

NATIONAL PLANS of ACTION for ***Nutrition***

In Southeast Asian Countries – A Review

A monograph of



ABOUT SEA-PHN NETWORK

The Southeast Asia Public Health Nutrition (SEA-PHN) Network, established in 2014, is a network among five nutrition societies/associations in the region, namely Food and Nutrition Society of Indonesia, Nutrition Society of Malaysia, Nutrition Foundation of the Philippines, Inc., Nutrition Association of Thailand and Vietnam Nutrition Association. In the spirit of public-private collaboration, selected corporate companies have been collaborating with the Network by providing financial support and technical input that are strictly not for commercial interests. This unique partnership is aimed at establishing and maintaining an interactive network, promoting periodic exchange of activities as well as participate in collaborative public health nutrition projects. A council, comprising presidents of the partner societies/associations was established to manage the activities of the Network. Regular meetings have been organised, rotated among the member countries and participated by Council members, corporate partner technical representatives and senior government officials. A website (www.sea-phn.org) has been established to serve as repository of various available nutrition documents in the region. This multi-stakeholder, multidisciplinary Network carried out collaborative projects amongst members of the Network and corporate partners to support government efforts in community nutrition improvement.

For more information about Southeast Asia Public Health Nutrition (SEA-PHN) Network, visit: <https://sea-phn.org>

ACKNOWLEDGEMENTS

The authors acknowledge the support of Associate Members of the Southeast Asia Public Health Nutrition Network for financial support to enable activities of the Network to be carried out, including this project. Associate Members of the Network in 2017 and 2018 were Beneo GmbH, Danone Nutricia Early Life Nutrition Asia Pacific, Du Pont Nutrition & Health, Mondelez International, Nestle (Malaysia) Bhd, PepsiCo Services Asia Ltd and Tate & Lyle PLC.

The assistance of the SEA-PHN Network Secretariat, VersaComm Sdn Bhd in the implementation of this project is gratefully acknowledged, especially the professional assistance of Ms Voon Siok Hui and Ms Muhaini Hussin in the preparation of this review.

Copyright © 2018 Southeast Asia Public Health Nutrition (SEA-PHN) Network

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior permission of the copyright owners.

NATIONAL PLANS OF ACTION FOR NUTRITION

IN SOUTHEAST ASIAN COUNTRIES – A REVIEW

Authors

Tee E Siong

Hardinsyah Ridwan

Ismail Mohd Noor

May Khin Than

Rodolfo F Florentino

Saipin Chotivichien

Le Thi Hop



2018

CONTENTS

1	INTRODUCTION	1
1.1	NPANs and related documents reviewed	2
2	FORMULATION AND PRESENTATION FORMAT	5
2.1	National Food and Nutrition Action Plan Indonesia (NFNAP) 2015-2019 (BAPPENAS Indonesia, 2015)	5
2.2	National Plan of Action for Nutrition of Malaysia (NPANM) III 2016-2025 (NCCFN Malaysia, 2016)	6
2.3	Myanmar National Plan of Action for Food and Nutrition (NPAFN) 2011-2015 (NNC Myanmar, 2013)	7
2.4	Philippine Plan of Action for Nutrition (PPAN) 2017-2022 Executive Summary (NNC Philippines, 2017)	7
2.5	2nd National Reproductive Health Development Policy and Strategy (2017-2026) on the Promotion of Quality Birth and Growth, Thailand (MOPH Thailand, 2017a)	8
2.6	Strategic Framework for Food Management (2018-2037) (MOPH Thailand, 2018)	8
2.7	The 5-year National Plan for Prevention and Control of Non-communicable Diseases (2017-2021) (MOPH Thailand, 2017b)	9
2.8	Vietnam National Plan of Action for Nutrition (NPAN) to 2020 (MOH Vietnam, 2018)	9
3	AGENCIES AND PARTNERS INVOLVED	13
4	GOAL AND OBJECTIVES	17
5	REPORTING ON NUTRITION SITUATION OF THE POPULATION	21
5.1	NFNAP Indonesia 2015–2019	21
5.2	NPAN Malaysia III 2016–2025	21
5.3	Myanmar NPAFN 2011–2015	22
5.4	Philippine PAN 2017–2022	22
5.5	2nd National Reproductive Health Development Policy and Strategy (2017-2026) on the Promotion of Quality Birth and Growth, Thailand	22
5.6	Vietnam NPAN to 2020	23

6	EXISTING NUTRITION POLICIES AND PROGRAMMES	25
6.1	Indonesia	25
6.2	Malaysia	25
6.3	Myanmar	25
7	REVIEW OF PREVIOUS NPANs	31
7.1	Main challenges/issues identified in implementing previous NPANs	31
7.1.1	<i>Common issues and challenges in implementing previous NPANs</i>	32
7.1.2	<i>Other challenges and issues in implementing NPANs</i>	33
8	NUTRITION ISSUES TO BE ADDRESSED	35
9	FRAMEWORK FOR NEW NPANs	39
10	IDENTIFIED STRATEGIES	43
10.1	NFNAP Indonesia 2015–2019	43
10.2	NPAN Malaysia III 2016–2025	43
10.3	Myanmar NPAFN 2011–2015	45
10.4	Philippine PAN 2017–2022	46
10.5	Vietnam NPAN to 2020	47
11	FOOD AND NUTRITION PROGRAMMES IDENTIFIED	49
11.1	Overview of programmes/activities in NPANs	49
11.1.1	<i>Indonesia</i>	49
11.1.2	<i>Malaysia</i>	50
11.1.3	<i>Myanmar</i>	50
11.1.4	<i>Philippines</i>	53
11.1.5	<i>Thailand</i>	54
11.1.6	<i>Vietnam</i>	56
11.2	Common activities identified in the NPANs and related documents	57
11.2.1	<i>Promoting good nutrition during the first 1000 days of life</i>	57
11.2.2	<i>Food and nutrition security enhancement</i>	58
11.2.3	<i>Food quality and safety enhancement</i>	59
11.2.4	<i>Dietary supplementation programmes</i>	60
11.2.5	<i>Micronutrient supplementation programmes</i>	60
11.2.6	<i>Food fortification</i>	61
11.2.7	<i>Overweight & obesity management and NCDs prevention</i>	62
11.2.8	<i>Nutrition promotion/education in school</i>	62

12	PERFORMANCE INDICATORS/OUTCOMES	65
12.1	Specific target for indicators and time frame for target	70
13	IMPLEMENTATION, MANAGEMENT, MONITORING AND EVALUATION	71
13.1	Implementation and management	71
13.1.1	<i>NFNAP Indonesia 2015-2019</i>	71
13.1.2	<i>NPAN Malaysia III 2016-2025</i>	71
13.1.3	<i>Philippine PAN 2017-2022</i>	71
13.1.4	<i>Vietnam NPAN to 2020</i>	72
13.1.5	<i>Myanmar NPAFN 2011-2015</i>	72
13.2	Advisory and administrative structure supporting/ overseeing the implementation	72
13.3	Monitoring and evaluation	73
14	FUNDING AND BUDGET FOR NPANS	81
15	DISCUSSIONS AND CONCLUSIONS	83
	REFERENCES	87
	AUTHORS	89

1 INTRODUCTION

Malnutrition in all forms jeopardises human health and development. Countries in Southeast Asia region had, in the past, carried a high burden of child undernutrition as a consequence of socioeconomic disadvantages and other social or biological determinants. The picture is now changing where economic growth and investments in education, social development and improvements in health infrastructures have resulted in remarkable improvements to the nutritional status of the population in the region. However, while undernutrition continues to persist across countries, there is parallel rise in nutritional disorders related to overnutrition. Today, most countries in the region face a double burden of malnutrition characterised by persistent undernutrition including stunting, wasting, micronutrient deficiencies and coexisting overweight and obesity across the life cycle. Concern about diet-related chronic non-communicable diseases (NCDs) has also grown as they have been found to be increasingly found to be responsible for the large proportion of the total disease burden (Shrimpton & Rokx, 2012; WHO, 2016).

The health systems of the region that were previously geared towards fighting persistent undernutrition in the past, will now need to curb the rising rates of overweight and obesity in order to reduce NCDs. The countries' food policies and plan of action for nutrition will be seen to play a major role in this context. Well-established nutrition policies and plans will help to protect and promote health and reduce the burden of nutrition-related disease while contributing to socioeconomic development and a sustainable environment. Moreover, the World Health Organization (WHO) has emphasised that unless food and nutrition plans are implemented, unsafe food and poor nutrition will be responsible for an increased economic burden from food-related morbidity and premature mortality (WHO, 2000)

The first International Conference on Nutrition (ICN) at Food and Agriculture Organization (FAO) Headquarters in Rome in December 1992 was a landmark intergovernmental conference, jointly organized by the FAO and the WHO to address global nutrition problems. One major policy decision made was for countries to prepare a National Plan of Action for Nutrition (NPAN). The NPAN is valuable in addressing nutritional issues of a particular country as it sets out a clear statement of intention and provides a firm foundation for food and nutrition initiatives in a country. It also represents a country's priorities and strategies for alleviating hunger and all forms of malnutrition. Since then, the NPANs of most countries detail specific nutrition objectives, appropriate goals, targets and time frames, priority nutrition areas for actions; strategies and programmes; resources available and intersectoral mechanisms for action in promoting better nutrition for a country. NPAN has therefore become an effective tool in guiding the nations on dealing with nutritional issues as well as provide a framework for coordinated implementation of nutrition intervention activities by the government and cross-sectoral nutrition stakeholders in the country. NPANs have also demonstrated the country's commitment to the public health of all the citizens and help to justify the allocation of resources to programmes on food and nutrition (WHO, 2006)

Recognising that global economy, food systems and the nutritional status of populations have changed markedly since the first ICN in 1992, FAO and WHO jointly organised a follow-up ICN in November 2014, known as ICN2. It was felt that a new policy framework and

more appropriate responses was needed. ICN2 reviewed the progress made since the 1992 ICN, including achievements made through direct nutrition interventions and nutrition-enhancing policies and programmes. The Conference also identified new challenges and opportunities for improving nutrition policies and coordination across multiple sectors. ICN2 sought to improve nutrition throughout the life cycle, focusing on the poorest and most vulnerable households, and on women, infants and young children in deprived, vulnerable and emergency contexts.

Many countries, including countries in the Southeast Asia (SEA) Region have reviewed their own NPAN following the Rome Declaration on Nutrition and the Framework for Action, arising from ICN 2 in 2014. In cognisance of the key role that NPANs play in nutrition strategies and interventions for countries, the Southeast Asia Public Health Nutrition (SEA-PHN) Network embarked on a project to compile and analyse NPANs and related documents in six SEA countries, namely Indonesia, Malaysia, Myanmar, Philippines, Thailand and Vietnam. The main objectives of this review are to provide an understanding of: approach and framework undertaken by countries to formulate NPANs; format and presentation of NPAN; main nutritional problems targeted; strategies and programmes identified; and the implementation and monitoring mechanisms. Through this publication, useful information on aspects of NPAN will become available for sharing with other countries which are developing or reviewing national nutrition action plans. Besides, conclusions drawn from this review could also serve as useful reference for nutrition policy and planning in the future.

1.1 NPANs and related documents reviewed

¹Authors of this review provided the official NPANs and related documents of their respective countries. A general search in the governmental websites and World Wide Web was also conducted to obtain additional related documents.

A total of eight relevant documents have been obtained for this review. Five of these were NPANs, namely: National Food and Nutrition Action Plan (NFNAP) (*Rencana Aksi Nasional Pangan Dan Gizi, RANPG*) 2015-2019 (BAPPENAS Indonesia, 2015); National Plan of Action for Nutrition of Malaysia (NPANM) III 2016-2025 (NCCFN Malaysia, 2016); Myanmar National Plan of Action for Food and Nutrition (NPAFN) 2011-2015 (NNC Myanmar, 2013); Philippine Plan of Action for Nutrition (PPAN) 2017-2022 Executive Summary (NNC Philippines, 2017); and Vietnam National Plan of Action for Nutrition to 2020 (MOH Vietnam, 2018). As Thailand does not have a specific NPAN document at this time, three relevant documents have been included in review. These are: the 2nd National Reproductive Health Development Policy and Strategy (2017-2026) on the Promotion of Quality Birth and Growth which has incorporated nutrition objectives, goals and strategies (MOPH Thailand, 2017a); the Strategic Framework for Food Management for the continuum linkage from agriculture, food, nutrition to health (2018-2037) (MOPH Thailand, 2018); and the 5-Year National Plan for Prevention and Control of Non-communicable Diseases (2017-2021) (MOPH Thailand, 2017b) which has important

¹ Except for MKT & SC, the other authors are Council members of the Southeast-Asia Public Health Nutrition (SEA-PHN) Network.

implications for nutrition outcomes. These eight documents used for this review are termed as NPANs and related documents.

Information on various key components of the NPANs and other related documents of each country, such as goal and objectives, agencies involved, nutrition situation in the country, nutritional issues to be addressed, challenges in implementing previous NPANs, strategies, programmes and activities, indicators identified, implementation, monitoring and evaluation approaches and budget for the NPAN were extracted from the documents obtained. This review is presented according to these various components and information from each country (where available) is inserted as appropriate.

2 FORMULATION AND PRESENTATION FORMAT

Most of the NPANs and related documents (except Philippines) in the six countries were first published in late 1990s or early 2000s, responding to the call of the first ICN on concerted effort to reduce starvation and all forms of malnutrition. The development of the NPANs also showed the nation's commitment to the adoption of World Declaration and Plan of Action for Nutrition in ICN 1992. The Philippines formulated its NPAN as early as 1974. A list of the NPANs and related documents included in this review is given in Table 1.

All countries recognised the persistent undernutrition and parallel rise of awareness concerning the escalating rates of obesity and other diet-related chronic diseases as the key drivers for nutrition action plan implementation.

These national strategic and action plans in the six countries have been developed by nutrition and health authorities in their respective country, usually with input from food and nutrition experts in the country, technical working groups, relevant stakeholders as well as international organisations such as FAO and WHO of the United Nations (UN). Most of the plans have been designed based on the experiences and lessons learnt from the past implementations, as well as detailed analyses of the nutrition situation in the respective country. The NPANs and related documents from the six countries were prepared to serve similar role in the respective country, namely to act as an essential tool to address nutrition problems in the country. They have been officially published as reference documents targeted for use by healthcare professional, policy makers, local government and stakeholders in implementing, monitoring and evaluating food and nutrition interventions using multi-sectoral approach.

2.1 National Food and Nutrition Action Plan (NFNAP) Indonesia 2015-2019 (BAPPENAS Indonesia, 2015)

The Indonesian government has prioritised the development of food security and nutrition in various policy documents. The first National Food and Nutrition Action Plan (NFNAP) or Rencana Aksi Nasional Pangan Dan Gizi, RANPG was developed for the period 2001-2005. The NFNAP covers a period of every 5 years and the current NFNAP 2015-2019 is the fourth National Food and Nutrition Action Plan of Indonesia. The formulation of current NFNAP was led by the Ministry of National Development Planning. This NFNAP together with the Strategic Policy on Food and Nutrition (*Kebijakan Strategis Pangan dan Gizi, KSPG*) 2015-2019 document serves as the basic reference for local government to develop coordinated cross-sectoral food and nutrition development programmes and activities to support the goal of creating healthy, active, productive and quality Indonesian communities.

The NFNAP 2015-2019 commences with an elaboration of the background and objectives for the preparation of the document, followed by a description of the roles of food and nutrition in the nation's development. The food and nutrition situation in Indonesia, causality analysis, consequences of food and nutrition in development, policy contexts as well as key challenges and barriers in improving nutrition situation of Indonesia in previous years

were discussed. The document also presents the multisectoral approach to the action plan and framework for implementing the plan. Details such as goal, outcome, logical & institutional frameworks, key principles and approaches, risks and assumptions, financial and funding management, indicative budgeting, capacity building strategies, advocacy and communication strategies and evaluation strategies are included in the document.

2.2 National Plan of Action for Nutrition of Malaysia (NPANM) III 2016-2025 (NCCFN Malaysia, 2016)

The first NPANM was developed for the period 1996-2000, representing Malaysia's commitment to the global call for the eradication of malnutrition made during the inter-governmental ICN in 1992. The NPANM provided the multisectoral framework for the country's national development efforts during the Seventh Malaysia Plan (1996-2000). The Plan was formulated under the purview of the National Coordinating Committee on Food and Nutrition (NCCFN) and was the culmination of extensive consultation and collaboration among various agencies, institutions and non-governmental organisations.

As a natural follow through of the first Plan, NPANM II for the period 2006-2015 was prepared. The objectives, strategies, activities and targets of NPANM II were based on the National Nutrition Policy approved by the government in 2003 and a review of NPANM I. The prevailing nutrition issues in the country were also taken into consideration. This second action plan on nutrition followed a similar approach of multi-stakeholder participation and coordinated by the NCCFN.

In line with the Declaration of International Conference in Nutrition 2014 (ICN2) as well as global, regional and national level development and direction on nutrition, NPANM II was reviewed and the NPANM III 2016-2025 for the next decade was formulated. As was practiced for the first two NPANMs, the development of the current NPANM III was spearheaded by the Ministry of Health under the purview of the NCCFN. There was active participation and input from all stakeholders in food and nutrition in the country, namely various government ministries and agencies, academia, professional bodies, non-governmental organisations and the private sector. The formulation of the NPANM III took into consideration the nutrition situation in the country as well as international and regional food and nutrition development. This document serves as the framework for action to address food and nutrition challenges in the country. Food and nutrition security was identified as the new focus area in the NPANM III for the next 10 years.

The NPANM III (2016-2025) document consists of eleven chapters. After the Executive Summary, an introduction (Chapter 2) provides the background of NPANs in the country, followed by a summary of the nutritional status, dietary practices and physical activity status of the population (Chapter 3). The global food and nutrition related policies and action plans is found in chapter 4. The main existing nutrition programmes and activities implemented to address the nutrition issues are next highlighted (Chapter 5) while an important Chapter 6 reviews the achievements and shortfalls and discusses the challenges of the NPANM II. After this chapter, the document focuses on details of NPANM III. It describes the key elements

and framework and the performance indicators of the Plan (Chapters 7-9). The activities for each of the three main groups of strategies are identified (Chapter 10). The final chapter summarises the mechanism of implementation, monitoring and evaluation of NPANM III.

2.3 Myanmar National Plan of Action for Food and Nutrition (NPAFN) 2011-2015 (NNC Myanmar, 2013)

The first NPAFN of the Republic of Myanmar was developed in 1994 and is to be updated every 5 years. The third NPAFN of Myanmar (2011-2015) is used for this review while the development of the fourth plan named "Myanmar Multi-sectoral National Plan of Action on Nutrition (MS-NPAN)" (2018-2022) is still in progress. The implementation roadmap of 3rd NPAFN was based on prioritisation and sequencing principles. The timeline for intervention was divided into short term, medium term and long term implementation (up to 2030). The formulation of the third NPAFN was spearheaded by the Department of Health under Ministry of Health and based on a holistic causal analysis of the malnutrition situation in Myanmar. It was a comprehensive approach to address the immediate, underlying and basic causal factors from a farm to table food chain perspective and along the different life stages.

The document starts with an elaboration of the overall context of nutrition and the NPAFN in the nation, followed by the overview of the food and nutrition situation in Myanmar, and the causes of malnutrition and food insecurity in the nation. The goal, target and indicators, guiding principles in achieving food security and better nutrition, the framework of the NPAFN as well as the implementation, monitoring and evaluation mechanism are described in the respective chapters. Lastly, the document presents the log frames for the different strategies in terms of specific activities proposed, population to be targeted and lead agency from both government and development partners.

2.4 Philippine Plan of Action for Nutrition (PPAN) 2017-2022 Executive Summary (NNC Philippines, 2017)

The Philippine Plan of Action for Nutrition (PPAN) is the country's blueprint for nutrition improvement for all Filipinos and the government's response to global commitment to eradicate hunger and malnutrition. To date, Philippines has formulated nine national plans since 1974. The latest PPAN 2017-2022 is a results-based plan with emphasis on the First 1000 Days circumscribed within the Life Stage Approach. It was designed to stem the worsening of wasting, stunting and micronutrient deficiencies and overweight and obesity in the Philippines. The formulation of PPAN was led by the National Nutrition Council (NNC) Secretariat, based primarily on the landscape analysis 'Situation Analysis of Nutrition in The Philippines' prepared by an independent group of consultants commissioned by the NNC with support from Micronutrient Initiative and UNICEF. The plan formulation which involved various methodologies, was both multi-sectoral & multi-level and involved two consultation workshops.

The first part of the document consists of a situation analysis of nutrition in the Philippines which details the nutrition situation in the Philippines, landscape analysis, manifestations of nutritional problems, dimensions of Philippines malnutrition and food security and the perceived causality of malnutrition in the country. The second part of the PPAN presents the Philippine Plan of Action for Nutrition 2017-2022, with different individual sections describing the PPAN design, the goal, objective and outcome targets by 2022, and the guiding principles and strategic thrusts of the Plan. The document also summaries the programme framework, which is divided into nutrition specific, nutrition sensitive, and enabling programmes, and for each of these programmes, initial list of projects and the agencies involved are identified. Finally, the Plan includes securing policy support for improving nutrition, the organisation for its overall management and coordination, the monitoring and evaluation framework, and the plan's budget estimates.

2.5 2nd National Reproductive Health Development Policy and Strategy (2017-2026) on the Promotion of Quality Birth and Growth, Thailand (MOPH Thailand, 2017a)

It has been recognised that reproductive health has to be an urgent national agenda, providing comprehensive reproductive health services to all age groups. Recognising this, the National Reproductive Health Development Committee of Thailand prepared the 1st National Reproductive Health Development Policy and Strategy (2010-2014). The 2nd National Reproductive Health Development Policy and Strategy (2017-2026) on the Promotion of Quality Birth and Growth were developed with the aim of continuing reproductive health implementation and revising policies and strategies in accordance with international policies so that they are more suitable for the reproductive health situation in Thailand that is in transition.

The document provided relevant background information including rationale, discussions on situations affecting the implementation of the national reproductive health plan in the future, the concepts and principles. Details of the 2nd National Reproductive Health Development Policy and Strategy (2017-2026) are given in the document, including identifying the target groups, goals, indicators and details of the strategies, measures, indicators, goals, and responsible agencies.

2.6 Strategic Framework for Food Management (2018-2037) (MOPH Thailand, 2018)

The Strategic Framework for Food Management (SFFM) is currently implementing under the National Food Committee for achieving food and nutrition security and prevention of the rising trend of overweight, obesity and NCDs. The vision of the SFFM is "Thailand ensures food and nutrition security, and is a sustainable source of nutritious and safe food with premium quality for Thai and the world". Multi-strategic and multi-stakeholders approaches have been emphasised with national commitment and support for community and setting based implementation for achieving the goals of food and nutrition security. This Framework

is a Master Plan to support food security, food safety, food quality and food education in Thailand. Strategies and actions to be implemented for achieving food and nutrition security include sustainable agriculture, ensuring food quality and safety, supplementation with food and/or micronutrients, food fortification, food regulation, right to food and nutrition, evidence based food and nutrition education and communication, public health measures through universal health services and care including clean water and sanitation, and community based programme integrating of many strategies with maximum people participation. It is expected that these strategies will lead to fulfill the Sustainable Development Goals (SDGs) 2: End hunger, achieve food security, improved nutrition, and sustainable agriculture, SDG3: Good health and well-being, and some other SDGs.

