



Accelerating progress towards SDG2

**THE LAO PEOPLE'S
DEMOCRATIC
REPUBLIC**



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List of Acronyms

ADS	Agricultural Development Strategy
AFD	L'Agence Française de Développement
AVSF	Agronomes et Vétérinaires Sans Frontières
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung
BRI	Belt and Road Initiative
BTI	Bertelsmann Stiftung Transformation Index
CBO	Community Based Organization
CCL	Comité de Coopération avec le Laos
CoC	Chamber of Commerce
CoP	Community of Practice
CotD	Cost of Diet
CPF	Country Programming Framework (FAO)
CSO	Civil Society Organization
CSPR	Center for Socio-Economic Science and Policy Research
DAFO	District Agriculture and Forestry Office
DALaM	Department of Agricultural Land Management
DoA	Department of Agriculture
DoF	Department of Forestry
DoI	Department of Irrigation
DoLF	Department of Livestock and Fisheries
DoPLA	Department of Policy and Legal Affairs
DPF	Department of Planning and Finance
DTEAP	Department of Technical Extension and Agricultural Processing
ENUFF	Enhancing Nutrition of Upland Farming Families
EVI	Economic Vulnerability Index
FAO	Food and Agriculture Organization of the United Nations
FCZ	Fish Conservation Zones
FFS	Farmer Field School
FIRST	Food and Nutrition Security Impact, Resilience, Sustainability and Transformation
FMC	Community Fisheries Management Committees
FNS	Food and Nutrition Security
FNSSA	Food, Nutrition, Security and Sustainable Agriculture
GAfsp	Global Agriculture and Food Security Program
GAP	Good Agricultural Practices
GIEWS	Global Information and Early Warning System
GIZ	Gesellschaft für Internationale Zusammenarbeit
HAI	Human Assets Index

HPA	Health Poverty Action
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IGA	Income generating activity
INGO	International Non-Governmental Organization
IYCF	Infant and young child feeding
JICA	Japan International Cooperation Agency
LANN	Land, Agriculture, Natural Resource Management and Nutrition
LDC	Least Developed Country
LOPA	Lao Organic Promotion on Agriculture
LWU	Lao Women's Union
MAF	Ministry of Agriculture and Forestry
MDD-W	Maternal dietary diversity in women
MDG	Millennium Development Goal
MIC	Ministry of Industry and Commerce
MoLSW	Ministry of Labour and Social Welfare
MONRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MSG	Monosodium glutamate
NEIR	National Institute for Economic Research
NGO	Non-Governmental Organizations
N-GPAR	National Governance and Public Administration Reform Programme, N-GPAR
NIPN	National Information Platform for Nutrition
NIRAS	International Consulting Company
NNC	National Nutrition Committee
NNS	National Nutrition Strategy
NPA	Non-Profit Association
NRM	Natural Resource Management
NSA	Nutrition-Sensitive Agriculture
NSEDP	National Socio-Economic Development Plan
NTFP	Non-Timber Forest Products
OA	Organic Agriculture
PA	Priority Action
PAFO	Province Agriculture and Forestry Office
PASAN	Partnership for Advisory Support for Agriculture and Nutrition
PDR	People's Democratic Republic
PORDEA	Poverty Reduction and Development Association
RAS	Rural Advisory Services
RDA	Rural Development Association
RTC	Round Table Conference

RTM	Round Table Mechanism
SAEDA	Sustainable Agriculture & Environment Development Association
SBCC	Social and Behaviour Change Communication
SDC	Swiss Agency for Development and Cooperation
SDG	Social Development Goal
SME	Small and medium-sized enterprises
SNUT	Staple-Adjusted Nutritious Diet
SNV	Netherlands Development Organization
SP1	Strategic Programme on Hunger Eradication, Food Security and Nutrition
SSWG	Sub-sector Working Group
Sub-CAW	Sub-Committee for the Advancement of Women
SUN-CSA	Scaling-up Nutrition – Civil Society Alliance
SUN	Scaling-up nutrition
SWG	Sector Working Group
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAT	Value-added tax
WASH	Water, Sanitation and Health
WFP	World Food Programme
WHO	World Health Organization
WINGS	Women's Income and Nutrition Groups
WWF	World Wildlife Fund

Executive Summary

BACKGROUND

The Ministry of Agriculture and Forestry (MAF) of Lao PDR is preparing its 9th five-year plan over the period 2020 to 2025. Because nutrition is becoming an important national policy goal, MAF intends to place nutrition more centrally in the National Agricultural Development Policy. It requested FAO support a policy effectiveness analysis study to provide options for policy changes that would result in better linkages between agriculture and nutrition.

METHODOLOGY

The study was implemented by researchers from the Department of Policy and Legal Affairs (DoPLA) in MAF supported by an FAO consultant. The team reviewed key policy documents, interviewed key informants and organized consultative workshops. The guiding questions for the review were derived from the FAO Food and Nutrition Security Impact, Resilience, Sustainability and Transformation (FIRST) programme.

DIAGNOSTIC ANALYSIS OF AGRICULTURE FOR NUTRITION

Food security has been achieved at the national level in Lao PDR since 2011, but it remains an issue for the poorest households living in remote rural areas. They struggle with persistent rice shortages in a rainfed upland environment and poor access to markets and are victims of increasing impacts of climate change.

Malnutrition remains an important national challenge that could impede graduation of the country out of LCD status by 2025. Key indicators such as stunting, wasting and anaemia are high and not diminishing sufficiently fast.

The main drivers of malnutrition are poor diversity in diets, poverty and food insecurity in remote areas, poor maternal and child care practices, and inadequate access to health services, clean water, sanitation and hygiene. These factors reinforce each other and can only be effectively contained by a multisectoral approach to the problems.

POLICY FRAMEWORK

There is a strong National Nutrition Strategy (NNS) and there has been considerable foreign donor support in the field of nutrition. There is a wider recognition that nutrition requires a multisectoral approach. Among the 22 priority actions in the NNS, four are the responsibility of the agriculture sector:

- (a) production of nutritious crops;
- (b) production of animal proteins from livestock;
- (c) processing food, access to food and food value chains; and
- (d) natural resource management and income generation from sustainable production of wild food products.

The Agricultural Development Strategy 2016–2020 was mainly focused on the transformation from subsistence agriculture to commodity production for marketing. Since 2017, MAF has

adopted a Nutrition-Sensitive Agriculture (NSA) approach, in the context of the four priority actions.

The NSA approach emphasizes six pathways from agricultural interventions or investments to nutrition outcomes:

1. On-farm availability diversity and safety of food;
2. food environments and markets;
3. income can improve food access;
4. women's empowerment;
5. nutrition knowledge/norms can improve care practices; and
6. natural resource management practices will create a better health and sanitation environment.

A review of NSA activities in Lao PDR was done in 2018. Interventions aimed at diversifying food production have been partly successful but have not yet led to measurable changes in diets. Little work has been done to address access to food for rural consumers, food processing, empowerment of women and gender roles, nutrition knowledge, and nutrition in natural resource management.

Nutrition has become one of the most significant agenda items in the dialogue between foreign aid donors and the Lao PDR Government. Several strong coordination mechanisms among development partners are in place to maintain a coherent strategy for addressing nutrition.

EMERGING ISSUES

At the global level, the impacts of urbanization are seen as the most important emerging issue in policies promoting agriculture for nutrition. This is less of an issue in Lao PDR, where 70 percent of the population resides in rural areas, but some emerging global policies could also be applied, such as transforming agrifood systems, scaling-up non-farm income opportunities, improving living conditions in rural areas, and reforming rural governance.

At the national level, the key emerging issues that are likely to affect the agricultural impact on nutrition are:

- Increased income does not lead to more dietary diversity in rural areas.
- Increased women's workloads have a negative impact on child nutrition.
- Unemployment among rural youth is growing.
- Climate change is creating more risks to food and nutrition security.
- Consumers demand safe and affordable food.
- Problems associated with obesity and overweight are imminent.
- The telecommunications revolution creates new opportunities.
- Rapid development of regional transport links and hubs opens up new market opportunities.

IMPLEMENTATION MECHANISMS, CAPACITIES AND REACH

The main implementation mechanism is for province and district agriculture and forestry offices to support rural communities in implementing NSA practices, mostly in the context of projects supported by foreign aid. Consulted stakeholders identified a number of gaps:

(a) Gaps in nutrition planning and policies:

1. Poor coordination among central, province, district and community levels on nutrition interventions.
2. No clear guidelines for developing local nutrition plans.
3. Little collaboration between government and the private sector to address nutrition issues.

(b) Gaps in capacity

4. Capacity building is very variable and there is no structured approach to build knowledge on NSA either for communities or government staff.
5. Few staff are trained in nutrition and few are available to work on nutrition. There are several causes: a halt to creating new positions or taking on volunteers in government offices, poor performance of the government extension system, fragmentation of staff over multiple departments, and staff spending most of their time collecting various fees, issuing permits and collecting monitoring data.
6. The capacity for developing good models for NSA remains limited.

It will be very difficult to expand the government workforce. The only realistic way to increase numbers of front-line staff is to engage in more partnerships with civil society and the private sector.

(c) Gaps in resources

7. NSA activities are not specifically mentioned in work plans, making it difficult to allocate working budgets.
8. Budgets are either disbursed through the agriculture department or the health department; it is difficult to share with each other or with the Lao Women's Union.

(d) Gaps in reach

9. A number of 75 priority districts have been identified, but nutrition-sensitive interventions are not always focused on areas with the greatest needs.
10. Reach is limited by lack of human and financial resources.

RESOURCE ALLOCATION

There is a structural budget deficit in public expenditures in health, agriculture and nutrition. Government budgets only just cover salaries, running costs and basic capital investments in buildings, and there remains little for implementing activities. Almost all the implementation budgets are derived from foreign assistance funding. This is not sustainable on the long run. The government is embarking on a policy of financial reform, but it will take several years before it is expected to make more public expenditure funding available for implementing

activities.

Foreign assistance funding for nutrition is growing, but the committed funds to date still fall short of what is required. Over the period 2016–2020, USD 90 million were committed to NSA, which would cover 63 percent of the target of USD 144 million required. There are no figures yet for the period 2020–2025, but a similar gap is likely to remain.

POLITICAL ANALYSIS

- The key policy changes needed for stronger impact from agriculture on nutrition include.
- Stronger political will to prioritize nutrition as a national priority and specifically in the agricultural sector.
- More space for CSOs, farmer organizations and consumer organizations.
- Stronger governance to improve investor confidence.
- Reforms in government finances to have more public budget for implementing nutrition activities (working budgets).
- More public debate on how to deal with emerging issues.

The main actors in favour of policy changes in the nutrition sector are the government and foreign aid donors. There are no strong consumer organizations and there are no strong farmer organizations. Leadership in the sector now rests mainly with the NNC, which has improved coordination of donor support. The weakness is that other ministries see nutrition primarily as the task of the Ministry of Health, which also hosts the NNC. This weakens the ability of the NNC to engage other ministries in nutrition duties.

The main constraints limiting state action are the lack of human and financial resources. At the same time, the state concentrates all powers in its own institutions, leaving very little space for other actors such as CSOs and the private sector to evolve. The challenge is to create more space for such actors.

PRIORITIZATION OF POLICY CHANGES

In conclusion, this study recommends fifteen policy changes, which can be prioritized as follows:

Three policy changes go beyond the agriculture sector and will need to be addressed at national policy level:

1. Fostering political will to prioritize nutrition.
2. Developing a nutrition-based planning mechanism.
3. Strengthening local institutions.

Within the agriculture sector, there is one policy change that can be addressed in the short term:

4. Mainstreaming nutrition in agricultural strategy and MAF organization. The aim is to finalize the new five-year strategy by April 2020, which appears feasible.

Most of the other policy changes can be achieved in the medium term. The most urgent policies are those that are critical for success but that have received little attention to date:

5. Developing capacity to address women's empowerment and gender equality in agriculture.
6. Improving market access for rural consumers.
7. Enhancing food processing and storage capacities.
8. Partnerships with CSOs and the private sector.

Other changes in the medium term are also urgent, but there is already a basis of experience:

9. Crop diversification for local consumption.
10. Accelerating small livestock production for consumption.
11. Linking nutrition knowledge to agricultural choices.
12. Supporting rural entrepreneurship and food value chains.
13. Incorporating nutrition goals in landscape management systems.

Lastly, several policy changes will require a long-term perspective:

14. Scaling-up safety standards in food value chains.
15. Promoting healthy food habits among consumers.

1. Introduction and context of the study

A. Prioritizing nutrition outcomes in the 9th National Agricultural Policy 2021–2025

The Ministry of Agriculture and Forestry (MAF) of Lao PDR is preparing its 9th five-year plan for the period 2021 to 2025. The main guiding document for preparing the five-year plan is the Agricultural Development Strategy (ADS) to 2025 and Vision to 2030, prepared in 2015. The strategy contains a short section on food security and nutrition.

In the national policy context, graduating out of Least Developed Country (LDC) status is an important goal for the period 2021–2025. While Lao PDR has achieved most economic requirements for graduation, persistent high malnutrition remains a key obstacle to graduation. MAF is tasked to give more priority to agricultural interventions aimed at improving nutrition in its next five-year plan.

MAF has requested FAO, the Food and Agriculture Organization of the United Nations, to implement a policy effectiveness analysis study on food security and nutrition in the agriculture sector. The aim of this study is to help MAF decide which policy options would be most conducive to improving food and nutrition security (FNS) over the next five years.

B. FAO support to nutrition-sensitive agriculture in Lao PDR

FAO has supported MAF to develop and adopt Nutrition-Sensitive Agriculture (NSA) since 2017 through the Partnership for Advisory Services in Agriculture and Nutrition (Lao-PASAN). The main outputs have been the development of a Community of Practice (CoP) of organizations implementing NSA and a series of studies and training workshops on NSA in Lao PDR.

FAO has developed a methodology for policy effectiveness analysis under its FIRST Programme: Food and Nutrition Security Impact, Resilience, Sustainability and Transformation. The FIRST programme was operational in Lao-PDR for two years but transitioned in June 2019. Following the end of FIRST operations in Lao-PDR, FAO's Strategic Programme on Hunger Eradication, Food Security and Nutrition (SP1) has provided technical assistance to implement a policy effectiveness analysis under its support to MAF in its Country Programming Framework (CPF). This study was undertaken under that framework.

C. Objectives and expected results from this study

The objectives of this study were to:

- Review key existing MAF policies towards food and nutrition security, by reviewing documents and interviewing stakeholders.
- Document gaps, inconsistencies, alignments between policies and implementation capacity.
- Draft policy options for improving food and nutrition security and explore local perspectives on them through a series of subnational workshops.
- Present results in a national-level workshop and prepare a summary report.

2. Methodology of the analysis

A. Key research questions

The methodology used for this study is based on the FAO programme Food and Nutrition Security Impact, Resilience, Sustainability and Transformation (FIRST). With support from the European Union, this methodology has been implemented in 32 countries since 2016. The aim of this programme is to:

- a) Review current national policy and institutional frameworks for FNSSA.
- b) Identify bottlenecks and leverage opportunities for improving impact.
- c) Develop options to improve delivery and impact.
- d) Advocate for and develop human and organizational capacities for change.
- e) Facilitate evidence-based and inclusive policy dialogue and stakeholder coordination.

The rationale for this policy effectiveness analysis is centred around six key questions:

1. What is hampering the achievement of the SDG2 food security and nutrition targets, even in countries that have appropriate policies in place?
2. Are we supporting the right set of actions, at the right moment, in the right places, for the right groups of people?
3. Are we having or are we likely to have a real impact on the right groups of people?
4. What are realistic, feasible areas for allocating scarce public sector resources?
5. What areas have or can be expected to give the greatest impact?
6. What are the most efficient ways of implementing those actions?

The FIRST methodology elaborates these key questions into eight research questions:

1. What are the trends, geographical and socio-economic patterns, and prospects for eradicating food insecurity, malnutrition and poverty in the country? What are the key drivers of food insecurity, malnutrition and poverty?
2. Is the current set of policies and strategies sufficiently focused and well-designed to address these immediate and underlying causes of food insecurity and malnutrition adequately in the most impactful way both at a national scale and at the level of specific socio-economic groups, geographic areas, agro-ecological zones and/or administrative areas that are facing stubborn or more pervasive problems of food insecurity and malnutrition?
3. Are current policies and strategies sufficiently forward looking to address the food security and nutrition impacts of emerging problems related to, for example, migration, youth unemployment, climate change, population growth, urbanization, etc.?
4. Are the implementation mechanisms and capacities that are in place adequate to reach specifically those people and areas most affected by food insecurity and malnutrition?
5. To what extent are the existing policies and strategies adequately resourced, implemented, and monitored? In case of inadequate or incomplete implementation, what are the implications for the achievement of the intended food security and

nutrition impacts?

6. What are the political economy factors that may prevent the adoption and/or implementation of the right set of measures, actions, and implementation mechanisms to eradicate hunger, food insecurity and malnutrition by 2030?
7. Considering the above analysis, what is the realism/credibility of the current set of policies and strategies?
8. Considering the above analysis and given a scenario of continued resource and capacity constraints, what areas of the policy framework and what implementation capacity gaps should be prioritized for resource allocation?

B. Research team

The research team consisted of Ms Chansom Khounsombath, national consultant from the Department of Policy and Legal Affairs under MAF (DoPLA) and Mr Joost Foppes, international consultant from FAO. The team was guided by Mr Somxay Sisanonh, the Director General of DoPLA and supported by Mr Nasar Hayat, the FAO Country Representative. Mrs Esther Wieggers and Ms Emilie Chazelle from the FAO FIRST team in Rome provided technical backstopping support and Mr Sengpaseuth Simmanvong and Ms Chitpasong Soumphonphakdy from the FAO-PASAN office in Vientiane provided logistical support.

C. Research process

The team conducted the following activities:

- prepare team and work plan (two days, 12–13 September 2019);
- agree on outline and process (one day, 16 September 2019);
- review MAF strategy documents (five days, 17–21 September 2019);
- hold six consultation meetings with key stakeholders (six days, 23–30 September 2019);
- livestock, fisheries, crops, standards;
- forestry, land tenure, climate change, disaster preparedness;
- gender, food processing, income;
- food trade, political economy, migration;
- food systems, social protection, food procurement;
- donor, NGOs /CSO and private sector organizations;
- draft a report (five days, 1–8 October 2019);
- hold three subnational workshops (north, centre, south, six days, 14–25 September 2019);
- draft interim report (three days, 28–31 September 2019);
- present findings in a national workshop (three days, 19–21 November 2019); and
- finalize report (four days, 25–29 November 2019).

The total process took 45 working days, spread over three months (September–November

2019).

D. Guiding questions for the consultation process

The team found that the eight guiding questions of the FIRST methodology were not always easy to understand for Lao PDR Government staff. For the purpose of getting participants in consultation meetings to reflect on pathways between agriculture and nutrition, a set of five discussion questions was prepared:

- 1) What lessons can we learn from implementing the four priority actions (PA) on nutrition to date?

	PA1: production of plant-based foods	PA2: production of animal-based protein foods	PA3: food processing and value chains	PA4: NRM and food-based income
Achievements				
Shortcomings				
Solutions				

- 2) Over the next five years, what agricultural actions should we undertake to reach a better nutrition status? Please think of each of the six pathways between agriculture and nutrition.

Pathway	Proposed activities/strategies
1 On-farm availability, diversity and safety of food	
2 Food environment in markets, value chains, processing	
3 Income to buy food	
4 Women's empowerment (time, labour assets, income)	
5 Nutrition knowledge and norms	
6 Natural resource management	

- 3) What gaps do you experience between policy and implementation? How could these problems be overcome?

Problems	Suggested solutions

- 4) What kind of investments in the agriculture sector will lead to better food security and nutrition?

Investment type	Proposed investments
1 Agricultural development (extension, research)	
2 Value chain development	
3 Community-driven development	
4 Water, irrigation, drainage	
5 Natural resource management	

- 5) How will all this help us revise our next five-year agricultural development strategy?

Where are we now?	Where do we want to be?	How do we get there?

3. Diagnosis of food and nutrition security in Lao PDR

This section is aimed at answering key question 1. What are the trends, geographical and socio-economic patterns, and prospects for eradicating food insecurity, malnutrition and poverty in the country? What are the key drivers of food insecurity, malnutrition and poverty?

A. Status and trends of food and nutrition security in Lao PDR

A.1 FOOD SECURITY

Rapid economic growth and increased agricultural productivity over the past two decades have resulted in the proportion of undernourished people falling by almost half. Lao PDR has achieved the MDG target of halving the proportion of hungry people. The proportion of undernourished in the population has declined from 42.8 percent in 1990 to around 18.5 percent in 2015.¹

Over the period 2014–2018, annual rice production averaged 4.117 million tonnes per year.² With a population of 6.858 million in 2017, that equates with a ratio of 600 kg un-milled rice per

capita per year, well in excess of the official government figure of 350 kg per capita per year (equivalent to 190 kg of milled rice per capita per year).

The country produces enough rice to feed the population and 89 percent of the population have acceptable food patterns. Yet 11 percent has very poor food consumption. These are mostly households in remote areas, cultivating less land and depending on cash crops as their main source of income and having little access to basic infrastructures. Future attempts to improve food security will therefore need to focus on these disadvantaged groups.³

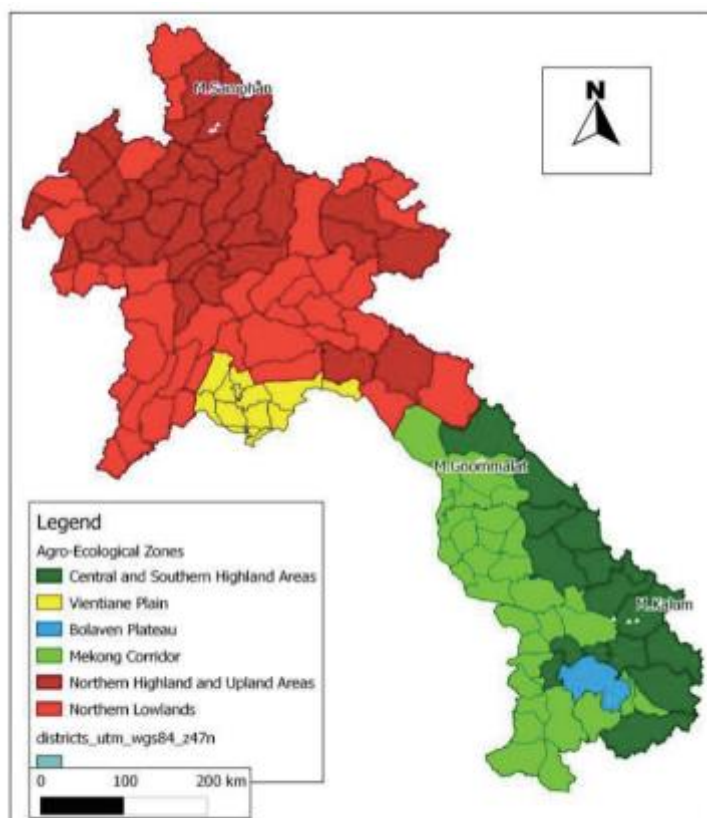


FIGURE 1: THE MAIN AGRO-ECOLOGICAL ZONES IN THE LAO PDR

SOURCE: STOBER ET AL., 2016.

The Lao PDR can be divided into six agro-ecological zones (see Figure 1 and Box 1).

¹ UNDP website, SDG2 Zero Hunger, 2019. <http://www.la.one.un.org/sdgs/sdg-2-zero-hunger>

² FAO-GIEWS, 2019. Country Brief for the Lao PDR. <http://www.fao.org/giews/countrybrief/country.jsp?code=LAO>

³ UNDP website, SDG2 Zero Hunger, 2019. <http://www.la.one.un.org/sdgs/sdg-2-zero-hunger>

BOX 1: THE SIX MAJOR AGRO-ECOLOGICAL ZONES IN THE LAO PDR

- 1) *Mekong Corridor*: Altitudes 100–200 masl, annual rainfall 1 500–2 000 mm, agricultural growing period 180–200 days. Mostly flat and gently sloping land with alluvial soils. The most populated zone (1.5 million people) and the key rice production zone.
- 2) *Central and Southern Uplands*: Altitudes 200–1 000 masl, annual rainfall 2 000–3 000 mm, agricultural growing period 210–240 days. Population density is low; there are fewer than 300 000 people. Limited potential for productive agriculture due to poor acid soils and risks of unexploded ordinances.
- 3) *Vientiane Plain*: Altitudes 500–1 000 masl, annual rainfall 2 500–3 000 mm, agricultural growing period 240–270 days. Rolling topography and mid-mountain areas. Upland rice cultivation is the main production system; animal husbandry is also of some importance. The population density is low to medium: total population around 300 000.
- 4) *Boloven Plateau*: Altitudes 500–1 500 masl, rainfall 2 500–3 000 mm. Fertile volcanic soils allow for cultivation of tree crops (coffee, tea and cardamom), some shifting cultivation of upland rice also occurs. Livestock also important: population 6 000.
- 5) *Northern Highland Areas*: Altitudes 1 500–2 500 masl, annual rainfall 1 300–2 500 mm. The zone is characterized by remoteness, inaccessibility and high erosion risk due to the steep mountainous topography. However, soils are well suited for farming and have potential for animal husbandry. Around 1 million people, density is low.
- 6) *Northern Lowlands*: Altitudes 500–1 500 masl, annual rainfall 1 500–2 000 mm. Mountainous zone, similar to the Northern Highlands, but with more flatland valleys. The total rural population is estimated at 1 million, and the population density is higher than that of the Northern Highlands.

The climate of the Lao PDR is characterized by a short rainy season from June to October and a longer dry season from November to May. Rice is grown in the rainy season and harvested from September to November. The main cropping systems are paddy field rice in the valleys and upland shifting cultivation in the uplands. Both systems are susceptible to climate change.

The main rice growing area is the Mekong corridor, where 70 percent of the nation's rice is produced. The other zones have structural rice deficits and have to import rice every year. Difficult road access increases prices of rice in mountainous areas.

