nature
IWMI	International Water Management Institute
LDC	least-developed country
LIWG	Land Issues Working Group
LWU	Lao Women's Union
LURAS	Laos Upland Rural Advisory Service
MAF	Ministry of Agriculture and Forestry
MDG	Millennium Development Goal
MoES	Ministry of Education and Sports
MoF	Ministry of Finance
MoH	Ministry of Health
MoNRE	Ministry of National Resources and Environment
MPI	Ministry of Planning and Investment

NAFRI	National Agriculture and Forestry Research Institute
NCAW	National Committee for the Advancement of Women
NCSA	National Capacity Self-Assessment
NDMO	National Disaster Management Office
NERI	National Economic Research Institute
NGO	Non-governmental Organization
NLMA	National Land Management Authority
NNC	National Nutrition Committee
NPA	Non-profit Associations
NSEDP	National Socio-Economic Development Plan
NTFP	non-timber forest product
ODA	official development assistance
REACH	Renewed Efforts Against Child Hunger and undernutrition
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal
SDGF	Sustainable Development Goals Fund
SNV	The Netherlands Development Organization
SUN	Scaling Up Nutrition
SWG-ARD	Sector Working Group on Agriculture and Rural Development
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
WHO	World Health Organization

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