2.7 The 5-year National Plan for Prevention and Control of Non-communicable Diseases (2017-2021) (MOPH Thailand, 2017b)

The 5-Year National Plan for Prevention and Control of Non-Communicable Diseases (2017-2021) focuses on promoting participation of citizens, communities, local administrations, and all sectors where citizens will be encouraged to take better care of their health. This plan will be rolled out in an integrated manner with other national strategic plans and is divided into three phases i.e. 2017, 2018, and 2019-2021. The first part of the document provides information on the background of this phase II plan of the Thailand Healthy Lifestyle Strategic Plan. The development overview and recommendations for phase II based on the evaluation of the NCDs plan are documented. Second part of the document covers the information such as the vision, goal, nine key indicators to be achieved by 2021, objectives and the six strategies identified in implementing the plan. Specific key performance indicators, strategy and action owner are identified for each of the six main strategies.

2.8 Vietnam National Plan of Action for Nutrition (NPAN) to 2020 (MOH Vietnam, 2018)

Vietnam developed its first National Plan of Action for Nutrition (NPAN) for 1995 – 2000, followed up by National Nutrition Strategy (NNS) for the period of 2001 – 2010, NNS for 2011-2020 and the current NPAN to 2020. The NPAN in Vietnam has been planned to be reviewed every 5 years. Both NNS & NPAN serve as the foundation to direct all nutrition interventions in Vietnam. The development of the NPAN was led by the Ministry of Health, working in collaboration with other ministries, sectors and international organisations. A midterm review of NPAN 2011-2016 was conducted in 2015 and Vietnam is now implementing the NPAN towards 2020.

The Vietnam NPAN to 2020 document is divided into two parts. First part of the document discusses the background of the NPAN to 2020 which include the legal basis, overall evaluation on implementation of the National Strategy on Nutrition 2011-2015 and the principles of NPAN to 2020. The achievements, difficulties and challenges, causes of limitations of the National Strategy on Nutrition 2011-2015 and Vietnam's commitments towards global nutrition goals are highlighted. The second part of the document provides details of the NPAN to 2020. This forms the bulk of the document and comprises six sections,

namely the objectives of the NPAN; solutions (which are the approaches taken for NPAN); activity contents detailing identified activities to be carried out and the expected outcomes; monitoring and evaluation; organisation of implementation and sources of operation. Three appendices are included at the last part of the document providing details on the plan indicators for the period 2011-2020, indicators for inspection of plan (indicators to 2020) and costing of the NPAN 2017-2020 in Vietnam.

Table 1: List of NPANs and related documents of six Southeast Asia countries included in review

Country	First NPAN/related strategic plan	Current NPAN/related strategic plan	Lead organisation in NPAN formulation	Time frame for review/ update
Indonesia	National Food and Nutrition Action Plan (<i>Rencana Aksi Nasional Pangan dan Gizi, RANPG</i>) 2001-2005	National Food and Nutrition Action Plan (<i>Rencana Aksi Nasional Pangan dan Gizi, RANPG</i>) 2015-2019	Ministry of National Development Planning	Every 5 years
Malaysia	National Plan of Action for Nutrition of Malaysia I (NPANM I) 1996-2000	National Plan of Action for Nutrition of Malaysia III (NPANM III) 2016-2025	Ministry of Health, under the purview of the National Coordinating Committee of Food and Nutrition (NCCFN)	Every 10 years
Myanmar	National Plan of Action for Food and Nutrition (NPAFN) 1994	National Plan of Action for Food and Nutrition (NPAFN) 2011-2016	Department of Health, Ministry of Health	Every 5 years
Philippines	Philippine Nutrition Plan 1974-1977	The Philippine Plan of Action for Nutrition (PPAN) 2017-2022	National Nutrition Council (NNC) Governing Board	Every 5 years

Country	First NPAN/related strategic plan	Current NPAN/related strategic plan	Lead organisation in NPAN formulation	Time frame for review/ update
Thailand	National Plan of Action for Food and Nutrition (1977-1981)	<ul style="list-style-type: none"> - 2nd National Reproductive Health Development Policy and Strategy (2017-2026) - Strategic Framework of Food Management in Thailand (SFFM), (2018-2037) - The 5-year National Plan for Prevention and Control of Non-communicable Diseases (2017-2021) 	<ul style="list-style-type: none"> - Ministry of Public Health (MOPH) - National Reproductive Health Development Committee - SFFM committee - Bureau of Non-Communicable Diseases and the Thai Healthy Lifestyle Management Office 	Every 10 years
Vietnam	National Plan of Action for Nutrition for 1995 – 2000	National Plan of Action for Nutrition to 2020	Ministry of Health	Every 5 years

3 AGENCIES AND PARTNERS INVOLVED

All the eight action plans and strategic documents acknowledge the importance of multidisciplinary approach, promote multi-stakeholders involvement and stress the collective responsibility of all the stakeholders in the development and implementing the action plan.

Malaysia, Indonesia and Philippines have described how the different stakeholders involved in the formulation/planning of the plan. Malaysia NPAN highlights that all stakeholders in food and nutrition in the country participated actively in the plan development to achieve consensus whereas Philippine PAN describes in detail the formulation mechanism that involved various methodologies and stakeholders. In Indonesia, the NFNAP 2015-2019 is formulated in consultation with various stakeholders including health, agriculture, education, food and drug agency, academia, food and nutrition societies and various non-governmental organizations. In Thailand, the responsible Ministries and stakeholders for the National Reproductive Health Development Policy and Strategy and the Strategic Framework for Food Management are clearly identified and the multisectorial coordination on nutrition related interventions is clearly presented. To ensure quality birth, growth and child development, the Memorandum of Understanding (MOU) in integrating the cooperation on the human development throughout life approach (2017-2021) has been signed by 4 Ministries: the Ministry of Public Health, the Ministry of Social Development and Human Security, the Ministry of Education and the Ministry of Interior. These programmes have been launched nationwide by the Quality of Life Development Committee at the district level, chaired by the chief of each district. In NPAN of Vietnam, ministries, sectors and agencies have been providing consultancy to the government, leaders of ministries and sectors to develop and promulgate a number of policy documents supporting nutrition at all levels.

Table 2 summaries the partners/stakeholders identified in the implementation of the different NPANs and related documents. In most of the countries, the stakeholders pulled together are firstly the governmental organisations. Other typical stakeholders are non-government organisations (NGOs), universities, professional bodies, social-political organisations and associations, private sectors such as food industries, bank associations and mass media. International organisations are also identified as stakeholders by most of the countries. The common international organisations identified include WHO, United Nation's Children's Fund (UNICEF), FAO and ASEAN secretariat. Some of the countries such as Myanmar and Philippines refer to these international organisations as development partners. All countries in this review, except Malaysia, are Scaling Up Nutrition (SUN) Movement member countries.

NFNAP 2015-2019 of Indonesia and Vietnam NPAN to 2020 describe the specific roles of each agency/sector involved in the action plan. Though the specific role of each agency involved is not elaborated by other countries, the action plans list the stakeholders/agencies involved for each of the activities/programmes identified. For example in Malaysia's NPAN, a lead agency and other implementing agencies are identified for each of the activities, which give guidance to the stakeholders on how and what area they can contribute. Philippine PAN also lists the suggested programme and projects for the member agencies and partners involved. It can be seen that local government units are important agencies being mobilised in Philippines action plan and are involved in all of the programmes

identified. On the other hand, Myanmar NPAFN has listed the responsible agency from both government and development partners for each of the interventions/action areas identified. In Thailand's 2nd National Reproductive Health Development and Strategy (2017-2026) on the Promotion of Quality Birth and Growth, a variety of agencies, have been identified as responsible agencies for each of the four sub-strategies established.

Media is one of the common stakeholders identified by most countries (Malaysia, Indonesia, Philippines Vietnam and Thailand). For the stakeholders from private sector, Malaysia has identified a wide range of partners (especially food related industries) as compared to other countries (Table 2). Food industries in Malaysia are particularly encouraged to play a major role in producing more healthier food and beverage products at affordable prices through reformulation and innovation. Likewise, Thailand has included media as a key stakeholder to promote the health of all age groups. A variety of widely viewed media in Thailand use the "healthier choice" logo to indicate healthier food package option and the "food choice" application on mobile phone, which was developed with the collaboration of government, private sectors, food industry and academic institutions. Stakeholders from private sector are less mentioned in Vietnam NPAN to 2020 and Myanmar NPAFN.

Table 2: Overview of agencies/partners/stakeholders identified in the implementation of NPAN and related documents of different countries

Country	Stakeholders/agencies/partners involved/identified in the action plans
Indonesia	Government ministries and agencies, Investment Coordinating Board (BKPM), Bank Indonesia, Local Government, private sectors and community institution, universities, professional institutions, community organisations, UN organisations, donors, civil societies, and media
Malaysia	Government ministries and agencies, professional bodies, academicians (universities), NGOs, private hospitals, mass media (telecommunication company), bank association, Federation of Malaysia Manufacturers, other food companies including small medium enterprises, fast food industries, hypermarket chains and supermarkets, food & beverages industries and international organisations (WHO, UNICEF, ASEAN Secretariat)
Myanmar	Government ministries and agencies, development partners such as UNICEF, WHO, WFP, FAO, United Nations Population Fund (UNFPA), United Nation Development Programme (UNDP) and other UN agencies, academia, donors
Philippines	National government agencies particularly the members of the NNC, the NNC Secretariat, local government units, NGOs, academic institutions, and development partners such as UNICEF, WHO, United Nations World Food Program Philippines. Others include Nutrition International (formerly Micronutrient Initiative), the Philippine Coalition of Advocates for Nutrition Security (PhilCAN), Civil Service Commission, media organizations, Employees' Unions, and the food industry.

Thailand	The Ministry of Public Health, the Ministry of Labor, the Ministry of Finance, the Ministry of Social Development and Human Security, the Ministry of Justice, the Ministry of Education, the National Health Commission Office of Thailand, the Ministry of Interior, the National Health Security Office, the Thai Health Promotion Foundation, the Ministry of Commerce, Ministry of Industry, the Bangkok Metropolitan Administration, the National Statistical Office, the Ministry of Digital Economy and Society, the National Research Council of Thailand, the Government Pharmaceutical Organization (GPO), Thai Healthy Lifestyle Management Office, other government ministries and agencies, Press Network, Thai Broadcast Journalists Associations, Village Health Volunteer Club of Thailand, local administrative organisations, other related public organizations, the academic sector, and others.
Vietnam	Government ministries and agencies, the National Institute of Nutrition, the Maternal Child Health department and Preventive Medicine Department of MOH, the Hospital of Endocrinology, Central Specialized Hospitals, Institutes of Hygiene and Epidemiology/Pasteur Institutes, Ho Chi Minh Institute of Public Health, training facilities, social-political organisations and associations, People's Committees of provinces and centrally-run cities, Provincial Health Departments, District Health Centers, Commune Health Centers, international governmental and non-governmental organisations (such as UNICEF, WHO, FAO), media

4 GOAL AND OBJECTIVES

The national action and strategic plans in this review have presented different goals. Nevertheless, most of the countries have given emphasis to hunger eradication, prevention of all forms of malnutrition, promotion of sustainable food systems, food and nutrition security and achievement of nutritional well-being in their goal.

Table 3: Goals identified by different NPANs and related documents

Indonesia	Formation of Indonesia Society with human resources that are intelligent, healthy, productive in a sustainable way and highly competitive.
Malaysia	Towards achieving optimal nutritional well-being of Malaysians.
Myanmar	To ensure adequate access to, and utilisation of food that is safe, adequate and well-balanced on a long-term basis in order to enhance the physical and mental development of the people of Myanmar.
Philippines	To improve the nutrition situation of the country as a contribution to the achievement of the Philippines' long-term vision of a prosperous country, free from hunger and poverty by 2040, reducing inequality in human development outcomes, and reducing child and maternal mortality.
Thailand	<p>2nd National Reproductive Health Development and Strategy:</p> <p>To ensure comprehensive growth and development of young people, the Government supports and promotes voluntary births, in which every pregnancy is planned and intended. Having parents who are well-prepared in all aspects through high coverage of qualified health services, particularly in nutritional well-being of mother and child, will lead to a safe delivery and a healthy newborn who will have a high quality upbringing.</p> <p>The 5-year National Plan for Prevention and Control of Non-communicable Diseases (2017-2021):</p> <p>To relieve the avoidable burden of sickness, death, and disability due to NCDs by means of collaboration between various entities and sectors as well as coordination on a national, regional, and global level to promote wellbeing of people and maximise productivity of all age groups and to prevent these diseases from obstructing the quality of life and economic development by the year 2021.</p>
Vietnam	To promote proper nutrition, contribute to protection, care and improvement of people's health; to reduce stunting and improve nutrition status and stature of Vietnamese people; and obesity/overweight will be managed, contributing to the control of nutrition-related chronic disease.

The NPANs reviewed show similarities in the objectives identified, where all of them emphasise on improving nutritional status of the population, prevent and/or reduce undernutrition as well as diet-related NCDs and improve food and/or nutrition security.

The five objectives identified in Indonesia's NFNAP 2015-2019 are to increase energy, protein, vitamins and minerals consumption to the ideal limit; to increase score of desirable dietary pattern; to improve nutritional status of pregnant women, lactating mothers, infants, toddlers, adolescents, and other vulnerable groups; to prevent increased prevalence of obesity primarily in population aged 18 years and above; and to increase availability of energy, protein, vitamins, and mineral.

In Malaysia, the objectives of NPANM III 2016-2025 go beyond improving household food security whereby the element of nutrition security is given greater emphasis. Strengthening food and nutrition security has been identified as the first objective in the action plan, followed by enhancing nutritional status and reducing diet-related NCDs.

A total of 10 objectives have been identified in Myanmar NPAFN 2011-2015. These include improving nutritional status and food security, food safety, environmental health & health services, institutions & coordination, human capacity, quantity and quality of information as well as investment in nutrition.

PPAN 2017-2022 of the Philippines focuses on two layers of outcome, namely the outcome targets and sub-outcome or intermediate targets. The outcomes targets are the final outcomes against which success of the Plan will be measured, which include the reduction of child stunting & wasting, reduction of micronutrients deficiencies to levels below public health significance, no increase in overweight among children and the reduction of overweight among adolescents and adults. The sub-outcomes, on the other hand refers to outcomes that will contribute to the achievement of the final outcomes. The sub-outcome targets identified are to reduce the proportion of nutritionally-at-risk pregnant women; reduce the prevalence of low birth weight; increase the prevalence of exclusive breastfeeding among infants below 5 months old; to increase the percentage of children 6-23 months old meeting the minimum acceptable diet and to increase the proportion of households with diets that meet the energy requirements.

Thailand 2nd National Reproductive Health Development and Strategy (2017-2026) on the Promotion of Quality Birth and Growth targeting women and men of reproductive age, pregnant women and children aged 0-5 years old by four sub-strategies: 1) improving the relevant legislations, policies, and strategies 2) improving the health service system and establishing equal access to services 3) improving the social welfare system and 4) improving the information system and public communication. The nutrition related specific objectives of this Strategy include to improve quality, adequacy and safety on the nutrition of mothers, infants and children; improve and reform the social welfare system to support couples who are ready to have children by taking care of the women from pre-marital and pre- pregnancy periods, during pregnancy, during delivery, and after childbirth; including the provision of other welfare to help new couples raise their child and to promote correct knowledge, beliefs and values through campaign, advocate and public communication on nutrition.

On the other hand, the Thailand's 5-year National Plan for Prevention and Control of Non-communicable Diseases (2017-2021) focuses on elevating priority of NCDs prevention and control among national development agenda by means of strengthening international collaboration and joint policy-driven progress as well as strengthen the potential of multilevel stakeholders to expedite responses to NCDs prevention and control. This plan also aims to minimize risk factors and social factors impacting NCDs risks, improving the health service system to correspond to NCDs prevention and control as well as to support research and development competency to prevent and control NCDs. Monitoring the trends and factors impacting NCDs prevention and control as well as assess progress thereof are also emphasised by this 5-year plan.

Vietnam NPAN to 2020 works towards improving the nutrition status of mothers and children; further reducing micronutrient deficiencies among people; improving Vietnamese people's height; and improving the quantity and quality of Vietnamese diets to control overweight/obesity and nutrition-related risk factors of some chronic NCDs in adults. The Vietnam NPAN also aims to reinforce capacity and effectiveness of the network of nutrition services in both community and health care facilities.

It is noteworthy that the goal and objectives identified in most of the national action and strategic plans are consistent with internationally agreed recommendations such as the Rome Declaration and the Framework for Action on Nutrition, and will contribute to the SDGs 2030 of the UN particularly SDG 2, as well as the results of the World Health Assembly for 2025.

5 REPORTING ON NUTRITION SITUATION OF THE POPULATION

Most countries in this review documented the nutrition situation of their population in the national action and strategic plans.

5.1 NFNAP Indonesia 2015–2019

In Indonesia's NFNAP 2015-2019, Chapter 2 (Role of food and nutrition in development), provides an in-depth description of the nutrition situation in Indonesia and nutritional status of the population. The chapter commences with a summary of the food availability of Indonesia and the national food production & importation situation. It next discusses the food distribution, food prices, factors affecting food prices and the national food consumption pattern. The nutritional status of the population is also discussed, including information such as the fluctuating trend of the prevalence of stunting, underweight and wasting among children under 5 years old, the percentage of stunting according to provinces, the high prevalence of anaemia and malnutrition among women of childbearing age, low prevalence of exclusive breastfeeding and increasing trend of overweight and obesity in adult population. A subtopic on causality analysis was included explaining the direct (adequacy of consumption, health status/infection condition) and indirect factors (family food security, access to clean environment, health care pattern including breastfeeding, complementary feeding, hygienic food preparation) contributing to the nutrition situation/nutritional status of the population.

5.2 NPAN Malaysia III 2016–2025

In NPANM III Malaysia, the current nutritional status, the main nutritional problems, the dietary practices as well as the physical activity status of the population are discussed in chapter three. The strategies and action plans of the NPANM III are based on a detailed analyses of these information. For the nutritional status part, prevalence of stunting, wasting, underweight and overweight /obesity of children below 5 years, school aged children and adults > 18 years old and anaemia among pregnant women are described. The prevalence of NCD (hypertension, hypercholesterolemia and diabetes mellitus) among adults 18 years old and above are also summarised. The status of selected vitamins and mineral intake among children (vitamin A, vitamin C, niacin, riboflavin, thiamin, iron and calcium) are also discussed. For dietary practices, the chapter presents the dietary practices of the infants, young children, children, adolescents and adults. At the end of this chapter, the physical activity status of the adult population (aged 10-69 years old) and adolescents (aged 10-17 years old) are also discussed.

5.3 Myanmar NPAFN 2011–2015

Myanmar NPAFN 2011-2015 documents the food and nutrition situation in Myanmar in chapter two. Part one of the chapter explains the status of food security of the country based on the Millennium Development Goals Data Report of the Integrated Household Living Conditions Survey in Myanmar. Part two of the chapter presents the nutrition situation of Myanmar. Nutritional status of children (prevalence of underweight, stunting, wasting), prevalence of micronutrient deficiencies (i.e. iodine deficiency disorders, vitamin A deficiency, iron deficiency anaemia, infantile beriberi) and nutritional status of adult population (underweight, overweight and obesity) are presented in the document.

5.4 Philippine PAN 2017–2022

Part one of the Philippine Plan of Action for Nutrition 2017-2022 provides an in-depth description of the nutrition situation in the Philippines. The Plan identifies the nutrition problems to be addressed, including high levels of stunting and wasting among children under 5 years of age, micronutrient deficiencies particularly in vitamin A, iron and iodine, the high rate of hunger and food insecurity, and at the same time the increasing trend of overweight and obesity among the various population groups. Also to be addressed are maternal nutrition, poor infant and young child feeding, and exclusive breastfeeding in the first 6 months of life. The trend in the prevalence of stunting and wasting among children under 5 years of age, the prevalence rate of micronutrient malnutrition (Vitamin A deficiency, anaemia, iodine deficiency), nutritionally at-risk pregnant women as well as other nutritional issues such as hunger, food insecurity, overweight, obesity and exclusive breastfeeding are presented. The landscape analysis embodied in the "Situation Analysis of Nutrition in the Philippines" is followed by a framework of what is perceived as the causality of malnutrition in the country, starting from the basic, underlysing and immediate causes, to their outcome and consequences.

5.5 2nd National Reproductive Health Development Policy and Strategy (2017–2026) on the Promotion of Quality Birth and Growth, Thailand

Thailand's 2nd National Reproductive Health Development Policy and Strategy (2017-2026) on the Promotion of Quality Birth and Growth has highlighted concerns of unsafe delivery. Regarding maternal health, the Report of the 5th Thailand National Health and Examination Survey (2014 – 2015) found that the prevalence of anaemia in women of reproductive age (15 years or over) was 22.7%. According to the Bureau of Health Promotion Annual Report (2014), the prevalence of iron-deficiency anaemia in pregnancy was as high as 39.0 %. For infant health, the Children and Women's Situation Survey (2010) found that 8% of infants had low birth weights (LBW). With regard to early childhood development, not only LBW but also breastfeeding rate, malnutrition, stunting, obesity and optimal growth were reported to be segmented according to the region of Thailand.

5.6 Vietnam NPAN to 2020

In Vietnam NPAN to 2020, there is no specific chapter or section that describes the nutritional status of the population. Instead, the nutritional status and main nutritional problems of the population are discussed in part one of the document, under the section highlighting the difficulties and challenges encountered in the implementation of the National Strategy on Nutrition 2011-2015. The prevalence of stunting among children under five, micronutrient deficiencies (pre-clinical vitamin A deficiency, anaemia and zinc deficiency), overweight and obesity among children and NCDs are documented. The low physical activities status of the population, low fruits/vegetables consumption among adults, dietary intake of children and workers, food supply and food shortage problem are also discussed. The Vietnam NPAN also discusses the poor physical status and stature of the population and has highlighted the need for stronger interventions.

6 EXISTING NUTRITION POLICIES AND PROGRAMMES

Indonesia, Malaysia and Myanmar elaborated in their respective action plan information on nutrition policies and programmes being implemented prior to the new NPANs. Though not presented in their action plan, the information on existing nutrition policies and programmes for Thailand and Vietnam have been obtained and as summarised in Table 4.

6.1 Indonesia

The policies and programmes currently implemented in Indonesia can be divided into four major categories, namely policies on food production and food access, policies and programmes to support the right consumption, and health services related policies and programme. Besides, there are several long-term food and nutrition programmes and policies that have been formulated into legislations. Among them are Strategic Policy on Food and Nutrition (*Kebijakan Strategis Pangan dan Gizi, KSPG*) 2015-2019 and National Medium Term Development Plan (RPJMN) 2015-2019 that serves as strong foundation for implementation of programme and nutrition improvement; National Long Term Development Plan (RPJPN) in 2005-2025; law No. 18 of 2012 about food that strengthens food security and focuses on meeting the adequacy and sovereignty of food in order to achieve better food security and nutrition at the national, community, household, and individuals level; law No. 36 Year 2009 on Health; Government Regulation No. 17 of 2015 on Resilience Food and Nutrition; Government Regulation No. 28 of 2004 on Food Safety, Quality and Nutrition; and Presidential Regulation No. 42 of 2013 on the National Movement for Acceleration Nutrition improvement.