Rice self-sufficiency is highly seasonal: on average, households exceed their rice requirements through their own production over the course of a year, but frequently sell some of the yield immediately postharvest and consequently must purchase rice later on in the lean season. Such practices can be part of a vicious cycle known as *khao kheo*, whereby farmers sell rice before it is even harvested to pay off debts and are then forced to take out additional loans at the end of the season.⁴

Nationally, it is estimated that 18 percent of the rural population is food insecure, of which nearly all are moderately food insecure, with only one percent being severely food insecure. These households can be characterized by livelihoods that rely on cash crop production, shifting

⁴ Foppes *et al.*, 2011.

upland cultivation, and unskilled labour. They are poorer and lack assets, with smaller plots of land and limited access to infrastructure, and are likely to be ethno-linguistic minorities (non-Lao-Tai).⁵ Access to land, for both crop cultivation and for foraging wild products, has been identified by villagers as the key factor in food security.⁶ Geographically, food consumption scores (an indicator of dietary diversity and hence better intake of required nutrients) are poorest in upland areas, both in the northern and central/southern regions, and in areas dominated by land concessions for rubber and mining.

Lao PDR retains one of the highest rates of milled rice consumption per capita, even though this rate has gone down from 190 kg in the 1970s to around 160 kg/capita/year at present.⁷ Diets are very much centred on rice, resulting in an over-consumption of carbohydrates and under-consumption of proteins and fats.

The main trend in overall agricultural production has been a shift from subsistence farming to commercial agriculture. Increased cash income from cash crops has enabled rural households to buy more food, but it has also made them more dependent on fluctuations in world market prices of cash crops. There are also negative impacts on the environment and on availability of wild foods.

One author argues that there is a food security paradox in Lao PDR: while a single focus on commodity crops is pursued as a key strategy to escape from poverty and may be expected to improve food security, the associated negative impacts on the environment and increased dependence on global markets may actually reduce food production and decrease food security.⁸

A.2 NUTRITION SECURITY

Food security (secure access and availability of food to all people) seems less of a concern in Lao PDR than nutrition security (sufficient intake of a wide range of foods providing essential, needed nutrients). Nutrition security is becoming an important government policy priority, enshrined in the National Nutrition Policy of 2015.

Nutrition security can be monitored through a range of factors: key indicators for malnutrition (stunting, under/overweight, anaemia) and their social/geographical distribution, diversity of diets, sources of food, affordability of food. Food security can be seen as a driver of nutrition security (access, availability and sustainability of food). It also means relating nutrition status to clean water and sanitation, health care, gender roles and equality.

While nutrition security is becoming a well-known topic within the health sector, the agriculture sector has been traditionally more focused on food security. The challenge remains to mainstream nutrition security in the agricultural development policy and among the key stakeholders in the sector.

⁵ WFP, 2017.

⁶ Foppes *et al.*, 2011.

⁷ FAO, 2012. Lao PDR Rice Policy Study 2012.

http://www.fao.org/fileadmin/user_upload/tci/docs/1_Laos%20document%20low%20resolution.pdf

⁸ Fullbrook, D. 2010. The food security paradox in Laos.

https://www.researchgate.net/publication/265825921_Development_in_the_Lao_PDR_the_food_security_parado
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A.3 TRENDS IN KEY INDICATORS FOR MALNUTRITION

Lao PDR is off track on key SDG target indicators such as reducing underweight and stunting. In 2016, 33 percent of children under five years of age were stunted, 25.5 percent were underweight and 9 percent were wasted. Only 5 percent of young children eat an acceptable diet.⁹ Anaemia rates were 41 percent for children under five and 37 percent for women of reproductive age.¹⁰ Overweight among children under five is still low at 2 percent, but obesity among children aged 5–9 years is rising (8.6 percent for boys, 4.4 percent for girls) compared with children aged 10–19 (boys 4.9 percent, girls 2.3 percent) in 2016.¹¹

While stunting rates have declined from 44 percent in 2011 to 33 percent in 2017, there are still concerns that the national targets for 2025 may not be reached. The national targets for reducing nutrition are in line with the global Sustainable Development Goals:¹²

- The target for stunting (low height for age) in 2025 is a 40 percent reduction for children under the age of five, compared with a baseline of 44 percent in 2011, which is set at 25 percent.
- The target for malnutrition (abnormal weight for height) is composed of both wasting (low weight for height) and overweight (high weight for height). The target for wasting is to be lower than 5 percent by 2025. The target for overweight is to be lower than 6 percent by 2025.
- The target for anaemia (low blood cell counts) is a 50 percent reduction for children under the age of five, compared with a baseline of 41 percent in 2011, which is 20 percent for 2025.

Trends in malnutrition statistics show that most stunting, wasting and underweight occur between six and 18 months of age (see Figure 2).

This is the period when children are no longer exclusively dependent on breastfeeding and require rich complementary foods. Also anaemia rates are highest among children of 6–11 months, indicating that mothers have insufficient iron during pregnancy and complementary foods for children are of low iron content.¹³

The nutritional status of women is characterized by high rates of anaemia (over 40 percent) among pregnant women in rural areas. Early marriage and childbearing are also common, with 25 percent of women between the ages of 15 and 19 being married. This percentage ranges from 16 percent in urban provinces to 35 percent in remote rural provinces. Early marriage not only affects physical health of young mothers but is also related to education and wealth. Thirty-six percent of women aged 15–19 have no education and have begun childbearing. Among the poorest quantile, 28 percent had begun childbearing at 15–19 years of age, compared with 1 percent among the wealthiest quantile. Stunting rates for children were 10 percent higher among those whose mothers were younger than 17 at the age of conception.¹⁴

⁹ UNDP website, SDG2 Zero Hunger, 2019. <http://www.la.one.un.org/sdgs/sdg-2-zero-hunger>

¹⁰ <http://www.wpro.who.int/laos/topics/nutrition/en/>

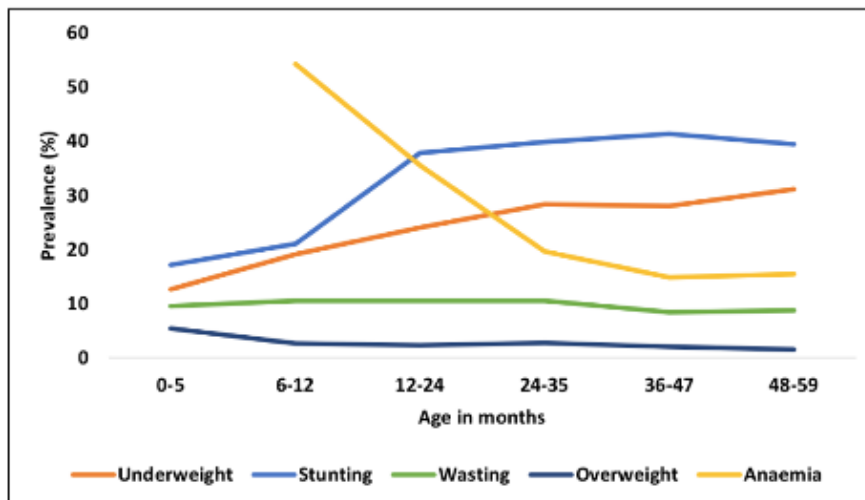
¹¹ World Obesity, 2019. Global Atlas on Childhood Obesity. <https://www.worldobesity.org/nlsegmentation/global-atlas-on-childhood-obesity>

¹² WHO, 2019. <https://www.who.int/nutrition/global-target-2025/en/>

¹³ WFP, 2017. <https://www.wfp.org/publications/2017-fill-nutrient-gap-lao-pdr>

¹⁴ WFP, 2017. <https://www.wfp.org/publications/2017-fill-nutrient-gap-lao-pdr>

FIGURE 2: PREVALENCE OF MALNUTRITION CHARACTERISTICS IN CHILDREN BY AGE (MONTH)



SOURCE: WFP, 2017

A.4 ETHNICITY AND MALNUTRITION

The population of the Lao PDR consists of 49 ethnic groups, which can be divided into four ethno-linguistic families: Lao-Tai (66 percent of the population), Mon-Khmer (22 percent), Hmong-Mien (8 percent) and Sino-Tibetan (2 percent).

There are clear differences in stunting rates among ethnic groups. Among children from Chinese-Tibetan and Hmong-Mien households, 60 percent were stunted, compared with 33 percent among children from Lao-Thai households. Poverty is also an important driver of malnutrition, with stunting rates ranging from 20 percent in the richest quantile to 60 percent in the poorest quantile.

If all three indices (stunting, wasting and underweight) are taken together, children from the Mon-Khmer ethnic group shows the highest level of malnutrition (50 percent stunting, 11 percent wasting and 35 percent underweight).

A.5 GEOGRAPHICAL AND SOCIO-ECONOMIC PATTERNS

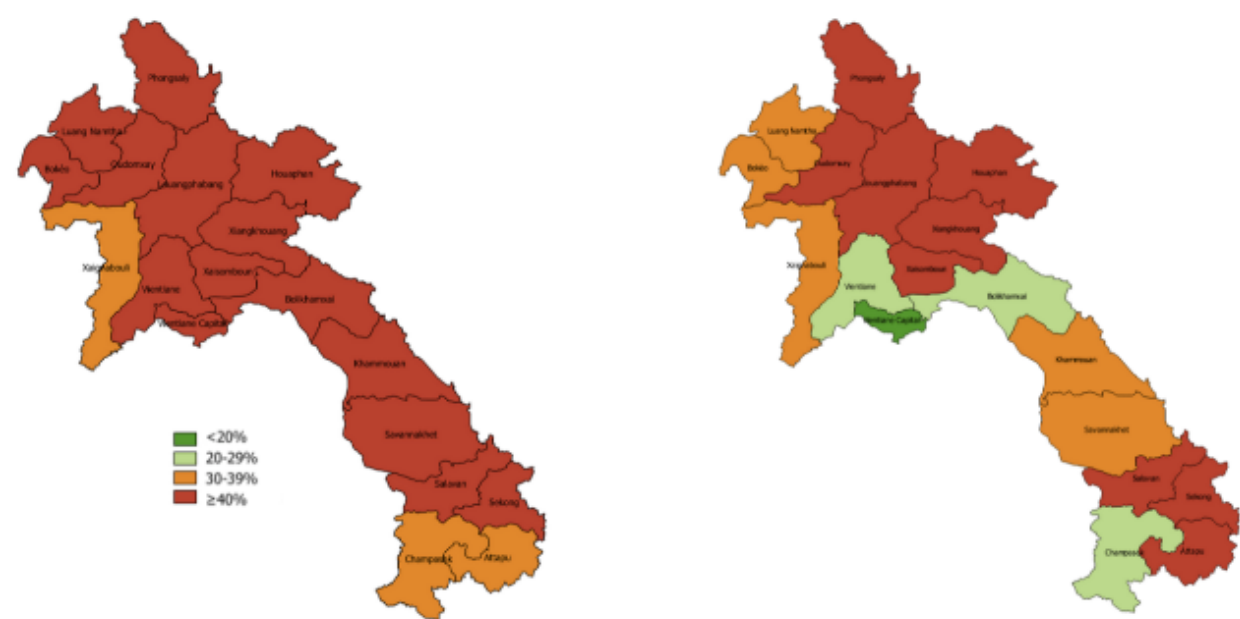
By 2011, stunting was a countrywide problem, with 15 out of 18 provinces having stunting rates of over 40 percent and a national average of 44 percent. By 2015, the national average had decreased to 36 percent and stunting rates over 40 percent still occurred in 8 out of 18 provinces. Stunting rates in rural areas without roads were over 50 percent, compared with 23 percent in urban areas (see Figures 3a and 3b).

Undernutrition shows strong inequalities across regions and groups and is associated with poverty. Stunting among children from the poorest households is three times higher than that in the richest households. This gap is widening, with little progress among the poorest children. Disparities among provinces are wide. Stunting rates range from 14 percent in Vientiane (lowest) to 54 percent in Phongsaly province (highest).¹⁵ Only five provinces of 18 have stunting levels

¹⁵ National Information Platform for Nutrition (NIPN), 2019. Multiple Overlapping Deprivation Analysis on Stunting of Children under 5 years in Lao PDR. http://www.nipn-nutrition-platforms.org/IMG/pdf/multiple_overlapping_deprivation_analysis_moda_on_stunting_among_children_under_5_years_in_lao_pdr.pdf

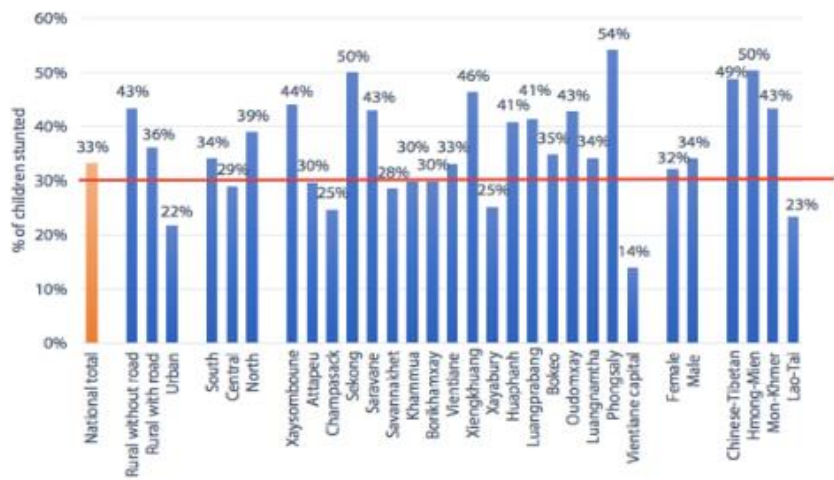
lower than the target of 25 percent for 2025 (see Table 1).

FIGURES 3A AND 3B: STUNTING PREVALENCE BY PROVINCE IN 2011 (LEFT) AND 2015 (RIGHT)



SOURCE: WFP, 2017.

TABLE 1: 2017 STUNTING RATES PER PROVINCE AND REGION.



SOURCE: WHO/UNICEF ANTHROPOMETRIC CLASSIFICATION SURVEY, QUOTED IN UNICEF 2019: MULTIPLE OVERLAPPING DEPRIVATION ANALYSIS ON STUNTING OF CHILDREN UNDER FIVE YEARS IN LAO PDR.

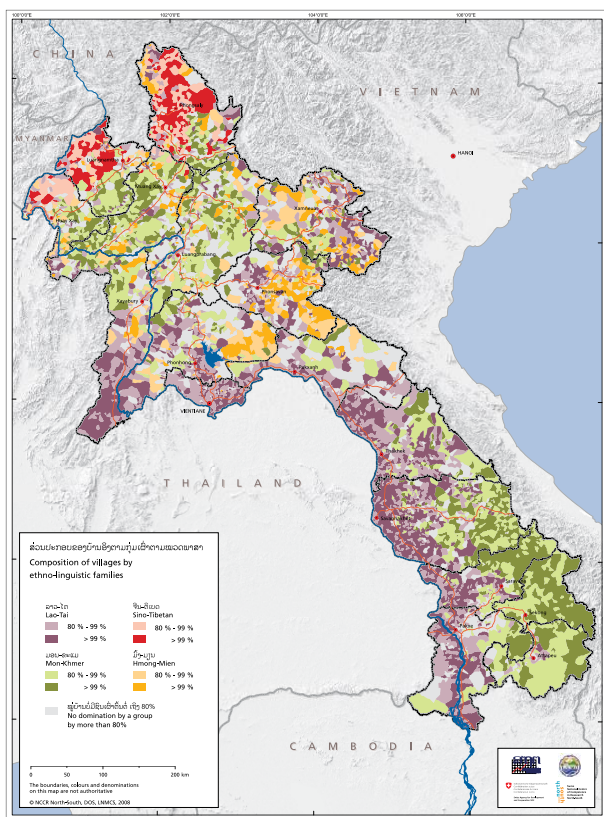


FIGURE 4: DISTRIBUTION MAP OF MAIN ETHNOLINGUISTIC GROUPS IN LAO PDR

Lao-Tai (66 percent of population) mainly occupy the Vientiane Plain and the Mekong Corridor, where lowland paddy rice farming is predominant. Mon-Khmer are based in the Northern Lowlands, Northern Uplands, Central and Southern Highlands and the Boloven Plateau. Hmong-Mieng (8 percent) and Sino-Tibetans are concentrated in the Northern Highlands. Shifting cultivation of upland rice is the predominant farming system in all these areas, gradually transforming into tree crops (rubber, coffee) and cash crops (maize, cassava).

The disparity in malnutrition rates between ethnic groups is related to their geographical distribution. The majority ethnic Lao-Tai group lives mainly in the

Lowlands of the Mekong corridor, an area with structural rice surplus and low food prices (see also Figure 5). Most of the Hmong-Mien and Sino-Tibetans are concentrated in the Northern Uplands. Mon-Khmer are concentrated in the Northern Lowlands, Central and Southern Uplands and Plateau regions. These are all upland areas with structural rice deficits and limited road access resulting in higher food prices. People in these areas are struggling with higher poverty rates, combined with higher food prices, resulting in structural lower affordability of food. Poverty and remoteness are key drivers of malnutrition.

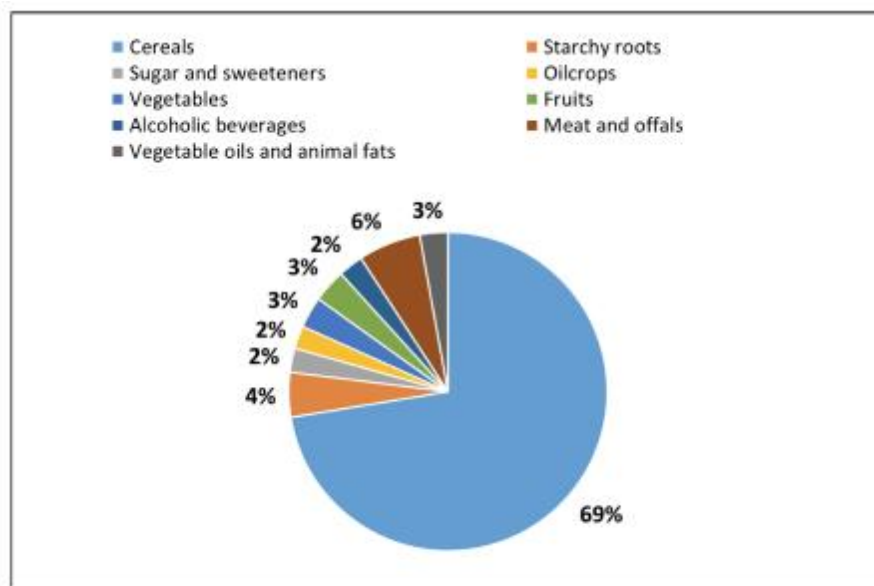
A.6 LOW DIVERSITY OF DIETS

Insufficient dietary diversity is of greater concern than meeting caloric intake, which even the poorest groups exceed on average.¹⁶ A typical diet is centred on rice and condiments such as monosodium glutamate (MSG), which are consumed every day. This results in excess consumption of carbohydrates but inadequate fat, protein and micronutrient intake. Food consumption surveys show that 69 percent of energy intake in a typical Lao diet comes from rice (see Figure 5).

A WFP study based on 24-hour recall ranked household dietary diversity as: (a) high if they had consumed more than eight food groups out of a total of 12, (b) acceptable if they had consumed five to eight food groups and (c) low if they consumed fewer than five food groups.

¹⁶ WB, 2016. <http://documents.worldbank.org/curated/en/706941471934533652/Nutrition-in-Lao-PDR-causes-determinants-and-bottlenecks>

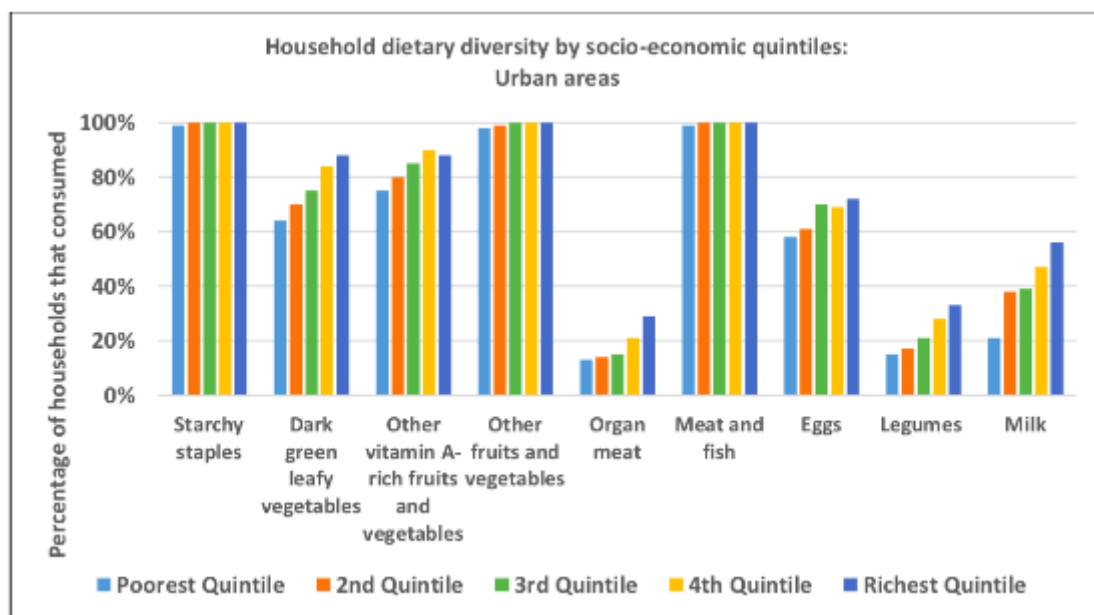
FIGURE 5: PROPORTION OF ENERGY SUPPLY FROM DIFFERENT FOOD GROUPS IN A TYPICAL LAO DIET



SOURCE: WB 2016.

Nationally, only 18 percent of interviewed households were classified as high, 63 percent acceptable and 19 percent low in dietary diversity. Dietary diversity was lowest in the Central/South and Northern Highlands, with 36 percent and 28 percent of households scoring low respectively. Dietary diversity was also lower in rural areas than in urban areas. Meat, legumes, dairy and eggs were consumed by a smaller percentage of households across wealth groups (see also Figures 6a and 6b).

FIGURES 6A AND 6B: HOUSEHOLD DIET DIVERSITY BY SOCIO-ECONOMIC QUINTILES IN URBAN AND RURAL AREAS



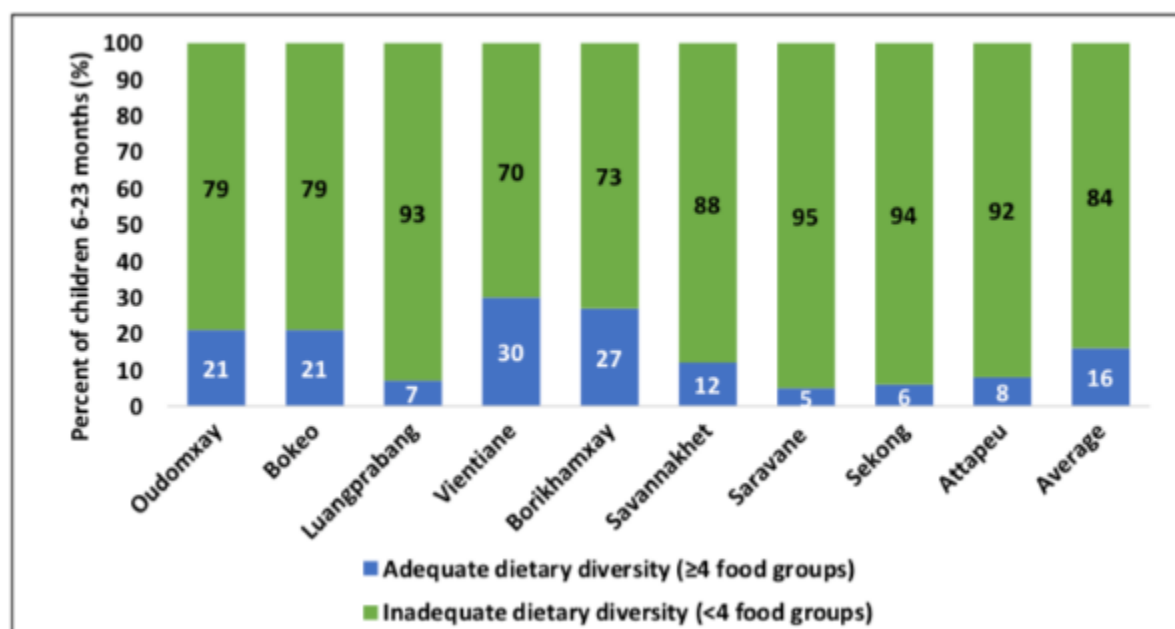


SOURCE: WB 2016, QUOTED IN WFP 2017.

Low diversity of child diets

Among young children aged 6–23 months of age, minimal meal frequency is met by only 43 percent. Dietary diversity among these young children is extremely low, with only 5–30 percent having adequate diet diversity (more than four food groups) as they are often fed primarily rice and occasionally fish or broth (Figure 7).

FIGURE 7: CHILD FOOD DIVERSITY SCORES FOR CHILDREN 6–23 MONTHS OF AGE IN 2013



SOURCE: WFP 2017.

Low maternal dietary diversity

Maternal dietary diversity in women (MDD-W) is a measure assessing whether women have consumed at least five out of ten food groups in the past 24 hours. In a survey covering five provinces, only 36 percent of non-pregnant women who had given birth over the last two years had minimally diverse diets. MDD-W was much higher among urban areas (76 percent) than in rural areas with or without roads (33 percent and 20 percent respectively). MDD-W was highest among Lao-Thai women (55 percent) and lowest among Mon-Khmer women (29 percent). The average number of food groups consumed ranged from 6.1 in urban areas to 3.9 in rural areas with roads and 3.4 in rural areas without roads. Consumption of legumes and dairy was particularly low (7 percent).

A.7 SOURCES OF FOOD

Nationally about half of all food consumption is sourced from a household's own production (10 percent gathered from the wild, 40 percent produced on the farm), 47 percent of food consumed being purchased on markets. The remaining 3 percent is obtained from borrowing, exchanges, gifts and food aid. Nationally, households spend more than half (63 percent) of their income on food (see Figure 8).

Households mainly obtain animal-source foods and fats, from markets: oils, sugar, meat, eggs and milk are commonly purchased. There are still big differences in access to markets with only 30 percent of villages nationwide having access to temporary purchase markets. Virtually none (2 percent) of rural villages have access to permanent markets (see also Figure 9).