6.2 Malaysia

In Malaysia, nutrition programmes have been implemented since the 1950s. Since mid-1990s, the nutrition programme in the country has expanded and has been strengthened with increasing number of nutritionists. In Ministry of Health Malaysia, the Nutrition Section has been upgraded to the Nutrition Division on 16 October 2009. Under this Division, nutrition programmes are divided into four main components, namely Nutrition Planning, Nutrition Surveillance, Nutrition Rehabilitation and Nutrition Promotion. Nutrition Division, Ministry of Health has been taking a leadership role in implementing nutrition programmes and activities in the country, supported by professional bodies such as the Nutrition Society of Malaysia and various research groups in the institutions of higher learning. These programmes address both under- and over-nutrition among the population, covering all age groups.

6.3 Myanmar

In Myanmar, National Nutrition programmes have been implemented since 1954 and National Nutrition Centre is the focal point for National Nutrition Programmes. The long-term Myanmar Health Vision 2030 was set out in 2001 and it includes Nutrition Programmes. Myanmar joined Global initiatives such as Scaling Up Nutrition (May 2013), and Zero Hunger Challenge (October 2014). Myanmar has been strengthening multi-stakeholder platform and initiating sub-national SUN plan known as the “Integrated Program for Nutrition Improvement” (IPNI) in Kayin and Chin State. The Maternal, Newborn and Child Health (MNCH) core package focuses on care of mothers, newborns, and children and includes promotive, preventive and curative interventions that are mutually beneficial and inextricably link to the goals of reducing maternal, neonatal and child mortality and the prevalence of malnutrition in children.

Table 4: Overview of the current nutrition programmes implemented in Indonesia, Malaysia, Thailand and Vietnam

Indonesia	<p>Policy on food production:</p> <ul style="list-style-type: none"> Increased food production capacity for cereals-based foods, protein food sources, sugar, domestic cattle, corn, soybeans, commodities plantations and horticulture (chilli, onion) based on local resources through an increase in planting area, intensification of fisheries business to support food security and nutrition. Increased safe food production through application of Good Food Production Method, guidance/supervision by the Food Security Extension (PKP) and District Food Supervisor or District Food Inspector (DFI) in each Local Government. <p>Policies and programmes on food access:</p> <ul style="list-style-type: none"> Stabilisation of supply and food prices, food diversification programme, food subsidies, direct aid stimulus through Family Hope Program (PKH), conduction of Sustainable Food Houses Programme (KRPL) in 6400 villages (in 2013) to promote the growing of groceries in yard, introduction of food and nutrition awareness systems (SKPG). <p>Policy and programmes related to consumption:</p> <ul style="list-style-type: none"> Food consumption diversification through the provision of diverse food and diverse food consumption campaigns; Village Food Safety Movement (GKPD) community empowerment programme that nurture community to be able to choose, prepare / process and serve safe foods independently. <p>Health Service related policies & programmes:</p> <ul style="list-style-type: none"> Improving access to health.
------------------	--

Malaysia	<p>Nutrition programmes and activities related to pregnant women and infants:</p> <ul style="list-style-type: none"> • Nutrition surveillance, nutrition education for mothers, nutrition counselling for pregnant and lactating women, breastfeeding promotion, baby-friendly hospital initiative, baby-friendly clinic initiative, breastfeeding mother support groups, code of ethics for the marketing of infant foods and related products, cooking demonstration on diet for mothers and infants, supplementary feeding programme, anaemia prevention programme and iodine deficiency disorders programme. <p>Nutrition programmes and activities for children 6 years and below:</p> <ul style="list-style-type: none"> • Nutrition surveillance, rehabilitation programme for malnourished children, nutrition activities at childcare centre. <p>Nutrition programmes and activities for school children:</p> <ul style="list-style-type: none"> • Providing technical guidance on nutrition-related activities among pre-schoolers, among primary and secondary children e.g. school feeding and school milk programme, foods sold in and around school canteens and monitoring of weight and height status. <p>Nutrition programmes and activities for adults:</p> <ul style="list-style-type: none"> • Healthy cafeteria, healthy catering training, healthy meal provision during meetings, healthy eating through healthy shopping, healthy community kitchen. <p>Nutrition programmes and activities for elderly:</p> <ul style="list-style-type: none"> • Nutrition guideline for elderly being finalised. <p>Others:</p> <ul style="list-style-type: none"> • Nutrition Information centre, nutrition counselling services, inter-sectoral collaboration with NGOs, Nutrition Month Malaysia, nutrition information on food labels to assist in food choice, implementation of front-of-pack (FOP) labelling, healthy eating initiative in fast-food restaurants, nutrition related programmes of other agencies.
-----------------	--

Thailand	<p>Laws and policies on food are follows:</p> <ol style="list-style-type: none"> 1. Milk Code Act (the Marketing Control on Food for Infants and Young Children) (2017) <ul style="list-style-type: none"> ▪ Enforce laws in order to control the quality, production, distribution, sales promotion, advertisements, and marketing of foods and all products that have an effect on the nutrition of mothers, infants, and children. 2. Sugar-sweetened beverage tax (2017) 3. Notification of Ministry of Public Health on Prescribed Prohibited Food to be Produced, Imported, or Sold : Trans fatty acid (No.388) 4. Notification of Ministry of Public Health on Iodized Salt (No.153) 5. Nutrition interventions in “Thai Women, Red Cheek” policy: <ul style="list-style-type: none"> ▪ Provide weekly dose of iron and folic acid supplement tablets in Universal Health Coverage Scheme to reproductive age women who want to have a child. 6. Nutrition interventions in the “Miracle of the first 1,000 day of life” policy: <ul style="list-style-type: none"> ▪ Provide family planning, counseling, nutritional assessment, health screening, and health check-ups. ▪ Provide quality parent preparation training to give knowledge and skills to parents and child care givers in accordance with the quality parent preparation school curriculum. ▪ Emphasize qualified antenatal care (ANC) and early ANC before 12 weeks of gestation. ▪ Provide daily iron, iodine and folic acid supplement tablets in Universal Health Coverage Scheme to pregnant women throughout the pregnancy period and until 6 months after delivery. ▪ Provide services to pregnant women to ensure that their weight is under surveillance so that they achieve standard weight gains and consume a proper diet during their pregnancy and lactating period. ▪ Promote exclusive breastfeeding for 6 months followed by breastfeeding in combination with age-appropriate food until the child is 2 years of age or older. ▪ Promote the importance of an age-appropriate diet at home, at child care centres, and at school among children aged 6 months to 5 years. ▪ Provide children aged 6 months to 5 years with liquid iron supplement once a week. In the case of newborns with low birth weight, liquid iron supplement is given daily from 2 to 6 months and then the dosage is reduced to once a week. Provide required immunization for children. ▪ Conduct surveillance on child nutrition, oral health, and development by parents or child care givers using the Maternal and Child Health Handbook (Pink book) and Developmental Surveillance and Promotion Manual (DSPM) as guidance. ▪ Advocate the use of Pink book and DSPM to promote child health and development in all nursing colleges, parents and care givers. 7. Health Promoting School Programme and School Milk/School Lunch Programme
-----------------	---

Vietnam	<ul style="list-style-type: none">• Nutrition Programme and activities related to pregnant women and infants: Nutrition surveillance, nutrition education for mothers, nutrition counselling for pregnant and lactating women, breastfeeding promotion, code of ethics for the marketing of infant foods and related products, supplementary feeding programme, anaemia prevention programme and iodine deficiency disorders programme. Food fortification project.• Nutrition programmes and activities for children under 5: The child malnutrition control programme focusing on the first 1000 day of life, rehabilitation programme for malnourished children, High-dose Vitamin A supplementation for children 6-36 months; Nutrition surveillance, nutrition activities at commune health centers.• Nutrition programmes and activities for school children: Promoting of school lunch programs in Hanoi, Ho Chi Minh City, Danang and Hai Phong. School milk programme is implementing in some City/provinces (Ho Chi MinhCT, hanoi, Bac Ninh, Nghe An, Baria Vung Tau.)
----------------	--

7 REVIEW OF PREVIOUS NPANs

The review of previous plans and strategies and documentation of what has worked and reasons for such success is vital, since it enables a cumulative build-up of experiences. NFNAP 2015-2019, NPANM III 2016-2025, PPAN 2017-2022 and Vietnam NPAN to 2020 has included a specific chapter/section discussing a review of the previous action plans and strategies. These countries show similar approach in reviewing the previous action plan, where all of them documented the achievements and discussed the issues and challenges in implementing the previous action plan.

Indonesia's NFNAP 2015-2019 elaborates the policies/programmes on food production, accessibility and consumption; nutrition improvement and healthcare services that have been carried out for the previous years. The achievements as well as the direct and indirect challenges associated with the implementation of nutrition specific and nutrition sensitive programmes in the previous years are also discussed.

The NPANM III 2016-2025 provides details on the achievement of the previous NPANM II according to the targets for each indicator. The factors and problems that affected the achievement of the planned targets, as well as the challenges faced in implementing the NPANM II are discussed.

In the Philippines, Plan formulation started with the conduct of nutrition landscape analysis of past performance and current nutrition situation by a team of Filipino consultants with the support of Micronutrient Initiative (now Nutrition International) and UNICEF. The analysis was based on document reviews, focus group discussions, key informant interviews, intersectoral consultations and validation meetings with a wide range of stakeholders.

In reviewing the previous NPAN, Vietnam has documented the achievements in improving the nutritional status of their people over the past years through the implementation of The NNS 2011-2020 with a vision to 2030. The difficulties and challenges in implementing the NNS are next highlighted, and major nutritional issues of the population are also described. After this section, the document reviews the causes of limitations in implementing the NNS.

Key challenges in implementing previous NPANs and related strategic documents are highlighted/summarised in separate section below.

7.1 Main challenges / issues identified in implementing previous NPANs

All action plans outlined the key factors that influence the extent to which the planned programmes and activities can be implemented successfully. Some common issues and challenges that these countries face in implementing their action plans can be identified as below.

7.1.1 Common issues and challenges in implementing previous NPANs

Most of the countries (Myanmar, Vietnam, Malaysia, Indonesia) identified lack of intersectoral and multi-stakeholder coordination as one of the major challenges in action plan implementation. These action plans emphasise that responsibility for implementation has to be shared across sectors. It appears that the Ministry of Health is often perceived as having sole responsibility, and it is difficult to get commitment from the other Ministries and stakeholders. Malaysia in its NPANM III mentioned that despite periodic meetings of the National Coordinating Committee on Food and Nutrition (NCCFN), chaired by the Deputy Director-General of Health (Public Health), Ministry of Health Malaysia, the multi-sectoral commitments in nutrition in the country still need to be strengthened and strong political commitment is required to ensure collaboration from various sectors. The action plan took note that population is often not involved or aware of the decision-making processes. It was mentioned that there is a need to develop a road map that allows adequate coordination between national and sub-national levels, with involvement of other related stakeholders and community representatives to ensure commitment and active participation. In Indonesia, the lack of public-private partnership, multi-stakeholders coordination in the national and sub-national level and non-implementation of multisectoral approaches have led to low programme coverage for nutrition specific intervention and fragmented nutrition policies and programmes. In Vietnam, though there have been more socialising activities on nutrition with the active participation of localities, the NPAN highlighted that policy advocacy and multisectoral coordination on nutritional activities have not been effectively promoted. Besides, nutrition issues have not getting adequate attention from the party and government, causing inadequateness in cross-collaboration and that the activities and resources of various organisations are not being integrated effectively especially at localities.

The commitment of financial resources was also seen to be critical factor by most of the countries (Philippines, Malaysia, Myanmar, Vietnam) in nutrition action plan development and implementation. In Vietnam, the resource investment has not met actual need and due to the limited budget, sufficient resources to reach the objectives have not yet been realised. Majority of the budget has been allocated to control malnutrition of children under five, and there is insufficient budget for other important nutrition issues which are considered to be decisive to the development of physical and stature such as the first 1000 days, nutrition for pregnant and lactating mothers, stunting and micronutrient deficiencies. In Philippines, the budget was not expressed in PPAN 2011-2016 and no budget tagging for the sector programme in nutrition. Budget formulation for 2017 has been largely concluded prior to the PPAN formulation exercise. In Malaysia, financial shortfall and lack of sustainable financial commitment was identified as one of the key challenges in implementing NPANM II. Proposal to have a “dedicated” budget (separate from Ministry of Health budget) from the Ministry of Finance to support NPANM activities which are largely prevention in nature, did not materialise. Insufficient political commitment to tackling malnutrition has led to a financial shortfall. In the review, it was highlighted that an adequate and predictable funding is key to ensure the effective delivery of nutrition programmes and activities in the country.

Human resource capacity to deliver nutrition programmes and activities is crucial. Lack of human resources capacity or development is another common challenge identified by

most of the countries (Malaysia, Myanmar, Philippines, Thailand and Vietnam). For example in Malaysia, there is insufficient number of nutritionists in the health sector and providing sufficient number for the population is a big challenge. The proposal to employ nutritionists at various ministries was not taken up and there is still a shortage of nutritionists at government health sector. Vietnam recognised that there is a lack of necessary knowledge and means to propagandise and encourage its people to change their nutritional practices due to the limiting capacity of the nutrition network. Similarly, Thailand has insufficient nutritionists who work focusing in community-based settings, especially in settings such as health promotion hospitals and schools.

Indonesia, Vietnam and Myanmar have identified low level of knowledge and awareness on the importance of nutrition among community/local authorities as one of the challenges in implementing their action plans. In Indonesia, there was inadequate coverage on nutrition communication and health education on an ongoing basis to promote proper nutrition and health behaviour. Similarly, Vietnam's NPAN identified that nutrition communication, advocacy and education activities to raise awareness of proper nutrition to effect behaviour change are key interventions that should be further improved and maintained in implementing the action plan.

Lack of managing or monitoring and evaluation system was another challenge identified by several countries (Indonesia, Philippines, Malaysia) in implementing the action plan. In Philippines, there was inadequate system for managing the previous action plan and had no end-point PPAN evaluation in the last two plans. The past PPANs, including the 2011-2016 plan, were not operational plans, not results-based and posed a challenge in evaluability of the plan. In Malaysia, the data for monitoring and evaluation purposes is often not collected in a timely or in periodic manner, with large surveys such as the National Health and Morbidity Survey and the Malaysian Adults Nutrition Survey, currently carried out only every few years. Moreover, collected data can be of poor quality and often does not represent by state.

In addition to these common challenges, there were other different challenges and issues faced by the countries in implementing their action plan.

7.1.2 Other challenges and issues in implementing NPANs

In Indonesia, issues that have been identified include continuous and inter-generational cycle of nutrition problems; malnutrition at the first 1000 days of life and during pre-pregnancy period as the contributing factors to NCDs; low consumption of fruits and vegetables; lack of optimal access to clean water and health environment; low income and purchasing power that constraint diversification of food consumption; consumers' habits and attitudes that prioritise other aspects of the product over the nutritional aspects of foods; decentralisation system that lead to a gap in resources, commitment and capacity among sub-national level and the provision of technical support and guidance for districts/regional level needs to be improved; big difference between nutritional outcomes in urban and rural areas and the large differences in the prevalence of food and nutrition problems among the regions. In addition, the NFNAP stressed that problem solving with a local approach should be a

concern, the different demographic, geographic, and socio-economic characteristic of each region should be taken into consideration for appropriate adjustment in implementing interventions. The action plan also highlighted the importance of improving food security at the household level in accordance with local-based food patterns as the archipelagic nature of Indonesia results in the problem of channeling food effectively to all corners of the country. This situation has also created difficulties in monitoring of nutritional problems.

NPAN III Malaysia has recognised that greater attention needs to be given to nutrition promotion and intervention in schools considering the increasing trend of obesity amongst school children and the co-existence of under nutrition. Besides, there is a need to carry out more intensive advocacy activities at state level to further increase the number of private hospitals with Baby Friendly Hospital Initiative. Myanmar NPAFN, on the other hand, mentioned the need to strengthen information networking, more investments and upgrade nutrition laboratory as its challenges in implementing action plan.

In the Philippines, the "Situation Analysis of Nutrition in the Philippines" put together by a team of consultants commissioned by the NNC Secretariat as the first step in the formulation of PPAN 2017-2022, summarised the trends in the nutrition problems in the country and the performance of the PPANs of recent past. The analysis formed the basis for the Guiding Principles that governed the formulation of the current PPAN, and the five Strategic Thrusts identified include: focus on the First 1000 Days of Life, complementation of nutrition-specific and nutrition-sensitive programmes, intensified mobilisation of local government units, reaching geographically isolated and disadvantage areas, and complementation of actions of national and local government units.

Currently, Thailand is still facing major challenges including the double burden of malnutrition along with NCDs, together with the complexity of agriculture and food systems. Under the Strategic Framework for Food Management, the linkage of agriculture, food production, nutrition, nutrition counseling and health, nutrition problems should be more active and take more responsibility from Ministries and stakeholders to ensure the availability, affordability and accessibility of healthy diets among consumers. In addition, integration of implementation programmes among related Ministries such as Ministry of Agriculture, Ministry of Education, Ministry of Social Human Development and Ministry of Public Health needs to be strengthened.

Other challenges and limitations that have been identified by Vietnam in implementing its NNS and NPAN include unstable network for implementing nutrition activities, management and operation constraints, lack of attention and investment in the role of school for nutritional status improvement, food hygiene and safety activities that have not been well implemented, high risk of food shortage due to natural calamities, poor nutrition advocacy and communication at different levels and channels. Emerging issues such as globalisation and urbanisation, climate change, increasing population and rapid ageing of the population, becoming middle income country, nutrition in transition and major disparities in living conditions and nutritional status among regions are among other challenges that Vietnam has been facing in implementing the plan.

8 NUTRITION ISSUES TO BE ADDRESSED

The different national action and strategic plans show some similarities in the nutrition issues identified to be addressed (Table 5). Some of the common nutritional issues that have been identified as the priority of these countries include low exclusive breastfeeding rate in the first 6 months of life (Indonesia, Malaysia, Philippines, Thailand, Vietnam); increased prevalence of obesity among children and adults (Indonesia, Malaysia, Myanmar, Philippines, Thailand, Vietnam); high prevalence of stunting (Indonesia, Malaysia, Myanmar, Philippines, Thailand, Vietnam), underweight (Indonesia, Malaysia, Myanmar, Philippines) and wasting (Indonesia, Malaysia, Myanmar, Philippines, Thailand) amongst children under 5 years of age; increased/high prevalence of nutrition-related NCDs (Malaysia, Myanmar, Thailand, Vietnam); micronutrient deficiencies (Malaysia, Myanmar, Philippines, Thailand, Vietnam); low vegetables and fruits intake amongst the population (Indonesia, Malaysia, Thailand, Vietnam); and low physical activity levels among the population (Indonesia, Malaysia, Thailand, Vietnam).

Other nutritional issues that have been identified to be addressed in Indonesia's NFNAP are high consumption of salt and high fat foods, imbalance between the availability of food and consumption of energy and protein where the consumption is not meeting the recommendation while food is available. Myanmar specifically mentioned high Global Hunger Index (18.8%) which contributed to undernutrition among young children as the major nutrition situation to be addressed. Hunger is also a nutritional issue to be addressed in the Philippines where there is an estimated 31% food-poor families. In addition, PPAN (2017-2022) reports that poor nutritional status of pregnant and lactating women, poor infant and young child feeding practices and high percentage of Filipino households not meeting the recommended energy intake are some other important nutritional issues to be addressed.

Vietnam NPAN to 2020 specifically identifies lower physical status and stature of the population (compared to the same age group in most Asian countries) as one of the nutritional issues to be addressed. The document highlights that stronger nutrition interventions during the early period of life and physical activities interventions for the pre-puberty and puberty ages are required to address this issue. Quantity and quality of the diets of Vietnamese people, improper nutrition knowledge and practices amongst mothers and family members as well as disparity in prevalence of undernutrition among regions are three of other nutritional issues to be addressed by Vietnam NPAN to 2020.

Table 5: Nutrition situation/issues to be addressed by different NPANs and related documents

Nutrition situation/issues to be addressed	Indonesia	Malaysia	Myanmar	Philippines	Thailand	Vietnam
High prevalence of stunting among children under 5 years old	+	+	+	+	+	+
High prevalence of wasting among children under 5 years old	+	+	+	+		
High prevalence of underweight among children under 5 years old	+	+	+			+
Increased prevalence of childhood obesity		+			+	+
Poor nutritional status of pregnant and lactating women				+		
Low rate of exclusive breastfeeding in the first 6 months of life	+	+	+	+	+	+
Anaemia	+ (in women of child-bearing age & pregnant mother)	+	+	+ (among infants 6-11 months)	+ (in pregnant women & child-bearing age women)	+ (in pregnant women & children under 5)
Infantile beri-beri			+			
Vitamin A deficiency			+	+ (among infants 6-11 months)		+
Iodine deficiency disorder (IDD)			+	+ (among pregnant & lactating women)	+ (in Pregnant women)	+

Nutrition situation/issues to be addressed	Indonesia	Malaysia	Myanmar	Philippines	Thailand	Vietnam
Hunger			+	+		
Poor infant and young child feeding			+	+		
Low consumption of fruits and vegetables	+	+	+		+	+
Energy consumption not meeting requirement	+			+		+
Protein consumption not meeting requirement	+					
High consumption of salt and high fat foods	+				+	+ (high salt intake)
Increased prevalence of overweight/obesity among adults	+	+		+	+	+
Double burden of underweight and overweight among adults			+			
High/Increased prevalence of non-communicable diseases		+	+		+	+
Improper nutrition knowledge and practices among mother and family members						+
Physical inactivity	+ (especially in urban area)	+ (among adolescents and adults)			+	+
Physical status & stature (height)					+	+

9 FRAMEWORK FOR NEW NPANs

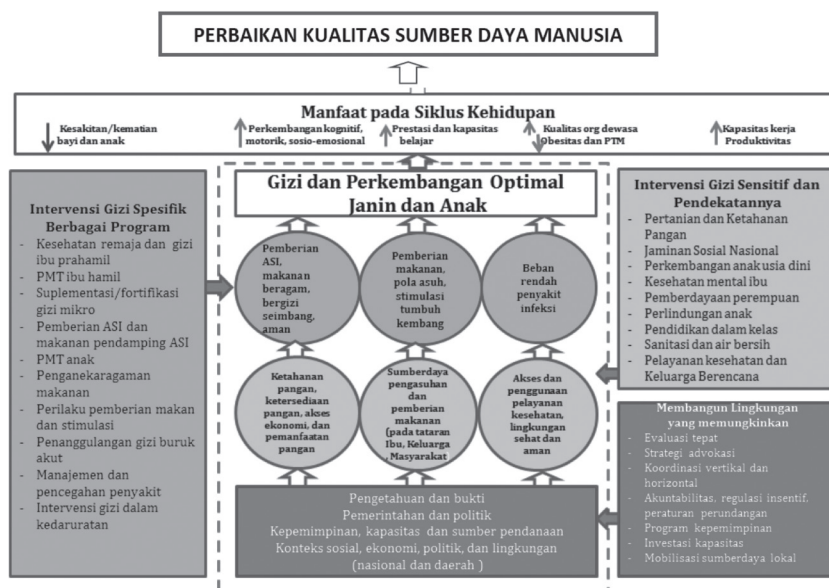
All NPANs in this study, except Vietnam, had developed a framework for the NPAN. All of these frameworks developed are presented in pictorial format. These frameworks show one commonality wherein all of them summarise the goal, priorities and strategies identified for the action plan.

The framework developed for Indonesia's NFNAP 2015-2019 is a pictorial presentation (Figure 1) illustrating the synergy among the nutrition specific programmes, nutrition sensitive programmes and other approaches to be implemented in contributing to nutrition and optimal development of foetus and children which subsequently benefits the whole life cycle and achieving the goal of improved human resources quality.

In Malaysia (Figure 2), the framework is a house-shaped pictorial presentation showing the goal of the NPANM III and the objectives at the top or roof of the house. The components of the three main groups of strategies adopted in the action plan, namely foundation strategy, enabling and facilitating strategies to achieve the objectives of the Plan, are stacked below the roof of the house. These strategies are elaborated in the next section.

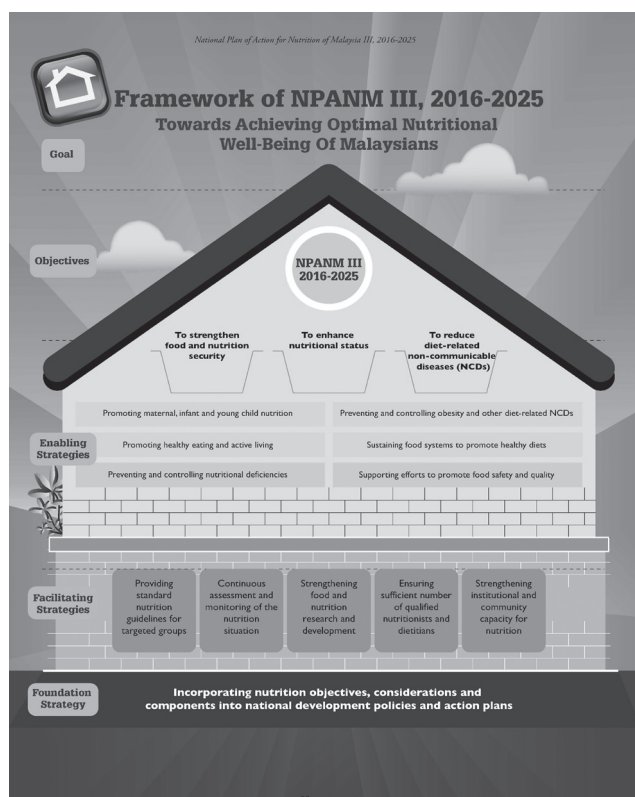
The Myanmar's framework for NPAFN 2011-2015 is presented in an organisational chart format (Figure 3) showing the three strategic directions (addressing immediate causes, underlying causes and basic causes of malnutrition in the country) and the strategic objectives that fall under each of these three categories.

PPAN 2017-2022's framework is a pictorial presentation (Figure 4) illustrating the synergy among the nutrition enabling programmes, nutrition supportive programmes and nutrition sensitive programmes in contributing to outcome targets, Philippines Development Plan goal and sustainable development goals.



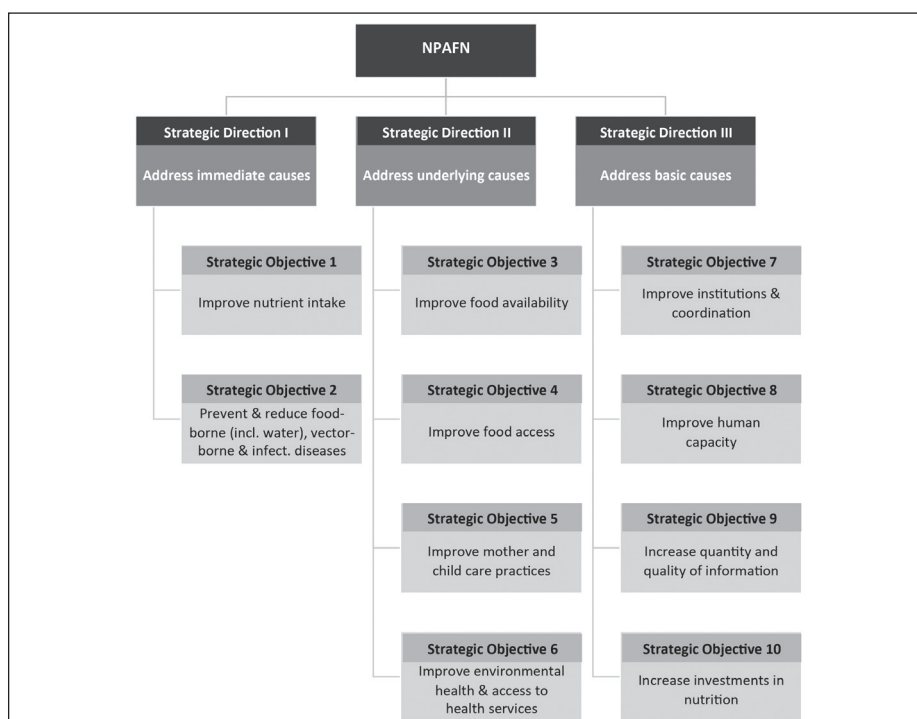
Source: BAPPENAS Indonesia, 2015

Figure 1. Framework of Indonesia's NFNAP 2015-2019



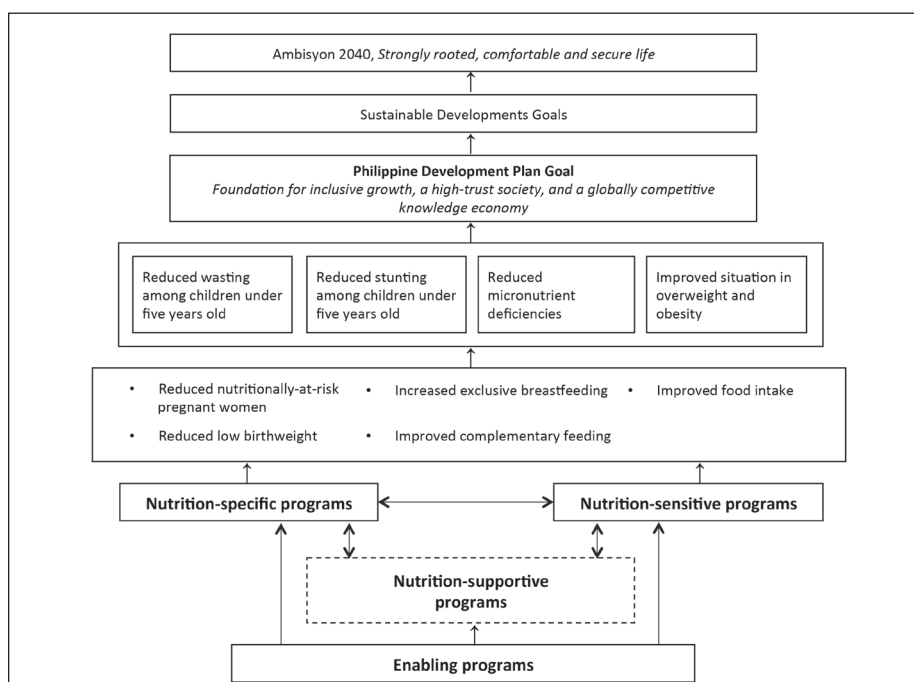
Source: NCCFN Malaysia, 2016

Figure 2. Framework of NPANM III, 2016-2025



Source: NNC Myanmar, 2013

Figure 3. Framework of Myanmar's NPAFN 2011-2015



Source: NNC Philippines, 2017

Figure 4. Framework of PPAN 2017-2022

10 IDENTIFIED STRATEGIES FOR NPANs AND RELATED DOCUMENTS

10.1 NFNAP Indonesia 2015–2019

In Indonesia, five pillars of strategies have been identified for the action plan. Community nutrition improvement is one of the important strategies identified in RANPG. This strategy focuses on community nutrition promotion and education; providing nutritional supplementation; health services and nutrition issues; community empowerment in the field of food and nutrition; social security that supports the improvement of food and nutrition; and early childhood education programmes.

The second pillar of strategy is to increase accessibility of various foods. This strategy focuses on domestic food production; provision of foods based on local resources; food distribution; calories, carbohydrates, proteins, vitamins, and mineral consumption; and increased access to food for the poor and the vulnerable groups.

The quality control and food safety enhancement strategy focuses on regulatory oversight and nutritional standards; supervision of fresh food safety, processed food security, food and drinking water facilities in public places and promotion of food safety. On the other hand, clean and healthy living behaviour improvement strategy focuses on prevention and control of infectious diseases; prevention and control of NCDs; water supply and sanitation; application of non-smoking areas; and the application of healthy behaviour.

Food and nutrition institutional strengthening/ coordination of food and nutrition development is the fifth pillar of strategy identified. This strategy focuses on food and nutrition planning; strengthening cross-sectoral services; strengthening of civil registration in the improvement of nutrition; stakeholder engagement; monitoring and evaluation; and preparation and submission of reports.

10.2 NPAN Malaysia III 2016–2025

In Malaysia, strategies identified are divided into three categories, namely foundation strategy, enabling strategies and facilitating strategies.

Foundation strategy:

The foundation strategy is built upon the idea that nutrition is not the sole responsibility of Ministry of Health and intervention programmes should also be implemented by other agencies. The strategy aims to incorporate nutrition objectives, considerations and components into national development policies and action plans in other relevant ministries and agencies. This foundation strategy is viewed as the overarching strategy and is vital for the effective implementation of the NPANM III. It also emphasises the need in ensuring the commitment and support of all the relevant agencies through National Food Safety

and Nutrition Council (NFSNC), as well as and effective coordination and monitoring of the NPANM III, 2016-2025 by the NCCFN.

Enabling strategies:

Six enabling strategies that have direct impact on achieving the specific objectives of the plan have been identified for the action plan. The first one being promoting maternal, infant and young child nutrition, which focuses on activities involving maternal, infant and young child feeding. This enabling strategy recognises the importance of good nutrition during the first 1000 days of life, and has been highlighted to improve nutrition for mothers and children through various promotional and intervention activities.

The second enabling strategy is promoting healthy eating and active living. It focuses on promotion to further increase awareness and practice of healthy eating which spans from toddlers to elderly. Various activities will be carried out in different settings and programmes such as child care centres, preschools, primary and secondary schools, institute of higher learning and other institutions, as well as community.

Preventing and controlling nutritional deficiencies is another enabling strategy identified where activities include an overall landscape analysis on malnutrition status among children to support in modifying existing nutrition strategies and programmes. In the preventing and controlling obesity and other diet-related NCDs strategy, the action plan emphasises the development of soft and hard policies that support and facilitate healthier environment (food and physical activity) to encourage behavioural change among population to improve the prevalence of obesity and other diet-related NCDs.

Sustaining food systems to promote healthy diets is the strategy that supports the strengthening of food and nutrition security of the population. All activities outlined under this strategy contribute to sustainable food systems encompassing from farm to table. The last enabling strategy identified is supporting efforts to promote food safety and quality where education to create the awareness among population on food labelling, food safety and consumer rights is emphasised. The addition of total sugars, sodium and main fatty acids as mandatory nutrients to be declared in nutrition labelling regulation are also proposed in this strategy.

Facilitating strategies:

The facilitating strategies identified in the NPANM III aim to provide the mechanism and support for the realisation of the enabling strategies. These include providing standard nutrition guidelines for various targeted groups, continuous assessment and monitoring of the nutrition situation, strengthening food and nutrition research and development, ensuring sufficient number of qualified nutritionists and dietitians and strengthening institutional and community capacity for nutrition.

10.3 Myanmar NPAFN 2011–2015

In Myanmar, different strategies were established based on three strategic directions identified, which were to address immediate causes, underlying causes and basic causes of malnutrition in the country.

The immediate causes of malnutrition reported in Myanmar include inadequate nutrient intake and food-, water-, vector-borne and infectious diseases. The strategies identified to address these immediate causes of malnutrition include giving priority to population groups and areas highly affected or at-risk to malnutrition in order to reduce disparities related to nutrition. The targeted population include pregnant women, infants, children aged 0-2 years old, underweight children aged 0-5 years old, families with pregnant women as well as states with high levels of child undernutrition or at risk to increased levels of undernutrition and food insecurity. Efforts such as increase investments in the identified promising interventions that could impact more significantly on undernutrition among children under five, pregnant and lactating women is taken.

Household food insecurity, poor mother and child care practices and poor environment, health and access to health services have been identified as the underlying causes of malnutrition in Myanmar. Strategies taken to address these causes include strengthening of the nutrition approaches to address malnutrition and food insecurity. Effort has also been taken to strengthen the nutrition information, education and communication component of the healthy lifestyle education/promotion programmes.

The basic causes of nutrition problems and food insecurity in Myanmar were found to be deeply rooted in a number of factors. Insufficient institutional capacity and coordination, human capacity, information and investment are some of the factors identified. Besides, food security and nutrition objectives have not yet been mainstreamed in national development policies and plans. This has consequently resulted in limited investments made for nutrition and related actions. The action plan aimed to address these basic causes through strategies such as strengthen the linkage of nutrition with other sectors of development, universal health care coverage, agriculture development, labour and employment, strengthen and nurture interagency structures for integrated and coordinated implementation of nutrition and related services at national and local levels as well as capacity-building of National Nutrition Centre and relevant staff/institutions.

The NPAFN has also highlighted the importance of identifying, documenting and adopting good practices and models for community-based nutrition improvement in addressing the basic malnutrition causes. Other strategies identified include strengthen system for planning, monitoring and evaluation of nutrition plan implementation at national and local levels; formulate and implement a nutrition research agenda; strengthen advocacy efforts through promulgation of coherent policies; and increased investments for nutrition.

10.4 Philippine PAN 2017–2022

In the Philippines, the strategies identified include focus on the first 1000 days of life, complementation of nutrition-specific, nutrition-sensitive and enabling management support programmes, intensified mobilisation of local government units (LGUs) and reaching geographically isolated and disadvantaged areas (GIDAs) and communities of indigenous peoples (IPs).

The PPAN 2017-2022 has been designed with a strong emphasis on the First 1000 Days circumscribed within the Life Stage Approach and guided by the analytics of the malnutrition tree. Under this strategy, the Lancet package of effective child and maternal interventions will be effectively implemented and the past approach which essentially promotes complementary food will be elevated from promotion to provision of complementary food to malnourished children of food insecure households. Government of the Philippines will also secure the resources to provide supplementary food to nutritionally-at-risk pregnant women.

The complementation of nutrition-specific, nutrition-sensitive and enabling management support programmes aim to address the immediate, underlying, and basic determinants of malnutrition in order to achieve targeted nutritional outcomes. These three sets of programmes included in the PPAN 2017-2022 constitute a complete set of necessary and effective combination of programmes to bring the planned nutritional outcomes by end 2022.

Under the intensified mobilisation of LGUs approach, 38 areas with greater magnitude of the stunting and wasting will be prioritized for mobilisation of local government units in order to ensure that PPAN 2017-2022 delivers the planned outcomes. Mobilisation will aim to transform low-intensity nutrition programmes to those that will deliver targeted outcomes. It will involve capacity building and mentoring of LGUs on nutrition program management to transform them to self-propelling LGUs able to plan, implement, coordinate, and monitor and evaluate effective nutrition programmes. This strategy is also expected to complement the interventions in the First 1000 Days.

Noteworthy is the PPAN's efforts to ensure that PPAN 2017-2022 programs are reaching out to geographically isolated and disadvantaged areas and communities of indigenous peoples (GIDA-IP). The community of NGOs and development partners' resources will be engaged for this purpose. The action plan fully recognises that children and their families at GIDAs like other Filipinos have the right to adequate food and essential services, despite their physical and cultural isolation. A package of necessary, adequate and appropriate services for GIDA-IPs will be developed along with the package for non-GIDA-IP communities. Financing available from government and other sources for GIDA-IP will also be controlled. The neighbouring LGUs that have performed well in nutrition are also encouraged to adopt GIDA-IP communities under a "big brother-little brother" approach to shepherd the latter in the pursuit of improving the nutritional status of the communities.

10.5 Vietnam NPAN to 2020

Five different solutions or approaches have been identified in implementing the NPAN to 2020, which are legislative solutions, solutions relating to advocacy and communication, technical solutions, solutions relating to resources and solutions relating to science, technology and international cooperation.

Legislative solutions:

Under this approach, focus is to be given to the review, development, finalisation and implementation of policies and regulations on various aspects of food and nutrition. The specific areas of focus for this include regulations on production, marketing, trading and utilisation of nutrition products for small children and pregnant women; food labelling and warning about effects of unhealthy foods; food fortification laws; breastfeeding promotion; school nutrition policy focusing on pre-school and primary school children; legislations to support food security for poor and disaster-affected areas; policies to encourage private sectors investment for production and provision of specific nutritional products for poor, disadvantaged and ethnic minority areas. Besides, several new/supplementation legislations relating to health insurance to cover rehabilitation treatment for children with severe acute malnutrition and policies on nutrition for children suffering from fatal diseases, genetic metabolic diseases and rare diseases will also be researched and proposed. It is proposed to strengthen the Steering Committee for the Plan of Action for Nutrition, develop mechanism to improve multi-sector cooperation and social mobilisation to increase nutritional investment. It is recognised that legislations are needed to mobilise and promote the involvement of mass organisations and industries in the implementation of the Plan.

Solutions relating to advocacy and communication:

This approach promotes the use of communication networks from the central to local levels to communicate, educate and mobilise authorities at all levels, mass organisations and people to implement legislation, guidelines and recommendations on nutrition. Direct communication to target populations, regions with high stunting rate, ethnic minorities, poor and marginal poor households will also be strengthened. The importance of developing model to promote children's right to participate in nutrition communication and education for children is highlighted under this approach. Developing communication programmes to improve food and nutrition knowledge and practices for all target groups, promoting effective social marketing communication to prevent micronutrient deficiencies and mobilising individuals, organisations and business to produce and supply safe food are other strategies identified under this approach.

Technical approaches:

This approach outlines various technical solutions to develop programmes, projects and specific interventions to improve nutritional, physical status and strength of the people with priority given to poor, disadvantaged and ethnic minority areas, as well as those at risk such as children, mothers and people in disaster areas. Nutrition care in the first 1000 days is one of the main solutions highlighted. Nutrition interventions for vulnerable groups identified include vitamin A supplementation and management of acute malnutrition and routine deworming. Other strategies identified under this approach include enforcement

of food fortification in domestic foods and imported products; implementation of activities to promote proper nutrition in schools; improvement of quantity and quality of people's meals through development/dissemination of plans and guidelines on food security, nutrition and appropriate physical activities. Improving quality of consulting services and nutrition rehabilitation activities, as well as development of technical guidelines on nutrition treatment at health facilities are also stressed under this approach. Effort will also be taken to strengthen the capacity of nutrition surveillance system and conduct periodical monitoring and surveys to evaluate the progress and results of the plan.

Solutions relating to resources:

The resources approaches focus on two areas, namely human resource development and mobilisation of budget for conducting the NPAN to 2020. Some of the main strategies identified for human resource development include consolidating nutrition collaborators particularly specialised staff network at commune levels; strengthen professional capacity for monitoring and operation of nutrition programmes from central to local levels, and mobilise the participation of social collaborators of mass politic-social organisations. Extensive training will be given to nutrition staff, dietitians in the hospitals and food safety professionals. Training will also be given to reporters; editors; information, education and communication officers at different levels to increase communication capacity in sensitising the action plan to the Vietnamese population. Besides, several training materials such as those related to nutrition in the first 1000 days, nutrition and physical activities to prevent NCDs, nutrition counselling as well as clinical nutrition and technical guidelines will be developed. In terms of raising financial resources, state budget for nutritional activities, official development assistance and international government aid, health insurance source, social mobilisation and other legal financial supports are some of the potential funding sources identified in the action plan.

Solutions relating to science, technology and international cooperation:

This approach focuses on improving international cooperation (for example with UN organisations) to conduct global nutrition movements and initiatives in Vietnam. The importance of active cooperation with scientifically advanced countries, research and education institutes in research and education fields both regionally and globally in order to increase the quality of nutrition human resources is highlighted under this approach. Other strategies identified for this approach include increasing the capacity of scientific research on nutrition and foods, and strengthening information technology application to monitor and provide information on nutrition and food safety.

11 FOOD AND NUTRITION PROGRAMMES/ACTIVITIES IDENTIFIED

Though the strategies proposed are different among countries, it can be observed that the programmes and activities established under each strategy are, to some extent, similar (especially among the countries participating in SUN Movement) and could be generally divided into specific programmes/activities for nutrition and nutrition sensitive programmes/activities. In most of the countries, several agencies are involved in one programme/activity and a lead agency is usually identified for every activity. Malaysia and Philippines identified different output indicators, specific target and time frame for each of the programmes/activities.

11.1 Overview of programmes/activities in NPANs

11.1.1 Indonesia

The nutrition specific interventions in Indonesia are implemented primarily by the Ministry of Health, targeting special groups under the First 1000 Days of Life Movement programme (pregnant mother, breastfeeding mother, children aged 0-23 months). These interventions are expected to contribute to 30% of the stunting reduction efforts in Indonesia. Different interventions have been identified for different target groups under the First 1000 Days of Life Movement (Table 6). Other nutrition specific interventions identified in NFNAP 2015-2019 are promotion of fortified foods including iodised salt, micronutrient powder supplementation (Taburia), macronutrient supplementation (supplementary feeding programme PMT), classes for pregnant mother, balanced nutrition and behavioural change campaigns and National Health Insurance.

Table 6: Interventions for different target groups under the First 1000 Days of Life Movement in Indonesia NFNAP

Target group	Nutrition specific interventions
Adolescent girls	Preconception service such as family planning, postpone first pregnancy, birth spacing extension and monitoring of psycho-social condition during pregnancy
Women of childbearing age and pregnant women	Iron-folate supplementation, calcium supplementation, balanced energy and protein supplementation, iodine supplementation, smoking cessation, prevention of malaria in women, obesity prevention
Neonatal	Delayed cord clamping, self-feeding initiation, vitamin K & vitamin A supplementation, kangaroo care treatments

Children under 2 years of age	Promotion of exclusive breastfeeding up to 6 months and continue breastfeeding up to 2 years of age, promotion of complementary foods after 6 months of age, zinc, iron and vitamin A supplementation
Children under 5 years of age	Provision of nutritionally balanced diet, vitamin A and iron supplementation
Disease prevention and management in children under 5 years of age	Malnutrition management, zinc therapy and feeding therapy for diarrhoea sufferers, The Water Sanitation and Hygiene (WASH) programme, malaria prevention, worms treatments, prevention of obesity

On the other hand, the nutrition sensitive interventions, which account for 70% of the effort in reducing stunting in Indonesia, are implemented by relevant ministries/institutions and targeting general population. The activities identified include provision of clean water, poverty reduction activities, gender equality, utilisation of household yard, early childhood development, women empowerment, family planning, strengthening of food systems, reproductive and nutritional health education for school and adolescent children, and other non-health development activities such as agriculture, formal education, regional incentive funds, domestic and social security development.