FIGURE 9: SOURCES OF FOOD BY SEVEN-DAY RECALL IN 2013

SOURCE: WFP, 2017

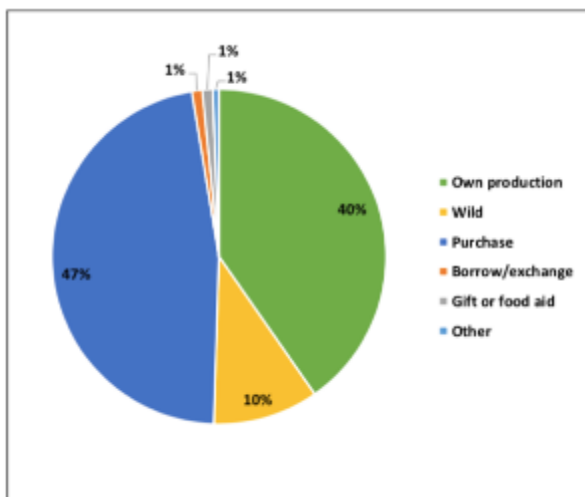
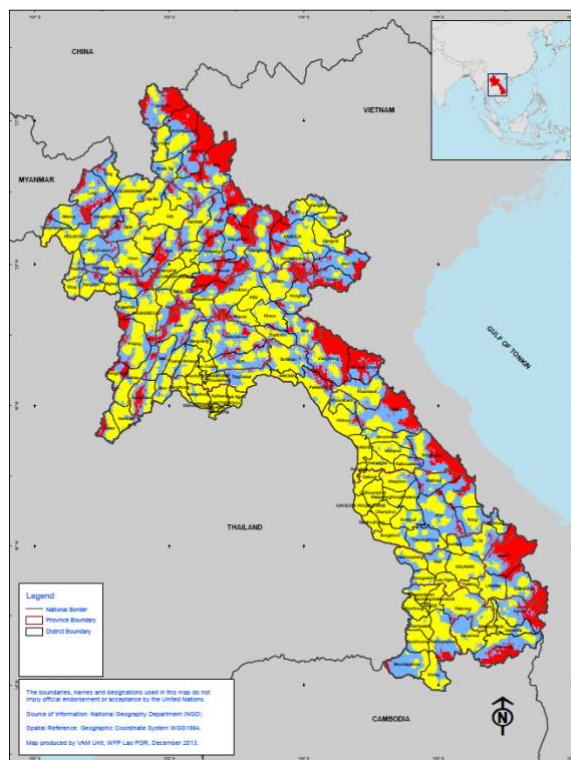


FIGURE 8: MARKET ACCESSIBILITY

Yellow: good market access; blue: challenging market access; red: poor market access.

SOURCE: WFP, 2017



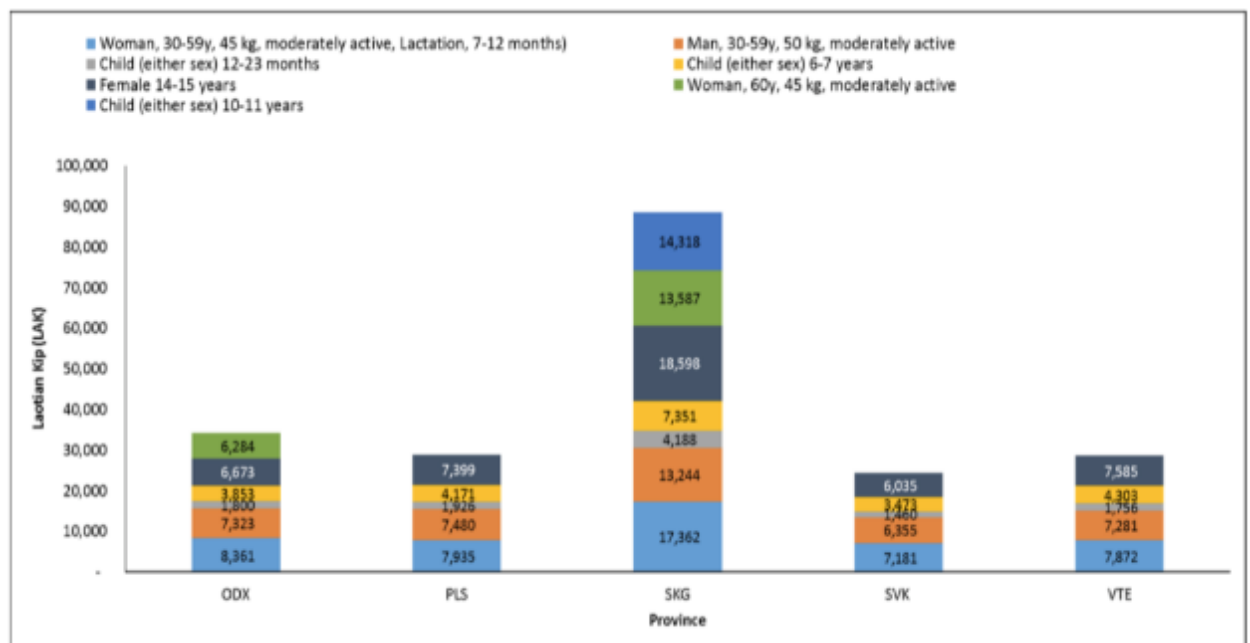
A.8 AFFORDABILITY AND ACCESSIBILITY OF HEALTHY FOOD

Physical access to markets is less relevant for households than lack of income to buy food. There are also large differences in prices of food between urban and rural areas. This can be illustrated by the WFP studies on the concept of the Cost of Diet (CotD). A computer-model formulates the cheapest possible diet for each household member based on available foods and in accordance with individual recommended nutrient intakes and portion size of each individual. The program also calculates a Staple-Adjusted Nutritious Diet (SNUT) based on recommended intakes for energy, protein fat and 13 micronutrients that can be derived from locally available food products.

The CotD study found a large difference in the availability of food items, ranging from 61 products in Sekong to 184 products in Savannakhet, among five provinces assessed.

The CotD study also found a large difference in the daily cost of a nutritious/SNUT diet. The lowest cost (24 503 LAK/USD 2.97) for the cost of a daily diet for an average five-person household occurred in Savannakhet Province, which is a prosperous lowland province in the Mekong Corridor, with good road access and a majority Lao-Tai population. The highest cost occurred in Sekong Province (60 744 LAK/USD 7.36), which is a very poor province in the Southern Highlands, with very poor road access and a majority Mon-Khmer population. In Sekong province, 95 percent of all households cannot afford a nutritious diet, compared with only 17 percent in Vientiane Province (Figure 10).

FIGURE 10: HOUSEHOLD COST OF A NUTRITIOUS/SNUT DIET IN FIVE PROVINCES



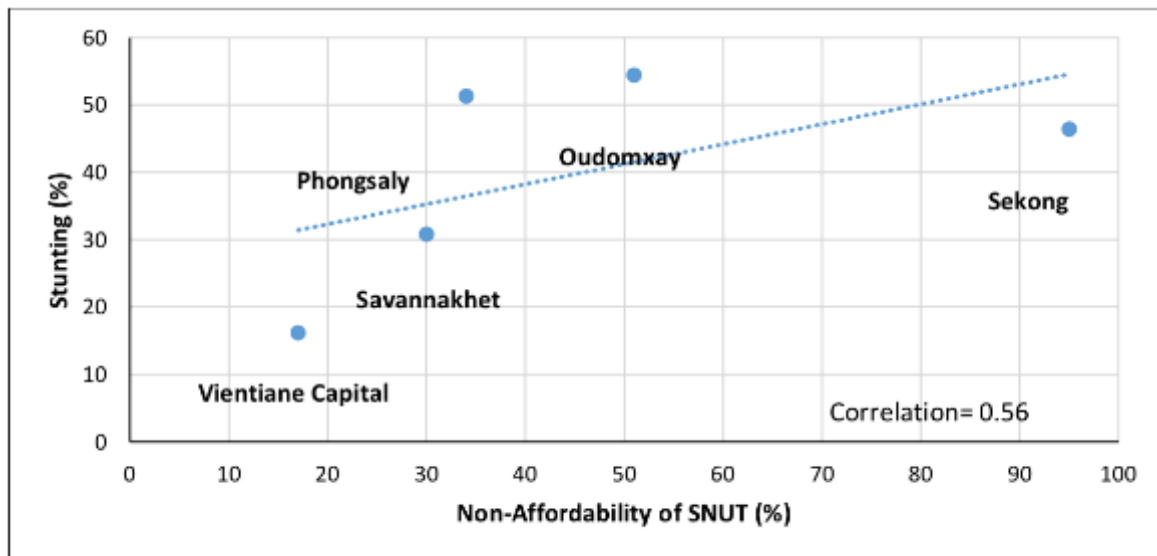
(Oudomxay (ODX), Phongsali (PSI), Sekong (SKG), Savannakhet (SVK) and Vientiane (VTE), broken down by cost for each household member.

SOURCE: WFP, 2017.

These results show that affordability of a nutritious diet is an important factor in determining a household's ability to meet nutrition needs. Poverty, remoteness, absence of markets and high food prices make it very difficult for households to buy foods they need to have a nutritious diet. There is a positive correlation between stunting and the non-affordability of a nutritious diet

(Figure 11).

FIGURE 11: THE CORRELATION BETWEEN STUNTING AND NON-AFFORDABILITY OF A NUTRITIOUS DIET



(Calculated using assumed food expenditure of 65 percent of total household expenditure).

SOURCE: WFP, 2017.

The CotD study also identified a number of limiting nutrients, for which the recommended intake is difficult to meet with the foods available in the market without exceeding prescribed energy limits. Calcium was the most limiting nutrient of the target groups (children 12–23 months, adolescent girls and pregnant/lactating women), followed by Vitamin B1, folic acid and iron. Zinc was also a limited nutrient for children under two years of age in almost all provinces.

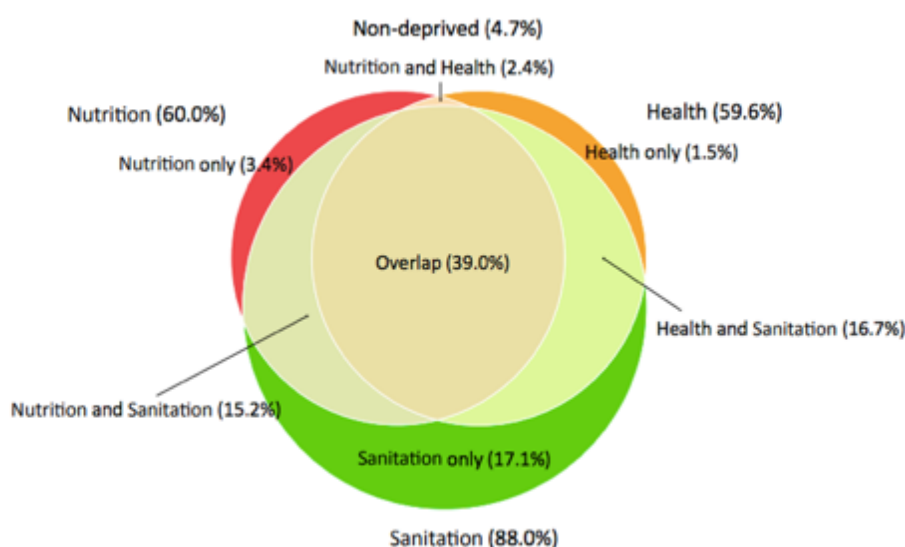
B. Key drivers of change for food insecurity, malnutrition and poverty in Lao PDR

B.1 FOOD SECURITY, MATERNAL PRACTICES, HEALTH AND SANITATION

Malnutrition is driven by many factors. Immediate causes are inadequate diets and food insecurity, which impact the nutrient intake of the body as well as illness. Underlying causes relate to food security (access, availability and utilization), maternal and child care practices, access to health services and to clean water, sanitation and hygiene.

The overlap between the three key domains of nutrition, health and sanitation was illustrated by a recent study (see Figure 12). These data underscore the need for cross-sectoral collaboration in combatting malnutrition.

FIGURE 12: THREE-WAY OVERLAP BETWEEN DEPRIVATION IN NUTRITION, HEALTH AND SANITATION, IN RURAL AREAS WITHOUT ROADS, AMONG CHILDREN UNDER FIVE YEARS OF AGE IN 2017



SOURCE: NIPN, 2019.¹⁷

B.2 DIET AFFORDABILITY

In Lao PDR, diet affordability, diversity and limited access to health and nutrition services are directly correlated with stunting prevalence. Social and cultural norms are also closely correlated with stunting. Lastly, women's agency and empowerment are also determinants of stunting.¹⁸

The theme of food affordability and approaching rural households not only as producers but also as consumers of food is also featured in the Nutrition and Food Systems approach, advocated by FAO. This approach looks at the food system as consisting of (a) food supply systems (production, storage, processing, and retail) and (b) food environments (food affordability, access, promotion, safety and quality). These two systems are governed by five sets of drivers: (1) biophysical and environmental drivers; (2) innovation, technical and infrastructure drivers; (3) political and economic drivers; (4) sociocultural drivers, and (5) demographic drivers.¹⁹

This approach is being applied in diagnostic surveys in other countries, e.g. Myanmar.²⁰

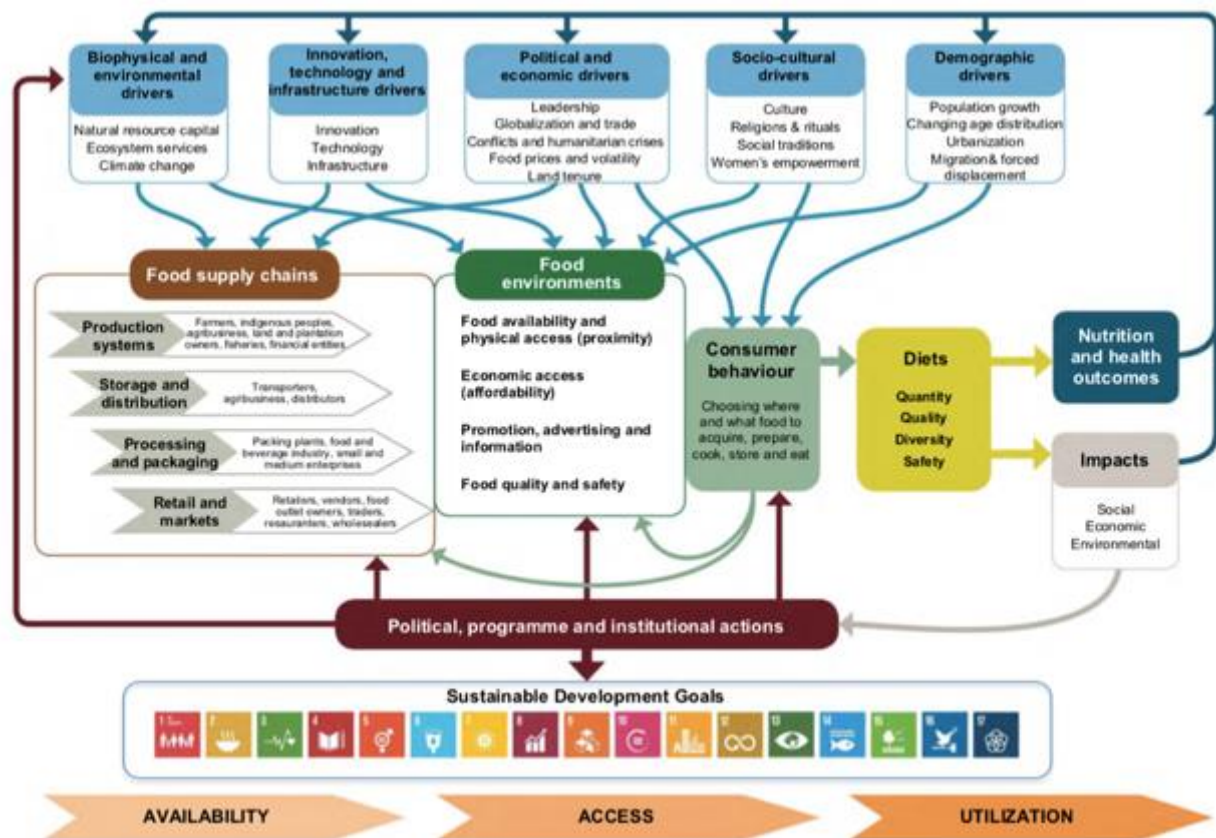
¹⁷ National Information Platform for Nutrition (NIPN), 2019. Multiple Overlapping Deprivation Analysis on Stunting of Children under 5 years in Lao PDR. http://www.nipn-nutrition-platforms.org/IMG/pdf/multiple_overlapping_deprivation_analysis_moda_on_stunting_among_children_under_5_years_in_lao_pdr.pdf

¹⁸ World Bank-MAF, 2017: Social Assessment for the Lao Reducing Poverty and Malnutrition Project. <http://www.maf.gov.la/wp-content/uploads/2018/10/Social-Assessment.pdf>

¹⁹ HLPE, FAO, 2017. Nutrition and Food Systems. A Report by the High Level Panel of Experts on Food Security and Nutrition. <http://www.fao.org/policy-support/resources/resources-details/en/c/1155796/>

²⁰ Babu, S.C. 2019. Nutrition Sensitive Food System. Policy Analysis and Investment Framework for Myanmar. IFPRI Discussion Paper 01840. <https://www.ifpri.org/publication/nutrition-sensitive-food-system-policy-analysis-and-investment-framework-myanmar>

FIGURE 13: CONCEPTUAL FRAMEWORK OF FOOD SYSTEMS FOR DIETS AND NUTRITION



SOURCE: HLPE, 2017.

In Lao PDR, poverty alleviation programmes supported by IFAD²¹ and the World Bank²² have started to link rural infrastructure development with nutrition education for healthy diets. The challenge is to develop interventions that also address affordability and access to healthy food.

Making healthy foods more affordable and accessible (SDG2), especially for rural households, will require more cross-sectoral coordination among agencies working on poverty alleviation, health and agriculture.²³ There is more scope for linking programmes aimed at road and market infrastructures with public-private partnerships,²⁴ supplemental nutrition assistance programmes²⁵ and food-based social welfare schemes, e.g. the National Food Security Act in India²⁶ and the Let's Move programme in the United States of America.²⁷

²¹ FAO, 2019. Healthy diets vital for progress in Lao PDR. <http://www.fao.org/asiapacific/news/detail-events/en/c/1194647/>

²² Reliefweb, 2019. Lao PDR: Additional World Bank Funding approved for National Poverty Reduction Fund. <https://reliefweb.int/report/lao-peoples-democratic-republic/lao-pdr-additional-world-bank-funding-approved-national>

²³ Boupao, L. e.a. 2016. Strategic Review of Good and Nutrition Security in Lao People's Democratic Republic. <https://www.directoryofngos.org/a/download?id=document2227&field=file¬etype=document&file=Rk5TIHN0cmFOZWdpY19yZXZpZXdfTGFrX3Bkcl9qdWwxNi5wZGY=>

²⁴ Unilever, 2018. Improving access to nutritious foods. <https://www.unilever.com/sustainable-living/improving-health-and-well-being/improving-nutrition/nutritious-diets/affordability-and-accessibility-for-everyone/>

²⁵ NSAC, 2013. Making healthy foods affordable. <https://sustainableagriculture.net/blog/usda-affordability-study/>

²⁶ Puri, R. 2017 India's National Food Security Act (NFSA): early experiences. <https://assets.publishing.service.gov.uk/media/5964831e40f0b60a44000154/NFSA-LWP.pdf>

²⁷ Let's Move, 2012. <https://letsmove.obamawhitehouse.archives.gov/make-healthy-food-affordable-and->

B.3 SUMMARY OF SUB-NATIONAL WORKSHOPS DISCUSSING DRIVERS OF NUTRITION

During subnational workshops held in October 2019, province-level stakeholders came up with many (40) of the underlying drivers:

a) Biophysical and environmental drivers (5):

- a. **Crop production** is limited by: (1) little access to arable land in upland villages, and
 - (2) climate change, aggravating risks of rainfed agriculture (droughts and floods).
- b. **Livestock production** is limited by: (3) livestock diseases that are difficult to control; (4) lack time to look after animals, and (5) high mortality rates of livestock because of animals not being fed (they are left to graze in the forest).

b) Innovation, technology and infrastructural drivers (12)

- a. **Crop production** is constrained by: (1) farmers lack access to inputs for fruit/vegetable growing; (2) limited technical skills among farmers; (3) difficult road access in remote villages, and (4) limited technical capacity, lack of staff and budgets among extension staff.
- b. **Livestock production** is constrained by: (5) limited technical skills of livestock officers; (6) lack of capacity and mechanisms to control outbreaks of animal diseases effectively; (7) farmers are not keen to vaccinate animals; (8) farmers do not make much use of improved races, and (9) animal raising is very difficult for poor households that lack time and resources to feed animals well.
- c. **Value chains and agro-processing** are constrained by: (10) lack of techniques and good models for processing/storage of food products; (11) very few projects working on this aspect, and (12) lack of standards on food safety and quality.

c) Political/economic drivers (18):

- a. **Crop production** is constrained by: (1) poverty – poor communities cannot buy food and have low diet diversity; (2) no budgets for extension; (3) little coordination among relevant agencies, and (4) no means for mitigating disasters like the extreme droughts this year.
- b. **Livestock production** is constrained by: (5) low prices for livestock; (6) rural families prefer to sell livestock rather than eat them; (7) it is difficult to buy fresh meat and fish in remote areas, and (8) livestock projects sometimes have unrealistic goals.
- c. **Value chains and agro-processing** are constrained by: (9) no activities or budgets assigned in annual work plans; (10) very few people skilled in food processing, both in the private sector and in government; (11) rural women have no access to markets/value chains for buying nutritious processed foods; (12) prices of most food products are not stable – it is a risky investment, and (13) producer groups often fail as they cannot find buyers for their processed foods.
- d. **Natural resource management for food production** is constrained by: (14) declining access to wild foods in spite of land-use planning processes; (15) lack

of good models for sustainable NTFP harvesting systems; (16) weak enforcement of agreed rules; (17) existing forest protection rules are not often followed, and (18) land-use planning procedures do not include nutrition goals.

d) Sociocultural drivers (5):

- a. Crop production and food processing** are constrained by: (1) local beliefs limiting diet diversity of pregnant/lactating women in remote areas; (2) villagers do not plant or eat fats/oils; (3) consumer preference for fresh foods, not easy to introduce processed foods; (4) consumers are not used to eating beans/pulses, dairy products, and (5) women have heavy workloads – they work hard on crop production but cannot look after their families or themselves well.

e) Demographic drivers (1):

- a. Crop production** is constrained by a growing shortage of land suitable to expand production for a growing population.

In summary, these 40 types of driver constraining nutrition-sensitive agriculture can be summarized as:

- a) Lack of time and resources** in rural communities to engage in more intensive farming methods, e.g. livestock raising or food processing, especially among women.
- b) Lack of technical skills and training capacity** among farmers and extension staff.
- c) Lack of resources (plans, staff, budgets, tools)** to provide good extension services, effectively control outbreaks of animal diseases or mitigating climate disasters.
- d) Lack of access to markets/value chains**, absence of entrepreneurs, lack of good models for agro-processing.
- e) Food habits and lack of knowledge on good nutrition practices.**

C. The role of agriculture in combatting malnutrition

Since 2015, the Lao PDR Government has put in place a National Nutrition Strategy (NNS),²⁸ which includes a section on the role of agriculture for nutrition. Four out of the 22 PA of the NNS have been included in the National Agricultural Strategy²⁹ as agricultural responsibilities. These actions can be summarized as: (1) sustainable production of nutritious plant foods; (2) sustainable production of small livestock as a source of protein; (3) food processing, storage and value chains; and (4) sustainable management of natural resources for food purposes.

Between 2013 and 2017, USD 90 million was spent by over 30 aid projects to promote nutrition-sensitive agriculture in Lao PDR. Typical activities supported were nutrition education, fishponds, fish conservation zones, home gardens and small grants for village infrastructures (water and sanitation).

²⁸ National Nutrition Committee, 2015. National Nutrition Strategy to 2025.

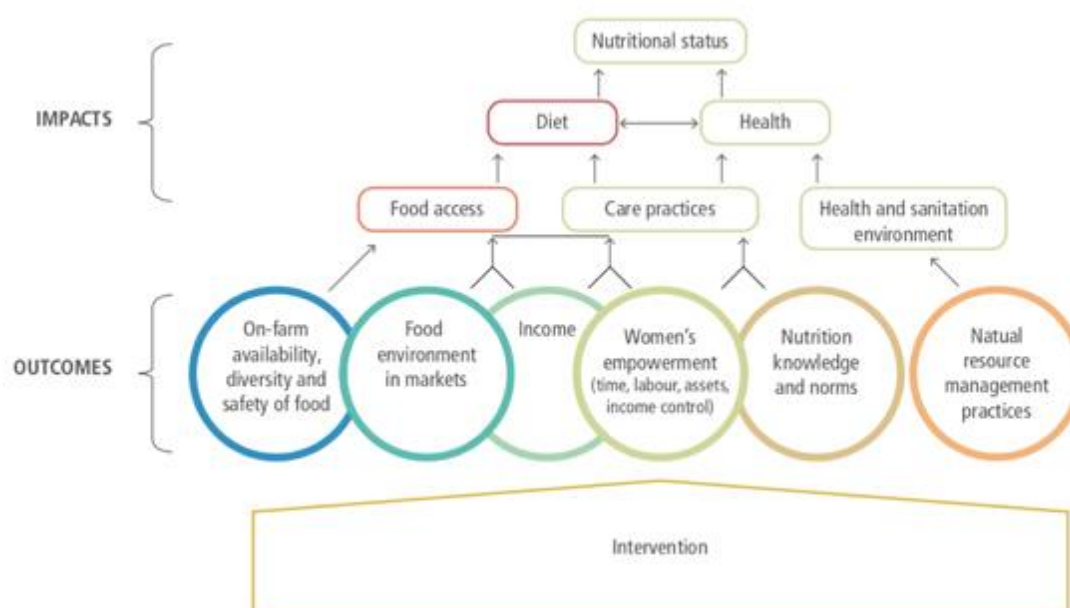
http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/lao_peoples_democratic_republic/final_lao_version_nnsa_2016_matrix_updated_21_dec_2015_-_part_1_rta_.pdf

²⁹ Ministry of Agriculture and Forestry, 2015. Agricultural Development Strategy to 2025 and Vision to the year 2030. <http://www.maf.gov.la/wp-content/uploads/2016/01/MDS-2025-and-Vision-to-2030-Eng.pdf>

In 2008, MAF undertook a mid-term review to assess the progress of the four agricultural responsibilities under the NNS.³⁰ Several technical challenges were identified:

- a) Women's empowerment is vital to help women balance the increasing demands on their time that affect nutrition, but is seldom addressed.
- b) Village planning does not often address natural resource management or adaptation to climate change, which are major drivers of nutrition security.
- c) Very few projects address improved food processing/storage to ensure seasonal availability.
- d) Very few projects address wider food value chains or access to food.
- e) Activities aimed at generating income do not often lead to more food buying or consumption.
- f) There are very few attempts to develop new technologies or alternative types of intervention.
- g) Cross-sectoral collaboration remains weak and there is no common ground for planning and monitoring activities among sectoral agencies.

FIGURE 14: SIX SIMPLIFIED IMPACT PATHWAYS FROM AGRICULTURE TO NUTRITION



SOURCE: FAO, 2015.

Since 2017, MAF has adopted a nutrition-sensitive approach to address malnutrition. This is based on an NSA concept developed by FAO.³¹

³⁰ MAF, 2018: Mid-Term Review of the Agricultural Responsibilities within the National Plan of Action for Nutrition (2016–2020).

³¹ FAO, 2015. Compendium of indicators for nutrition-sensitive agriculture. <http://www.fao.org/3/a-i6275e.pdf>

The concept is built on six different pathways by which interventions in agriculture can lead to impacts in nutrition:

- (1) on-farm availability diversity and safety of food;
- (2) food environments and markets.;
- (3) income can improve food access;
- (4) women's empowerment.;
- (5) nutrition knowledge/norms can improve care practices; and
- (6) natural resource management practices will create a better health and sanitation environment.

Two reviews have since been undertaken of progress made in developing an NSA practice in Lao PDR, with support from FAO and the European Union. In 2017, a case study on four NSA projects implemented by Helvetas³² concluded that:

- 1) Successful NSA practices include vegetable gardens and fruit trees (plant-based products), fishponds and fish conservation zones (animal-based). The challenge remains to develop an NSA solution for food processing and linking nutrition to natural resource management.
- 2) NSA works best if combined with nutrition awareness and education activities.
- 3) Women are the key actors – success depends on involving them and addressing their issues.
- 4) In all four cases, cash cropping has increased women's workloads considerably. As women have less time to collect or cook food, this has had a negative impact on child nutrition.
- 5) Systems for monitoring impact of NSA activities on nutrition still need to be set up.
- 6) Project design and intervention mode matter. Successful cases had long-term skilled staff working at village level, planned activities around a nutrition-centred approach and village nutrition plans for successful cross-sectoral cooperation. CSOs can fill capacity gaps.
- 7) Underlying causes of malnutrition are not sufficiently addressed. Cash crop dominance reduces risk mitigation through diversification and makes it difficult to develop niche food products. Availability of wild foods is decreasing and there is little access to affordable nutritious fresh or processed foods for rural households.

D. Prospects for eradication food insecurity, malnutrition and poverty in Lao PDR in the agriculture sector

This chapter provided an overview of the status of agriculture for nutrition in Lao PDR. While food security has been achieved at the national level since 2011, it remains an issue for the poorest households living in remote rural areas that are poor and struggle with persistent rice

³² Foppes, J. and Sengyavong, V. 2017. Case Study on Nutrition-Sensitive Agriculture in Lao PDR. MAF-Helvetas.

shortages. Increasingly heavy impacts of climate change on food production are becoming a new reality.

High rates of malnutrition are still an important national challenge, threatening to impede graduation out of LDC status, an important national policy goal for 2025. The main drivers of malnutrition are poor diversity of diets, poverty, food insecurity and low food affordability, poor maternal and child care practices, and restricted access to health services and to clean water, sanitation and hygiene. These factors reinforce each other and can only be effectively contained by a multisectoral approach.

A start has been made with the adoption of NSA, but affordability of nutritious food remains a challenge for many rural households. Interventions aimed at improving diet diversity and diversifying food production have been partly successful, but there is no real change in consumption of proteins, calcium and other nutrients needed to overcome stunting.

There is a strong national nutrition strategy and there has been considerable foreign donor support in the field of nutrition. There is a wider recognition that nutrition requires a multisectoral approach. Policy makers are starting to recognize that there are multiple pathways leading from agricultural interventions to nutrition outcomes. It is not only about producing more food, but also about providing better access to affordable foods for rural households, income to buy foods, empowering women, changing knowledge and norms and protecting wild food resources.

The government has started to apply the NSA approach, which is promising. Recent reviews of the NSA practice in Lao PDR found that more attention is needed on:

- Climate-resilient and risk-reducing diversified agricultural production of food.
- Developing value chains of niche food products where Lao farmers can develop a competitive advantage and add value through processing, mitigating the negative impacts of single-crop commodity cultures on nutrition.
- Rural households as consumers, improving their access to food.
- Empowering women as the key actors in NSA, addressing their workloads.
- A nutrition planning approach that combines interventions in agriculture, health and rural infrastructures for water and sanitation at village, district and province levels and devolved working budgets for effective cross-sectoral collaboration.

The NSEDP 2016–2020 states the importance of achieving SDG2 goals and provides a number of targets and indicators for achieving impact from agriculture to nutrition:

- Achieve food security through rice production in ten priority provinces to achieve 2.5 million tonnes by 2020 on an area of 560 000 ha, of which 2.1 million tonnes are for domestic consumption and 0.4 million tonnes for reserves. Rice production should contribute to human consumption of about 2 600 kilocalories per capita per year (rice, flour, meat, fish, eggs and dairy).
- Achieve average consumption of meat, fish and eggs at 65kg/capita/year by 2020.
- Produce 228 000 tonnes sweet corn, 304 000 tonnes potatoes and starch, 800 000 tonnes fruit and vegetables – 1.5 million tonnes by 2020.
- Increase livestock by 6 percent per year, fish and aquatic animals by 8–10 percent per year.

Targets for nutrition and health include:

- Reduce underweight in children under five to 20 percent and stunting to 32 percent by 2020.
- Ninety percent of population has access to clean water, 74 percent use latrines by 2020.

Other targets related to nutrition include:

- Reduce poverty rate to 10 percent by 2020.
- Allocate target areas for agricultural production (a) in large flatland areas for rice farming and industrial tree plantations and (b) plateaus and mountain areas for fruit trees, cold weather flowers and vegetables.
- Increase forest cover to 70 percent by 2020.

A.2 KEY POLICY PRIORITIES: GRADUATING OUT OF LDC STATUS AND ACHIEVING SDG2

Graduating from LDC status by 2024 is a key goal of the Lao PDR Government. While Lao PDR is already meeting most of the criteria for graduation under the Economic Vulnerability Index (EVI), persistent high malnutrition rates are holding back progress on the Human Assets Index (HAI)³⁴.

The main criteria for measuring progress in nutrition are stunting, wasting, anaemia (see section III.2). They are aligned to SDG2³⁵ – End hunger, achieve food security and improved nutrition and promote sustainable agriculture. Many aid agencies are committed to supporting the Lao PDR Government to achieve SDG2.

It is expected that nutrition will gain a higher priority in the 9th National Socio-economic Development Plan 2021–2025 and consequently in the 9th Agric. Development Plan 2021–2025.

³⁴ <https://rtm.org.la/nsedp/criteria-ldc-graduation/>

³⁵ <http://www.la.one.un.org/lao/sdgs-lao/sdg-2-zero-hunger-2-lao>

A.3 NATIONAL NUTRITION STRATEGY

The government adopted a National Nutrition Strategy to 2025 (NNS)³⁶ in 2015, aimed at achieving SDG2 goals. It has raised awareness of the importance of tackling malnutrition, both among Lao PDR policy-makers as well as among aid donors.

The NNS comprises 22 priority actions (PAs). Most fall under the mandate of the Ministry of Health, but four (15–18) have been assigned to the agriculture sector (see Table 2):

PA1: Increase the production of nutritionally rich plant-based foods for household consumption.

PA2: Increase the production of animal-based protein (meat, poultry, fish, and other aquatic life) for household consumption.

PA3: Support establishment of post-harvest facilities and apply technology to food processing, preservation and storage to ensure year-round availability of safe and nutritious food.

PA4: Promote agriculture-based and NTFP-based income generating activities (IGAs) to increase household incomes, with emphasis on women.

TABLE 2: THE 22 PRIORITY ACTIONS IN THE NATIONAL NUTRITION STRATEGY, WITH FOUR PRIORITY ACTIONS ASSIGNED TO THE AGRICULTURE SECTOR

<p>A: 4 multisectoral interventions</p> <ol style="list-style-type: none"> 1. Provide system capacity-building 2. Strengthen coordination and partnership among nutrition stakeholders 3. Improve information management (monitoring & evaluation, surveillance and research) and policy development. 4. Increase communication, advocacy and investment for nutrition. <hr/> <p>B: 10 interventions for the health, nutrition, and clean water/sanitation sectors</p> <ol style="list-style-type: none"> 5. Provide micronutrient supplements 6. Deworming 7. Food fortification including salt iodization 8. Promote Infant and Young Child Feeding (IYCF) and maternal nutrition 9. Provide food supplements for pregnant and breastfeeding women 10. Provide food supplements for children aged 6–23 months. 11. Improve food quality and safety 12. Management of acute malnutrition 13. Nutrition education and communication for social behaviour change to promote good practices and healthy diet 14. Strengthen water sources and supply systems and improve sanitation in households, communities, health facilities and schools 	<p>C: 4 interventions for the agriculture sector</p> <ol style="list-style-type: none"> 15. <i>Increase the production of nutritionally rich plant-based foods for household consumption</i> 16. <i>Increase the production of animal- based protein (meat, poultry, fish, and other aquatic life) for household consumption</i> 17. <i>Support establishment of post-harvest facilities and apply technology to food processing, preservation and storage to ensure year-round availability of safe and nutritious food</i> 18. <i>Promote agriculture-based and NTFP-based IGAs to increase household incomes, with emphasis on women</i> <hr/> <p>D: 4 interventions for the education sector</p> <ol style="list-style-type: none"> 19. Provide nutritious food in schools 20. Promote and support vegetable gardens in schools 21. Integrate nutrition into curricula 22. Provide iron and folic acid supplements and deworming in schools
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SOURCE: NNPA (2016–2020)

The implementation of the NNS is supervised by the National Nutrition Committee (NNC). The NNC is led by the Deputy Prime Minister. The committee consists of representatives of seven

³⁶http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/lao_peoples_democratic_re_public/final_lao_version_nnspa_2016_matrix_updated_21_dec_2015_-_part_1_rta_.pdf

different ministries (those for health, agriculture, education, finance, industry, planning, culture and information) and several other organizations (National Commission for Women and Children; organizations such as Lao Women's Union, Lao Youth Union, Lao Front for National Construction and Lao Trade Union).

The Ministry of Health hosts the secretariat and houses the government focal point of the committee. The Ministry of Agriculture and Forestry, Ministry of Planning and Investment and Ministry of Education and Sports act as co-chairs of the Secretariat (see Figure 15).

An important aspect of the NNS is multisectoral collaboration. This is to be achieved through a convergence approach, supported by donor organizations through the SUN movement. This initiative has led to the establishment of Province Nutrition Committees in all 18 provinces and District Nutrition Committees in 106 of all 148 districts, that meet every three months in order to coordinate nutrition activities.³⁷

A weakness of these committees is that they do not yet have province or district level nutrition plans that would align activities and budgets and force line agencies to coordinate. Up to now, most budgets are assigned to line ministries implementing various projects – it is not easy for them to share budgets or adjust work plans that are governed by their respective line agencies.³⁸

A.4 THE NATIONAL AGRICULTURE DEVELOPMENT STRATEGY (ADS)

The guiding policy document in the agricultural sector is the ADS to 2025 and Vision to the year 2030.³⁹ The overall vision to the year 2030 is: “Ensuring food security, producing comparative and competitive potential agricultural commodities, developing clean, safe and sustainable agriculture and shift gradually to the modernization of a resilient and productive agriculture economy, linking with rural development contributing to the national economic basis”.

Goals in food production are framed in terms of consumption per person per year (see Table 3).

TABLE 3: TARGETS IN THE LAO PDR AGRICULTURAL DEVELOPMENT STRATEGY FOR THE YEARS 2020 AND 2025 FOR AGRICULTURAL PRODUCTION

Product	Target (kg/capita/year)		Product	Target (kg/capita/year)	
Year	2020	2025	Year	2020	2025
Milled rice	160	140	Tubers/ground roots	2.5	2.1
Flour	5	4.5	Fruits	30	40
Meat, fish, eggs	65	79	Sugar	1	1.5
Vegetables	50	80	Milk	3	5
Legumes/beans	2	2	Fat/oils	23	25
Sweet corn	2.5	2			

Interestingly, these figures do not foresee an increase in production or consumption of beans/legumes and tubers. There is no further explanation as to how these targets will be monitored.

³⁷ SUN, 2019. Lao Country Report. https://scalingupnutrition.org/wp-content/uploads/2019/10/SUN_Report_EN_2019_Country_Lao_PDR.pdf

³⁸ MAF-DoPLA/FAO, 2019. Report on Sub-National Consultations about the policy effectiveness analysis in agriculture for nutrition.

³⁹ Ministry of Agriculture and Forestry, 2016. Agricultural Development Strategy to 2025 and Vision to the year 2030, <http://www.maf.gov.la/wp-content/uploads/2016/01/MDS-2025-and-Vision-to-2030-Eng.pdf>

Most of the strategy is concerned with production of commodities. Key interventions foreseen in agriculture for nutrition are covered in a short two-page section 3.2.1.3, which mentions support for:

- Nutrition-oriented agriculture:
 - A. Household food production (home gardens, small livestock raising).
 - B. Replacing dwindling forest foods with domestication in gardens.
 - C. Household financial planning and decision-making.
 - D. Diversification of diets, especially enhancing consumption of fish/aquatic animals.
 - E. Small irrigation and water supply for aquaculture and gardening.
- Post-harvest losses: application of machinery, especially improved rice mills.
- Food accessibility: safeguarding access to Non-Timber Forest Products (NTFPs) and sustainable use thereof, supporting farmer groups to access markets upgrading farming techniques for more income to buy foods.
- Food safety and nutrition:
 - A. Food preservation: improved processing of food to be available all year round.
 - B. Nutrition knowledge: creating understanding of nutrition to be more than food security, the need to diversify diets and the links between nutrition and health.
- Food stability: reducing risks from climate change through climate-adapted agriculture, better capacity to store food and uninterrupted food supply.

Compared with other sections, this section is not very detailed and no specific activities are worked out. Among the nine actions and 162 projects listed at the end of the strategy, there is not a single activity specifically aimed at nutrition. There is no specific mention of the NPP or the four PAs assigned to MAF. It is foreseen that these will be included in the next five-year plan.

A.5 SUB-SECTOR STRATEGIES IN THE AGRICULTURE SECTOR

Beyond the ADS, there are several agricultural subsector strategies that are relevant for nutrition:

- **Forestry Strategy to the year 2020.**⁴⁰ The strategy stresses the role of forest foods as a safety net for the livelihoods of rural people. It has a substantial section on the importance of NTFPs and biodiversity resources for the rural and national economy and proposed the development of regulations to ensure sustainable harvesting of NTFPs. This strategy also laid the groundwork for much of the land-use planning and allocation work, which took place over the last twenty years.

Recent reviews of food security have shown that availability of NTFPs for food is reducing rapidly in many rural communities. Villagers cite government land-use plans and resettlements of villages as the main reasons for having less access to forest resources.⁴¹

⁴⁰ MAF, 2005. Forestry Strategy to the Year 2020 of the Lao PDR.

https://theredddesk.org/sites/default/files/fs_2020.pdf

⁴¹ Foppes, 2011. Understanding Food Security in Northern Laos: An analysis of household food security

The Department of Forestry is currently working on a review of the Forest Strategy to 2030.

- **Development Strategy of the Crop Sector 2025 and Vision to 2030.**⁴² The vision for crop production is “Focusing on modernization, clean, safety, quality, stability, sustainability and commercialization”. Clean agriculture development through adaption of standards such as Good Agricultural Practices (GAPs) and organic agriculture (OA) is a key element of the new strategy.
- **Strategic Implementation Plan for the Fisheries Sector in Lao PDR.**⁴³ In 2007, 48 percent of the total of 142 847 tonnes of fish consumed in Lao PDR was derived from fish farming and 62 percent from wild capture. By 2025, the target is to produce fish and aquatic animals up to 274 000 tonnes per year, with 75 percent derived from fish farming.

The plan is to develop and disseminate good aquaculture technology as well as promote all types of fish farming systems, including integration with livestock farming, and fish production in paddy fields, in reservoirs, in natural rivers and in fishponds. This is to ensure a production growth rate of about 10 percent per year. In addition, Lao PDR will expand and enhance the capacity of its existing 62 fish breeding stations in supplying fingerlings and improving breeds. The plan includes the promotion of Community Fisheries Management Committees (FMCs) that can manage Fish Conservation Zones (FCZ).

- There is a wider discussion in Lao PDR as to the impact of hydropower dams on the wild fish resources and the feasibility and costs of replacing them with fish farms.⁴⁴

A.6 STAKEHOLDERS, DONOR SUPPORT AND COORDINATION STRUCTURES IN NUTRITION

There has been a surge in donor spending on nutrition in Lao PDR over the past ten years, which will be described in detail in Chapter VII. The main organizations active in the nutrition sector include the European Union, IFAD, governments of Switzerland (SDC), France (AFD) and Germany (BMZ) as well as several NGOs: Helvetas, CARE International.

Strong donor coordination is a key aspect of this support. All spending in the nutrition sector is channelled through frameworks such as the Round Table Conference (RTC) process, aligning foreign aid with the National Socio-Economic Development Plan. Among European Union member states, there is a common policy followed by all.

strategies in upland production systems. NAFRI-Nurifar.

https://www.academia.edu/9358933/Understanding_Food_Security_in_Northern_Laos_An_analysis_of_household_food_security_strategies_in_upland_production_systems

⁴² MAF, 2015. Development Strategy of the Crop Sector 2025 and Vision to 2030. https://www.asean-agrifood.org/?wpfb_dl=81

⁴³ MAF, 2013. Strategic Implementation Plan for the Fisheries Sector in Lao PDR. <http://dlf.maf.gov.la/wp-content/uploads/2018/05/Process-of-SIP-development-and-interpretation-of-content-NickSFS.pdf> see also: http://www.fao.org/fishery/legalframework/nalo_laos/en

⁴⁴ Intralawan *et al.* 2017. Economic Evaluation of Hydropower Projects in the Lower Mekong Basin. <http://www.mrcmekong.org/assets/Uploads/Final-report-Mekong-Study-March-2017-8.pdf>

Several networks bring together stakeholders in the field of nutrition:

- **Round-table Meeting⁴⁵ (RTM), Sector Working Groups (SWG) and Sub-sector Working Groups (SSWG).** Since 1993, the RTM has been the main mechanism by which the Lao PDR Government and development partners agree on development support. It coordinates foreign aid inputs over five-year periods, in alignment with the SDEP. The process includes ten SWGs to coordinate action among various stakeholders by theme.
- SWGs aim at providing a forum for dialogue and coordination between government and development partners, promote sectoral development and monitor achievements. There is a **SWG on Health**,⁴⁶ which is co-chaired by the Government of Japan and the World Health Organization (WHO). One of its SSWG covers Mother & Child Health and Nutrition. The **SWG on Agriculture and Rural Development**⁴⁷ is chaired by the Government of France and FAO. There are SSWGs on agro-biodiversity, agribusiness, forestry, rural development and a policy think-tank, which all cover aspects of agriculture for nutrition. As of yet, there is not a specific SSWG on agriculture for nutrition.
- **Development partners meeting on food and nutrition security.** These are two-monthly meetings are organized by the European Union delegation and UNICEF. Participants include all multilateral organizations, bilateral donor organizations, INGOs (International Non-Governmental Organizations) and CSO partners supporting nutrition in Lao PDR. The aim is to share information and coordinate.
- **SUN networks:** Lao PDR joined SUN in 2011. The Minister of Health reports annually to the international **SUN-Government Network** on progress in implementing the National Nutrition Strategy towards SDGs. This network also supports multisector convergence. Its website publishes a daily update on key indicators for the nutrition situation in Lao PDR (see Figure 16).
- At national level there is the **SUN-Civil Society Network Asia**⁴⁸ (SUN-CSA), which has 60 member organizations in Lao PDR who meet regularly. This CSO network also publishes training materials such as the curriculum on Linking Agriculture, Natural Resource Management and Nutrition (LANN), which is applied by many CSO partners in Lao PDR working with government agencies at province and district levels.
- Under the SUN-CSA network, there is a **taskforce on the code of marketing breastmilk substitutes**, which meets infrequently to promote the enforcement of the code.
- There is also a new **Lao SUN-Business Network**,⁴⁹ with 17 members since early June 2018. It promotes peer learning on promoting improved nutrition/health initiatives among businesses and sharing tools for monitoring, in collaboration with the National Chamber of Commerce and the NNC.

⁴⁵ Round Table Meeting Website: <https://rtm.org.la>

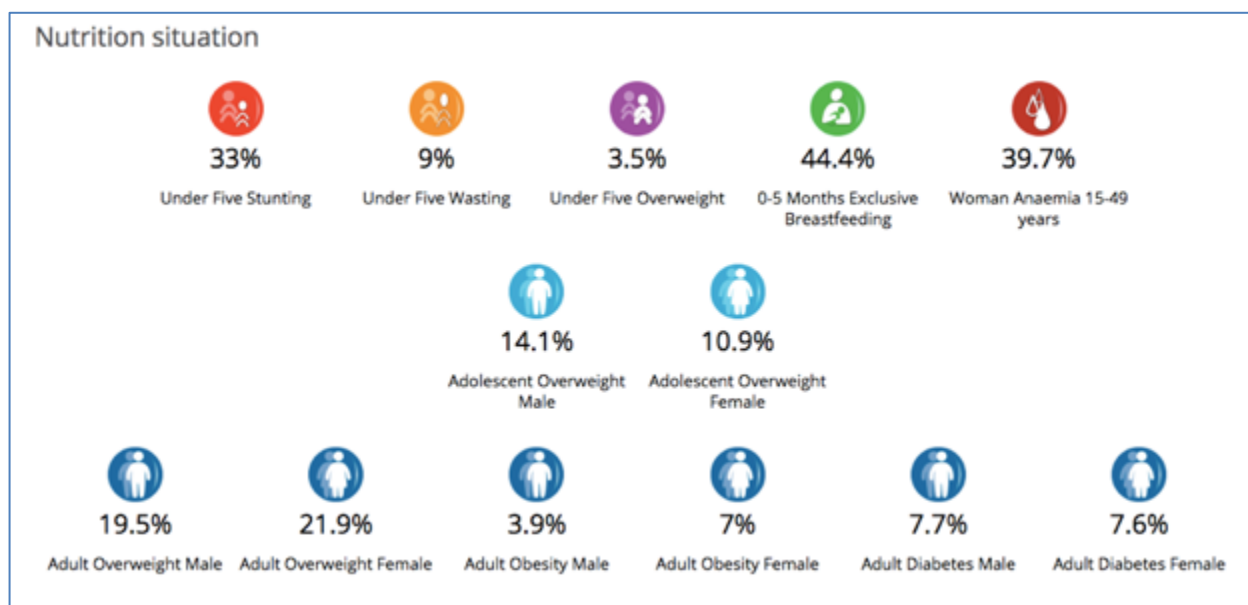
⁴⁶ Website Working Group on Health: <https://rtm.org.la/sector-working-groups/health/>

⁴⁷ Website Working Group on Agriculture and Rural Development: <https://rtm.org.la/sector-working-groups/agriculture-rural-development/>

⁴⁸ Website of the SUN-CSA network in Laos: <https://www.suncsalaos.org/>

⁴⁹ SUN-Business Network: <https://sunbusinessnetwork.org/>

FIGURE 16: KEY NUTRITION INDICATORS FOR LAO PDR



AS PUBLISHED ON THE SUN WEBSITE,⁵⁰ SNAPSHOT OF 26 NOVEMBER 2019.

- The **Lao Community of Practice on Nutrition-Sensitive Agriculture (Lao NSA CoP)**⁵¹ has been active since 2017. It is a forum with 35 member organizations, with regular meetings organized by the Department of Planning and Finance (DPF) in MAF with support from FAO. The network helps practitioners of NSA to exchange lessons learned from implementation.
- The **National Information Platform for Nutrition (NIPN)**⁵² was set up in 2018. It is hosted by the Centre for Development Policy Research in the Ministry of Planning and Investment (MPI) and supported by the European Union and UNICEF. The aim of the network is to share and coordinate all information on indicators and databases relevant to nutrition in Lao PDR, as well as provide policy studies regarding nutrition.
- During a workshop on 14 November 2019, NPIP presented the outcomes of a study on nutrition indicators and existing databases among all relevant Ministries. In November 2019, NPIP presented the outcomes of a study on the Data-mapping on Nutrition Indicators in Lao PDR in November 2019. A total 4, 381 indicators are being monitored. The bulk of these (2,415) are collected by the National Statistics Bureau and published on the LaoInfo system. The Ministry of Health collects 118 indicators, MAF 90.
- The main conclusion was that there is a wealth of data being collected, but very little analysis is done that could provide relevant feedback to policy makers. The main recommendations were to build a central dashboards summarizing indicators to key goals, to improve the quality of database management and data exchange and apply standards (SMDX).

⁵⁰ Website SUN-UN network Laos: <https://scalingupnutrition.org/sun-countries/lao-pdr/>

⁵¹ Google Group of the Lao NSA-CoP: <https://groups.google.com/forum/#!forum/lao-nsa-cop>

⁵² NIPN website: <http://www.nipn-nutrition-platforms.org/Laos>

A.7 ROLE OF NON-STATE ACTORS

CSOs have played an important role in the development of NSA in Lao PDR. INGOs like Helvetas, CARE International, CCL, Plan International and others as well as national Non-Profit Associations (NPAs) like SAEDA,⁵³ LOPA,⁵⁴ RDA,⁵⁵ PORDEA⁵⁶ and others have developed promising models for supporting farmer-to-farmer extension approaches that are essential to bridge the capacity gap that exists in government extension agencies. These approaches are based on having skilled facilitators based at district level, who build farmer groups that start experimenting with NSA techniques. Gradually these pilot farmers become trainers to other groups of farmers.