11.1.2 Malaysia

A total of 172 activities have been established based on the specific strategies identified. Table 7 summarises the type of activities based on each strategy. The programmes and activities cover all age groups from pregnant women, infant and young children to the elderly. Most of the nutrition programmes and activities carried out aim to address both under- and over-nutrition among the population.

11.1.3 Myanmar

Twelve nutrition specific interventions have been established. The interventions cover breastfeeding, complementary feeding, improved hygiene practices, periodic vitamin A supplements, therapeutic zinc supplements for diarrhoea management, multiple micronutrient powders, deworming, iron-folic acid supplement for pregnant women, salt iodisation, rice fortification, prevention or treatment for moderate undernutrition and treatment of severe acute malnutrition with ready to use therapeutic foods.

Myanmar's nutrition sensitive interventions focus on aspects such as health, WASH, agriculture, food, livelihood, education, social protection, governance, research (biofortification, increasing yields of nutrient-rich foods), increasing policy coherence and media.

Table 7: Summary of NPANM III activities based on specific strategies identified

Strategies	Activities
Foundation strategy	
1. Incorporating nutrition objectives, considerations and components into national development policies and action plans	This strategy emphasises the need in ensuring the commitment and support of all relevant agencies for effective coordination and monitoring of the NPANM III. A total of 10 activities have been identified which include incorporate nutrition/ nutrition related agenda/ nutrition component in higher level meetings, social protection programmes in various ministries and National Agro-food Policy; strengthen advocacy of the NPANM III to all relevant stakeholders; ensure commitment and effective coordination of all relevant stakeholders through the NFSNC and NCCFN; revised the National Nutrition Policy of Malaysia 2005; establish Technical Working Group for food and nutrition security as well as strengthen collaboration with UN agencies and ASEAN countries in nutrition strategies and programmes implementation.
Enabling strategies	
1. Promoting maternal, infant and young child nutrition	A total of 19 activities have been identified which include dietary advice; haematinic intake; strengthening breastfeeding promotion; cooking demonstration; rehabilitative activities such as distribution of full cream milk to mothers with inadequate weight gain.
2. Promoting healthy eating and active living	Activities under this strategy are to be carried out in different settings, namely childcare centres, preschools, schools and various institutions of learning and general community. A total of 50 activities have been identified, including reviewing curriculum, develop teaching modules and guidelines; enforcement on banning sale of unhealthy food & beverages to children; strengthening existing nutrition programmes namely Healthy Community Kitchen, Healthy Eating through Healthy Shopping, Healthy Catering and Healthy Cafeteria; “Back to Nature Programme” initiative to inculcate fruit and vegetable intake especially to young children.

3. Preventing and controlling nutritional deficiencies	Sixteen activities have been listed, targeted at different groups, namely women, children 6 years old and below, school children, as well as all age groups. Activities listed include overall landscape analysis on malnutrition status among children to support in modifying existing nutrition strategies and programmes; implementation of Universal Salt Iodisation (USI) and fortification of wheat flour with iron and folic acid; continuous collaboration with Ministry of Education for the National Supplementary Feeding Programmes such as School Supplementary Feeding and School Milk Programme; continued training among health care providers and care givers to increase nutrition management skills of children below 5 years.
4. Preventing and controlling obesity and other diet-related non-communicable diseases (ncds)	This strategy has identified 16 activities, including development of stronger soft and hard policies that will support and facilitate healthier behavioural change among the population; establish guidelines on Weight Management Programme for Overweight and Obese Person; community empowerment through KOSPEN programme; monitor and establish guideline to regulate marketing of food and non-alcoholic beverages.
5. Sustaining food systems to promote healthy diets	The strategy calls for collaboration with the Ministry of Agriculture and Agro-Based Industry in making agriculture system more nutrition enhancing. A total of 16 activities have been identified, including revisiting the national food system policies including food production, distribution, marketing and purchasing to provide more effective and supportive food system; promotion of sustainable food system.
6. Supporting efforts to promote food safety and quality	Six activities identified include educating and improving awareness of the population on food labelling, food safety and consumer rights; proposal on mandatory declaration of total sugar, sodium and main fatty acids.
Facilitating strategies	
1. Providing standard nutrition guidelines for various targeted groups	The six activities identified include to develop dietary guideline for different population groups such as children with special needs, pregnant and lactating women, elderly and vegetarian; review all guidelines and recommendations at least once every ten years; review nutrition training modules.
2. Continuous assessment and monitoring of the nutrition situation	Five activities have been identified, including monitoring prevalence of diarrhoea in children under 5 years old; monitoring of body mass index (BMI) among school children, strengthening the national nutrition surveillance systems for specific groups; periodically report to the related UN agencies for country accountability and as commitments to the global and regional nutrition parameters and frameworks.

3. Strengthening food and nutrition research and development	The eight activities identified include conducting periodic and comprehensive national nutrition surveys for all age groups; establishment of Nutrition Research Priorities (NRP) for the 11th and 12th Malaysia Plans; update the Malaysian Food Composition Database 1997 and establishment of the National Institute of Nutrition (NIN).
4. Ensuring sufficient number of qualified nutritionists and dietitians	This strategy is related to the Allied Health Professions Act and the six activities identified include registration of nutritionists and dietitians, as well as periodic review of curriculum in universities, development of guideline to recognize subject matter experts and to provide more opportunities for post-graduate and sub-specialty training.
5. Strengthening institutional and community capacity for nutrition	A diverse of 14 activities have been identified in this last strategy and including mandatory placement of nutritionists in relevant ministries as well as industries; further strengthen institutional and community capacity for nutrition; training on healthy eating, food safety and healthy meal preparation.

11.1.4 Philippines

There are 28 projects included under eight nutrition specific programmes, ten projects included under the nutrition sensitive programme, and three enabling management support programmes designed to implement the PPAN 2017-2022.

The eight nutrition specific programmes are (i) Infant and young child feeding through health systems support, community based health and nutrition support, maternity protection, establishment of breastfeeding places, and enforcement of the milk code; (ii) Integrated Management of Acute Malnutrition (PIMAM) through enhancement of facilities and provision of services, and building capacity of local implementers; (iii) National Dietary Supplementation Programme through supplementary feeding of pregnant women, preschool and school children; (iv) National Nutrition Promotion Programme for Behaviour Change through nutrition promotion in schools, communities and in the workplace; (v) Micronutrient supplementation with vitamin A, iron-folic acid, zinc and multiple micronutrient powder for specified population groups; (vi) Mandatory food fortification that specifically targets industries of the staple foods to be fortified, i.e. rice, sugar, cooking oil, flour and salt; (vii) Nutrition in emergencies with the aim to build capacity for mainstreaming nutrition protection in emergencies; and (viii) Overweight and obesity management and prevention programme, through healthy food environment, promotion of healthy lifestyle, and weight management intervention for overweight and obese individuals.

On the other hand, PPAN's nutrition sensitive programme comprises ten nutrition sensitive projects to promote child nutrition, ranging from farm-to-market roads, economic and livelihood projects to reduce poverty, vegetable gardening in schools, public works infrastructure, and water, sanitation and hygiene project. These are development programmes and projects that will be tweaked to produce nutrition outcomes.

Three enabling management support programmes have also been established. These include mobilisation of local government units for nutritional outcomes, policy development for food & nutrition, and management strengthening support to PPAN effectiveness.

11.1.5 Thailand

While specific NPAN has not been established in Thailand, various nutrition projects/programmes have been carried out under other national strategies/plans. Among them are the 2nd National Reproductive Health Development and Strategy (2017-2026) on the Promotion of Quality Birth and Growth targeting women and men of reproductive age, pregnant women and children aged 0-5 years old; Thailand healthy lifestyle strategic plan, Strategic Food Management Strategy, the Prevention and Control of NCDs RTG-WHO Country Co-operation Strategy 2017-2021 and National Strategies for IDD Prevention and Control 2017-2021.

The nutrition programmes established under the 2nd National Reproductive Health Development and Strategy (2017-2026) includes The Miracle of the First 1000 Days Project with the aim to create a new generation of Thai people in the 21st century with optimum growth and well-development, and with good IQ, health, strong, diseases free and equipped with appropriate life skill; Thai Women Red Cheek Project targeting reproductive women; Optimum Growth in School Children Project targeting school children and Optimum Growth in Adolescent Project targeting adolescent to promote optimum growth in both children and adolescent.

The implementation of The Miracle of the First 1000 Days Project is based on the three stages of pregnancy and lactating period i.e. the first 270 days during pregnancy, the 180 days after birth to 6 months and the 550 days from 6 months to 2 years. The activities identified for the first stage (first 270 days during pregnancy) include antenatal care; counselling on physical and mental health; food preparation skill practice and adjustment of food habit/behaviour; provision of free iodine, iron and folic acid tablet throughout pregnancy period; and provision of 90 boxes of milk for 90 days in the third trimester. The nutrition measures taken for the second stage (the 180 days after birth to 6 months) focus on promotion of exclusive breastfeeding. For example, breastfeeding corners are set up in workplace of both private and public sectors. The length and weight of the infants are monitored every three months and nutrition counselling is also provided for lactating women. Free 90 boxes of milk will also be provided for 90 days. The activities outlined for the 550 days from 6 months to 2 years (stage three) include height and weight monitoring; developmental screening; promotion of play, story-telling and appropriate sleep; education on complementary feeding, oral health of infants; weekly iron supplementation and provision of milk and free egg (one egg per day) for children age one year and above.

The Thai Women Red Cheek Project is scheduled to be carried out in two phases where phase I involves advocating through public relations such as Facebook and website. Phase II of the project involves activities for nutrition improvement, focusing on education, capacity building and strengthening of reproductive women in 19 workplaces in ten provinces of Thailand.

Two programmes implemented under the Optimum Growth in School Children Project are The Health Promoting School Programme and School Milk/School Lunch Programme. A health promoting school policy is established for the Health Promoting School Programme and several other implementation strategies have been outlined which include health promotion activities with collaboration between the school and local community; provision of school-based health education, school health services such as physical exams and first aid, counselling and social support for students; promotion of proper nutrition and consumption of safe foods, regular physical activities; and support the health status of school staff. On the other hand, the School Milk/School Lunch Programme involves the development of the NuPETHS (Nutrition, Physical Activity, Environmental health, Teeth, Hygiene, Sleep) education package and promotion of milk drinking through the World Milk Day.

The implementation of the Optimum Growth in Teenager Project involves the development of the NEST (Nutrition, Exercise, Sleep & Sex Education, Teeth) knowledge package and survey of optimum growth situation and consumption behaviour in Thai people aged 15-21 years old before and after the NEST education.

There are also several projects targeting different population groups being carried out under the Prevention and Control of NCDs RTG-WHO Country Co-operation Strategy 2017-2021. These include the Iron Control and Prevention Project; The Promotion of Desire Behaviour in Working Group by Health Leader Project to promote normal BMI among working group age 30-44 years old; Healthy District to Reduce Sweet, Fat and Salt to Control NCDs Project targeting all age groups especially elderly; and The Promotion of Nutrition in Healthy Aging targeting elderly population to promote health-adjusted life expectancy where elderly are able to take care of themselves and have a good quality of life. In the two programmes targeting elderly, Thailand has taken specific measures such as implementation of 'Low Salt Week'; collaboration among Nephrology Society of Thailand, The Royal College of Physicians of Thailand and related organisation in educating the public; development of innovation to reduce Alzheimer's Disease through Elderly Club/Community/Temple; development of Food-Based Dietary Guideline (FBDG) and Nutrition Flag for Elderly; advocate FBDG and Nutrition Flag through several settings such as Elderly School, Elderly Club, Health Promotion Hospital, Phrapariyattidhamma School and Regional Health Promotion Center which are located nationwide in various part of the country.

On the other hand, the Iodine Deficiency Disorders (IDD) Control and Prevention Project targeting pregnant women, children aged 3-5 years old and elderly is established under the National Strategies for IDD Prevention and Control 2017-2021. This project aims to control and prevent IDD and improve the quality of life of all age groups in Thailand. Two major measures taken for this project are iodine supplementation tablet for the pregnant and lactating women during the first 6 months of exclusive breastfeeding as well as provision of iodised drinking water for particular remote areas where the accessibility of iodised salt is limited.

11.1.6 Vietnam

The nutrition activities identified to be implemented in Vietnam NPAN to 2020 are based on six focus areas; namely (i) strengthening of policy-making and inter-agency collaboration for the promotion and support of nutritional activities; (ii) improvement of maternal and child nutrition status; (iii) improvement of micronutrient deficiencies; (iv) improvement of the quantity and quality of people's meals; (v) control of overweight/obesity and nutrition-related risk factors of some chronic NCDs and (vi) supervision, monitoring and evaluation.

Two main groups of activities have been identified in the effort to strengthen policy-making and inter-agency collaboration to promote and support nutritional activities namely establishing, implementing, inspecting and monitoring policies, regulations on nutrition and foods; and developing inter-sectoral collaboration and socialization mechanisms to promote and increase investment in nutrition.

In order to improve maternal and child nutrition status, the Vietnam NPAN to 2020 highlights six main activities, namely strengthening networking and capacity building for personnel engaged in malnutrition prevention; implement nutrition interventions for vulnerable groups; implementation of child growth and development monitoring; implement communication to raise awareness of mothers and child caregivers; conduct studies and develop specific nutrition intervention models; and improve nutritional status of school-aged children.

For the improvement of micronutrient deficiencies, the Vietnam NPAN to 2020 stresses on strengthening preventive and treatment services for micronutrient deficiencies, fortification of micronutrients in commercial domestic and imported products (especially edible oil fortified with vitamin A, wheat flour fortified with iron and zinc and iodised salt), and promotion of meal diversification through multimedia communication strategies and social marketing activities.

In the area of improving the quantity and quality of the population's meals, the activities identified focus on ensuring household food security and developing and disseminating scientific basis to guide people on appropriate diet.

The activities outlined in the Vietnam NPAN to 2020 in order to control overweight/obesity and chronic NCDs focus on improving people's awareness about risk factors of overweight and obesity in children. Other activities identified to be carried out include the National Strategy for Prevention and Control of Cancer, Cardiovascular Disease, Diabetes and Other Non-Communicable Diseases, 2015-2025; development and implementation of tools to support nutrition counselling and treatment of diseases related to nutrition; and capacity building for Department of Nutrition and Dietetics at health facilities at the central, provincial and district level.

Lastly, a range of activities have been identified in order to ensure better supervision, monitoring and evaluation of the Plan. The activities outlined include capacity building aimed at improving and maintaining nutrition surveillance system and evaluation of the implementation of the National Nutrition Plan and Strategy.

11.2 Common activities identified in the NPANs and related

Overall, for all the six countries in this review, it can be noted that most programmes/activities identified are in response to the issues identified in the situation analysis for each respective country, are relevant to the priority gaps identified in the review, and are locally appropriate. The programmes and activities are also adopted after considering the past experiences in implementation capacity in order to achieve the intended nutrition impact.

Some common activities implemented in most of the countries may be identified. These are summarized in the following paragraphs.

11.2.1 Promoting good nutrition during the first 1000 days of life

All NPANs and related documents recognise the importance of good nutrition during the first 1000 days of life and focuses on promoting and improving nutrition for mother and children through various activities. Exclusive breastfeeding is promoted by all countries. Other common activities/programmes undertaken to promote mother and children nutrition include education on complementary feeding, nutrition education and counselling sessions to pregnant women and mothers, monitoring of nutritional status of children under 5 years old and supplementary provision of nutritional products for mothers/children at risk for poor nutrition.

In Malaysia, the concept of the first 1000 days of life is integrated into nutrition activities related to maternal nutrition to promote and improve nutrition for mothers and children. In addition to the common activities conducted by most countries mentioned above, other related activities outlined in the NPANM to promote good nutrition during the 1000 days of life include Baby Friendly Hospital/Clinic Initiatives, breastfeeding rooms in public facilities, strengthen the Code of Ethics for the Marketing of Infant foods and Related Products through legislation in Malaysia.

Some activities in Myanmar to promote good nutrition during the first 1000 days of life include strengthening infant and young child feeding (IYCF) practices through strengthening of Baby-Friendly Hospital Initiative (BFHI), community-based IYCF, release the 'Order of Marketing Formulated Foods for Infant and Young Child', and mass campaign of "Nutrition Promotion Month" in every August.

In Vietnam, effort will be taken to compile, print and release a kit of advocacy materials to increase resources for nutritional intervention in the first 1000 days of life. Initiative is taken by the government to develop regulations on the operation of the breast milk bank. At community level, nutrition groups/clubs are developed and maintained as a platform for direct communication activities such as group discussions, food demonstration for mothers, nutrition instructions for pregnant and lactating women, sharing of experiences related to good nutrition care in order to improve knowledge and nutrition practices to improve nutritional status of newborns and young children. Nutrition counselling activities are also implemented to provide information on diet. The importance of the first 1000 days is also being

promoted through mass media. Audio/video clips (including news and science education) with different nutrition topics and the '1000 Golden days' programme will be developed to be broadcast on television or radio of Vietnam. Besides, several nutrition education media campaigns such as "Breastfeeding Week" and "Nutrition and Development Week" are implemented at different times of the year. A nutrition campaign concentrating on the first 1000 days of life will also be launched in conjunction with a high level conference on the movement to scale up nutrition activities in Vietnam.

In Indonesia, the First 1000 Days of Life Movement has been set as an effort to cope with children malnutrition. Two types of activities i.e. specific (Table 6) and sensitive interventions are included in this Movement. Provide clean water and sanitation, food and nutrition security, family planning, public health insurance, basic delivery insurance, intervention for teenage girls and poverty eradication are among the nutrition sensitive interventions included in the Movement.

In the Philippines, the National Nutrition Promotion Programme for Behaviour Change together with Micronutrient supplementation will be implemented in schools, communities, and in the workplace. It is an essential intervention that provides nutrition support for improving nutrition from childhood to adulthood.

In Thailand, nutrition interventions are based on promoting good nutrition throughout the course of life, emphasising the early life nutrition. Nutritional intervention in childbearing age group is focusing on preventing anaemia and lowering the risk of neural tube defects in newborns, as is demonstrated in "Thai Women Red Cheek" project. A woman who plans to have a baby is recommended to take weekly dose of folic acid 2.8 mg and iron 60 mg (Ferrofolic) at least 3 months before getting pregnant. Another project is "The Miracle of the First 1,000 Days of life" in which the nutrition interventions are divided into three stages, under the concept of proper eating, hugging, playing, story-telling and appropriate sleeping. First stage is during the pregnancy period (270 days) during which nutrition intervention is emphasised on nutrition counseling and iodine, folic acid and iron supplementation. The second stage is newborn until 6 months (180 days), when the nutrition intervention is focused on exclusive breastfeeding for 6 months for babies and iodine, folic acid and iron supplementation for mothers. The third stage is children aged 6 months to 2 years old (550 days) which is focused on breastfeeding with proper complementary food and promote child development with the Developmental Surveillance and Promotion Manual (DSPM).

11.2.2 Food and nutrition security enhancement

Indonesia has outlined a wide range of activities to increase food availability and food affordability. These include the production of superior seed/seedlings through agriculture research and development and fostering breeder at the countryside level in order to create seed sovereignty, strengthening of government food reserves in each region with the intention of to prevent food insecurity while maintaining price stability, importation control, development of diversification effort through integrated farming to reduce the risk of crop

failure, increase effectiveness of rice programme for poor families, and domestic and foreign market development for local food products.

Sustainable food systems are promoted by Malaysia. Several activities outlined include integrate nutrition component in the planning of food supply for the population, advocate the establishment on community gardening, advocate increasing local production of fruits and vegetable, increase accessibility to affordable fruits and vegetables, increase the production and promotion of healthier foods and beverages, food wastage reduction, promoting the consumption of underutilised crops and guideline on food supply and distribution according to nutrition requirement during crisis.

Vietnam promotes the diversification of local food production, processing and utilisation. Several food security guidelines and plans such as food security plans and guidelines for at risk areas (e.g. disadvantaged areas and areas affected by climate change); long-term plans and specific plans for each region to reduce food insecurity risks are being developed. Besides, the household nutrition security is ensured through the application of Vegetation-Aquaculture-Cage for Animal husbandry (VAC) ecosystem, a model that integrates garden, pond and livestock pen. Through the VAC systems, all the available land, air, water and solar energy resources will be effectively used and by-products and waste will be effectively recycled to provide diversified agricultural products to meet the nutritional demands of rural communities. For food and nutrition security in emergencies, an early warning surveillance system as well as a food price variability surveillance system are also developed to identify risks of food and nutrition insecurity.

Similarly, in its objective to increase and diversify domestic food production as well as improve access to food, several activities that have been outlined in Myanmar include promotion of homestead food production; crops resistant to pests, droughts and floods; technique and quality extension support for increasing crop and livestock production; transfer of technology on sustainable ecologically sound agriculture and nutrient enhancing methods; integrating food-based nutrition education into agricultural planning and production; and establishing an effective food price control system.

11.2.3 Food quality and safety enhancement

In Myanmar, food and water safety awareness and awareness on consumer rights are promoted. Contaminated food and food borne disease surveillance system has also in place to enhance food quality and safety. Malaysia has developed a strong food control system for over three decades to promote food safety and quality in the country. As an extension to the mandatory nutrition labelling regulation, Malaysia is in the process of imposing mandatory declaration of total sugars, sodium in all food products and expanding mandatory nutrition labelling for processed food and beverages sold in retail outlets. Besides having established a strong food safety framework in Thailand for several decades, the country has also developed a “Food Choice” application on mobile phones and the “Healthier Choice” logo serves as a tool for consumers to easily get the nutrition information and make decisions based on the labelling. In Vietnam, guidelines for safe farming, organic

farming with high technology to provide safe and nutritious food will be developed and implemented. Besides, the VAC ecosystem implemented also helps to ensure the production, circulation and distribution of safe foods. Indonesia promotes food safety through regulatory oversight and nutritional standards as well as supervision of fresh food safety, processed food security, food and drinking water facilities in public places.

11.2.4 Dietary supplementation programmes

Malaysia, Myanmar and Philippines have dietary supplementation programmes for different target groups. In Malaysia, school supplementary feeding programme is offered for targeted school children. In Philippines, five dietary supplementary projects are established under their National Supplementary Programme. The Philippines' National Dietary Supplementation Program aims to safeguard the health of nutritionally-at risk groups by providing nutritious foods to complement breastfeeding of 6-24 month-old infants and supplement diets of preschoolers, school children, and pregnant women. The programme also provide information on healthy eating; and referrals to health care. This programme will be complemented by other nutrition support programmes i.e. deworming, immunisation, nutrition promotion, oral health, WASH and nutrition counselling to maximize the impact of dietary supplementation. Besides School Feeding Programmes, Myanmar planned to provide food and nutrition supplementation for moderate acute malnourished children under five, potentially pregnant and lactating women at risk of malnutrition. On the other hand, Vietnam is working on developing a school meal support policy and implementing school meal project for school children. All countries in this review implement School Milk Programme for school children.