As will be discussed in more detail in Chapter VI, the government is struggling with structural shortages of staff and working budgets, which are not likely to be overcome in the near future. CSOs can play a crucial role in helping to bridge these capacity gaps at district level.

A similar approach is the Farmer Field School approach (FFS), introduced in Lao PDR on NSA by FAO in the context of an IFAD-supported poverty alleviation.⁵⁷ Unfortunately, there has been no follow-up since the programme ended.

B. How does the agricultural development policy address drivers of food and nutrition security

This section assesses how the ADS addresses drivers of food and nutrition security by answering ten strategic questions:

Question 1: Does the strategy incorporate explicit nutrition objectives and indicators?

The strategy has goals and indicators for consumption of various food categories, but does not mention how these will be reached or monitored. There is no mention of the NNS or the four PAs assigned to the agriculture sector in the ADS.

Over the past five years, MAF has undertaken a wide range of initiatives aimed at developing models for NSA. As mentioned in section 2-C, MAF and FAO reviewed progress towards the four PAs in 2018.

There is a growing understanding that NSA covers multiple pathways from agricultural interventions to nutrition. It is not only about producing more food or preserving natural resources, but also about improving access to food for rural households as consumers, about enabling women.

Over the next five years, the ADS will need to expand its section on NSA to be able to reach the SDG2 goals.

⁵³ SAEDA website: <https://saedalaos.org/index.php/strategies/>

⁵⁴ LOPA Facebook Page: <https://web.facebook.com/pages/category/Agricultural-Cooperative/LOPA-1330732006973312/?rdc=1&rdi=1>

⁵⁵ Rural Development Association (RDA) website: <https://rda.org.la/>

⁵⁶ Poverty Reduction and Development Association (PORDEA) Facebook page: <https://web.facebook.com/pordea?rdc=1&rdi=1>

⁵⁷ FAO article 2016: <http://www.fao.org/support-to-investment/news/detail/en/c/432305/>

Question 2: Are interventions appropriately addressing local types and causes of malnutrition?

There is no mention of local types or causes of malnutrition, or their relation to agriculture.

Question 3: Are interventions targeting the most vulnerable groups?

This is not clearly mentioned in the strategy. However, provinces and districts do have lists of poor communities and target activities on nutrition for agriculture towards these communities, whenever budget support from donor projects is made available.

Question 4: Are collaboration and coordination mechanisms with other sectors clearly defined?

The main coordination mechanism in the nutrition sector is the NNS and the convergence mechanism aimed at bringing sectors together in quarterly meetings. As most of these mechanisms were set up after 2016, they are not yet mentioned in the ADS. It is foreseen these mechanisms will be included in the next five-year plan. Improving these mechanisms would also require interventions above the level of MAF, e.g. in strengthening province/district nutrition plans, budgets and committees.

Question 5: Are processes for protecting the natural resource base (water, soil, climate and biodiversity) as a sustainable source of food clearly defined?

Yes, there is a clear policy for land-use planning and forest management to protect natural resources, implemented by the Department of Forestry (DoF) and the Department of Agricultural Land Management (DALaM). So far, these plans do not include specific nutrition goals, activities or indicators. As this is one of the four PAs, there is still considerable work to done in this regard.

Question 6: Are agricultural extension, credit and labour/time-saving and community organization building activities designed to empower women?

There is no specific section on this in the ADS. The ministry has a very small section on advancement of women with four staff members, but their capacity to develop activities at community level is limited. There is a growing realization that empowerment of women is a key pathway to create impact from agriculture on nutrition. There are some donor-supported projects that have started to work on this. This is key gap in the ADS in terms of promoting agriculture for nutrition. This aspect deserves a special section in the next five-year ADS.

Question 7: How does the strategy promote diversification and production of nutrient rich plant and animal food products (small-scale fish and livestock, horticultural products)?

Diversification is a key goal of the ADS, but it is mainly addressed in terms of commodity production, less in terms of diverse food production. This covers both PAs 1 and 2. There are many projects aimed at promoting small-scale livestock and fish raising, less on nutrient-rich plant production. Small livestock raising is difficult for poor households with time constraints and rice shortages. More work is needed to promote consumption of proteins by making meat/fish products affordable and easy to buy for rural households through improving market access. More work is needed to develop good models for nutrient-rich plant cultivation.

Question 8: What is the strategy for improving processing storage and preservation of food?

This is part of PA 3 under the NNS, but there is no sub-strategy on food processing, storage and preservation within the national ADS. Very little has been done in this field and there is very limited capacity. This is one of the biggest gaps in the ADS in terms of agriculture for nutrition.

Question 9: What is the strategy for expanding markets, market access and safe/affordable value chains for nutritious foods?

This is part of PA 3. The action is mentioned in the ADS, but no specific strategies are presented for addressing it. Value chains for fresh vegetables feeding the capital city have been developed and there are efforts to introduce standards for clean and safe production. There has been little effort to develop value chains that are geared to improve access to markets for rural households as consumers of food products. This aspect will need more attention in the next ADS.

Question 10: How is nutrition promotion and education around food incorporated in the strategy?

This aspect is not clearly addressed in the ADS. To date this type of work was mostly done by the ministries for health and education. Among donor-projects working on NSA in the field, there is a growing realization that staff from agriculture and the Lao Women's Union need to be included in this activity because they are often good communicators and they are better skilled in facilitating practical activities such as forming cooking groups, food processing etc. This is another pathway between agriculture and nutrition to build on in the next ADS.

C. Gaps in the existing policies addressing key issues and drivers of change in food security and nutrition

C.1 GAPS BETWEEN THE AGRICULTURAL DEVELOPMENT STRATEGY AND THE NATIONAL NUTRITION STRATEGY

The four PAs for agriculture from the NNS were developed just after the ADS was written, so they remain to be included. Also the more recently evolved concept of NSA should be included. The next five-year ADS should articulate the following elements and identify objectives and allocate resources clearly:

- 1)** On the higher level of objectives, put more emphasis on nutrition as the basis for agriculture by producing safe niche food products that are competitive in regional markets. At the objectives level, link to the objectives of the NNS and describe the strategies by which the four PAs from the NNS in agriculture will be addressed.
- 2)** Describe what other strategies will be used to address additional pathways from agriculture to nutrition, with special sections on (a) women's empowerment and gender equality, (b) improving access to food for rural consumers, and (c) linking nutrition knowledge to agricultural production.
- 3)** Identify and select priority zones for NSA intervention based on an analysis of drivers of food security and malnutrition.
- 4)** Improve linkages between indicators for agricultural production, consumption and nutrition.

C.2 GAPS BETWEEN THE AGRICULTURAL DEVELOPMENT STRATEGY AND DRIVERS OF MALNUTRITION

In section III-B, drivers of malnutrition were divided into:

- a) direct drivers (low diet diversity, food insecurity, poor mother and childcare practices, poor sanitation and hygiene);
- b) indirect drivers (social attitudes, women's empowerment, food affordability and access, food safety); and
- c) underlying drivers (biophysical/environmental, innovation/technical, political/economic, social cultural, demographic).

The way the agricultural policy addresses these drivers is summarized in the three tables below.

a) Direct drivers

Driver	How it is addressed	Gaps
Low diversity of diets	Promoting production of nutrient-rich foods	No clear link between promoting nutrition knowledge and promoting diversified agriculture, nutrient-rich crops
Food insecurity	There is food security at national level, but not at local level	There is no clear guideline for improving food security in poor remote upland communities
Poor mother and child care practices	Mostly seen as a responsibility of the Ministry of Health	Should be shared responsibility between Health, LWU and MAF
Poor sanitation and hygiene	Mostly a responsibility of the Ministry of Health	No gaps, not a responsibility of MAF

b) Indirect drivers

Driver	How it is addressed	Gaps
Social attitudes	Mostly a responsibility of the Ministry of Health	Should be shared responsibility between Health, LWU and MAF
Women's agency and empowerment	Not seriously addressed	There is no strategy for addressing women's empowerment in agriculture
Food affordability and access	Not seriously addressed	There is no strategy for improving access to food for rural communities and food affordability
Food safety and quality	Introduction of clean food standards	To date mainly applied to the vegetable sector around Vientiane, not much in rural areas. Adaptation and enforcement of standards still weak

c) Underlying drivers

Drivers	How it is addressed	Gaps
Biophysical and environmental	Zoning, irrigation, climate-smart agriculture, livestock disease control	Stakeholders admit there is no capacity to control livestock diseases as most animals run around freely, alternative containment strategies are lacking
Innovation, technical	Applying modern techniques, research	Few strategies to cover gaps in capacity for developing better techniques through networking and communities of practice
Political, economic	Mainly addressed in terms of seeking new markets, investors Little recognition of unintended negative impacts of commodity production strategy on nutrition	No strategy for analysing competitiveness, market trends, diversification to reduce risks No strategy for mitigating negative impacts of commodity production on nutrition
Social, cultural	Education and awareness raising	No clear strategy for changing knowledge, attitudes and practices
Demographic	Projections of more production needed to feed more people	No analysis of rural-urban migration and associated changes in food habits/needs

C.3 GAPS BETWEEN THE AGRICULTURAL DEVELOPMENT POLICY AND THE SIX PATHWAYS FROM AGRICULTURE TOWARDS NUTRITION

During the subnational consultation workshops held in October 2019, province-level stakeholders proposed a range of 28 options for addressing the six pathways from agriculture to nutrition defined in the FAO concept for NSA:

Pathway 1: On-farm availability, diversity and safety of foods

- 1) Strengthen the capacity of extension workers and provide better technical extension materials for household food production.
- 2) Establish good models for successful NSA practices, promoting crop diversity.
- 3) Ensure that food production is included in province/district socio-economic development plans and land-use plans.
- 4) Strengthen producer groups for knowledge networking.
- 5) Provide working budgets for extension of NSA practices and strengthen financial management and reporting procedures and capacity.

Pathway 2: Food environments and markets (value chains, agro-processing)

- 6) Improve access for rural communities to markets by improved market infrastructures and support to trader networks, ensuring they can buy fresh foods available all-year round.
- 7) Promote value chains for nutritious products of good safety and quality, with a focus on niche products where farmers/producers could develop a competitive advantage
- 8) Continue to attract investors and buyers who will buy products from farmers.
- 9) Focus on developing processed nutritious foods that save cooking time for women.

Pathway 3: Income to buy food

- 10) Build capacity of rural households to diversify food production as a source of income, with a focus on niche products where farmers can build a competitive advantage.
- 11) Develop entrepreneurial skills at village level, both of individuals and farmer groups, to understand markets, negotiate with buyers, have business plans etc.
- 12) Provide tax incentives and premium prices to organic/clean producers.
- 13) Provide mechanisms for information exchange on market and nutrition for rural communities.
- 14) Attract investors/buyers with tax incentives to buy products from farmers.

Pathway 4: Women's empowerment (time, labour, assets and income control)

- 15) Support mechanisms for women to have a stronger voice and leadership in decision-making on food production and marketing, especially for ethnic minorities.
- 16) Build specific mechanisms for information exchange among women in rural areas.
- 17) Prioritize rural women in entrepreneurship building to increase revenue from agricultural production and agro-processing.
- 18) Train rural women in mother-and-child care focused on good nutrition.
- 19) Develop labour saving interventions that allow women to spend more time on care practices.

Pathway 5: Nutrition knowledge and norms

- 20) Scale up nutrition awareness raising campaigns already developed (e.g. LANN, SBCC).
- 21) Promote diet changes through popular media such as smartphones, e.g. engaging popular influencers on multi-media, training local youth to produce video clips on nutrition etc.
- 22) Promote cooking groups at community level that meet frequently and discover new recipes for nutritious meals together and act as a child care group at the same time.
- 23) Ensure that managers and policy makers stay close to the action of front line workers to ensure policies and instruments are adapted to local needs and build on lessons learned.
- 24) Basic principles of nutrition and nutrition-sensitive agriculture should be incorporated in education curricula of schools at all levels.

Pathway 6: Natural resource management practices

- 25) Land-use plans and regulations should include specific measures to support nutrition security of rural communities.
- 26) Land-use plans and regulations should ensure rights of access to forests, rivers and ensure sufficient land is available for food production and harvesting.
- 27) Rural communities should be encouraged to co-manage natural resources and enforce regulations.
- 28) Good models of communities living together sustainably with nature should be developed and scaled up through information exchange networks.

D. Policy options to overcome the gaps

Based on the diagnostic analysis of gaps in the existing policy framework guiding agriculture for nutrition, several policy changes could be considered:

- Reduce the focus on commodity crop production and sharpen the focus on food production, both for food and nutrition security as well as for sustainable income generation from exports.
- Align the agricultural strategy to the NNS, and the four PAs assigned to the agriculture sector, with a clear description of cross-sectoral linkages.
- Widen the scope of agricultural interventions from a single focus on production to multiple pathways (access for rural food systems and markets, income for rural households to buy food, empowerment of women, linking nutrition knowledge to agricultural practices and safe-guarding access and availability of wild foods through inclusion of nutrition in community natural resource management plans and regulations).
- Address the key gaps in capacity to develop food processing, storage and value chain models.
- Address the key gaps in capacity to address women's workloads and empower women.
- Develop communities of practice to accelerate development of good models for growing nutrient-rich crops, small livestock and alternative sources of proteins and calcium.

A number of additional suggestions were made on capacity-building and allocation of resources by participants at subnational consultation workshops. These will be revisited at the end of Chapter 6: implementation mechanism and Chapter 7: resources.

5. Looking forward: to what extent do existing policies address emerging issues?

This section is aimed at answering key question 3: Are current policies and strategies sufficiently forward looking to address the food security and nutrition impacts of emerging problems related to, for example, migration, youth unemployment, climate change, population growth, urbanization, etc.?

A. International level outlook on emerging food policy issues

IFPRI issues annual papers on the global outlook for food policy development. The 2017 issue⁵⁸ focused on global **urbanization** as the most critical trend shaping food security and nutrition. Urbanization creates new problems like obesity. It shifts the burden of malnutrition from rural areas to cities. Most of the poor people in the world currently live in cities and they spend over 50 percent of their income on food. Dependence on purchased food and employment in the informal sector leaves them vulnerable to income and food shocks. Formal and informal safety nets often fail to protect the poorest.

Urbanization also forces farmers and food processing value chains to transform, applying modern inputs, developing the **mid-stream sections of value chains** and applying new communication techniques. It requires investment in rural infrastructures and intermediate towns, feeder roads, storage facilities, communications and information to build better rural–urban linkages that benefit both rural producers and cities.

In the 2019 issue⁵⁹ these messages have been synthesized into a new term – Rurbanomics – an approach to rural revitalization considering all aspects of making rural areas a good place to live and work. It is about ensuring greater attention to rural needs, developing local assets, leveraging their potential to emerging changes and empowering local communities and governments. The focus is on:

- **Transforming agrifood systems**, by diversifying agriculture (inputs, climate-smart agriculture, post-harvest management, financial support for NSA and sustainable food production), public investments in agricultural research, technologies and territorial approaches: special economic zones, agribusiness incubators.
- **Scaling-up non-farm income opportunities** in rural areas through the creation of clusters, growth poles, corridors and special zones, investing in vocational training in rural areas.
- **Improving living conditions in rural areas**: strong safety nets, better access to basic services and a healthier environment.
- **Reforming rural governance** to improve accountability and outcomes.

What can we learn from this? Lao PDR may be atypical, with 70 percent of the population still living in rural areas. The problems of urbanization have not manifested themselves much yet. Still, the challenge remains for farmers to transform their production to link to demand in urban markets. This is already happening in the vegetable sector, which has emerged around Vientiane, where new value chains emerge and standards for safe food, GAP and OA are

⁵⁸ IFPRI, 2017. Global Policy Report 2017. <http://www.ifpri.org/publication/2017-global-food-policy-report>

⁵⁹ IFPRI, 2019. Global Policy Report 2019. <http://gfpr.ifpri.info/>

increasing in popularity.

Given the limits of the urban markets inside Lao PDR, farmers will need to look beyond the borders. Urban markets in the region (China, Vietnam, Thailand), where demand for clean, safe, organic food products is growing, represent the most realistic outlook for the future of Lao PDR farmers. The challenge is to identify niche markets where farmers can develop a competitive advantage, offering high quality products in compliance with high safety standards, backed up by strong government support.

The Lao PDR Government has already put in place some of these ideas, notably territorial approaches such as special zones, but these have mostly focused on attracting industrial investors from outside the agricultural sector. There is a case for adding the new terms of **transforming agrifood systems, scaling-up non-farm opportunities in rural areas, improving living conditions in rural areas** and **reforming rural governance** into the Lao PDR Government policy vocabulary.

B. National level emerging issues

At the national level, the main emerging issues are:

- **Increased income does not lead to more diet diversity in rural areas.** Rural households start to have enough cash income to become consumers of purchased food, but they cannot buy affordable nutrient-rich foods because markets do not reach them. The agricultural strategy needs to look more at rural households as consumers and develop strategies to address their issues of access.
- **Increased women's workloads have a negative impact on child nutrition.** Evaluations of nutrition-sensitive projects show that rural women have less time to care for children as they spend more time in the fields on cash crop production. This one of the key underlying causes of persistent malnutrition in Lao PDR. Strategies need to be developed to address this issue. A number of promising models are starting to emerge: Women's Income and Nutrition Groups (WINGS), quotas for women agricultural extension workers, scholarships for women, gender WASH monitoring tools and others.⁶⁰
- **Unemployment among rural youth.** The majority of the population is young, with 60 percent of over 6 million inhabitants under 25 years of age. Seventy percent of the young population resides in the countryside. Early marriages (19 percent of women aged 15–19) are an issue. While most young people are employed and work long hours, the majority work in subsistence farming and earn little.⁶¹ Most young men and women have limited education.

Even among the few who reach higher education, very few find a paid job in rural areas in farming. A tracer study among graduates from the Northern Agricultural College in 2014 found that 51 percent of graduates found a job with the government, 10 percent with the private sector, 19 percent were self-employed on family farms and

⁶⁰ Baldwin, M. 2015. Women's Empowerment for improving community nutrition. SUN-CSA.

<https://www.suncsalaos.org/download/womens-empowerment-for-improved-community-nutrition-report/>

⁶¹ LYA, 2014. Adolescent and Youth Situation Analysis in Lao PDR. https://lao.unfpa.org/sites/default/files/pub-pdf/Final_Eng_AYSA%20Report.pdf

2 percent continued their studies.⁶²

- The new National Rural Employment Strategy of 2019⁶³ targets 1.9 million people in rural areas currently outside the labour force and engaged in self-employed production work. The general rationale for investment in these people is that investing in youth will deliver demographic dividend that can continue to deliver welfare improvements to citizens when the population starts to age. There are many recommendations, but most of the responsibility for implementation is assigned to the Ministry of Labour and Social Welfare (MoLSW). Very few linkages to the domain of MAF are mentioned.
- **Climate change is creating more risks to food and nutrition security.** Droughts and floods are becoming more intense and have an impact on rice production. A Chinese newspaper article quotes environmental experts estimating crop yields in Lao PDR could fall by 10 percent in 2020 and 30 percent by the year 2050.⁶⁴ Actual impacts were much worse over the last two years. Floods caused rice production to decline by 18 percent to 1.47 tonnes in the wet season of 2018⁶⁵, compared with 2017. Due to droughts, farmers were only able to plant 40 percent of the country's 850 000 ha of cultivable area in the wet season of 2019.⁶⁶
- **Consumers demand for safe, affordable and accessible food.** Following several cases of food poisoning through vegetables contaminated with chemical residues from pesticides and herbicides, there is a growing awareness among consumers that demand standards for the safety of food products. Consumers also want affordable prices. There are not yet any strong consumer organizations as in neighbouring countries, but this is a growing trend that will dominate the agricultural sector.
- **Problems associated with obesity and overweight are imminent.** Obesity rates are still low, but are rapidly growing, especially among children in cities. Strategies should be developed to tackle this emerging issue.
- **The telecommunications revolution creates new opportunities.** Mobile phones were used by 95 percent of the population in Lao PDR in 2019. There are 2.4 million Facebook users, of a total population of 6.5 million.⁶⁷ While there is some concern about government censorship of social media, it also opens up a great potential for sharing knowledge in the field of nutrition. Education and extension programmes could make much more use of modern media.
- **Rapid development of regional transport links and hubs opens up new market opportunities.** Over the last decade, exports of fruits from Lao PDR to China have

⁶² SURAFCO, 2014. Tracer study of graduates 2013 & 2014, Northern Agriculture and Forestry College.

https://data.opendevlopmentmekong.net/library_record/2013-2014-nafc

⁶³ MoLSW, 2019. National Rural Employment Strategy. https://www.ilo.org/asia/publications/WCMS_372784/lang-en/index.htm

⁶⁴ Xinhuanet, 2018. http://www.xinhuanet.com/english/2018-09/12/c_137462724.htm

⁶⁵ USDA, 2019. Laos Rice Report MY2018-2019.

https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Laos%20Rice%20Report%20MY2018-2019_Bangkok_Laos_2-6-2019.pdf

⁶⁶ RFA, 2019. <https://reliefweb.int/report/lao-peoples-democratic-republic/severe-drought-mekong-region-reduces-rice-planting-laos>

⁶⁷ SEAPA, 2019.. <https://www.seapa.org/laos-screws-on-online-discourse-get-even-tighter/>

boomed, growing from USD 77 million in 2010 to USD 227 million in 2016.⁶⁸ This was mainly due to the rapid expansion of banana cultivation, which has now been banned due to concerns over high levels of chemical use. Yet there is still a lot of potential demand for agricultural exports from Lao PDR. As part of the railway is being constructed linking Vientiane in to Kunming in China, as part of the Belt and Road Initiative (BRI) of the Chinese Government. This train link is expected to start operating in 2021.

- There are concerns about the high levels of debt incurred by the Lao PDR Government in this investment.⁶⁹ Yet this new transport link will open more avenues for exporting goods to China. Economic studies show that even the poorest households in provinces bordering China have been able to participate in exports to China due to low transaction costs.⁷⁰ The challenge is to ensure that investments in agricultural exports to China will benefit Lao PDR farmers, will not have negative impacts on the environment and will provide a competitive, safe product for the market. This will require capacity-building of young rural entrepreneurs who speak Chinese and have the capacity to negotiate effectively with Chinese markets.

C. Priority changes in the agricultural strategy framework

- **Emerging international issues.** Some of these are already addressed, but they are not always made explicit and not connected to nutrition. The government often lacks the means to address issues such as scaling-up non-farm income in rural areas. These new policy directions merit more debate in the national policy arena.
- **Increased income does not lead to more diet diversity in rural areas.** To date, the National agricultural strategy focuses on rural households as producers of food, not as consumers. In surrounding countries, there is a strong correlation between a household's ability to buy food and the dietary diversity of that household. The agricultural strategy should include this new approach.
- **Increased women's workloads have a negative impact on child nutrition.** This is an important pathway between agriculture and nutrition, which is not yet addressed in the strategy. This policy gap will need to be filled. Rural women need time-saving solutions in food preparation based on processed local foods, off-farm income, options to gain money while staying closer to home, more representation in decision-making and leadership on decisions in agricultural production.
- **Unemployment among rural youth.** To date the issue of rural youth employment is mainly addressed by MoLSW. Its strategy does not mention any links to the work of MAF. There seems to exist a strategy gap that should be addressed at prime ministerial level. More discussion is needed at the national policy level on how the agriculture sector can play a role, e.g. to prepare rural youth to capitalize on the potential for exporting food products to China.

⁶⁸ Nolintha, 2018. Lao PDR's fruit production for export- a case of watermelon in Luang Namtha Province. Bangkok Research Centre, JETRO. https://www.ide.go.jp/library/English/Publish/Download/Brc/pdf/21_03.pdf

⁶⁹ Figiaconi, 2019. Are Laos' Land-Linking Dreams a Risky Bet? The Diplomat. <https://thediplomat.com/2019/09/are-laos-land-linking-dreams-a-risky-bet/>

⁷⁰ Andersson and Engvall, 2019. In the Shadow of China: Trade and Growth in Lao PDR. https://www.researchgate.net/publication/46470137_In_The_Shadow_Of_China_Trade_And_Growth_In_Lao_Pdr

- **Climate change.** National rice production has been greatly affected by climate change over the past two years. This aspect is mentioned in the present National Agricultural Strategy but will likely need more attention in the next one. There are already many initiatives in place for resilient, climate-smart farming systems, but few are working specifically on nutrition.
- **Consumer demands for safe, affordable food.** This is not sufficiently well addressed in the current policy, but would seem to represent a sizeable future market for farmers: to produce safe, affordable food that modern Asian consumers will demand and will be willing to pay for. The agriculture sector should focus on capturing this demand and will need government support to establish strong farmer-to-consumer linkages and develop credible systems for maintaining product safety standards.
- **Obesity and overweight.** This an important trend, not directly related to agricultural production choices, but more with consumer choices linked to availability and affordability. This is primarily an issue of nutrition education, but agricultural policy choices such as support for monocropping and cash crops may have a negative impact on availability and affordability of healthy foods.
- **Telecommunications revolution.** This is not addressed in the current policy. There is great scope for sharing good models through mobile platforms. Agricultural extension approaches could gain from building capacity among the rural young to produce video clips and share in popular social media platforms.
- **Rapid development of regional transport links and hubs.** This is not addressed much in current policy. It will require a coordinated strategy among various relevant ministries (agriculture, welfare, commerce) to build the capacity of young agricultural entrepreneurs and investors to capitalize on the potential of the Chinese market.

6. Implementation mechanisms, capacities and reach

This section is aimed at answering key question 4: Are the implementation mechanisms and capacities that are in place adequate to reach specifically those people and areas most affected by food insecurity and malnutrition?

A. Analysis of existing implementation mechanisms and gaps

The main implementation mechanism is for province and district agriculture and forestry offices to support rural communities in implementing NAS practices, mostly in the context of projects supported through foreign aid.

Subnational workshops were held in November 2019 with 98 representatives from province agriculture, health, planning and LWU who are implementing projects promoting agriculture for nutrition. They identified the following gaps between policy and implementation:

- a) gaps in nutrition planning and policies;
- b) gaps in capacity;
- c) gaps in resources; and
- d) gaps in reach.

A.1 GAPS IN NUTRITION PLANNING AND POLICIES

1. Coordination among central, province, district and community levels on nutrition interventions remains poor.

The main mechanisms for coordination are district and province nutrition committees, chaired by district governors, meeting every three months. These exist in ten of the 18 provinces. While these meetings are useful, their effectiveness is limited as there is little room for real collaboration among sectors. Each agency follows its own agenda and has its own budgets. There are no cross-sectoral plans that force collaboration.

2. There are no clear guidelines for developing local nutrition plans.

Participants would like to see a process that allows for structured nutrition-based planning. These should start at community level and include all key elements, such as production of crops, livestock, food processing and income generation, access to food markets for buying food and access to value chains for selling products, NRM, water and sanitation, small-scale irrigation, road access and telecommunications. They should also include key indicators of nutrition status (diet diversity, anthropometric data).

A model for such plans has been developed by the SNV-SDC ENUFF Project.⁷¹ It would allow communities to set clear goals for all nutrition-sensitive activities. Community-based plans could then be taken together to produce district and province nutrition plans that could be used to guide investments and coordinate interventions.

⁷¹ Enhancing Nutrition of Upland Farming Families (ENUFF). <https://snv.org/project/enhancing-nutrition-upland-farming-families-enuff>

3. Little collaboration between government and the private sector to address nutrition issues

Households in remote villages depend on traders to come to their village with a truck to sell fresh vegetables, meat and other nutrition-rich food products. Very few projects are aimed at supporting traders to organize more frequent markets in remote areas, to build on their potential to spread nutrition messages and to apply standards for safety of food.

A.2 GAPS IN CAPACITY

4. Capacity-building is very variable; there is no structured approach to build knowledge on NSA, either for communities or government staff.

There is a manual from the Ministry of Health for nutrition training at village level, which focuses mainly on good mother-and-child care practices. There is also a training manual on the LANN approach,⁷² which combines the mother-and-child training with knowledge on food and production of nutrient-rich crops and sustainable use of wild foods. The LANN approach is advocated by a number of INGOs in Lao PDR.

Some organizations focus on the Social and Behaviour Change Communication approach (SBCC).⁷³ The relative merits of each approach remain to be seen. A study on applying the SBCC approach did not find conclusive evidence that there was impact on agriculture.⁷⁴ However, field workers need a simple, straightforward approach to promoting agriculture for nutrition.

5. Few staff are trained in nutrition and few are available to work on nutrition.

The impression of participants is that only a few staff received training in the field of agriculture for nutrition and that few of them remained in positions where they could apply the skills due to frequent staff rotations. In general there are not many skilled staff assigned to extension positions. There are three underlying issues here that should be considered:

- (a) The absence of a comprehensive agricultural extension system.
- (b) Fragmentation of divisions in agricultural offices and coordination they require.
- (c) Time spending of agricultural officers.

a. The absence of a comprehensive agricultural extension system

There has been a long history of support to the development of an agricultural extension system in Lao PDR. Between 2001 and 2014, the Swiss Government spent USD 13 million over a period of 13 years supporting the Lao Extension System. The main conclusion from this effort was that a demand-driven extension system did not materialize. Government partners would listen to farmers, but not include farmer suggestions in making decisions on extension interventions. Whereas farmers raised dozens of priority problems, the extension system only targeted three technology packages consistently, which achieved a limited change in farmer practices.⁷⁵

⁷² Training Materials on Linking Agriculture, Natural Resources Management and Nutrition (LANN). Sun-CSA Network Laos. <https://www.suncsalaos.org/download/1527/>

⁷³ Our Promise Lao PDR, Social Behaviour Change Communication (SBCC) campaign for Save the Children in Lao PDR. <http://www.runningreel.net/2019/01/10/our-promise-lao-pdr/>

⁷⁴ Kennedy, E. *et al.*, 2018. Impact of Social and Behavior Change Communication in Nutrition Sensitive Interventions on Selected Indicators of Nutritional Status. Human Nutrition 2018 2(1): 24-33. https://resourcecentre.savethechildren.net/node/13787/pdf/sbcc_in_nsa.pdf

⁷⁵ Kaegi, S. 2016. CAPEX Study t4: Capitalisation of Experiences of the Laos Extension for Agriculture Project (LEAP) in Laos: 2001-2014.

The present focus of the Swiss support has shifted from the concept of extension to the concept of Rural Advisory Services (RAS). This perspective focuses on creating capacity among private sector and civil society actors to provide advisory services to farming communities. The message from this experience for MAF would be to build on partnerships between government agencies with the private sector and civil society as key actors in nutrition-sensitive support to rural communities, rather than rely on government agencies alone. A promising start is being made in the nutrition sector with the establishment of the SUN-CSA business network. The new strategy for the agriculture sector should take this development into account.

b. Fragmentation of divisions in agricultural offices and coordination they require

The number of departments in MAF has grown from 11 in 2014 to 16 in 2018. Recent departments added include: Policy and Legal Affairs, Forest Inspection, Agricultural Land Management, Committee for Science and Technology and Rural Development.

There are no recent data on the numbers of staff under MAF and in provinces/districts. An older report from 2000 gives an estimate of a total of 2 803 staff, with an average of 19 agriculture staff per district (see Table 4). By 2019, the average number of DAFO (District Agriculture and Forestry Office) staff was estimated to be 20–30.

TABLE 4: AGRICULTURAL PERSONNEL IN THE YEAR 2000

Agricultural personnel	No. of staff	No. of units	Staff/unit
MAF	957		
Province	2043	18	114
District	2803	148	19

SOURCE: JICA, 2000.

Likewise, a typical DAFO will have 20–30 staff, distributed over at least 11 divisions: (1) administration and personnel, (2) planning and finance (3) inspection, (4) irrigation, (5) crops, (6) livestock and fisheries, (7) forestry, (8) forest inspection, (9) agricultural land development, (10) rural development, (11) technical extension. For each division, only two to three staff are available. Each unit has a director who will spend most of his time in coordination meetings with other divisions or at district and province level. This leaves few staff available for working on activities geared towards agriculture for nutrition.

c. Time spending of agricultural officers

As to the time spending of agricultural officers, this is a theme not often openly discussed but relevant for understanding the situation. Official government salaries are very low (on average 1.5 million Kip or USD 187 per month in 2019, only slightly higher than the minimum wage of 1.1 million Kip or USD 132 per month).⁷⁶

There is a big incentive for province/district staff to engage in rent-seeking activity, to focus on tax collection and issuing permits for sales of agricultural products. This kind of

⁷⁶ Asian Briefing, 2018. Laos Increases Minimum Monthly Wage for the Third Time in Eight Years. <https://www.aseanbriefing.com/news/2018/05/31/laos-increases-minimum-monthly-wage-third-time-eight-years.html>

behaviour was especially profitable in the forestry sector⁷⁷ and has caused many distortions in markets. It could be argued that agricultural officers spend a lot of their time on this type of activity. Such unofficial income opportunities pull staff away from extension duties.

Also, there is no system for rewarding or promoting staff based on performance in extension. As a result, extension is often left to the youngest and most inexperienced staff in district offices. Recent anti-corruption drives of the government are addressing such governance issues, but there are still many challenges to overcome.

6. At village level, there is still limited progress in good models that can be scaled up

In addition to fishponds and vegetable gardens, participants note they have seen very few good models of agricultural production for nutrition. They would like to see more development of good models that contribute to local consumption of food and to farmer income from selling food products.

A.3 GAPS IN RESOURCES

7. NSA activities are not specifically mentioned in work plans, making it difficult to allocate them working budgets

The work of province and district offices is governed by annual work plans, which follow a format of activities grouped into categories according to the five-year sectoral plans. Budgets are also allocated according to existing categories in the annual work plans. As the sectoral agricultural work plans do not have a specific category for activities on agriculture for nutrition, it is difficult to allocate budgets for this new type of work.

8. Budgets are either disbursed through the agriculture department or the health department, and it is difficult to share with each other or with the LWU

The nature of sectoral budgets makes it difficult to allocate funds outside the agency itself. The LWU has the capacity to support training and outreach of food processing and other activities but is often excluded from projects aimed at agriculture for nutrition.

A.4 GAPS IN REACH

9. Nutrition-sensitive interventions are not always focused on areas with the highest needs

The NNS prioritizes 75 districts for its implementation. Each province has a clear delineation of the poorest communities into target areas for interventions on poverty alleviation. At national level, projects aimed at agriculture for nutrition do not always focus on the poorest districts or districts with high malnutrition rates. Selection of target districts can also include other criteria such as potential for capacity-building or connections to other project goals. Participants wish to see more focus on districts and communities with the highest malnutrition rates.

10. Reach is limited by lack of human and financial resources

Due to the lack of budget and staff resources, mentioned above, only a limited number of

⁷⁷ Baird, 2010. Quotas, Powers, Patronage and Illegal Rent Seeking: The Political Economy of Logging and the Timber Trade in Southern Laos. Forest Trends.
https://www.academia.edu/1049244/Quotas_Powers_Patronage_and_Illegal_Rent_Seeking_The_Political_Economy_of_Logging_and_the_Timber_Trade_in_Southern_Laos

communities have been served adequately to date.

B. Priorities for filling gaps in implementation, capacities and reach

B.1 FILLING GAPS IN NUTRITION PLANNING AND POLICIES

1. Give province/district nutrition committees a clear mandate and enable them to manage and coordinate nutrition plans and budgets.
2. Include NSA activities in the MAF strategy and annual plans and issue clear guidelines for developing province/district/village nutrition plans.
3. Explore mechanisms for collaboration with the private sector to address issues of access to food.

B.2 FILLING GAPS IN CAPACITY

4. MAF should have a dedicated unit for mainstreaming NSA. The current staff divisions at PAFOs and DAFOs should be reviewed to make more staff available for nutrition-related work. Creation of a dedicated division for agriculture for nutrition should be considered.
5. The human resources strategy of MAF should develop incentives and directives for more staff to serve in front line extension positions at subdistrict level. Participants from Huaphan Province raised the example of the extension system in Vietnam. In Vietnam, promotions in the Ministry of Agriculture are based on an assessment of achievements in field extension positions. Anybody who wants to head an office has to earn his/her reputation as an effective extension worker. Such incentive systems ensure that the best people become future leaders.
6. Participatory technology development, e.g. through FFS approaches, should be stepped up to deliver good models for extension of agriculture for nutrition.

B.3 FILLING GAPS IN REACH

1. Ensure that nutrition campaigns cover all priority areas and villages with the highest rates of malnutrition.

7. Resource allocation

This section is aimed at answering key question 5: To what extent are the existing policies and strategies adequately resourced, implemented, monitored and, in case of inadequate or incomplete implementation, what are the implications for the achievement of the intended food security and nutrition impacts?

A. Resource allocation to existing policies and strategies on food security and nutrition

The mid-term review of the NNC from December 2019 found that more than thirty projects are working on NSA, with a total allocated budget of USD 90 million between 2016 and 2022.⁷⁸ However, only nine of the projects were primarily focused on NSA and were only working in 43 of the 75 priority districts.

There is significant investment in NSA services, totalling USD 27.2 million in 2018. There are 11 nationally registered NSA projects funded by various donors: GAFSP/IFAD, European Union, SDC, Helvetas and BMZ/WWF. MAF also implements projects with World Vision/AVSF, SNV, NIRAS, Helvetas, HPA, CARE, and WWF. These projects cover 36 districts in 11 provinces.

A detailed analysis on expenditures in the health sector may serve to illustrate the key issues of inadequate government funding and high reliance on foreign aid support.

In 2014, the Lao PDR Government spent USD 182 million on health (1.5 percent of GDP and 5 percent of total government spending). Per capita health spending was USD 16 in 2014, which is one of the lowest in Southeast Asia.

About 70 percent of health expenditures (USD 130 million) was spent on wages (33 percent) and capital expenditure (37 percent). Only 30 percent remained for implementing activities. Also 30 percent of the health budget was derived from external funding (foreign aid funding).

Out-of-pocket spending still accounts for 40 percent of total health expenditures, which deters health service utilization by the poor. This is reflected in financing health centres at subdistrict level, which receive 58 percent of their budget from selling medicines, 20 percent from development assistance, 11 percent from the government budget and 7 percent from health insurance reimbursements.⁷⁹

As for the agriculture sector, the total expenditure over 2018 consisted of USD 160 million, of which USD 38 million (24 percent) came from the government and USD 122 (76 percent) was contributed by foreign aid assistance.⁸⁰ NSA projects covered USD 27.2 million, which is 17 percent of total expenditure and 22 percent of foreign assistance investments in the agriculture sector in 2018.

B. Assessment of the adequacy of resource allocation

The main issue in both health and agricultural budgets is that almost all the government funds

⁷⁸ NNS, 2019. Mid-Term Review of the National Nutrition Strategy and Plan of Action 2016-2020. National Nutrition Secretariat with support from Unicef and the European Union.

⁷⁹ World Bank, 2017. Lao Economic Monitor. Challenges in promoting more inclusive growth and shared prosperity. <http://documents.worldbank.org/curated/en/334091494603178415/pdf/115000-WP-P158830-PUBLIC-LaoEconomicMonitorAprilChallengesinpromotingmoreinclusivegrowthandsharedprosperity.pdf>

⁸⁰ MAF, 2019. Annual report of Ministry of Agriculture and Forestry over the fiscal year 2018-2019 (in Lao language).

are needed to keep the operations of the ministry running, leaving almost no budget for implementation. Almost all funds needed for implementing work are dependent on foreign aid assistance. The major challenge is for the Lao PDR Government to develop a sustainable mechanism to fund working budgets for nutrition interventions.

At the same time, the prospects for increasing the share of the national government budget to the agriculture sector do not look promising. The share of agriculture in the government budget was reduced from 19 percent in 2001⁸¹ to 2.71 percent in 2016.⁸²

The Lao PDR Government is struggling with rapidly increasing expenditures on salaries and running costs, especially in education and health. The government revenue grew from 14.5 percent of GDP in 2001 to 19 percent in 2015, mainly through improved VAT. However, this revenue falls short of expenditures, resulting in a fiscal deficit. The government is trying to address this issue but it will require a great effort to increase governance in the financial sector and will also take a long time to accomplish.

The NNC estimated that an investment of USD 411 million would be needed to implement all 22 PAs from 2016 to 2020. From that amount, USD 144 million would be needed for agriculture. To date, only USD 90 million or 63 percent was committed to agriculture, leaving a gap of USD 54 million or 37 percent.⁸³

Over the period 2020–2025, the NNC estimates that an additional investment of USD 820 million will be needed. With less than 10 percent of budgets for social spending drawn from the public sector, the assumption is that foreign development assistance will provide most of this funding is not realistic. The funding gap is likely to widen.

The main conclusion here is that it is not realistic to assume significant gains in government budget allocations allocated to agriculture for nutrition without a change in political will to do so. Foreign aid committed will cover part of the required investments, but a significant gap is likely to remain.

C. Likely implications of funding gaps for food security and nutrition

If the present funding gaps are not resolved, it is unlikely that malnutrition indicators will be reduced to their targets for 2025. Capacities will not be built that could help stakeholders escape the present situation.

D. Priorities for funding actions that are most likely to address priority strategies and implementation gaps

The 2019 mid-term review of the NNS recommends stakeholders consolidate lessons learned and apply good practices in NSA consistently through the Lao NSA Community of Practice. The most critical areas for funding are: 1) focus on nutrition-sensitive value chains and 2) multisector

⁸¹ ADB, 2006. Governance Issues in Agriculture and Natural Resources.

<https://www.adb.org/sites/default/files/evaluation-document/35925/files/governance-issues-lao.pdf>

⁸² UNDP, 2017. Lao People's Democratic Republic: Financing the future with an integrated national financing framework. <https://www.undp.org/content/dam/rbap/docs/dg/dev-effectiveness/RBAP-DG-2018-Development-Finance-Assessment-Snapshot-Lao-PDR.pdf>

⁸³ Boupao, L. e.a. 2016. Strategic Review of Good and Nutrition Security in Lao People's Democratic Republic. <https://www.directoryofngos.org/a/download?id=document2227&field=file¬etype=document&file=Rk5TIHN0cmF0ZWdpY19yZXZpZXdfTG93b3Bkcl9qdWwzNi5wZGY=>

promotion of nutritious diets for all community members. Also the review recommends strengthening nutrition-based planning and monitoring approaches and mainstreaming NSA within district socio-economic plans. More specifically, the recommendations are to invest in:

A: Multisector coordination and policy

- 1) Support NSA technical capacities by consolidating and sharing good practices.
- 2) Improve multisector coordination with group facilitation approaches and applying consistent criteria to select target villages.
- 3) Apply the NSA monitoring and reporting system nationwide to inform planning and programming.
- 4) Mainstream NSA within district socio-economic development plans to prioritize work and increase funding.

B: Technical design and implementation

- 5) Improve sustainability of support to nutritious crop production by focusing on practices and production for community consumption.
- 6) Improve sustainability and support to animal protein production by focusing on improved practices and production for community consumption.
- 7) Support nutrition-sensitive value chains and work with private sector and local processors.
- 8) Support village-level participatory NSA planning to improve natural resource management, enhance resilience and improve small-scale infrastructures.
- 9) Multisector support for improved diets for all community members, such as standard but adaptable dietary recommendations.

C: Cross-cutting themes

- 10) Incorporate women's empowerment in all NSA actions.
- 11) Incorporate climate-change resilience in all NSA actions.

8. Political analysis

A. What are the key policy changes needed to prioritize nutrition?

From the analysis in the preceding chapters, a number of wider policy changes in Lao PDR can be identified that are needed to improve nutrition outcomes from agricultural interventions:

- 1) ***Stronger political will to prioritize nutrition as a national priority and more specifically in the agricultural sector.*** Global studies find that political commitment for nutrition is best achieved through a combination of factors:⁸⁴
 - *Effective nutrition actor networks:* There are strong networks supporting the dialogue between the government and foreign aid donors. However, consumer organizations, farmer organizations and other CSOs are largely absent and do not take part in nutrition actor networks. As the Lao society advances and modernizes, such organizations will be needed more and more, not only in the political arena but also in the field of nutrition education.
 - *Strong leadership:* The Lao PDR Government is in a position of strong leadership, partly due to its one-party system. The weakness is that the leadership is mainly focusing on nutrition in the dialogue with foreign aid organization and, there is less dialogue with local citizen organizations on nutrition.
 - *Civil society mobilization:* Civil society organizations are heavily restricted in Lao PDR, mainly out of concerns for political stability. Chances for mobilizing people and resources for nutrition are being missed as a result.
 - *Supportive political administrations:* The political administration is supportive of the goal of improving nutrition. The key weakness lies in the inability of the administration to gather enough public revenue to finance nutrition services.
 - *Societal change and focusing events:* There is limited space for organizing societal change and focusing events outside the government system.
 - *Cohesive and resonant framing:* The key arguments used to boost nutrition are that it is important for economic development, to achieve SDGs and to graduate out of LDC status. Framing of nutrition as an issue in the national debate is still in its early stages.
 - *Robust data systems and available evidence:* At policy level, data for monitoring malnutrition are functioning and used as convincing evidence to invest more resources in nutrition. There is less use being made of evidence in public awareness-raising.
- 2) ***More space for CSO, farmer organizations, consumer organizations.*** There is little realistic hope for the government effectively to address the key issues of lack of government staff in frontline positions and lack of budgets for implementing agriculture

⁸⁴ Baker, P. *et.al.* 2018. What drives political commitment for nutrition? A review and framework synthesis to inform the United Nations Decade of Action on Nutrition.

<https://gh.bmj.com/content/3/1/e000485>

for nutrition activities. There is only so much that foreign aid donors can do to alleviate this situation.

- The obvious solution lies in involving CSOs and the private sector more. The present government policies make it very difficult for CSOs and the private sector to engage. A newly introduced law regulating civil society restricts the work of CSOs, who face lengthy delays in approvals and exhaustive reporting requirements.⁸⁵ For private sector investors, Lao PDR still ranks 154 out of 190 countries in 2019 in the World Bank index for Ease of Doing Business. Key issues include complicated tax administration, misconduct, underdeveloped human resources and poor understanding on sanctity of contracts.^{86,87}

3) Stronger governance to improve investor confidence. The absence of private sector investment in the nutrition sector has a lot to do with the perceived risks of investing in Lao PDR, which scores 106 out 129 countries in the Bertelsmann Stiftung Transformation Index (BTI), an indicator for how well countries in transition are steering social change towards democracy and a market economy.⁸⁸ Boosting transparency and accountability, strengthening the rule of law and combatting corruption need to be accelerated to attract much needed investors to boost food processing.

4) Reforms in government finances to have more public budget for implementing nutrition activities (working budgets). As illustrated in Chapter 7 on resources, the government is struggling to raise sufficient revenues to pay for more than the running costs of various ministries. Most of the budget for implementing nutrition-related work is now financed by foreign assistance funding. Sustainable provision of nutrition services cannot be built on foreign aid funding, it should come from public revenues over the long term.

5) More public debate on how to deal with emerging issues:

- Changing attitudes to spend more household income on good quality food.
- Giving women more agency to decide on time to spend on child care and on use of income.
- Mitigating climate change.
- Reducing unemployment of rural youth.
- Dealing with rapid increase of foreign investment and national debt.
- Ensuring affordability, safety and diversity of food.
- Reversing trends towards more obesity and overweight.

⁸⁵ Radio Free America, RFA, 2018. Civil Society groups in Laos delayed funding, forced to disband under new law. <https://www.rfa.org/english/news/laos/csos-01242018122715.html>

⁸⁶ World Bank, 2019. Doing Business in Lao PDR: Constraints to Productivity.

<https://www.worldbank.org/en/country/lao/publication/doing-business-in-lao-pdr-constraints-to-productivity>

⁸⁷ International Trade Administration, ITA, 2019. Laos-Market-Challenges. <https://www.export.gov/article?id=Laos-Market-Challenges>

⁸⁸ Bertelsmann Stiftung, 2018. Transformation Index (BTI) country report for Laos. <https://www.bti-project.org/en/reports/country-reports/detail/itc/lao/ity/2018/itr/aso/>

B. Who are the main actors in favour, who is opposed to, who is left out, who could lead, why?

The main actors in favour of policy changes in the nutrition sector are the government, with the NNC as its main instrument, and foreign aid donors and INGOs. Their main channel of conversation is the Annual Nutrition Forum, the last of which took place 9–10 December 2019.⁸⁹

Nobody is opposed to improving nutrition, but other interests may be given preference over nutrition within the wider government development policy. The latest RTM was held in Luang Prabang, 25–26 November 2019.

This is the key mechanism where development partners negotiate with the Lao PDR Government on development assistance. Nutrition was not directly mentioned among the four focus areas discussed:⁹⁰

- Impact of LDC graduation on trade, official development assistance and financing opportunities for transition period.
- Monitoring and reporting for SDG localization and achievement.
- Integration of disaster risk reduction to the national planning.
- Impact of climate change on Lao PDR's national plans, including the National Green Growth Strategy.

The missing voices in the nutrition sector are those of consumers and farmer representatives. There are no strong consumer organizations and there are no strong farmer organizations. Without stronger civil society mobilization, it is unlikely that political will towards better nutrition will be achieved.

Leadership in the sector now rests mainly with the government's NNC. This has proven to provide good results in coordinating budget support from foreign aid agencies to relevant government agencies.

The weakness is that this dialogue does not include producer and consumer organizations, which are mainly absent in Lao PDR. Another weakness is that most of the other ministries see nutrition primarily as the task of the Ministry of Health, which also hosts the NNC. This weakens the ability of the NNC to engage other ministries in nutrition activities.

As to the narrower task of leading the development of agriculture for nutrition, MAF has made a good start adopting NSA as its approach to addressing the four PAs assigned to the agriculture sector. The ministry does not yet have a dedicated unit leading the mainstreaming of agriculture for nutrition in its strategy and work plans. Such an institutional step could boost leadership for this.

C. What are the key political challenges for addressing causes of food insecurity and malnutrition?

In section III B, 18 socio-political drivers or causes of food insecurity and malnutrition were

⁸⁹ UNICEF, 2019. Nutrition Forum takes stock of progress on nutrition of Lao children and families. <https://www.unicef.org/laos/press-releases/nutrition-forum-2019>

⁹⁰ UNDP Laos, 2019. Round Table Implementation Meeting to take stock of Lao PDR's development progress. <http://la.one.un.org/media-center/news-and-features/539-2019-round-table-implementation-meeting-to-take-stock-of-lao-pdr-s-development-progress>

identified for each of the four PAs for agriculture in the NNS in subnational consultation workshops held in October 2019. Options for policy change to address these causes were identified in various chapters. Table 5 summarizes the findings.

TABLE 5: SOCIO-POLITICAL DRIVERS OF FOOD AND NUTRITION INSECURITY IDENTIFIED BY STAKEHOLDERS IN SUBNATIONAL CONSULTATION WORKSHOPS, OCTOBER 2019.

Socio-political drivers	Options for policy change
Crop production: (1) Poverty: poor communities cannot buy foods and have low diet diversity (2) No budgets for extension (3) Little coordination among relevant agencies (4) No means for mitigating disasters like the extreme droughts this year	(1) Improve access to food for rural consumers (2) Do not pursue extension, build rural advisory services by engaging in partnerships with CSOs and the private sector (3) Nutrition-based planning at all levels (4) Better policies for mitigating climate change and disasters
Livestock production: (5) Low prices for livestock (6) Rural families prefer to sell livestock rather than eat them (7) It is difficult to buy fresh meat and fish in remote areas (8) Livestock projects sometimes have unrealistic goals.	(5) Make smart choices on controlling or not controlling food prices (6) Provide alternative savings/security nets for rural households (7) Improve market access for rural consumers, cold chains (8) Have realistic goals in livestock projects
Value chains and agro-processing: (9) No activities or budgets assigned in annual work plans (10) Very few people skilled in food processing, both in private sector and in government (11) Rural women have no access to markets/ value chains for buying nutritious processed foods (12) Prices of most food products are not stable, it is a risky investment (13) Producer groups often fail as they cannot find buyers for their processed foods	(9) Add activities on agriculture for nutrition and budgets to annual work plans (10) Build capacity in food processing (11) Improve market access for rural women as consumers of food, making healthy foods more affordable and accessible (12) Make smart choices on controlling or not controlling food prices (13) Have strong support systems for rural producers to link to food value chains
Natural resource management for food production: (14) Declining access to wild foods in spite of land-use planning processes (15) Lack of good models for sustainable NTFP harvesting systems (16) Weak enforcement of agreed rules (17) Existing forest protection rules are not often followed (18) Land-use planning procedures do not include nutrition goals	(14) Village level nutrition plans that include management of wild food resources (15) Participatory development of sustainable NTFP harvesting systems (16) Delegate more power for law enforcement to communities, linked to higher level institutions for law enforcement (17) Include food goals in land use management plans

SEE ALSO SECTION III B.