11.2.5 Micronutrient supplementation programmes

Another programme/activity that most of the countries has in common is micronutrient supplementation. Iron and folic acid supplementation for women of reproductive age, pregnant women and adolescent girls is implemented in six countries in this review. In Philippines, iron-folic acid supplementation is extended to all women age 10-49 year old. In Thailand, weekly iron-folic acid tablet supplementation is provided to reproductive age (20-49 years old) women who want to have a child under the Universal Health Coverage Scheme.

Besides, all the countries (Indonesia, Malaysia, Myanmar, Philippines, Thailand and Vietnam) promote the use of iodised salt in order to control iodine deficiency. Vietnam monitors the production and importation of iodised salt, and provide iodised salt especially for poor and disadvantaged regions, which have no access to iodised salt. In Philippines, iodised oil is provided for pregnant and lactating women in endemic areas. In Thailand, iodised drinking water is provided for particular remote areas, where the accessibility of iodised salt is limited. This is done by dropping two drops of concentrated iodine solution into ten litres of drinking water to produce a glass of 200 cc with 40 microgram of iodine for target group. If children drink 2-3 glasses of water per day, they will receive enough iodine (daily iodine requirement for young children is 90 micrograms and for school children is 120 micrograms).

In Vietnam, high dose vitamin A capsules are supplemented for children from 6-36 months, children under 6 months old not receiving breastfeeding, children under 5 years old with risk factors for vitamin A deficiency and women within one month of giving birth for Vitamin A deficiency control. Vitamin A supplementation is implemented for children 6-59 months, post natal women in Myanmar and also through community-based distribution for remote area. In Philippines, Vitamin A supplementation is provided for lactating women and children aged 6-59 months.

On the other hand, Indonesia, Myanmar, Philippines and Vietnam provide zinc supplementation for diarrhoea prevention and control in children. In Indonesia, zinc supplementation for diarrhoea management are provided for children 7-23 months as part of the First 1000 Days Movement.

In Vietnam, children under 2 years of age are given multi micronutrients supplementation. Media campaign 'Micronutrient Day' is organised on 1-2 June each year in Vietnam to raise community awareness on micronutrient deficiencies prevention. Vietnam is also making the effort to develop, experiment and implement micronutrient deficiency prevention model in schools in urban areas, industrial zones with many female workers, mountainous areas and delta areas.

11.2.6 Food fortification

Food fortification is a programme/activity identified in most NPANs (Malaysia, Myanmar, Philippines, Vietnam). In Myanmar, national legislation on USI has been developed. Besides, home-fortification with micronutrient powder (Sprinkles) are implemented in Myanmar as one of the important component of interventions to prevent anaemia and micronutrient deficiencies and improve infant and young child feeding. Fortified rice has been initiated in Myanmar and development of National Rice fortification policy is still in progress.

In Malaysia, mandatory iron and folic acid fortification of wheat flour has been planned to be implemented as one of the actions to prevent and control nutritional deficiencies in women. Universal Salt Iodisation for the whole country has also been identified by the NPANM III.

In Philippines, the "Food Fortification Law" mandates fortification of flour, oil and sugar with Vitamin A and flour and rice with iron. Under the PPAN 2017-2022, the Mandated Food Fortification (MFF) Programme covers nationwide implementation targeting the general population. The programme specifically targets industries of the staple foods to be fortified, i.e. rice, sugar, oil, flour and salt. The institutionalization of salt iodisation and food fortification to local government units to strengthen the implementation of salt iodisation and food fortification addressing micronutrient deficiencies in the country is the key project under the MFF programme. Besides, the Sangkap Pinoy Seal Program (SPSP) is also implemented as a strategy by the government to promote voluntary fortification that encourages manufacturers to fortify processed foods or food products with essential nutrients at levels approved by the Department of Health.

In Thailand, the mandatory fortification of vitamin A and vitamin D in sweetened condensed milk has been implemented. For USI, the Thai government has encouraged salt producers to produce qualified iodised salt for human, animal, and food industries. Beginning, in 1994, the Ministry of Public Health issued a Notification on Iodised Salt (No.153), requiring iodine to be added to edible salt in the amount of ≥ 30 milligrams per kilogram of salt. Then, in 2012, the notification was revised, with iodine concentration to 20-40 milligrams per kilogram of salt. Also, additional regulations were issued for fish sauce, salt brine and seasoning products of soybeans that should be iodised. These salty condiments must contain iodine in the concentration of 2-3 milligrams per litre of products or using iodised salt in the process of production. The triple fortification of instant noodles, dosages for iodine, iron, and vitamin A were 50 mg, 5 mg, and 267mg, respectively, which represent one-third of the Thai recommended dietary intake (RDI) for these nutrients. This project has been conducted on a voluntary basis, and representatives from the manufacturers are working jointly with the committee members. For the feasibility study, information about the fortified products, such as the fortificant to be used, sensory acceptability, cost, and shelf stability, was evaluated.

In Vietnam, the fortification of several food items is implemented to increase micronutrient levels intake of the population. Fortification is implemented for both commercial domestic and imported products, focusing on vitamin A fortification for edible oil; iron and zinc in wheat flour and iodized salt fortification.

11.2.7 Overweight & obesity management and NCDs prevention

Overweight & obesity management and NCDs prevention programme/activities exist in most countries. Most of the activities focus on promoting healthy eating and physical activities to prevent overweight and obesity.

The Overweight and Obesity Management and Prevention Programme (OOMPP) in Philippines adopts the key messages from the Nutritional Guidelines for Filipinos (NGF) and Department of Health. The three projects (Healthy Food Environment, Promotion of Healthy Lifestyle, and Weight Management Intervention) under the OOMPP are intended for the general population and overweight and obese individuals across all age groups. The key activities outlined for the three projects include the implementation of policies and guidelines that will regulate the marketing and selling of unhealthy food and beverages catering to all age groups, as well as development of policies and guidelines, conduct of nutritional status assessments, and provision of appropriate management interventions such as counselling, nutrition education/promotion, physical activities and others across all age groups.

Malaysia works on developing standard Guideline on Weight Management Programme for Overweight & Obese Individual at Workplace and made available self-screening equipment for NCD risk factors (weighing machines, stadiometer, blood pressure set, glucometer) through KOSPEN activity at workplace. Malaysia also reduces cooking oil subsidy, and imposes tax on unhealthy foods and beverages.

In Thailand, the formulation of the Healthy Lifestyle Strategic Plan is in phase II. The 5-Year National Plan for Prevention and Control of Non-Communicable Diseases (2017-2021) is based on the preceding master plan for the period between 2011 and 2020. Aiming to achieve nine global NCDs objectives, which were adjusted to fit the context of Thailand and in line with the National Economic and Social Development Plan No. 12 and the 20-Year Thai Health Strategic Plan, the plan focuses on promoting participation of citizens, communities, local administrations, and all sectors where citizens will be encouraged to take better care of their health. Thailand promotes Health Literacy for Thais by using 66 key messages as a tool to communicate with Thai population. Other enabling activities have been carried out to help for NCDs prevention and control. For example,

- Sugar-sweetened beverages taxes (SSBs) passed by the legislature under the new Excise Tax B.E. 2560 (2017), the new regulation went into effect on September 16, 2017.
- Banning the use of partially hydrogenated oils in foods and trans fat through the Notification of the Ministry of Public Health No. 388 B.E. 2018 RE: Prescribed Prohibited Food to be Produced, Imported, or Sold effected on January 9, 2019.

For annual awareness campaigns to reduce sweet, fat, salt and increase consumption of fruits and vegetables, “Flat Belly Thais Network” aims to raise public awareness on diet and physical activity through a number of activities including empowerment of implementers and people at provincial and local levels, use of mass media to communicate with the public, and provision of education and care service for promoting healthy eating and sufficient physical activity through the local health care delivery system. The Diet and Physical Activity clinic (DPAC) is implemented in health promotion hospitals for behaviour modification, and Thailand Physical Activity Strategy (2017-2026) set goal to see Thai people having active lifestyles by physical activity through conducive environments.

In Vietnam, the efforts taken to control overweight/obesity and NCDs include implementation of annual awareness campaigns, implementation of the clinical nutrition activities such as counselling facilities, development of communication materials to broadcast on mass media, development of overweight prevention guidelines, developing software for calculation of dietary intakes, and establishment of therapeutic menus for diabetes, hypertension, and other diseases in hospitals. Vietnam also promotes research and development of nutritional products for different target groups in controlling overweight and obesity and nutrition related non-communicable chronic diseases.

In its action to prevent and control NCDs, Myanmar promotes the community awareness on healthy dietary food behaviour and activities on healthy lifestyles (smoking, inactivity, diet, harmful use of alcohol).

11.2.8 Nutrition promotion/education in schools

Healthy eating and nutrition education/promotion in schools is a mechanism pursued by some countries. Healthy eating component/health education is integrated in school curriculum of some countries e.g. Malaysia, Myanmar, Philippines, Thailand and Vietnam.

In Malaysia, healthy eating component is included in school curriculum such as preschool curriculum and will be reviewed in line with Ministry of Education planning. Malaysia also works on developing educational package on healthy eating (e.g interactive, educational games) in line with Malaysian Dietary Guideline's key messages for preschool and integrate nutrition component into '*Kebun Dapur Project*' initiated by KEMAS (Community Development Department). Parents of parent teacher association members are also trained to promote healthy eating towards healthy lifestyle.

In Philippines, the nutrition education is delivered through the School Health and Nutrition Programme. Under the PPAN 2017-2022, the integrated school nutrition programme (a model integrating school gardening, supplementary feeding and nutrition education) piloted in Cavite will be expanded to the whole region. Teacher-child-parent approach will be relaunched to promote nutrition and healthy eating in schools in Philippines.

In Thailand, nutrition education in line with the health curriculum is provided for children from kindergarten through to university, to reduce prevalence of childhood overweight and obesity, by implementing Smart Kids Coacher (SKC) in 6,405 targeted school. The SKC aims to train the super trainers about food and nutrition, physical activity and emotional control through the implementation of three learning activities including (i) Food for Fun which is about nutrition flag, nutrition label, food portion and nutrition surveillance; (ii) Fun for Fit includes intermediate and advanced level workouts within 60 minutes such as kangaroo dance, chair stretching; and (iii) Control emotion which is about preventing probability of access to unhealthy food, to ensure having meal in appropriate time, and to recruit peers and family member to increase awareness among target groups. Moreover, risk group will be screened for obesity signs at school level and referred to hospitals for further investigation if necessary.

In Vietnam, nutrition and physical education is provided for children from kindergarten through to university. Models of nutrition programmes in schools will also be developed and standardised menus will be disseminated in school systems in accordance with regional conditions. Communication activities are carried out in schools including counselling on the prevention of malnutrition, overweight, obesity and nutritional anaemia for students and their parents. Both Malaysia and Vietnam are working on training the food handlers in schools on healthy meal preparation to provide healthier menus for school children, as well as providing/developing regulations/guidelines on beverages and foods sold at school canteens. Besides, standard operating procedure for menu preparation at childcare centres are to be developed in Malaysia whereas Vietnam is developing regulations regarding provision of lunch for children in schools.

Other common activities identified by the various NPANs and related documents include strengthening institutional community capacity for nutrition by improving the number of qualified nutritionists/dietitians in the country; providing training for nutrition, dietetics, and food safety professionals; research and technology development in the areas of nutrition and food.

12 PERFORMANCE INDICATORS/OUTCOMES

NPAN III Malaysia has identified relatively more indicators (a total of 46 indicators) as compared to the action plans in the other four countries. These 46 indicators have been identified based on four priority areas namely promoting maternal, infant and young child nutrition; promoting healthy eating and active living; preventing and controlling nutritional deficiencies as well as preventing and controlling obesity and other diet-related NCDs.

Indonesia, Myanmar, Philippines and Vietnam have respectively identified 17, 9, 17 and 21 indicators/outcomes for their Plan. PPAN divided the indicators into main outcome targets and sub-outcome targets. The indicators identified in Vietnam NPAN to 2020 are based on the specific objectives identified.

The five national action plans identified similar indicators that can be categorised into three groups, namely indicators related to nutritional status, food security and micronutrient status. The common indicators identified include prevalence of babies with low birth weight, prevalence of exclusive breastfeeding in infants less than 6 months old, prevalence of stunting, wasting and underweight in children below 5 years old, prevalence of overweight/obesity among children, prevalence of overweight/obesity among adult and prevalence of anaemia in pregnant mother (Table 8).

In addition to the common indicators shown in Table 8, Indonesia has identified several indicators on food production such as rice, corn, soybean, sugar, beef, fish and salt production. Another indicator identified include fish consumption.

Malaysia identifies indicators for promoting healthy eating and active living. The indicators identified include percentage of adults meeting recommended serving for cereal and cereals products; fruits and vegetables; meat, poultry and egg, fish and fish products; legumes and nuts; milk and dairy products; water intake and reading the nutrition information panel. It is the only country which has identified indicators for diet-related NCDs and elderly obesity.

In addition to the common indicators shown in the table, Vietnam NPAN to 2020 has identified several indicators related to its objective to reinforce capacity and effectiveness of the network of nutrition services in both community and health care facilities. These include the proportion of nutrition coordinators, nutrition collaborators receiving training in nutrition, the proportion of central, provincial and district hospitals with dietitians providing counselling and therapeutic treatment for specific conditions and patients, as well as the proportion of provinces performing nutrition surveillance and proportion of the nutritional emergencies due to disasters being assessed and intervened. Besides, Vietnam specifically identified two indicators relating to the improvement of Vietnamese people's height (Table 8).

Most of the indicators in the country action plans are found to be specific to objectives of respective action plan; reflect the change the action plan seeks to achieve; measurable either quantitatively or qualitatively; and time-bound where the expected time for the objective or target to be achieved is stated. Besides, Malaysia NPAN III has defined each of

the indicators selected for the action plan. Defining the indicators is important so that they can be measured unambiguously.

The goals and indicators of other global nutrition action plan or policies have been taken into consideration by these countries when selecting the indicators. For example, several indicators in NPANM III, are in line with indicators for the Comprehensive Global Monitoring Framework for the Prevention and Control of Non-Communicable Diseases 2014-2020, core indicators for the Global Nutrition Targets 2025 and indicators for the Global Monitoring Framework on Maternal, Infant and Young Child (IO5). Philippines has also highlighted that the PPAN 2017-2022 outcomes help to contribute to the SDG2 and Global Nutrition Target 2025.

Table 8: Indicators measured in different NPANs/related documents

Indicators	Indonesia	Malaysia	Myanmar	Philippines	Thailand	Vietnam
Nutritional status						
Prevalence of babies with low birth weight/to reduce the rate of low birth weight	+	+	+	+	+	+
Percentage of malnutrition (underweight) in toddlers/children below 5 years of age	+	+			+	
Prevalence of wasting in toddlers/ children below 5 years of age	+	+	+	+	+	+
Prevalence of stunting in babies under 2 years old/children below 5 years of age	+	+	+	+	+	+
Prevalence of overweight and obesity among children below 5 years old		+	+	+	+	+
To reduce overweight among adolescent				+	+	
Prevalence of overweight and obesity among adults	+	+		+	+	+
Prevalence of overweight among elderly aged \geq 60 years old		+				
Prevalence of obesity among elderly aged \geq 60 years old		+				
Proportion of of nutritionally-at-risk pregnant women				+		
Proportion of chronic energy deficiency among women of childbearing age						+
Height of children under 5 years old for both boys and girls will increase by 1.5-2.0cm in comparison to the year 2010						+
Height of adult by gender will increase by 1.0-1.5cm in comparison to the year 2010						+
Micronutrient status						
Prevalence of anaemia in pregnant mother	+	+			+	+
Prevalence of anaemia among children under 5 years old					+	+
Prevalence of anaemia among women of reproductive age		+	+	+	+	

Indicators	Indonesia	Malaysia	Myanmar	Philippines	Thailand	Vietnam
Prevalence of iodine deficiency among children 6-12 years old				+		
Median urinary iodine concentration of mothers with children under 5						+
Median urinary iodine concentration of children 6-12 years old, pregnant and lactating women				+	+	(only in pregnant women)
Percent wit urinary iodine concentration <50mcg/L in children 6-12 years old and lactating women				+		
Prevalence of children under 5 with vitamin A deficiency/low serum vitamin A				+		+
The prevalence of households using iodised salt qualified preventive (20-40ppm)					+	+
Food security						
Improvement of calorie consumption (kcal/capita/day)	+					
Percentage of household food insecurity		+				
To increase the proportion of household with diets that meet the energy requirements				+		
Reduction of proportion of households with a per capita energy intake below 1800kcal			+			+
Food production (rice, corn, soybean, sugar, beef, fish, salt)	+					
Dietary intake						
Percentage of infants at 6 months of age who receive solid, semi-solid or soft foods		+				
Percentage of children meeting the minimum acceptable diet		+	+	+	+	
Desirable dietary pattern score (PPH)	+					
The average salt intake in adults					+	+
Fish consumption	+					

Indicators	Indonesia	Malaysia	Myanmar	Philippines	Thailand	Vietnam
Prevalence of adults meeting recommended intake (for cereal and cereal products; fruits; vegetables; meat, poultry and eggs; fish and fish products; legumes and nuts; milk and dairy products; water)		+	+		+	
Nutrition practices and others						
Prevalence of exclusive breastfeeding in infants less than 6 months old	+	+	+	+	+	+
Prevalence of early initiation of breastfeeding (within one hour of birth)		+				
Prevalence of adults reading the Nutrition Information Panel (NIP)		+				
Nutrition officers at the provincial level have specialised training in nutrition						+
Nutrition officers at commune level and nutrition collaborators are trained and updated with nutrition knowledge						+
Have nutritionist/dietitians at the hospital (central, provincial and district level)						+
The proportion of hospitals implementing nutrition counselling and therapeutic treatment for some specific diseases and groups at hospitals of different levels						+
The number of provinces with nutrition surveillance unit capable of collecting adequate and qualified indicators on the implementation of the plan. Supervision of nutrition during emergencies in disaster-prone provinces						+
Non-communicable diseases						
Prevalence of hypercholesterolemia among adults > 18 years old		+				
Prevalence of diabetes among adults > 18 years old		+				
Prevalence of hypertension among adults > 18 years old		+				

12.1 Specific target for indicators and time frame for target

The specific targets established for the various indicators vary among the different country action plans. Though the process of target setting is not elaborated in detail by most NPANs and related documents, it is observed that most of them use or adapt global targets (e.g. Global Nutrition Targets 2025, Sustainable Development Goals) and available baseline data as point of reference in setting the target for the indicators identified.

It is noted that for several of the indicators, these countries are in agreement and are aiming collectively to reach the Global Nutrition Targets 2025 as adopted in the World Health Assembly 2012 (Table 9). The action plan of Indonesia, Myanmar, Philippines and Vietnam plan cover a time frame of 5-6 years whereas NPANM III is designed for a duration of 10 years. All of the countries aim to achieve the target set within this time frame.

Table 9: Global Nutrition Targets 2025 versus specific target for maternal, infant and young child nutrition identified by different NPANs and related documents

Indicators	Global Nutrition Targets 2025	Indonesia (NFNAP 2015-2019)	Malaysia (NPANM III)	Myanmar (NPAFN 2011-2015)	Philippines (PPAN 2017-2022)	Thailand	Vietnam NPAN to 2020
Number of children under-5 who are stunted	40% reduction	15% reduction by 2019	11% by 2025	16% reduction by 2016	21.4% by 2022	10% reduction by 2025	12.6% reduction by 2020
Anaemia in women of reproductive age	50% reduction	-	11% by 2025	30% reduction by 2016	6% by 2022	50% reduction by 2025	-
Low birth weight	30% reduction	22% reduction by 2019	8% by 2025	7% by 2016	16.6 % by 2022	10% reduction by 2025	33% reduction by 2020
Childhood overweight	No increase	-	No increase from baseline data of 7.6% (year 2015)	No increase	No increase from baseline data (3.9%)	No increase from baseline data (8.2%)	No increase/ less than 5% in the rural, less than 10% in urban area by 2020
Rate of exclusive breastfeeding in the first 6 months	Up to at least 50%	Up to 50% by 2019	Up to at least 70% by 2025	Up to 50% by 2016	Up to 33.3% by 2022	Up to at least 50% by 2025	Up to 35% by 2020
Childhood wasting	Reduce and maintain to less than 5%	Reduce to 9.5% by 2019	Not more than 5% by 2025	Reduce to 7% by 2016	Not more than 5% by 2022	≤ 5% by 2025	Reduce to under 5% by 2020

- Information not available

13 IMPLEMENTATION, MANAGEMENT, MONITORING AND EVALUATION

13.1 Implementation and management agencies

Most of the countries in this review practise decentralisation and multisectoral approach in implementing the action plan, where the implementation has been allocated to a range of different institutions. The implementation is largely in-charged and co-ordinated by the Ministry of Health, national nutrition council or high level coordinating committee. Some countries such as Indonesia and Philippines developed separate action plans for regional/local level.

13.1.1 NFNAP Indonesia 2015–2019

In Indonesia, NFNAP at central level is implemented by multiple ministries/institutions and other stakeholders in accordance with the authority. Ministry of National Development Planning, Coordinating Ministry for Human Development and Culture Affairs, Coordinating Ministry for Economic Affairs and the Coordinating Ministry for Maritime Affairs are four coordinating bodies identified for the implementation at central level.

13.1.2 NPAN Malaysia III 2016–2025

In Malaysia, the Nutrition Division in the Ministry of Health plays a leading role in implementing the NPANM III activities at national level and supported by several others divisions in the Ministry of Health. The implementation of the activities at state and district level is coordinated by State Health Department and District Health Offices respectively. Besides, the implementation involves a wide range of different stakeholders from government departments, NGOs, professional bodies, academia, food industry and related private sectors. Initiatives are taken to engage with the local government and communities in designing related nutrition promotion and intervention programmes, whereas private industries contribute and collaborate through Corporate Social Responsibility (CSR) activities.

13.1.3 Philippine PAN 2017–2022

In Philippines, representatives from ten government sectors together with three private sector representatives appointed by the President of the Philippines comprise the National Nutrition Council Governing Board, providing overall leadership in plan formulation, implementation, monitoring, evaluation, and coordination. At national level, implementation plan is formulated to cover specific activities to be undertaken by different agencies for each programme for each year. A resource framework with stated estimates of funded and unfunded budgets and resource mobilisation strategy are developed. Additional nutrition action plans are formulated respectively for regional (Regional Nutrition Action Plan, RNAP)

and local (Local Nutrition Action Plan, LNAPs) level to capture the initiatives of regional and local offices along the PPAN programme.