D. What other constraints are there on state action? How would this affect nutrition policy changes?

The main constraints limiting state action are the lack of human and financial resources to carry out agriculture for nutrition activities effectively. At the same time, the state concentrates all powers for executing such work in its own institutions, leaving very little space for other actors

such as CSOs and the private sector to evolve. Two types of policy change would affect the impact of nutrition intervention:

- a) ***Improved efficiency of the government system*** by improving governance, performance-based human resource management, reducing incentives for rent-seeking behaviour, improved tax revenues and allocating more public expenditure budgets to implementation of nutrition activities.
- b) ***Providing more space for CSOs to work at grass roots level***, providing incentives to private sector for investing in food value chains and food processing.

E. Where are the spaces for negotiating policy changes and are there options for creating more space?

Currently the main space is in the five-year cycle of government policy revisions and change is negotiated in the RTC process and its associated working group mechanisms.

Options for creating more space lie in the development of stronger consumer and producer organizations as well as stronger CSOs and allowing them to have more say in the political space around nutrition.

At a more technical level, the community of practice for NSA (CoP–NSA) provides a starting point for discussing local policy changes. Lastly, emerging networks involving the private sector in nutrition such as the SUN–private sector network may evolve as spaces for negotiating policy changes in nutrition.

F. What are the capacities/competences that need to be changed?

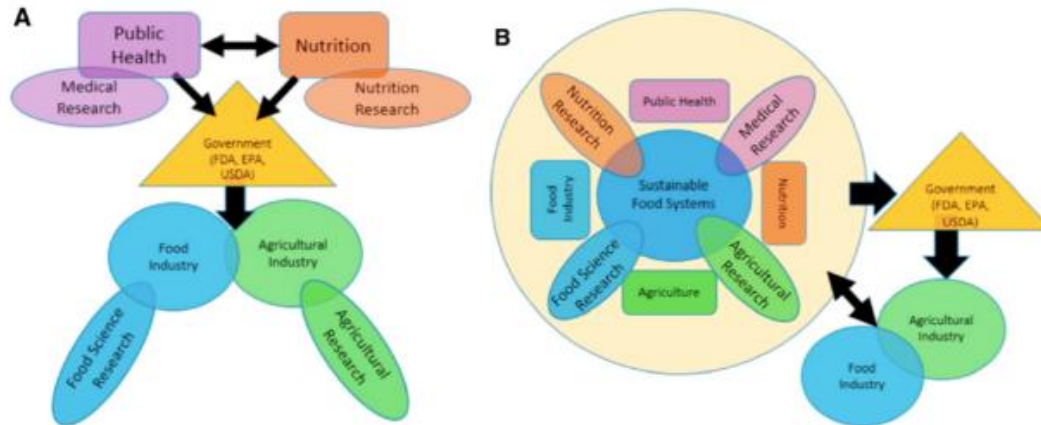
States can influence agriculture–nutrition linkages by having the capacity to do three things⁹¹ well:

- 1) ***Intervene systematically and inter-sectorally***: The capacity to enable a food system that provides citizens with a nutritious diet through food production systems and food environments. This requires strong inter-ministerial bodies and cross-sectoral networks.
- 2) ***Engage with participatory and locally relevant understanding of agricultural linkages***: having decentralized institutions, approaches that allow equal sharing of power among stakeholders and a shared understanding that jointly agreed outcomes will be implemented by the state in collaboration with people–structured institutions. This is about research, knowledge management, technical support, logistics and storage, as well as delivering multi-stakeholder initiatives, ranging from local cooking groups to plant breeding, climate smart agriculture, biodiversity and underutilized crops.
- 3) ***Create, maintain and engage in formal spaces for dialogue***: a key role of the state is to make sure key stakeholders can create and share knowledge and drive innovations needed to improve nutrition. In many countries, a key obstacle to overcome is the lack of a common, integrated framework for analysis and programmatic response, integrating short- and long-term solutions. To maintain a dialogue among nutrition, health and agricultural sectors, the government should move away from direct

⁹¹ Gupte and Longhurst, 2019. How do the state’s organisational capacities at the micro- and macro-levels influence agriculture-nutrition linkages in fragile contexts? Food Policy, Volume 82, January 2019, pp 74-83. <https://www.sciencedirect.com/science/article/pii/S0306919218308388>

interaction among stakeholders (see Figure 17: moving from situation A to situation B). This avoids the risk of policy-makers having to make difficult decisions for which they often lack sufficient information, leaving it to actors in the food system.

FIGURE 17: MAINTAINING A DIALOGUE AMONG NUTRITION, HEALTH AND AGRICULTURE PROFESSIONS



SOURCE: FINLEY ET.AL., 2017, QUOTED IN: GUPTA AND LONGHURST, 2019.

Secondly, global research on nutrition policy processes identified two elements of success for advancing national nutrition agendas:⁹²

- 1) In any country there will be a large variety of challenges and opportunities that shape the nutrition agenda. Also, in every country there are always disagreements over interventions, primarily among mid-level actors, rather than among politicians or senior administrators. Mostly these disagreements stem from divergent institutional perspectives and interests, rather than from strictly technical disagreements based on evidence. This means that efforts to resolve these disagreements strictly through evidence-based decision-making often will not work.
- 2) The ability to mobilize a wide variety of strategies and tactics plays a crucial role in strengthening commitment, coherence, consensus and coordination in relation to the national nutrition agenda. This ability can be summarized as strategic capacity: it is the human and institutional capacity to build relationships and broker agreements.
- 3) At an individual level, strategic capacity includes socially attuned leadership, management and communication, negotiation and conflict management skills.
- 4) At the institutional level, strategic capacity includes formal and informal venues and practices for nutrition actors and others to exchange information, discuss common concerns, strategize, coordinate efforts, build relationships, seek consensus, resolve conflicts and sustain momentum.

In Lao PDR, there would seem to be a key role for policy-support organizations such as the National Institute for Economic Research (NEIR), the Center for Socio-Economic Science and

⁹² Pelletier, D. e.a., 2011. The nutrition policy process: the role of strategic capacity in advancing national nutrition agendas. Article in Food and Nutrition Bulletin, June 2011.
[file:///Users/jfoppes/Google%20Drive/2019%20jobs/08_FAO_First_MAF_nutrition_policy_review/Library/Governance%20in%20agriculture/Pelletier The Nutrition Policy Process The Role of Strategic.pdf](file:///Users/jfoppes/Google%20Drive/2019%20jobs/08_FAO_First_MAF_nutrition_policy_review/Library/Governance%20in%20agriculture/Pelletier%20The%20Nutrition%20Policy%20Process%20The%20Role%20of%20Strategic.pdf)

Policy Research (CSPR) inside the Ministry of Planning and Investment and the Department of Policy and Legal Affairs (DoPLA) inside MAF, to build capacity and to promote strategic capacity among individuals and institutions involved in processes shaping national policies for agriculture for nutrition.

G. How can nutrition be mainstreamed in the process for developing the new National Agricultural Strategy 2021–2025

Within MAF, DoPLA is responsible for implementing the process preparing the new National Agricultural Strategy 2021–2025. The process is guided by Resolution No. 7 of the Central Party Committee with regards to the development of the 10th Agricultural Development Strategy and Action Plan 2021–2025:

“The focus for agricultural development should be to apply modern science and technology for environmentally friendly agricultural production, adapted to local conditions and resilient to climate change, based on sustainable use of natural resources. The aim of the agriculture sector should be to produce fresh, safe foods of high quality, free of chemicals, applying enhanced food processing methods, which can be exported as well as consumed domestically. The agricultural system should move away from single commodity crop production to diversified production, strengthening agricultural infrastructures in rural areas”.

The formulation of the policy is to be implemented by three committees:

- 1) Steering committee, consisting of three persons, at the minister level. Their task is to ensure that the policy is aligned with the National Socio-Economic Development Plan and with Resolution No 7.
- 2) A technical guidance committee, consisting of 16 persons, at the level of director of department, who are responsible for ensuring the policy is aligned with the overall Strategy and Vision for the Agricultural Sector to the year 2030.
- 3) A secretariat committee, consisting of 24 persons, who are responsible for writing the detailed chapters of the policy.

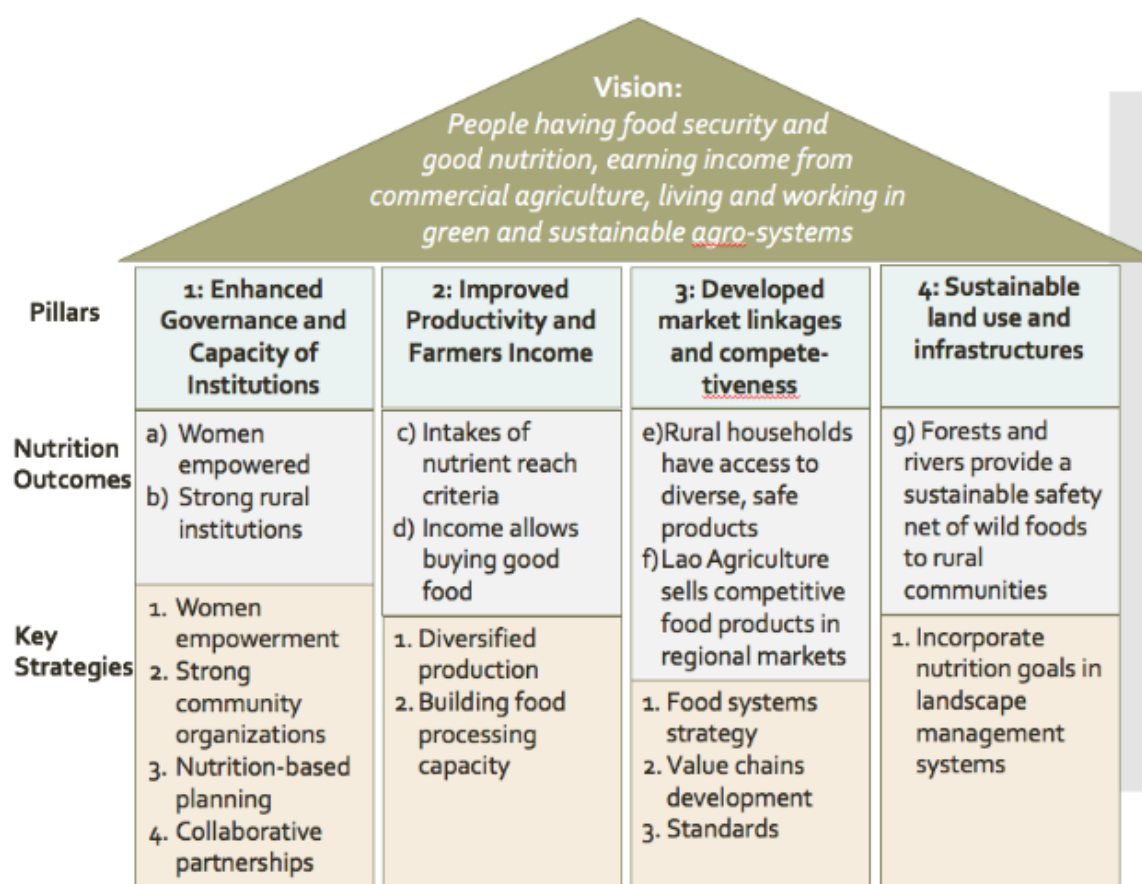
The main process for writing the policy comprises three steps: (a) assessing where we are now (looking at past achievements, lessons learned, emerging issues), (b) setting goals for the next five years (where we want to be) and (c) describing strategies and steps, methods (how we will get there).

The first rounds of planning have resulted in a draft strategy that will be people-centred and based on four pillars:

1. Enhanced governance and capacity of institutions.
2. Increased productivity and farmer incomes.
3. Developed market linkages and competitiveness.
4. Sustainable land use and infrastructures.

Figure 18 gives an example of how nutrition outcomes and nutrition-sensitive strategies could be incorporated in the four pillars.

FIGURE 18: OUTLINE OF KEY OUTCOMES AND STRATEGIES FOR PROMOTING NUTRITION-SENSITIVE AGRICULTURE



Arising from the concept of four pillars being developed for the new Agricultural Development Strategy 2020–2025 by the Ministry of Agriculture and Forestry.

SOURCE: DISCUSSIONS WITH STAKEHOLDERS IN SUBREGIONAL WORKSHOPS, OCTOBER–NOVEMBER 2019.

Under pillar 1, the key outcomes would be empowered women and strong rural institutions (producer groups, consumer groups, cooking groups, rural advisory service providers, nutrition committees). The main strategies would include capacity-building for women’s empowerment and equitable gender roles, nutrition-based planning processes and collaborative partnerships with CSOs and the private sector.

Under pillar 2, the key outcomes would be improved intakes and diversity of food categories, as well as reduced malnutrition indicators, more income and higher diversity of foods being bought. The strategies would include diversification of production (PAs 1 and 2, sustainable production of crops and livestock) as well as capacity-building on food processing and storage techniques.

Under pillar 3, the desired outcomes would be improved access to safe, affordable and diverse foods for rural households, as well as an emerging niche food products sector that are competitive in Southeast Asia. The strategies would include the adoption of a food systems strategy with support for all elements in food value chains as well as the wider food environment and the mainstreaming of standards for food safety and quality.

Under pillar 4, the desired outcome would be that forest and water resources are managed sustainably so as to produce a range of wild foods (NTFP, fish and other aquatic animals) that continue to provide a diverse safety net for rural households. The main strategy would be to incorporate nutrition goals in existing landscape management systems.

9. Overall credibility of current policies and practices

This section is aimed at answering key question 7: *Considering the above analysis what is the realism/credibility of the current set of policies and strategies?*

A. Conclusions from the policy effectiveness analysis

Issues

Food security has been achieved at the national level since 2011, but it remains an issue for the poorest households living in remote rural areas. They struggle with persistent rice shortages in a rainfed upland environment and poor access to markets and are increasingly vulnerable to the impacts of climate change.

Malnutrition is still an important national challenge, which could impede graduation of the country out of LCD status by 2025. Key indicators such as stunting, wasting and anaemia are still high and not falling fast enough.

The differences between food security and nutrition security are not yet well understood among many agricultural officers, especially at province and district level. There is a tendency to focus on thinking about nutrition in terms of production targets, ignoring other pathways between agriculture and nutrition.

Drivers

The main drivers of malnutrition are poor diversity of diets, poverty and food insecurity in remote areas, poor maternal and child care practices, restricted access to health services, clean water, sanitation and hygiene. These factors reinforce each other and can only be effectively contained by a multisectoral approach. Other factors are gaining more recognition, such as women's workloads, lack of access to food in markets, safety and durability of foods.

Policy framework

There is a strong NNS and there has been considerable foreign donor support in the field of nutrition. There is a wider recognition that nutrition requires a multisectoral approach. Among the 22 priority actions in the NNS, four are the responsibility of the agriculture sector: (a) production of nutritious crops, (b) production of animal proteins from livestock, (c) processing of food, access to food and food value chains and (d) natural resource management and income generation from sustainable production of wild food products.

The Agricultural Development Strategy 2016–2020 was mainly focused on the transformation from subsistence agriculture to commodity production for market. Since 2017, MAF has adopted an NSA approach, in the context of the four priority actions. Interventions aimed at diversifying food production have been partly successful but do not yet lead to measurable changes in diets. Very little work has been done on access to nutritious food and food processing, empowerment of women and gender roles, linking nutrition knowledge to food production practices, embedding nutrition goals in natural resource management.

Nutrition has become one of the biggest agenda points in the dialogue between foreign aid

donors and the Lao PDR Government. Several strong coordination mechanisms among development partners are in place to promote a coherent strategy for addressing nutrition.

Emerging issues

At the global level, the impacts of urbanization are seen as the most important emerging issue in policies promoting agriculture for nutrition. This is less of an issue in Lao PDR, where 70 percent of the population resides in rural areas, but some emerging global policies could also be applied: transforming agrifood systems, scaling-up non-farm income opportunities, improving living conditions in rural areas and reforming rural governance.

At the national level, the key emerging issues that are likely to affect agriculture's impact on nutrition are:

- Increased income does not lead to more diet diversity in rural areas.
- Increased women's workloads have a negative impact on child nutrition.
- Unemployment among rural youth is growing.
- Climate change is creating more risks to food and nutrition security.
- Consumers demand for safe, affordable food.
- Problems associated with obesity and overweight are imminent.
- The telecommunications revolution creates new opportunities.
- Rapid development of regional transport links and hubs opens up new market opportunities.

Implementation mechanisms, capacities and reach

The main implementation mechanism is for PAFO and DAFO to support rural communities in implementing NSA practices, mostly in the context of foreign aid supported projects. Consulted stakeholders identified a number of gaps:

a. Gaps in nutrition planning and policies:

1. Coordination among central, province, district and community levels on nutrition interventions is still poor.
2. There are no clear guidelines for developing local nutrition plans.
3. There is little collaboration between government and the private sector to address nutrition issues.

b. Gaps in capacity

4. Capacity-building is very variable; there is no structured approach to build knowledge on NSA, either for communities or government staff.
5. Few staff are trained in nutrition and few are available to work on nutrition:
 - a. There is a halt to creating new positions or taking on volunteers in all government offices. It will be very difficult to expand the government workforce. The only realistic way to increase numbers of front line staff is to engage in more partnerships with CSOs and the private sector.
 - b. The government agricultural extension system is not functioning well due several intrinsic factors, current approaches focus more on developing rural advisory services capacity through partnerships with civil society and the private sector.

- c. Fragmentation of staff distributed over many divisions in district agricultural offices means very few staff are available for working on nutrition in villages.
 - d. Many agricultural officers spend most of their time issuing and monitoring various permits, which can be lucrative as it opens the door to rent-seeking behaviour
6. The capacity for developing good models for NSA is still limited.

(c) Gaps in resources

- 7. NSA activities are not specifically mentioned in work plans, making it difficult to allocate working budgets for them.
- 8. Budgets are either disbursed through the agriculture department or the health department and it is difficult to share with each other or with the LWU.

(d) Gaps in reach

- 9. Several of the 75 priority districts have been identified, but nutrition-sensitive interventions are not always focused on areas with the highest needs.

Resource allocation

There is a structural budget deficit in public expenditures in health, agriculture and nutrition. Government budgets can barely cover salaries, running costs and basic capital investments in buildings, and there is hardly any budget remaining for implementing activities. Almost all the implementation budgets are derived from foreign assistance funding. This is not sustainable in the long run. The government is embarking on a policy of financial reform, but it will take several years before this may be expected to make more public expenditure funding available for implementing activities.

Foreign assistance funding for nutrition is growing, but the funds committed to date still fall short of what is required. Over 2016–2020, USD 90 million were committed to NSA, which would cover 63 percent of the target of USD 144 required. There are no figures yet for the period 2020–2025. While donor funding is expected to increase, there is likely a large gap remaining.

Political analysis

The key policy changes needed for stronger impact from agriculture on nutrition include:

- Stronger political will to prioritize nutrition as a national priority and more specifically in the agriculture sector.
- More space for CSOs, farmer organizations, consumer organizations.
- Stronger governance to improve investor confidence.
- Reforms in government finances to have more public budget for implementing nutrition activities (working budgets).
- More public debate on how to deal with emerging issues.

The main actors in favour of policy changes in the nutrition sector are the government, with the NNC as its main instrument, and foreign aid donors and INGOs. Their main channel of conversation is the process of RTMs. The missing voices in the sector are those of consumers and farmer representatives. There are no strong consumer organizations and there are no strong farmer organizations. Without stronger civil society mobilization, there is a risk that political will remains limited to policy makers and is not embraced at all levels of society.

Leadership in the sector now rests mainly with the NNC, which has resulted in good coordination

of budget support from foreign aid agencies to relevant government agencies. The weakness is that other ministries see nutrition primarily as the task of the Ministry of Health, which also hosts the NNC. This weakens the ability of the NNC to engage other ministries in nutrition activities.

The main constraints limiting state action are the lack of human and financial resources. At the same time, the state concentrates all powers for executing such work in its own institutions, leaving very little space for other actors such as CSOs and the private sector to evolve. Two types of policy change would improve the impact of nutrition intervention: (a) Improved efficiency of the government system and (b) Provision of more space for CSOs to work at grass roots level and provision of incentives to the private sector for investing in food value chains and food processing.

At present, the spaces for negotiating policy changes are the five-year government strategy formulation cycles and the dialogue between government and development partners (RTM). The challenge is to create more space for consumer and producer organizations to develop and participate.

The key capacities needed to be able to achieve real policy changes in agriculture for nutrition are:

- Developing a food systems approach for engaging stakeholders towards a common goal.
- Strengthening horizontal and vertical knowledge development and networking.
- Promoting platforms for policy dialogue, allowing stakeholders to interact, where the government takes less of a central role.
- Strengthening strategic capacity of individuals and institutions in agriculture for nutrition.

B. Key gaps in the agricultural sector strategy regarding food security and nutrition to be addressed in the 2020 review process

Key gaps can be identified in each of the four pillars of the ADS:

Pillar 1: Enhanced capacities of institutions and governance

- 1)** Add clear strategies and mechanisms for empowering women in agriculture and nutrition (DoPLA/Sub-CAW, LWU).
- 2)** Develop a participatory nutrition-planning mechanism under the umbrella of the NNC, where village nutrition plans are based on needs assessments and then integrated into district and province nutrition plans, which can be funded in a decentralized manner.
- 3)** Develop mechanisms for partnership with CSOs and the private sector to fill the human resource gap in front line extension positions at subdistrict level.
- 4)** Mainstreaming nutrition in the ADS and organizations:
 - a.** Put nutrition as a higher goal, on the same level as commodity production in the overall vision for agriculture, following the guidance of resolution No. 7 of the Central Party Committee on the development of the 10th Agricultural Development Plan.

- b. Add clear nutrition objectives and indicators, based on the four PAs of the NNS. This should include a road map with milestones for achieving government goals, to improve local ownership and reduce dependency on development assistance projects (DoPLA).
 - c. Define strategies for all the six pathways for addressing malnutrition and fit them in the future policy framework of the four pillars for agricultural development being developed by MAF (DoPLA).
 - d. Ensure that there are clear, separate planning and budget lines in annual plans for nutrition-sensitive activities at all levels.
- 5) Foster political will and commitment to prioritizing nutrition among all levels of society.

Pillar 2: Increased productivity and farmer incomes

- 6) Strengthen research and development of models for diversification crops.
- 7) Promote production and consumption of animal protein from fish and livestock (DoLF).
- 8) Develop a clear strategy for improving food storage and processing (DTEAP).
- 9) Develop a collaborative strategy for linking nutrition promotion and education with agricultural production with the ministries of health and education.

Pillar 3: Developed market linkages and competitiveness

- 10) Develop a strategy for food value chain development and rural entrepreneurship (DTEAP, SME, CoC).
- 11) Develop a strategy for improving market access for rural consumers (DTEAP, SME, CoC).
- 12) Promote safe food standards (DoA, DTEAP).
- 13) Promote healthy food habits among consumers (DTEAP).

Pillar 4: Sustainable land use and infrastructures

- 14) Include mechanisms to secure access and sustainable use of wild foods in processes for protecting natural resources (DoF, DALAM).
- 15) Strengthen rural institutions such as village producer groups, resource management groups, cooking groups as well as rural advisory services (DTEAP).

Add mechanisms for implementation:

- 16) Assign a central unit to build strategic capacity for policy change to promote agriculture for nutrition among all departments of MAF, in PAFOs and DAFOs, and well as among stakeholders in the Community of Practice.
- 17) Update mechanisms for collaborating with other ministries for achieving SDG goals under the NNS (DPF). Create more ownership of all ministries involved, and to enable inclusion of other agencies such as the LWU.

Include indicators for food and nutrition security, including diet quality indicators, in the existing agricultural database and regular reporting mechanisms of MAF.

10. Prioritizing policy areas and gaps in implementation for resource allocation

This chapter is aimed at answering question 8: *Considering the above analysis and given a scenario of continued resource and capacity constraints, what areas of the policy framework and what implementation capacity gaps should be prioritized for resource allocation?*

A. Suggested criteria for prioritizing policy areas, gaps in implementation and resource allocation

The preceding chapters have yielded various suggested policy changes to increase impact on nutrition in Lao PDR. The FAO-FIRST methodology proposes seven criteria for prioritizing them (see Table 6).

TABLE 6: SEVEN CRITERIA FOR PRIORITIZING POLICY CHANGES IN AGRICULTURE FOR NUTRITION

Criticality:	How critical is the issue to ensuring food security and nutrition for the vulnerable populations? Consider a qualitative scale: low–medium–high, with high indicating that without addressing the particular bottleneck, no change can be made.
Scale of impact:	Are we talking about national level impact or impact for a certain area or population group?
Depth of impact:	How significant is the impact on the target communities?
Time:	Over what period do you realize impact? Consider: Short (within several years, possible within current resource and capacities) Medium (dependent on new resources and capacities) Long (beyond current policy frameworks, needing shifts in policy orientation, resources, and capacities)
Sustainability:	Whether the impact will be self-sustaining beyond the period of support
Feasibility:	How feasible is the proposed option for change? (1) Politically (will you have political support?) (2) Economically (what type of resources are needed?).
Who:	Who is anticipated to take a lead in organizing improvements, in funding, in carrying out related services? Public sector, private sector, development agencies, certain donor, public-private partnership, UN, etc.

SOURCE: FAO-FIRST GUIDELINES FOR POLICY EFFECTIVENESS ANALYSIS.

B. Prioritization of policy changes for food security and nutrition

This section applies the criteria described above to key policy changes brought forward in this analysis. Overall, the challenge is to link the ADS structurally to the NNS to build a coherent food systems framework. There should be an on-going discourse on how the food system can deliver sustainable healthy diets and address causes of malnutrition. This should provide a technical compass to identify entry points for the agricultural sector as well as areas of convergence that can help fill funding gaps. Adapting a nutrition-sensitive approach would provide a practical framework for mainstreaming nutrition within the agriculture sector.