13.1.4 Vietnam NPAN to 2020

In Vietnam, the General Department of Preventive Medicine at the Ministry of Health is the focal point in developing, coordinating, managing, monitoring and evaluating the implementation of the plan. Central level steering committee (chaired by the Minister of Health and comprised of leaders of related ministries) holds primary responsibility for implementation of the Plan. Related departments in the Ministry of Health are assigned with specific roles to develop related nutrition programmes/activities. For example Department of Maternal and Child Health is responsible for the development of legal documents in the field of maternal and child nutrition; Medical Services Administration is the focal point in developing projects and programmes on nutrition treatment in medical examination and treatment facilities; Vietnam Food Administration leads the development of documents and policies on nutritional products and nutrition labelling; National Center for Health Education and Communication is responsible for providing contents of communication messages, developing communication materials for the community and health system. Activities are implemented following approval by assigned authorities.

13.1.5 Myanmar NPAFN 2011-2015

In Myanmar, the implementation of the action plan is based on the prioritisation and sequencing principles, with the implementation goal of address all immediate causes of malnutrition in first two years. The National Nutrition Centre and Department of Health play major role in overall aligning, priorities setting and implementation of the programmes and its results as well as channeling and mobilising appropriate resources for the different strategies. At ministries/agency level, each of the parties involved in the implementation will outline arrangements for planning and implementation of the sector-specific interventions.

13.2 Advisory and administrative structure supporting/overseeing the implementation of plan/strategies

Most of the countries have specific advisory bodies and technical working groups (TWGs) that support or facilitate the implementation of the action plan.

In Indonesia, a TWG is formed for the national First 1000 Days of Life Movement. In provincial and district/city level, a steering committee and technical team are also established to help in the implementation of the action plan in provincial and district/city level.

In Malaysia, the NFSNC chaired by the Minister of Health acts as the highest advisory Council to the government on issues related to food and nutrition. The NCCFN is a committee

established under this Council and has an overall purview to monitor and evaluate the implementation of the plan. The members of NCCFN consist of representatives from various ministries and government agencies, NGOs, professional bodies, academia and private sector. In addition, this committee acts as a platform to discuss issues pertaining to nutrition which need commitment and collaboration from other health sectors. Besides, there are six TWGs under NCCFN to support the implementation of NPANM, namely TWG Policy, TWG Training, TWG Research, TWG Promotion and TWG Guidelines and TWG Food & Nutrition Security.

In Myanmar, a Food and Nutrition Advisory Group (FNAG) has been established to provide technical advice to National Health Committee in policy and strategic decisions making. For inter-ministerial/inter-agency technical coordination, a steering committee or an interagency technical working group has been re-established to function as oversight committee to reinforcing internal control mechanisms and effectively coordinate all cross-cutting issues related to nutrition and food security.

In the Philippines, the National Nutrition Council Governing Board will continue to be the policy-making body for PPAN 2017-2022. To assist the Board, the NNC Secretariat serves to advise the Board on nutrition policy and programme matters and recommend a comprehensive food and nutrition policy. NCC Secretariat also coordinates with government agencies and non-government organisations for nutrition programmes management and resource programming. On the other hand, a NNC Technical Committee (composed of heads of major department bureaus and agencies involved in nutrition and NGOs) was formed to provide technical assistance to the Governing Board and NNC Secretariat in facilitating inter-agency and intra-agency coordination, supervision and monitoring, and implementation of nutrition policies and programmes. TWG, task forces, ad hoc bodies and other interagency will be formed to address particular issues when needed.

In Thailand, The National Food Committee analyses Thailand's food situation, as well as food policies and strategies of domestic and international organisations on the Strategic Framework for Food Management in Thailand (SFFM) in 2018-2037.

In Vietnam, the National Institute of Nutrition (NIN) assists the central steering committee with technical aspects in developing plans, programmes and projects to implement the NNS and NPAN. NIN also gives direction, guidance to the provinces in implementing nutritional activities in the community. Besides, the NIN is responsible for developing indicators and targets for the NNS, monitoring and evaluating the progress and results of the implementation of the Plan and subsequently propose the next NPAN.

13.3 Monitoring and Evaluation

All nutrition action plans in this review underscore the importance of monitoring and evaluation activities. The different NPANs show commonalities in these activities. Most of them (Malaysia, Philippines, Indonesia, Vietnam) involve the generation of annual reports

on implementation and progress from various stakeholders/agencies involved. Besides, a system of indicators is adopted by all countries where a detailed list of outputs and indicators and outputs to be followed and achieved are developed.

In Indonesia, the implementation report will be prepared by the minister/head of the related institution and submitted to the Ministry of National Development Planning once a year and at any time if needed. The implementation report will be sent to the President once in a year and at any time if necessary. The review of the plan is based on monitoring and evaluation results of the implementation plan and/ or when there are changes in Strategic Plan of Food and Nutrition of Indonesia. Besides, websites for monitoring and evaluation purposes have been developed at central, provincial and district or city levels. The evaluation process also involves record and collect data related to the target and main indicators to be achieved and meetings or forums for coordination and routine cross sector evaluation.

In Malaysia, the status of achievement for both impact indicators and process indicators will be measured based on targets that have been set. Mid-term review of NPANM III, 2016-2025 will be conducted every 5 years and long-term review will be conducted every 10 years. The National Health and Morbidity Survey (NHMS) has been one of the platforms for monitoring these indicators. NHMS provides community-based data on the pattern of common health problems, health service utilisation and health expenditure in the community. Findings of the NHMS support the Ministry of Health to review the priorities and activities of the health programme, to plan for future allocation of resources and to evaluate the impact of the strategies.

Myanmar has in place a National Monitoring and Evaluation system for the implementation assessment where National Survey on the key indicators are conducted on midway of the implementation and at the end to collect data on inputs, processes, outputs, outcome and impact from the village, district, provincial and central level.

In the Philippines, performance monitoring of the projects identified will be carried out on an annual basis by the project implementer, producing the end of the year report and the next year indicative plan. The PPAN management committee will also gather all the 11 programme leads as they discuss the results of the current year, learn from the experience and approve the plans for the following year. Besides, a formative programme evaluation covering all projects will be conducted during mid-term review and major adjustments for the remaining years are identified for programmes, projects and the entire PPAN to increase the chances of reaching their outcomes.

In Thailand, performance monitoring of the projects are as follows: (1) Annual country report on public health situation. The data are presented mostly in an overall view at country level; (2) Reporting system from Health Data Center at all levels in government hospitals excluding Bangkok hospitals; (3) Inspection system twice a year; and (4) Supervision system by Department of Health, Ministry of Public Health four times a year.

In Vietnam, monitoring and evaluation are carried out annually, regularly and supervise points at all levels. The Ministry of Health plays primary role in monitoring and regularly

provide reports on the status of the Plan implementation to the Prime Minister. Preliminary and final review of the plan will be organised based on planned schedule. A national survey on nutrition will be conducted in 2019 to provide basic information for the evaluation of progress and results of the plan implementation. The Plan will be evaluated through the reporting system of the implementing agencies in accordance with the set of indicators that are unified throughout the country. Final review of the Plan will be conducted by 2020.

Dissemination and restitution of the monitoring and evaluation results to the stakeholders are not elaborated in detail in most action plans. Philippine PAN documents the theoretical foundations and development process of their nutritional surveillance system.

Table 10: Overview of the implementation, monitoring and evaluation mechanism of different NPANs and related documents

Country	Implementation	Monitoring & Evaluation
Indonesia	<ul style="list-style-type: none"> NFNAP at central level is implemented by multiple ministries/ institutions and other stakeholders in accordance with the authority. The Ministries/ Institutions and other stakeholders carry out sensitive and specific nutrition interventions using multi-sectoral approaches and other appropriate approaches as well as preparing annual report on the implementation of NFNAP. At provincial and district/city level, a Steering Committee is established and a technical team is established to help in the implementation of the action plan. Annual report on the action plan implementation is then prepared based on district-level results. Coordinating body: Ministry of National Development Planning, coordinating Ministry for Human Development and Culture Affairs, Coordinating Ministry for Economic Affairs and the Coordinating Ministry for Maritime Affairs. 	<ul style="list-style-type: none"> Annual report on the implementation is to be submitted by the minister/head of the related institution to the Ministry of National Development Planning. The implementation report will then be sent to the President once in 1 (one) year and at any time if necessary. Website development at central and provincial level for monitoring and evaluation. Collect and record data related to the target and main routine to be achieved. Routine cross sector evaluation. Conduct meetings or forums for coordination and routine cross sector evaluation. Responsible body: Ministry of National Development Planning.

Country	Implementation	Monitoring & Evaluation
Malaysia	<ul style="list-style-type: none"> • The Nutrition Division in the Ministry of Health leads the activities implementation at national level and supported by several others divisions in the Ministry of Health. • The implementation of the activities at state and district level are coordinated by State Health Department and District Health Offices respectively. • Engagement with local government and communities in designing nutrition promotion/ intervention programmes. • Collaboration with private companies/industries to address nutritional issues through CSR activities. • Coordinating body: NCCFN. 	<ul style="list-style-type: none"> • Annual monitoring will be carried out to monitor the progress and achievements in the identified activities. • The NPANM III progress report will be presented to the NCCFN annually and NSFNC biennially. • The achievement status will be measured for both impact indicators and process indicators based on targets that have been set. • Mid-term review will be conducted in 5 years (2020); long term review will be conducted in 10 years (2025). • Responsible body: NCCFN
Myanmar	<ul style="list-style-type: none"> • Based on the prioritization and sequencing principles. Short term interventions were carried over 2 years and medium term interventions were carried out over 5 years. • The implementation leveraged on existing relevant policies, legislations, laws and regulations developed by different sectors, and by international parties. • At ministries/agency level, each of the party involved in the implementation will outline arrangements for planning and implementation of the sector-specific interventions. • Coordinating body: National Nutrition Centre and Department of Health 	<ul style="list-style-type: none"> • Establishment of National Monitoring and Evaluation (NME) system • National Survey on the key indicators on midway of the implementation and at the end are conducted to collect data on inputs, processes, outputs, outcome and impact from the village, district, provincial and central level. These data consisted of a set of key indicators that look into delivery, outputs and outcomes agreed by all relevant ministries. • Reports and other dissemination materials are then prepared to inform and advocate among politicians, policy makers and donors. • Responsible body: National Nutrition Centre and Nutrition Working Group

Country	Implementation	Monitoring & Evaluation
Philippines	<ul style="list-style-type: none"> Implementation plan will be formulated and updated yearly to cover specific activities to be undertaken by different agencies for each programme. Regional & local level: Regional Nutrition Action Plan (RNAP) and Local Nutrition Action Plan (LNAP) will be formulated to capture initiatives of regional and local offices along the PPAN programme. Coordinating body: National Nutrition Council Secretariat 	<ul style="list-style-type: none"> Generation of reports on physical and financial accomplishments from various stakeholders. The year-end project review will be conducted by the project implementer producing the end of the year report and the next year indicative plan. A formative midterm evaluation will be conducted in 2019. Major adjustments for the remaining three years will be identified for programmes and projects and the entire PPAN to increase the chances of reaching the outcomes. Final evaluation will be conducted in 2022 as an input to the full review of the PPAN and the formulation of its successor for 2023 to 2028. Responsible body: National Nutrition Council Governing Board.

Country	Implementation	Monitoring & Evaluation
Thailand	<ul style="list-style-type: none"> • Bureau of Nutrition, Department of Health (DOH), Ministry of Public Health, Thailand leads the policy and surveillance system of nutrition in Thailand. Regional Health Promoting Centers receive the policy from DOH and transfer knowledge and technology on nutrition to provinces under responsibility. • The health promotion activities, including good nutrition, are implemented nationwide through life course with PIRAB strategy; <ul style="list-style-type: none"> ◦ P = Partnership ◦ I = Investment ◦ R = Regulation ◦ A = Advocacy ◦ B = Capacity building • Policy and programmes to promote health and nutrition launch nationwide through various committee at district/sub-district levels such as the Quality of Life Development Committee at the district level, chaired by the chief of each district, and the Child Development Committee, chaired by Provincial Governor. These committees are composed of a responsible officer from related Ministries. 	<ul style="list-style-type: none"> • Biannual inspection system by the Regional inspector of public health. The main points of inspection are key activities under the 20-year national strategy and plan and Performance Agreement (PA). • Quarterly supervision system by DOH follows the DOH's strategy plan which cascaded from Thailand 20-year strategic plan and MOPH's strategy and plan. • Routine reporting system through Health Data Center, including nutrition, health, services, prevention and diseases. DOH's indicators are analysed in details and demonstrated on DOH's dashboard. • Annual country report on public health situation by the Strategy and Planning Division, Permanent Secretary of Public Health, Ministry of Public Health.

Country	Implementation	Monitoring & Evaluation
Vietnam	<ul style="list-style-type: none"> • The General Department of Preventive Medicine, Ministry of Health is the standing body responsible for coordinating, managing, monitoring and evaluating the Plan. • The NIN plays a major role in assisting, directing and guiding the Ministry of Health in developing plans, programmes, projects to be implemented, setting indicators and targets for the plan as well as monitoring and evaluating the results of the plan implementation. • Provinces and cities level: People's Committees of provinces and centrally-run cities direct the development and implementation of plans and programmes in localities, allocate sufficient budget and resources for plan implementation and propose to the People's Councils to include nutrition indicators in local socio-economic development plan. The Provincial Health Departments, on the other hand, direct health units in the province to implement nutritional activities assigned and mobilise resources to organise the implementation of local action plans. • Coordinating body: General Department of Preventive Medicine, Ministry of Health. 	<ul style="list-style-type: none"> • Relevant ministries, sectors, localities, political and social organisations are responsible for submitting an annual report to the Ministry of Health, who will review and report to the Prime Minister, on their progress and operational results in achieving the plan objectives. • Provinces and cities level: People's Committees of provinces and centrally-run cities monitor and report progress/results of the implementation. The Provincial Health Departments periodically report on implementation progress of provincial nutrition strategy to People's committees of provinces and municipalities, and Ministry of Health. • National survey on nutrition to be conducted in 2019 to provide basic information for the evaluation of progress and results of the plan implementation. • Final review of the Plan to be conducted by 2020. • Responsible body : Ministry of Health (General Department of Preventive Medicine, National Institute of Nutrition).

14 FUNDING AND BUDGET FOR NPANs

Only the action plans of Indonesia, Philippines and Vietnam have provide insights into the funding sources and budget allocated to implement the national nutrition action plan.

In Indonesia, the state budget (*Anggaran Pendapatan Belanja Negara, APBN*) from central government and the regional government budget (*Anggaran Pendapatan Belanja Daerah, APBD*) from local government are the primary funding sources for the nutrition action plans. There are special funding schemes allocated for certain regional areas such as health operational costs (BOK) for Ministry of Health, school operating costs (BOS) for Ministry of education and social assistance funds (Bansos). In addition, grants from corporate sector through the CSR donation are the other funding sources for the plan.

The PPAN budget is an estimate of the costs of 38 projects and their ten programmes for the six-year period (2017-2022). The estimate was done on the basis of past budgets for previously existing projects and programmes and best estimates for new projects and programmes. The funding is from the budgets of implementing agencies of the government, as well as from development partners and the Department of Budget and Management (DBM).

In Vietnam, the budget sources for the implementation of the plan include state budget at the central and local levels, contribution/mobilisation from the community and domestic organisations, investment and financial support from the international organisations as well as other legal funding sources. State budgets, especially the Ministry of Health's budget accounted for the largest shares of overall budget sources. Vietnam conducts costing exercise for its NPAN to 2020 and estimates the budget required for the NPAN activities each year from 2017 to 2020. The largest proportion (more than 30%) of the budget would be for improving the quantity and quality of people's meals and nutritional status of mothers and children. Nutrition sensitive interventions would account for up to 90% of the budget with agriculture and food safety related activities requiring the largest budget shares. For nutrition specific interventions in the Vietnam NPAN to 2020, most of the budget will be allocated for micronutrient supplementation, breastfeeding and complementary feeding, treatment of severe acute malnutrition and disease prevention and management.

The other countries do not elaborate on the financial resources specifically for the implementation of the plan.

15 DISCUSSIONS AND CONCLUSIONS

The development of food and nutrition action plans by governments is vital in providing practical guidance to significantly reduce the burden of preventable diet-related NCDs and all other forms of malnutrition prevalent in the country. Countries in the Southeast Asian region do recognise this importance. The six countries in this review have respectively formulated their NPANs and related documents to provide a framework for coordinated implementation of nutrition intervention activities by the government and food and nutrition related stakeholders.

Reviewing the key components of the NPANs and other related documents of each country, it is recognised that prioritisation of nutrition interventions outlined are based on respective country context and needs. Although differing in their implementation strategies and target set, these plans show similarities in several components including objectives (emphases on improving nutritional status of the population, prevent and/or reduce undernutrition as well as diet-related NCDs and improve food and/or nutrition security), agencies and stakeholders involved, nutrition situation in the country (double burden of malnutrition), nutritional issues to be addressed (low exclusive breastfeeding rate; increased prevalence of obesity among children and adults; high prevalence of stunting, underweight and wasting amongst children under 5 years of age; increased/high prevalence of nutrition related NCDs and micronutrient deficiencies), implementation mechanism (decentralisation and multisectoral approach) and challenges in implementing previous NPANs/related documents.

It appears that there are more commonalities than differences in the indicators used in the action plans of these SEA countries. Similar priority indicators include those related to nutritional status, diet quality and diversity have been identified by these countries. While most of the countries are in agreement with the Global Nutrition Targets 2025 adopted in World Health Assembly 2012, only Malaysia and Philippines include the indicators that measure all six global nutrition targets (prevalence of stunting in children under 5 years of age, prevalence of wasting in children under 5 years of age, percentage of infants less than 6 months of age who are exclusively breastfed, percentage of women of reproductive age with anaemia, prevalence of overweight in children under 5 years of age and percentage of infants with low birth weight).

There are, however, some differences in a few aspects of the NPANs of these countries, such as the implementation strategies and targets set. Specific nutritional issues that are considered important to be addressed by respective countries are also identified, for example the problem of protein consumption that are not meeting requirement in Indonesia; infantile beriberi in Myanmar; poor nutritional status of pregnant and lactating women in Philippines; and lower physical status and stature of the population in Vietnam. There are also few different specific indicators used by the countries, for example Malaysia establishes few indicators for diet-related NCDs whereas Philippines look at proportion of nutritionally-at-risk pregnant women. On the other hand, while other countries look at prevalence of anaemia in pregnant mother or women of reproductive age, Vietnam is the only country in this review who also include prevalence of anaemia among children under 5 years old.

Vietnam includes indicators on improvement of population height whereas Indonesia monitor several indicators on food production.

In the effort to achieve Global Nutrition Targets 2025, countries have set specific target that are comparable to Global Nutrition Target especially for the indicators on prevalence of low birth weight (most countries establish target ranging from 22% to 33% reduction), childhood overweight (most countries aim to achieve no increase from baseline), and childhood wasting (most countries target a prevalence of no more than 5%).

The nutrition situation analysis in the NPANs and related documents indicates that most countries in this review have not fully achieved the various nutrition and dietary goals/targets set. Several common challenges will have to be tackled by the countries in order to effectively implement the NPAN and achieve the targets. These include the need for a greater coordination among all relevant stakeholders, capacity for implementation, monitoring and evaluation system improvement, and significant financial commitment to the NPAN by the government. These four elements are also the interlinked key factors that create the supportive and enabling macro-environment for successful NPAN implementation.

Governments and international agencies have emphasised that Intersectoral coordination is essential at all stages of the process, from the preparation of the NPAN framework, implementation and monitoring and evaluation of the activities and impact indicators. However, ensuring that the intersectoral coordination mechanism functions effectively in NPAN implementation has been a challenge among the countries in this review. This includes SUN Movement countries that have been vocal in the calls for multisector governance in developing policies and plans. It is important to have clear commitment from the various stakeholders for the multisectoral coordination mechanism to function effectively. In order to achieve this, various stakeholders in these countries will have to first recognise that the implementation is not the sole responsibility of the health sector and that the responsibility has to be shared across multisectors. However, the various stakeholders involved may have difficulty in visualising common goals as they may hold contradictory opinions and is competing with others for resource allocations to carry out its own mandate. Thus, harmonising their opinions, identifying their needs in earlier phase of plan development to ensure that their objectives are not at stake and clearly define the roles and responsibilities for each of the stakeholders are important to ensure good collaboration between them. Some authorities have indicated strong legislative framework and specialised institution (as experienced from countries in other parts of the world) may also be needed to effectively coordinating intersectoral action. This sharing of responsibilities to jointly implement nutrition action plans must start with government ministries and agencies. Activating a nutrition-based mandate across a multiplicity of ministries e.g. using improved nutrition outcomes as one of the performance indicators for relevant stakeholders/ministries could be considered as an approach to improve commitment. Besides, it is also recognised that the implementation is also more likely to be successful if rooted in the active participation of the population. The population should be involved and aware on decision making process, the geographic reach of the programmes should be expanded so that remote populations can access nutrition services and the community awareness of nutrition problems, programmes and

rights should also be improved to strengthen demand. (Lachat *et al.*, 2005; Gillespie, Bold & the Stories of Change Study Team, 2017; IFPRI, 2016; WHO, 2006).

The roles of different stakeholders in these countries will mean very little and they could not be held accountable if it is not backed up by high quality technical expertise and no serious effort to build capacity. The ability to carry out stated objectives is needed at different levels. Thus it is important to ensure that well-trained nutrition professionals, health workers, food/nutrition management personnel and decision makers are employed at both national, sub-national and grass-root levels in these countries to coordinate, implement, monitor and evaluate the programmes and activities implemented. Countries which rely on international experts should find ways to train more local technical experts and replace international experts with local professionals to achieve self-reliance. In this context, the establishment of a high quality national nutrition research and training institution in the country or region that are capable of providing nutrition and continuous professional development training are crucial. Philippines, Thailand and Vietnam have their respective institute of nutrition for research and training such as Institute of Nutrition, Mahidol University (INMU) in Thailand, Food and Nutrition Research Institute (FNRI) in the Philippines, Vietnam Nutrition Association (VINUTAS) in Vietnam, while establishment of National Institute of Nutrition (NIN) as a centre for nutrition research and training is on the implementation agenda of Malaysia NPANM III. Nutrition research, science and technology capacities not only contributes to improving food and nutrition security, but also play crucial roles in providing an evidence base for decisions making and supporting policy making by the authorities/stakeholders. Besides, the adequacy of national technical expertise/capacity need to be assessed (Ismail *et al.*, 2005). Past experiences suggested that before trying to strengthen nutrition capacity especially in low- and middle income countries, there is a need to have a common understanding of the form of capacities needed, including an understanding of the current capacity exists, what capacity must be developed, as well as the challenges, limitations and the opportunities for doing this (Ismail *et al.*, 2005). A four level conceptual framework for capacity development is proposed to facilitate a more systematic approach to assessing the need for nutrition capacity development, and it is believed that based on such assessment a comprehensive capacity development plan could be established for a country (Shrimpton *et al.*, 2014). The levels comprise: (1) system level (e.g. legal framework, policies, government structures and commitment that influences nutrition capacity development); (2) organisational level (e.g. national level coordination mechanisms, tertiary education institutions for pre-service training of professionals, sector specific interventions and nutrition indicators for improved nutrition programme effectiveness, leadership and preparation that enable nutrition-related workforce to perform functions and deliver interventions effectively); (3) workforce level (e.g. knowledge, attitude and skills competencies for work performance, workforce preparation and continuing professional development, training systems); and (4) community level (e.g. leadership for facilitation and mobilisation, community organisations for community-led nutrition programmes, accessible resources for communities to address nutrition issues) (Shrimpton *et al.*, 2014).