The DoPLA within MAF has already started to develop the new Agricultural Development Strategy 2021–2025. They are developing an approach that is based on four pillars:

Pillar 1: Enhanced capacities of institutions and governance

Pillar 2: Improved productivity and farmer income

Pillar 3: Developed market linkages and competitiveness

Pillar 4: Sustainable land use and infrastructures

Over the following sections, key policy changes that could promote food and nutrition security are suggested for each of the four pillars.

Pillar 1: Enhanced capacities of institutions and governance

Five policy changes could be prioritized here (see Table 7):

1. empowering women and gender balance;
2. nutrition-based planning for cross-sectoral impact;
3. partnerships with CSOs and the private sector;
4. mainstreaming nutrition in MAF's strategy and organization; and
5. fostering political will to prioritize nutrition.

TABLE 7: PRIORITIZING POLICY CHANGES UNDER PILLAR 1

Description of the priority	1: Empowering women and gender balance	2: Nutrition-based planning for better cross-sectoral impact	3: Partnerships with CSOs and the private sector	4: Mainstreaming nutrition in MAF strategy/organization	5: Fostering political will to prioritize nutrition
Policy process	National Gender Action Plan	National Nutrition Strategy	National Nutrition Strategy	National Agriculture Development Strategy	NSEDP, National Assembly
Key changes to support	Women have more freedom to choose their time spent on income or care, more representation and leadership and their own organizations	Format for village nutrition and development plans with targets/ indicators, assembled into district/ province plans/budgets	Government policy promotes partnerships, less restrictive policies on CSOs, more enabling environment for investors in agrifood sector	Nutrition is a central theme in the agricultural strategy. Specific nutrition-sensitive activities are included in work plans/ budgets at all levels	Nutrition is visible in government policies and actions, and supported by strong societal organizations (e.g. consumer organizations)
Core capacities to develop	Facilitation skills for women's empowerment and gender equality, dedicated staff	Nutrition committees at all levels are capable of planning, monitoring and reporting nutrition plans	Mobilizing more field staff working on nutrition by smart partnerships between government, CSOs and the private sector	There is a focal unit for mainstreaming nutrition and building strategic capacities. All departments have nutrition focal persons	Strong leadership, effective actor networks, CSO mobilization, societal change, governance
Key local stakeholder	Sub-CAW, LWU	NNC, nutrition committees at all levels, PAFOs, DAFOs	MAF, MPI, MIC	MAF, NNC	National Assembly, PM Office, various policy support networks
Key development partner(s)	EU, FAO, IFAD, WB, CSO partners	UN partners (WFP, UNICEF, WHO), EU, WB	Bilateral donors	FAO	RTM mechanism

Criteria	1: Empowering women and gender balance	2: Nutrition-based planning for better cross-sectoral impact	3: Partnerships with CSOs and the private sector	4: Mainstreaming nutrition in MAF strategy/organization	5: Fostering political will to prioritize nutrition
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Criticality	High: women's workloads caused by agricultural transformation are a big underlying cause of malnutrition	High: lack of nutrition based planning is a key bottleneck to effective cross-sectoral collaboration	High: lack of frontline agents cannot be filled because government lacks resources. Other inputs are required to reach impact	High: PAFOs and DAFOs cannot work on nutrition if it is not clearly included in their annual work plans and budgets	High: without political commitment, most of the strategies proposed by stakeholders will not happen
Scale	Village level	Village, district, province	Village/cluster/district	Inside agricultural offices	Nationwide
Depth	Impact on target groups depends on intensive capacity building inputs	Impact will depend on good process and enough funding for follow-up	Impact will depend on space given for community-based organizations (CBOs)	Impact on communities through better rural service delivery	Impact on communities through nationwide mobilization
Time	Medium: pilot projects showed visible impact after 3–4 years	Medium: pilot projects showed visible impact after 3–4 years	Medium: pilot partnerships should show visible impact after 3–4 years	Short: new strategy April 2020. Medium: building strategic capacity	Long: it will take time to mobilize awareness and new societal organizations
Sustainability	High: once capacity is built, it is permanent and is likely to have a lasting effect	Medium: will initially depend on external funding of village activities	Medium: duration of partnerships will depend on success for continued funding	High: once nutrition is mainstreamed in the 5-year strategy, it is likely to stay there	High: Political commitment drives all other actions
Feasibility	High: Approaches already exist in Lao PDR, only need scaling-up	Medium: still in pilot phase, needs technical support to scale up	Medium: for CSOs, pilots exist, for private sector, not yet	High: MAF is already working on nutrition-sensitive agriculture	Medium: depends on space given to societal organizations
Who	Sub-CAW, LWU, WB	NNC, EU	SUN-PS, EU	MAF FAO	NA, RTM

Pillar 2: Improved productivity and farmer income

Three policy changes could be prioritized here:

1. crop diversification for local consumption;
2. accelerating small livestock production for consumption;
3. enhancing food processing and storage capacity; and
4. linking nutrition knowledge to agricultural choices.

TABLE 8: PRIORITIZING POLICY CHANGES UNDER PILLAR 2

Description of the priority	6: Crop diversification for local consumption	7: Accelerating small livestock production for consumption	8: Enhancing food processing and storage capacity	9: Linking nutrition knowledge to agricultural choices
Policy process	Agricultural Development Strategy	Agricultural Development Strategy	National Nutrition Strategy	Agricultural Development Strategy
Key changes to support	Cultivating a variety of nutrient-rich crops (like beans) and consuming them	Farming households produce animal-based protein (fish, frogs, insects, meat, eggs) that they consume and sell	Farmers apply food processing and storage techniques that allow all-year round availability and add value	Farming households diversify into nutrient rich crops which they can integrate in their preferred food habits
Core capacities to develop	Fitting a range of nutrient-rich crops into existing farming systems through farmer field school approaches	Extension of animal feeding, husbandry and health care practices, fish farming and household economics	Capacity to find and adapt suitable techniques and train producer groups to apply them	Influencing consumers through modern media, cooking groups, nutrition in schools
Key local stakeholder	MAF/DoA	MAF/DoLF	MAF/DTEAP	MAF/DTEAP
Key development partner(s)	CSOs, Bilateral Donors	CSOs, Bilateral Donors	CSOs, Bilateral Donors	CSOs, Bilateral Donors

Criteria	6: Crop diversification for local consumption	7: Accelerating small livestock production for consumption	8: Enhancing food processing and storage capacity	9: Linking nutrition knowledge to agricultural choices
Criticality	High: potential of nutrient-rich crops is underutilized, especially of beans, and pulses	High: lack of proteins in children's diets is a key cause of stunting. Dairy products are almost absent in diets	High: rural women need time-saving options using processed foods that can be stored and used all year round	High, as nutrition knowledge is still limited and not applied to farming choices
Scale	Village, rural enterprises	Village, rural enterprises	Village, rural enterprises	Rural households
Depth	Impact will depend on marketability: farmers are unlikely to grow crops they cannot sell	Impact will depend on time availability of households to spend more time looking after livestock and fishponds	Impact will depend on strong linkages with private sector	Medium: not all foods needed can be produced locally, some are better bought from elsewhere
Time	Medium: 3-4 years	Medium: 3-4 years	Medium: 3-4 years	Long term
Sustainability	Medium: always market dependent	Medium: depends on markets, land availability	High: once successful techniques are found	High: once knowledge is applied it is likely to stay
Feasibility	Medium: requires large investments in farmer training and knowledge exchange	Medium: there are limits to improving productivity of smallholders	Medium: there are very few skilled people and few enterprises processing food	Medium: depends on skills and resources of frontline workers
Who	NSA-CoP, SUN-CSA	NSA-CoP	DTEAP, USAID	SUN-CSA, NSA-CoP

Pillar 3: Developed market linkages and competitiveness

Three policy changes could be prioritized here (see Table 9):

1. support rural entrepreneurship and food value chains;
2. improve market access for rural consumers;
3. scale-up safety standards in food value chains; and
4. promote healthy food habits among consumers.

TABLE 9: PRIORITIZING POLICY CHANGES UNDER PILLAR3

Description of the priority	10: Support rural entrepreneurship and food value chains	11: Improving market access for rural consumers	12: Scaling up safety standards in food value chains	13: Promoting healthy food habits among consumers
Policy process	SME, Youth and Agricultural Development Strategies	National Nutrition Strategy	National Agricultural Development Strategy	National Nutrition Strategy
Key changes to support	Lao PDR producers can produce niche food products that are competitive in regional value chains	Affordable, safe and diverse food is accessible to rural households in their communities	Food products sold anywhere in Laos comply with reliable safety standards	Consumers know what healthy food habits and products are, express demand and are willing to pay more for it
Core capacities to develop	Knowing value chains and selecting niche products with competitive advantage, have technical and business skills to gain access to value chains	Improving road access, networks and capacity-building among traders to service remote areas, cold chains and other interventions that improve access to food	Mainstreaming existing food safety standards and labelling through capacity building, networking and participatory monitoring systems	Social marketing skills and networks to promote awareness on nutrition, strengthen consumer organizations, mobilizing events
Key local stakeholder	MAF, MIC, CoC	MAF, MIC, CoC	MoH, MAF	MoH, MAF, MONRE, National Assembly
Key dev. partner(s)	EU, WB, USAID	EU, WB, USAID	CSOs	UNICEF, WHO, CSOs

Criteria	10: Support rural entrepreneurship and food value chains	11: Improving market access for rural consumers	12: Scaling up safety standards in food value chains	13: Promoting healthy food habits among consumers
Criticality	Medium: not directly contributing to rural consumption, only indirectly (income)	High: capacity to buy foods is essential to achieve diverse diets	Medium: especially relevant for urban and export markets, less for poor rural consumers	Medium: Concern for middle-class and high end consumers, less for the poor
Scale	Village level	Village/district level	National level	National level
Depth	Double impact: nutrition and income	High priority for rural communities	Less for rural consumers, high for urban consumers	Should be able to reach all Laotian citizens, both urban and rural
Time	Medium: 4–5 years	Medium: 3–4 years	Long-term	Long-term
Sustainability	Initially outside support is needed, later It should sustain itself	Initially outside support is needed, later It should sustain itself	Yes, if driven by private sector	Yes, if social dividends for country are considered
Feasibility	Regional markets are very competitive	Depends very much on investment in rural feeder roads	Legislation already in place, focus on capacity/institution building	Social marketing capacities exist but need to focus on this sector
Who	MIC, CoC, DoA, LYU	MIC, CoC, DTEAP	DoA, USAID	Sub-CAW, Safe the Children

Pillar 4: Sustainable land use and infrastructures

Two policy changes could be prioritized here:

1. incorporating nutrition goals in landscape management systems; and
2. strengthening local institutions.

TABLE 10: PRIORITIZING POLICY CHANGES UNDER PILLAR 4

Description of the priority	14: Incorporate nutrition goals in upland landscape management systems	15: Strengthen governance in local institutions and infrastructures
Policy process	Forestry Strategy and Land Management Strategy	N-GPAR, NSEDP
Key Changes to support	Community land and forest management plans include goals and rules safeguarding access and sustainable use of wild food resources	Strong Community-Based Organizations (CBO) of producers, consumers, resource managers and strong rural advisory services (RAS) institutions
Core capacities to develop	(3) Processes for linking agriculture, natural resources and nutrition (LANN)	Leadership, governance, legal status and representation of local institutions
Key local stakeholder	MAF/DaLAM, MONRE	Ministry of Interior, MAF-DoPLA
Key development partner(s)	World Bank, GIZ, JICA, EU	UNDP, CSOs, EU

Criteria	14: Incorporate nutrition goals in upland landscape management systems	15: Strengthen governance in local institutions and infrastructures
Criticality	High: wild foods (NTFPs) are a safety net for rural communities, especially for the poor	High: without strong local institutions, actual resource management will not happen
Scale	Communities, districts, watersheds, protected areas	Village/district
Depth	Main interest of communities in forests is for daily food collection	Getting more relevant as communities get bigger
Time	Medium, 3–4 years	Long term
Sustainability	Depends on rights given to communities to govern resources	Difficult to predict
Feasibility	Medium: land-use planning is expensive, so far has had limited impact on protecting community access to natural resources	Medium: depends on political will to devolve power to local communities
Who	DaLAM, SDC, GIZ, USAID	Ministry of Interior, UNDP, GIZ

CONCLUSIONS ON PRIORITIZATION OF POLICY CHANGES

Looking back at these fifteen policy changes, they can be prioritized as follows:

Two policy changes go beyond the agriculture sector and will need to be addressed at national policy level:

- 1) Fostering political will to prioritize nutrition; and
- 2) Developing a nutrition-based planning mechanism.

Within the agriculture sector, there is one policy change that can be addressed in the short term:

- 3) Mainstreaming nutrition in the ADS and MAF, developing stronger convergence mechanisms for linking the Agricultural Development Strategy to the National Nutrition Strategy.

Most of the other policy changes can be achieved on the medium term: the most urgent are those policies that are critical for success but received little attention to date:

- 4) Developing capacity to address women's empowerment and gender equality in agriculture;
- 5) Improving market access for rural consumers;
- 6) Enhancing food processing and storage capacities;
- 7) Strengthening governance of local institutions, and
- 8) Partnerships with CSOs and the private sector, creating an enabling environment.

Other changes on the medium term are also urgent but there is already a basis of experience:

- 9) Crop diversification for local consumption;
- 10) Accelerating small livestock production for consumption;
- 11) Linking nutrition knowledge to agricultural choices;
- 12) Supporting rural entrepreneurship and food value chains, and
- 13) Incorporating nutrition goals in landscape management systems.

Lastly a few policy changes will require a long-term perspective:

- 14) Scaling-up safety standards in food value chains; and
- 15) Promoting healthy food habits among consumers.

References

- ADB, 2006. Governance Issues in Agriculture and Natural Resources. <https://www.adb.org/sites/default/files/evaluation-document/35925/files/governance-issues-lao.pdf>
- Asian Briefing, 2018. Laos Increases Minimum Monthly Wage for the Third Time in Eight Years. <https://www.aseanbriefing.com/news/2018/05/31/laos-increases-minimum-monthly-wage-third-time-eight-years.html>
- Babu, S.C. 2019. Nutrition Sensitive Food System. Policy Analysis and Investment Framework for Myanmar. IFPRI Discussion Paper 01840. <https://www.ifpri.org/publication/nutrition-sensitive-food-system-policy-analysis-and-investment-framework-myanmar>
- Baird, 2010. Quotas, Powers, Patronage and Illegal Rent Seeking: The Political Economy of Logging and the Timber Trade in Southern Laos. Forest Trends. [https://www.academia.edu/1049244/Quotas Powers Patronage and Illegal Rent Seeking The Political Economy of Logging and the Timber Trade in Southern Laos](https://www.academia.edu/1049244/Quotas_Powers_Patronage_and_Illegal_Rent_Seeking_The_Political_Economy_of_Logging_and_the_Timber_Trade_in_Southern_Laos)
- Baker, P. *et al.* 2018. What drives political commitment for nutrition? A review and framework synthesis to inform the United Nations Decade of Action on Nutrition. <https://gh.bmj.com/content/3/1/e000485>
- Baldwin, M. 2015. Women's Empowerment for improving community nutrition. SUN-CSA. <https://www.suncsalaos.org/download/womens-empowerment-for-improved-community-nutrition-report/>
- Bertelsmann Stiftung, 2018. Transformation Index (BTI) country report for Laos. <https://www.bti-project.org/en/reports/country-reports/detail/itc/lao/ity/2018/itr/aso/>
- Boupao, L *et al.*. 2016. Strategic Review of Good and Nutrition Security in Lao People's Democratic Republic. <https://www.directoryofngos.org/a/download?id=document2227&field=file¬etype=document&file=Rk5TIHN0cmF0ZWdpY19yZXZpZXdfTG9VX3Bkcl9qdWwxNi5wZGY=>
- FAO, 2012. Lao PDR Rice Policy Study 2012. http://www.fao.org/fileadmin/user_upload/tci/docs/1_Laos%20document%20low%20resolution.pdf
- FAO, 2015. Compendium of indicators for nutrition-sensitive agriculture. <http://www.fao.org/3/a-i6275e.pdf>
- FAO, 2019. Food and Nutrition Security Impact, Resilience, Sustainability and Transformation programme (FIRST). <http://www.fao.org/europeanunion/eu-projects/first/en/>
- FAO-GIEWS, 2019. Country Brief for the Lao PDR. <http://www.fao.org/giews/countrybrief/country.jsp?code=LAO>
- Foppes, 2011. Understanding Food Security in Northern Laos: An analysis of household food security strategies in upland production systems. NAFRI-Nurifar. https://www.academia.edu/9358933/Understanding_Food_Security_in_Northern_Laos_An_analysis_of_household_food_security_strategies_in_upland_production_systems
- Foppes, J. and Sengyavong, V. 2017. Case Study on Nutrition-Sensitive Agriculture in Lao PDR. MAF-Helvetas.
- Fullbrook, D. 2010. The food security paradox in Laos. https://www.researchgate.net/publication/265825921_Development_in_the_Lao_PDR_the_food_security_paradox
- Gupte and Longhurst, 2019. How do the state's organisational capacities at the micro- and macro-levels influence agriculture-nutrition linkages in fragile contexts? Food Policy, Volume 82, January 2019, pp 74-83. <https://www.sciencedirect.com/science/article/pii/S0306919218308388>
- HLPE, FAO, 2017. Nutrition and Food Systems. A Report by the High Level Panel of Experts on Food Security and Nutrition. <http://www.fao.org/policy-support/resources/resources-details/en/c/1155796/>
- IFPRI, 2017. Global Policy Report 2017. <http://www.ifpri.org/publication/2017-global-food-policy-report>

IFPRI, 2019. Global Policy Report 2019. <http://gfpr.ifpri.info/>

International Trade Administration, ITA, 2019. Laos-Market-Challenges. <https://www.export.gov/article?id=Laos-Market-Challenges>

Intralawan *et.al.* 2017. Economic Evaluation of Hydropower Projects in the Lower Mekong Basin. <http://www.mrcmekong.org/assets/Uploads/Final-report-Mekong-Study-March-2017-8.pdf>

Kennedy, E. *et.al.* 2018. Impact of Social and Behavior Change Communication in Nutritio Sensitive Interventions on Selected Indicators of Nutritional Status. Human Nutrition 2018 2(1):24-33. https://resourcecentre.savethechildren.net/node/13787/pdf/sbcc_in_nsa.pdf

LYA, 2014. Adolescent and Youth Situation Analysis in Lao PDR. Lao Youth Organization. https://lao.unfpa.org/sites/default/files/pub-pdf/Final_Eng_AYSA%20Report.pdf

MAF, 2013. Strategic Implementation Plan for the Fisheries Sector in Lao PDR. <http://dlf.maf.gov.la/wp-content/uploads/2018/05/Process-of-SIP-development-and-interpretation-of-content-NickSFS.pdf> see also: http://www.fao.org/fishery/legalframework/nalo_laos/en

MAF, 2015. Development Strategy of the Crop Sector 2025 and Vision to 2030. https://www.asean-agrifood.org/?wpfb_dl=81

MAF, 2015. Agricultural Development Strategy to 2025 and Vision to the Tear 2030. Ministry of Agriculture and Forestry. <http://www.maf.gov.la/wp-content/uploads/2016/01/MDS-2025-and-Vision-to-2030-Eng.pdf>

MAF, 2017. Policy Development for the Livestock Sub-sector of the Lao PDR. Ministry of Agriculture and Forestry.

MAF, 2018: Mid-Term Review of the Agricultural Responsibilities within the National Plan of Action for Nutrition (2016-2020).

MAF, 2019. Annual report of Ministry of Agriculture and Forestry over the fiscal year 2018-2019 (in Lao language).

MAF-DoPLA/FAO, 2019. Report on Sub-National Consultations about the policy effectiveness analysis in agriculture for nutrition.

MIP, 2016. 8th Five-Year National Socio-economic Development Plan (2016-2020). Ministry of Planning and Investment, http://www.la.one.un.org/images/publications/8th_NSEDP_2016-2020.pdf

MIP, 2019. Criteria for LDC Graduation. Ministry of Investment and Planning, Lao PDR. <https://rtm.org.la/nsedp/criteria-ldc-graduation/>

MoLSW, 2019. National Rural Employment Strategy. Ministry of Labor and Social Welfare, Lao PDR. https://www.ilo.org/asia/publications/WCMS_372784/lang--en/index.htm

NIPN, 2019. Overview of the Nutrition Information System in Lao PDR. <http://www.nipn-nutrition-platforms.org/IMG/pdf/nutrition-info-system-laos.pdf>

NIPN, 2019. Multiple Overlapping Deprivation Analysis on Stunting of Children under 5 years in Lao PDR. National Information Platform for Nutrition. http://www.nipn-nutrition-platforms.org/IMG/pdf/multiple_overlapping_deprivation_analysis_moda_on_stunting_among_children_under_5_years_in_lao_pdr.pdf

NNC, 2015. National Nutrition Strategy to 2025 and plan of action 2016-2020. National Nutrition Committee, Lao PDR. http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/lao_peoples_democratic_republic/final_lao_version_nnsa_2016_matrix_updated_21_dec_2015_-_part_1_rta_.pdf

NNC, 2019. Mid-Term Review of the National Nutrition Strategy and Plan of Action 2016-2020. National Nutrition Secretariat with support from Unicef and the European Union.

Nolintha, 2018. Lao PDR's fruit production for export- a case of watermelon in Luang Namtha Province. Bangkok Research Centre, JETRO. https://www.ide.go.jp/library/English/Publish/Download/Brc/pdf/21_03.pdf

Our Promise Lao PDR, Social Behaviour Change Communication (SBCC) campaign for Save the Children

in Lao PDR. <http://www.runningreel.net/2019/01/10/our-promise-lao-pdr/>

Pelletier, D. *et.al.*, 2011. The nutrition policy process: the role of strategic capacity in advancing national nutrition agendas. Article in Food and Nutrition Bulletin, June 2011.
[file:///Users/jfoppes/Google%20Drive/2019%20jobs/08 FAO First MAF nutrition policy review/Library/Governance%20in%20agriculture/Pelletier The Nutrition Policy Process The Role of Strategic.pdf](file:///Users/jfoppes/Google%20Drive/2019%20jobs/08%20FAO%20First%20MAF%20nutrition%20policy%20review/Library/Governance%20in%20agriculture/Pelletier%20The%20Nutrition%20Policy%20Process%20The%20Role%20of%20Strategic.pdf)

Radio Free Asia, RFA, 2018. Civil Society groups in Laos delayed funding, forced to disband under new law. <https://www.rfa.org/english/news/laos/csos-01242018122715.html>

Radio Free Asia, RFA, 2019. <https://reliefweb.int/report/lao-peoples-democratic-republic/severe-drought-mekong-region-reduces-rice-planting-laos>

Round Table Meeting Website Laos: <https://rtm.org.la>

SEAPA, 2019. <https://www.seapa.org/laos-screws-on-online-discourse-get-even-tighter/>

SNV, 2019. Enhancing Nutrition of Upland Farming Families (ENUFF). <https://snv.org/project/enhancing-nutrition-upland-farming-families-enuff>

SUN-CSA, 2018. Training Materials on Linking Agriculture, Natural Resources Management and Nutrition (LANN). Sun-CSA Network Laos. <https://www.suncsalaos.org/download/1527/>

SUN, 2019. Lao Country Report. https://scalingupnutrition.org/wp-content/uploads/2019/10/SUN_Report_EN_2019_Country_Lao_PDR.pdf

SURAFCO, 2014. Tracer study of graduates 2013 & 2014, Northern Agriculture and Forestry College. https://data.opendevdevelopmentmekong.net/library_record/2013-2014-nafc

UNICEF, 2019. Nutrition Forum takes stock of progress on nutrition of Lao children and families. <https://www.unicef.org/laos/press-releases/nutrition-forum-2019>

UNDP, 2017. Lao People's Democratic Republic: Financing the future with an integrated national financing framework. <https://www.undp.org/content/dam/rbap/docs/dg/dev-effectiveness/RBAP-DG-2018-Development-Finance-Assessment-Snapshot-Lao-PDR.pdf>

UNDP website, SDG2 Zero Hunger, 2019. <http://www.la.one.un.org/sdgs/sdg-2-zero-hunger>

UNDP Laos, 2019. Round Table Implementation Meeting to take stock of Lao PDR's development progress. <http://la.one.un.org/media-center/news-and-features/539-2019-round-table-implementation-meeting-to-take-stock-of-lao-pdr-s-development-progress>

USDA, 2019. Laos Rice Report MY2018-2019. [https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Laos%20Rice%20Report%20MY2018-2019 Bangkok Laos 2-6-2019.pdf](https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Laos%20Rice%20Report%20MY2018-2019%20Bangkok%20Laos%202-6-2019.pdf)

WFP, 2017. Fill the Nutrition Gap in Lao PDR. September 2017. <https://www.wfp.org/publications/2017-fill-nutrient-gap-lao-pdr>

WHO, 2019. Nutrition Program in Lao PDR. <http://www.wpro.who.int/laos/topics/nutrition/en/>

WHO, 2019. <https://www.who.int/nutrition/global-target-2025/en/>

World Bank, 2016. Nutrition in Laos: causes, determinants and bottlenecks. <http://documents.worldbank.org/curated/en/706941471934533652/Nutrition-in-Lao-PDR-causes-determinants-and-bottlenecks>

World Bank-MAF, 2017: Social Assessment for the Lao Reducing Poverty and Malnutrition Project. <http://www.maf.gov.la/wp-content/uploads/2018/10/Social-Assessment.pdf>

World Bank, 2017. Lao Economic Monitor. Challenges in promoting more inclusive growth and shared prosperity. <http://documents.worldbank.org/curated/en/334091494603178415/pdf/115000-WP-P158830-PUBLIC-LaoEconomicMonitorAprilChallengesinpromotingmoreinclusivegrowthandsharedprosperity.pdf>

World Bank, 2019. Doing Business in Lao PDR: Constraints to Productivity.

<https://www.worldbank.org/en/country/lao/publication/doing-business-in-lao-pdr-constraints-to-productivity>

World Obesity, 2019. Global Atlas on Childhood Obesity.

<https://www.worldobesity.org/nlsegmentation/global-atlas-on-childhood-obesity>

Working Group on Health: <https://rtm.org.la/sector-working-groups/health/>

Working Group on Agriculture and Rural Development: <https://rtm.org.la/sector-working-groups/agriculture-rural-development/>

Xinhuanet, 2018. http://www.xinhuanet.com/english/2018-09/12/c_137462724.htm