Health data are essential for monitoring of the health of the population, for evaluating the effects of health interventions and for facilitating the development of the NPAN. The execution/implementation of the NPANs will be very much limited when there is lack of data and evidence that are actionable at national and sub-national levels. Thus, countries must work on establishing better monitoring and evaluation systems to ensure that timely, nationally representative data/information on outcomes of actions and trends of nutritional issues are available and accessible to evaluate and advise plan/programme development. National nutrition surveys or nutrition surveillance should be conducted in a periodic manner covering all priority nutrition indicators. The data generated from National Nutrition Surveys and surveillance are useful for evaluation of intervention, provide valuable information on the extent of existing nutritional problems, as well as help in policies formulation and better resources allocation in the future. New surveillance systems in areas still not covered should also be developed. Past experiences highlighted that effective evaluations include not only the assessments of whether a plan works but also the process evaluations that highlight impact pathways in order to better understand why, how, and where programme/plan work, or do not work (Gillespie, Bold & the Stories of Change Study Team, 2017). Besides, monitoring and evaluation should also include the timely management, analysis interpretation, dissemination and communication of accurate nutrition data to and among relevant stakeholders. Countries in the SEA region should take heed of these important aspects and work towards acquiring quality food and nutrition data.

To better support financial commitment, countries may need to consider costing their nutrition plans and exercising budget analyses. Costing help to estimate the funding needed to implement nutrition activities and it serves as a first step in understanding overall resources required to support nutrition actions in a country (SPRING, 2018). With this, it helps policy makers to prioritise among the different implementation strategies in order that the funding can be allocated properly. Besides, it would be helpful to develop appropriate analyses and evidence through budget and expenditure analyses to demonstrate how much money can be lost to poor nutrition of the population if national resources are not invested appropriately in nutrition policy/programmes implementation. This could help to make a powerful case to target decision makers e.g. Ministry of Finance who have the power over budgets and spending for increased funding for nutrition.

The similarities in the nutritional issues, challenges for implementation, multisectoral implementation mechanism as well as the programmes/activities identified would suggest that closer collaboration among countries and stakeholders on NPANs would be beneficial. The Southeast Asia Public Health Nutrition Network will work towards creating opportunities for periodic exchanges to enable sharing of approaches and experiences in the development and implementation of NPANs among the countries. It is also envisaged that the Network can facilitate discussions on specific topics in NPAN.

REFERENCES

- BAPPENAS Indonesia (2015). *National Food and Nutrition Action Plan Indonesia (Rencana Aksi Nasional Pangan Dan Gizi Tahun) 2015-2019*. Ministry of National Development Planning/National Development Planning Agency (Kementerian Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional). From <https://www.scribd.com/document/318524987/Dokumen-RAN-PG-2015-2019-edit12April-doc> (Retrieved 12 February 2018)
- Gillespie S, Bold M van den & the Stories of Change Study Team (2017). Stories of Change in nutrition: An overview. *Global Food Security* 13: 1–11. From <https://doi.org/10.1016/j.gfs.2017.02.004> (Retrieved 1 July 2018)
- IFPRI (2016). Taking action: Progress and challenges in implementing nutrition policies and programs. In *Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030*. Chapter 5. Pp. 44-59. Washington, D.C. International Food Policy Research Institute (IFPRI). From http://dx.doi.org/10.2499/9780896295841_05 (Retrieved 30 June 2018)
- Ismail S, Immink M & Nantel G (2005). *Improving Nutrition Programmes An Assessment Tool for Action*. Revised Edition. Food and Nutrition Division. Food and Agriculture Organization of the United Nations. Rome. From <http://www.fao.org/docrep/009/a0244e/a0244e00.htm> (Retrieved 30 June 2018)
- Lachat C, Van Camp J, De Henauw S, Matthys C, Larondelle Y, Remaut-De Winter AM & Kolsteren P. (2005). A concise overview of national nutrition action plans in the European Union Member States. *Public Health Nutr.* 8(3):266-74. From <https://doi.org/10.1079/PHN2004691> (Retrieved 1 May 2018)
- MOPH Thailand (2017a). *The 2nd National Reproductive Health Development Policy and Strategy (2017-2026) on the Promotion of Quality Birth and Growth*. Bureau of Reproductive Health. Ministry of Public Health of the Kingdom of Thailand.
- MOPH Thailand (2017b). *Thailand Healthy Lifestyle Strategic Plan Phase II 5-Year Non-Communicable Diseases Prevention and Control Plan (2017-2021) and related Action Plan (draft)*. Ministry of Public Health of the Kingdom of Thailand. From http://www.searo.who.int/entity/ncd_tobacco_surveillance/monitoring_fw/tha_ncd_action_plan_2017-2021.pdf?ua=1 (Retrieved 19 November 2018)
- MOPH Thailand (2018). *Strategic Framework for Food Management Thailand (No. 2) 2018-2036 (draft)*. Thai National Food Committee, Ministry of Public Health of the Kingdom of Thailand.
- NCCFN Malaysia (2016). *National Plan of Action for Nutrition of Malaysia III 2016-2025*. National Coordinating Committee on Food and Nutrition, Ministry of Health Malaysia, Putrajaya.
- MOH Vietnam (2018). *National Plan of Action for Nutrition to 2020*. Ministry of Health Vietnam, Hanoi, Vietnam.
- NNC Myanmar (2013). *National Plan of Action for Food and Nutrition 2011-2015*. National Nutrition Centre, Department of Health, Ministry of Health Myanmar. From https://extranet.who.int/nutrition/gina/sites/default/files/MMR_2011_National_Plan_of_Action_for_Nutrition.pdf (Retrieved 22 August 2017)
- NNC Philippines (2017). *Philippine Plan of Action for Nutrition 2017-2022 A Call to Urgent Action for Filipinos and Its Leadership Executive Summary*. National Nutrition Council, Department of Health, Manila, Philippines. From <http://www.nnc.gov.ph/index.php/downloads/category/118-ppan.html> (Retrieved 7 October 2018)
- Shrimpton R, Hughes R, Recine E, Mason JB, Sanders D, Marks GC & Margetts B (2014). Nutrition capacity development: a practice framework. *Public Health Nutr.* 17(3):682-8. From <https://doi.org/10.1017/S1368980013001213> (Retrieved 1 July 2018)
- Shrimpton & Rokx (2012). *The double burden of malnutrition: a review of global evidence (English)*. Health, Nutrition and Population (HNP) discussion paper. Washington D.C. World Bank. From <http://documents.worldbank.org/curated/en/905651468339879888/The-double-burden-of-malnutrition-a-review-of-global-evidence> (Retrieved 2 May 2018)

- SPRING (2018). *Putting Budget Data to Work for Nutrition*. Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project. From https://www.spring-nutrition.org/sites/default/files/publications/briefs/budget_data_nutrition_brief.pdf (Retrieved 1 July 2018)
- WHO (2000). *Development of the first food and nutrition action plan for the WHO European Region. Report on a WHO Consultation*. World Health Organization, Regional Office for Europe, Copenhagen. From <http://apps.who.int/iris/bitstream/handle/10665/108297/E68895.pdf;jsessionid=01E301FE0BD39EB72FBBC17E96B168E5?sequence=1> (Retrieved 6 May 2018)
- WHO (2006). *Comparative analysis of nutrition policies in the WHO European Region. A comparative analysis of nutrition policies and plans of action in WHO European*. World Health Organization, Regional Office for Europe, Copenhagen. From http://www.euro.who.int/__data/assets/pdf_file/0004/149782/istanbul_conf_20ebd02.pdf (Retrieved 22 April 2018)
- WHO (2016). *Strategic Action Plan to reduce the double burden of malnutrition in the South-East Asia Region 2016-2025*. World Health Organization. Regional Office for South-East Asia, India. From http://apps.searo.who.int/PDS_DOCS/B5295.pdf (Retrieved 8 May 2018)

AUTHORS

Tee E Siong; Chairman of SEA-PHN Network and President of Nutrition Society of Malaysia

E-Siong Tee PhD, is President of the Nutrition Society of Malaysia (NSM). In this capacity, he has led the implementation of various community promotion programmes for over 20 years. He is also Chair of the National Steering Committee for Nutrition Month Malaysia. He represents NSM in several Technical Working Groups in the Ministry of Health Malaysia, including the National Coordinating Committee for Food and Nutrition (NCCFN), the Technical Working Group for Nutritional Guidelines and committees related to Malaysian Food Regulations and Codex Alimentarius. He is nutrition consultant for TES NutriHealth Strategic Consultancy. Dr Tee is also a member of the Board of Scientific Directors of the International Life Sciences Institute (ILSI) (Southeast Asia Region) and Chairman of the Southeast Asia Public Health Nutrition (SEA-PHN) Network.

Dr Tee was Head of the Cardiovascular, Diabetes and Nutrition Research Centre of the Institute for Medical Research (IMR) until his retirement in February 2002, after serving for 30 years.

Hardinsyah Ridwan; Council Member of SEA-PHN Network and President of Food and Nutrition Society of Indonesia

Dr Hardinsyah MS PhD, is a Professor in Nutrition at Faculty of Human Ecology, Bogor Agricultural University, Indonesia. He is currently Rector of Sahid University Jakarta, President of the Food and Nutrition Society of Indonesia (PERGIZI PANGAN Indonesia), Chairman of the Association of Nutrition Higher Education Institutions of Indonesia (AIPGI), Vice President, Federation of Asian Nutrition Society (FANS), Global advisory board of hydration for health, and Council member of South East Asia Public Nutrition (SEA-PHN). He has schopus index of 4 and h-index 13 and his publications can be seen in this link <http://scholar.google.com/citations?user=npvXhNsAAAAJ&hl=en>

Ismail Mohd Noor; Council Member of SEA-PHN Network and Vice-President of Nutrition Society of Malaysia

Dr. Mohd Ismail Noor is an Emeritus Professor in Nutrition at the Faculty of Social Sciences and Leisure Management, Taylor's University. Previously, he has served Universiti Kebangsaan Malaysia for 35 years. His major research interest includes energy requirements, energy balance, obesity, nutritional status of selected population groups including sports nutrition. He was a member FAO/WHO/UNU Expert Consultation on Energy in Human Nutrition, FAO, Rome, 2001. He was the Council member, International Union of Nutritional Sciences IUNS (1997-2001), Secretary, Federation of Asian Nutrition Societies-FANS (1991-1993), President, FANS (1993-1995), Immediate Past-President, Federation of Asian Nutrition Societies FANS (1995-1999), Executive Council FANS (2000-present). He is the Chairman, TWG on Nutritional Guidelines, NCCFN (1994-present). He was President, Nutrition Society of Malaysia (1994-

1996), Vice-President, Nutrition Society of Malaysia (1996-2020), President, Malaysian Association for the Study on Obesity (1996-2019). He was Chief Editor, Recommended Nutrient Intakes (RNI) for Malaysia (2005 & 2017) and Chief Editor, Malaysian Dietary Guidelines (2010, 2013). For his contributions in the field of Nutrition, he was awarded, Fellow, International Union of Nutritional Sciences, FIUNS (2005) Fellow, Academy of Sciences Malaysia, FASc (2006), Emeritus Professor in Nutrition UKM (2014) and Foreign Correspondent, Academy of Medicine, France (2017).

May Khin Than; Former Director, National Nutrition Center, Ministry of Health and Sports, Myanmar

Dr May Khin Than, MBBS, DFT, MPS-FNP, commenced work in National Nutrition Center under Ministry of Health and Sports from 1992. She was assigned as the Project Manager of Nutritional Anemia Initiative Project, a Joint project of Australian and Myanmar Governments (2003-2005). In 2011 she was designated as the Deputy Director (Nutrition)/National Nutrition Program Manager and was promoted as the Director (Nutrition)/National Nutrition Program Director in May 2015. As the Nutrition Program Director, the NNC undertook to promote nutritional status of Myanmar by strengthening of multi-stakeholder platform, endorsement of the "Order on marketing formulated foods for infant and young child" under the National Food Law (July 2014), conducted Myanmar Micronutrient and Food Consumption Survey etc. Some initiatives such as Scaling up Nutrition (SUN), Rice fortification, Nutrition stock taking, Becoming Breastfeeding Friendly Initiative, were introduced in Myanmar. As the Principle Investigator of "Initial trial on Multiple Micronutrient sprinkles among children in Myanmar" she was awarded as the Best paper award for Applied Health Research in 41st Myanmar Health Research Congress (2013).

Dr May was also designated as the Governing Board Member for Myanmar of the SEMEO-Regional Centre for Food and Nutrition (SEAMEO-RECFON) (2011 till 2016) and Member of Food Advisory Committee, Myanmar (2013 till 2018). She has retired as Director of the National Nutrition Centre since Mid July 2018.

Rodolfo F Florentino; Council Member of SEA-PHN Network and Nutrition Foundation of the Philippines Inc.

Dr Rodolfo F. Florentino, MD, PhD, has been in the nutrition field since 1958, working mostly in nutrition research, nutrition policy and planning. At present he is a Council Member of the SEA PHN Network and currently a Scientific Advisor of the ILSI Southeast Asia Region. Until recently he was the Country Coordinator of the Philippine ILSI Committee and the Chairman-President of the Nutrition Foundation of the Philippines (NFP). He served the NFP as Chairman-President for eight years and as Member of the Board of Trustees for 25 years. From 1983 to 1997, he served as Director of the Food and Nutrition Research Institute (FNRI), and as such he directed and managed the nutrition research program of the Institute in support of the Philippine Plan of Action for Nutrition. He organised and managed the National Nutrition Surveys from 1983 to 1996, results of which served as the basis for the targets of the

Philippine Plan of Action for Nutrition. During this time, he also served as the Chairman of the Technical Committee of the National Nutrition Council in support of the NNC Secretariat and NNC Governing Board, and a valuable contributor to key initiatives in the country's nutrition policies, strategies and plans.

Saipin Chotivichien; Director of Bureau of Nutrition, Ministry of Public Health, Thailand

Dr Saipin Chotivichien serves as Director of the Bureau of Nutrition, Department of Health, Ministry of Public Health (MOPH), Thailand. She is past Director of the National Institute of Child Health and Development, DOH, MOPH, Thailand.

She received her medical degree with honours from the Faculty of Medicine, Ramathibodi Hospital, Mahidol University and was trained in the Field Epidemiology Training Program (FETP) of Thailand. She received her Master's degree in Health Promotion from Mahidol University and a Diploma in Preventive Medicine (Epidemiology), from the Medical Council of Thailand. She completed her Ph.D. in Epidemiology at the University of California, Los Angeles.

She is a member of the Medical Association of Thailand and the Nutrition Association of Thailand.

Le Thi Hop; Vice-Chairperson of SEA-PHN Network and President of Nutrition Association of Vietnam

Prof Le Thi Hop, MD, PhD, is currently the President of Vietnam Nutrition Association (VINUTAS), Vietnam and was formerly the Director of the National Institute of Nutrition, Vietnam. She received her MD at Tashkent Medical College and her MSc in Community Nutrition and PhD in Nutrition from SEAMEO - University of Indonesia, Jakarta. Prior to her position as Director, Prof Hop worked within the National Institute of Nutrition for a number of years in various roles, including Director of Food and Nutrition Training Centre and Head of Maternal and Child Nutrition. Her areas of research interest include nutrition, growth and physical development of children from birth to 17 years old; strategy/intervention to reduce stunting of the <5 children; nutritional status and anaemia in reproductive-aged and pregnant women; multi-micronutrient supplementation of young infants, and the effects of iron fortification of rice and fish sauce on anaemia in female workers. She was participated in developing of the National Nutrition Strategy 2011-2020, NPAN 2012-2020 and Food -Based Dietary Guidelines for Vietnamese people of the period 2001-2010 and 2013-2020.

Prof Hop is also currently the Vice-Chairperson of the Southeast-Asia Public Health Nutrition Network.



Southeast Asia Public Health Nutrition Network

Promoting regional collaboration for community improvement



Food and Nutrition Society of Indonesia



Nutrition Society of Malaysia



Nutrition Foundation of the Philippines, Inc



Nutrition Association of Thailand
under the Patronage of
Her Royal Highness Princess
Maha Chakri Sirindhorn



Vietnam Nutrition Association

The Southeast Asia Public Health Nutrition (SEA-PHN) Network is a partnership of key stakeholders in the region, namely nutrition societies and corporate partners to promote public health nutrition among the population and alleviating nutritional problems in the region.

Rationale

There is a need for a network among nutrition societies in the region that focuses on promotion of public health nutrition, in partnership with government agencies and the private sector for a more effective implementation of public health nutrition measures.

Recognising the need for a regional nutrition network focused on public health nutrition, the Southeast Asia Public Health Nutrition (SEA-PHN) Network was established on 2 June 2014 with the aim of bringing together members interested in researching, applying and promoting public health nutrition among the population, in the effort of alleviating nutritional problems in the region.

Objectives

- Establish and maintain an interactive network among public health nutritionists in the Southeast Asian region.
- Promote the periodic exchange of experiences, activities in all public health nutrition issues, including nutrient deficiencies and diet-related chronic diseases.
- Consolidate efforts among nutritionists, both in the public and private sector, for the advancement of public health nutrition.
- Share available information and documentation with all stakeholders involved in public health nutrition, including professional bodies, government agencies and the private sector.
- Conduct activities to promote public health nutrition to benefit communities in the Southeast Asian region, while ensuring avoidance of potential conflicts of interest.
- Promote and conduct collaborative projects amongst members of the SEA-PHN Network, government agencies and private sector for community nutrition improvement, in the spirit of a public-private partnership.



Key Network Activities

Regular contact among members to implement activities in pursuance of the objectives of the Network:

- Conduct annual meetings among members of the Network, preferably in conjunction with a scientific meeting. The organisation of annual meetings will be rotated among members of the Network.
- Interaction through a dedicated website: www.SEA-PHN.org.
- Conduct collaborative projects among members of the Network and its partners.
- Organise scientific meetings or conferences.

SEA-PHN NETWORK COUNCIL MEMBERS 2017/2020

CHAIRMAN

Dr Tee E Siong
Nutrition Society of Malaysia



VICE-CHAIRMAN

Prof Dr Le Thi Hop
Vietnam Nutrition Association



COUNCIL MEMBERS



Prof Dr Ir. Hardinsyah Ridwan
Food and Nutrition Society of Indonesia



Dr Rodolfo F. Florentino
Nutrition Foundation of the Philippines, Inc



Emeritus Prof Dr Mohd Ismail Noor
Nutrition Society of Malaysia

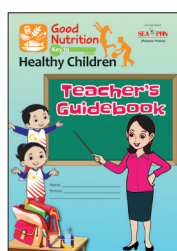


Assoc Prof Dr Ladda Mo-suwan
Nutrition Association of Thailand (under the Patronage of HRH Princess Maha Chakri Sirindhorn)



Annual Meetings

The Network conducts regular meetings of members and associate members at least once a year to plan and implement projects & activities. Meetings are rotated among member countries and usually in conjunction with a conference for scientific exchanges. A total of 8 meetings have been conducted since the Network was established in 2014.



GNKHC – A Multi-Country School Children Nutrition Education Programme in SEA

Recognising the importance of preventing the double-burden of malnutrition from a young age, the Network initiated a multi-country nutrition education programme for school-going children called Good Nutrition – Key to Healthy Children (GNKHC). The programme is implemented by teachers, utilising a specially designed nutrition-teaching module, developed by members of the SEA-PHN Network. The module comprised nine topics covering the basics of healthy eating and active living.

GNKHC aims to empower school children with appropriate nutrition knowledge to enable them to adopt healthier eating habits and be physically active.

It is our hope that this initiative sends messages to the health and education authorities, regarding the importance of improving nutrition knowledge among school children. We are also hopeful that the module can be promoted to other school children in the region.



make a difference!

1st Southeast Asia Public Health Nutrition (SEA-PHN) Conference

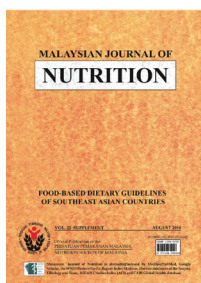
The Network successfully organised the 1st SEA-PHN conference in May 2017 that was attended by 477 delegates from 23 countries. The conference had brought together diverse stakeholders to share and discuss the latest scientific knowledge, effective intervention policies, strategies, research programmes and regulatory updates to promote and sustain public health nutrition in the region.

It featured 54 speakers from 17 countries. The Scientific Programme comprised 1 Keynote Address, 5 Plenary Lectures, 3 Roundtable

Discussions, 11 Main Symposia, 8 Sponsored Lunch Symposia, 24 free paper presentations, 200 posters presented and the Young Researchers' Awards (oral and poster categories).



An analysis of Food-Based Dietary Guidelines in SEA



The Network compiled and analysed the Food-Based Dietary Guidelines (FBDG) of six SEA countries. This analysis serves as a useful reference for countries that are reviewing their guidelines or establishing new ones.

Two articles derived from the FBDGs compilation project were published in the supplement of the Malaysian Journal of Nutrition Vol. 22, 2016.

First article compared the key messages of the FBDGs of 6 SEA countries and the second article compared the pictorial guide that accompanied the FBDGs.

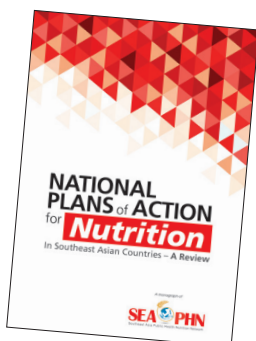
Download the articles for free:

1st article: <http://www.nutriweb.org.my/mjn/publication/22-3/c.pdf>

2nd article: <http://www.nutriweb.org.my/mjn/publication/22-3/d.pdf>

National Plans of Action for Nutrition in SEA Countries - A Review

In cognisance of the key role that national plans of action in nutrition (NPANs) play in nutrition strategies and interventions for countries, the Network published a compilation and analysis of NPANs in six Southeast Asian countries, namely Indonesia, Malaysia, Myanmar, Philippines, Thailand and Vietnam. The main objectives of this review are to provide an understanding of: approach and framework undertaken by countries to formulate NPANs; format and presentation of NPAN; main nutritional problems targeted; strategies and programmes identified and, the implementation and monitoring mechanisms. This monograph provides useful information for nutrition policy and planning, as well as a reference for countries which are developing or reviewing NPANs.



SEA-PHN Network website www.sea-phn.org

The network established a dedicated website that serves as another channel of communication among members and associate members of the Network and nutritionists in the region. The website provides a platform of interaction, sharing of activities by Network members and, as a repository of public health nutrition documents in the region.



This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across its entire surface, providing a template for writing or drawing. The margins are consistent on all sides.

[illegible]



For more information, contact:

Dr Tee E Siong
Chairman

Southeast Asia Public Health Nutrition (SEA-PHN) Network
Email: president@nutriweb.org.my