



Papua New Guinea National Nutrition Policy 2016 - 2026

Smart, Wise, Fair, Healthy and Happy Society

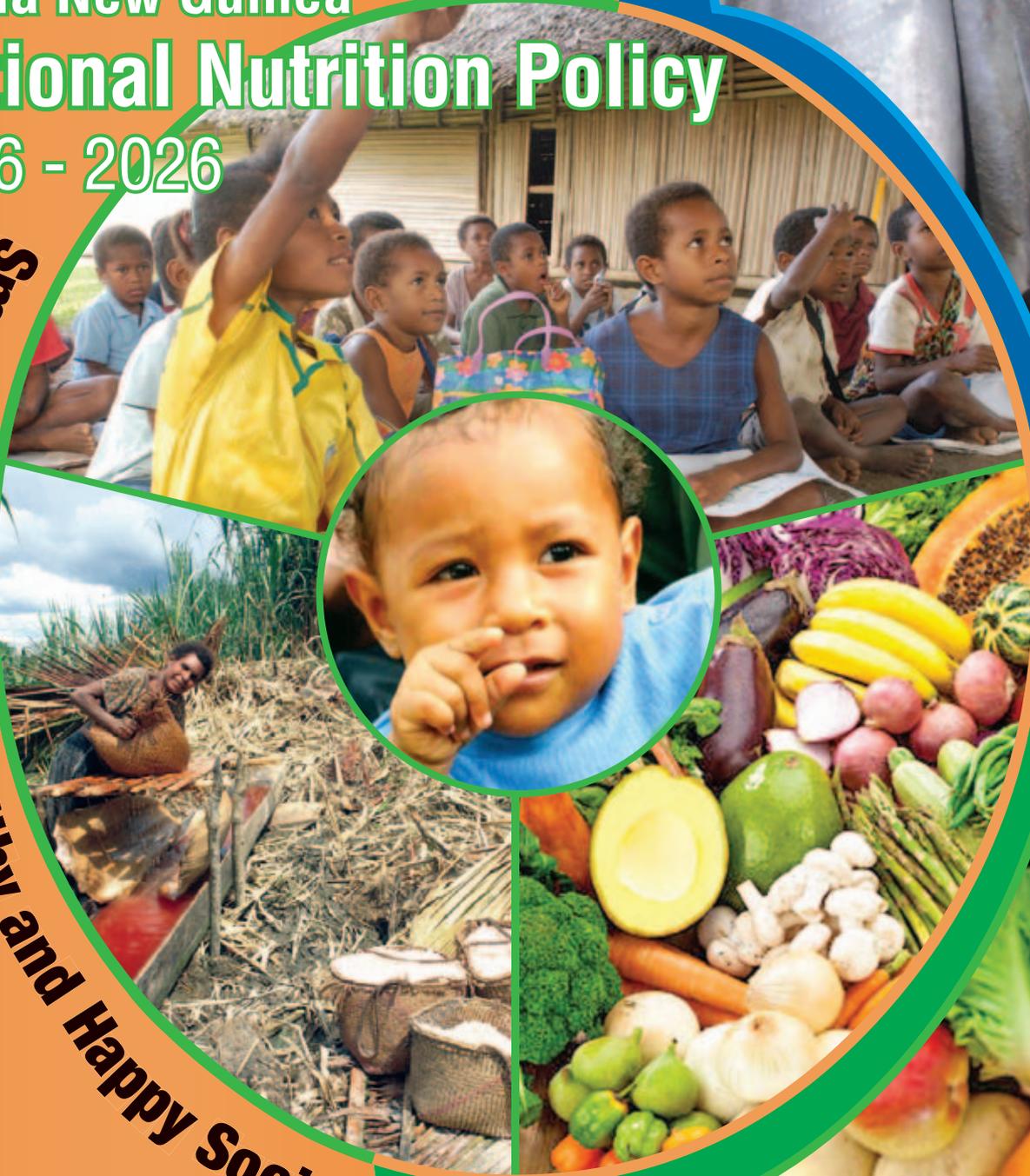


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Foreword



In any society, access to food and good nutrition is the cornerstone for good health and development. In 2011 the Government released the 'Vision 2050' which is the roadmap for Papua New Guinea (PNG) to reach the goal of becoming a smart, fair, wise, healthy and happy nation. For our nation to achieve this vision addressing the nutrition challenges that face our country will be critical.

The last nutrition policy was written nearly two decades years ago, and our nation has struggled to make significant advances in terms of health, nutrition and development. Malnutrition continues to affect the lives of infants, children, women and men at all stages of the human lifecycle. The consequences of nutritional problems such as low birth weight, stunting, underweight, wasting, vitamin A deficiency, iodine deficiency disorders and anemia continue to impede the economic and social development of PNG. In addition, the emergence of overweight and obesity, and other lifestyle diseases such as heart disease, diabetes and some cancers threaten to derail the overall social and economic development of PNG society.

The development of PNG National Nutrition Policy (NNP) aims to focus and build momentum towards improved nutrition status, especially of the vulnerable groups, which is a prerequisite for a healthy and productive nation. It represents the coming together of several government departments, development partners, and civil society, each with a stake in the delivering the outcomes of improvements in nutrition. A multi-sectoral response is essential to address the multiple social determinants of malnutrition. At the same time, improved nutrition significantly enhances the prospects for achieving the goals of each of these sectors. The NNP is a result of a participatory process involving nutrition stakeholders at various levels. It provides an opportunity for re-examining critically factors contributing to malnutrition, especially for vulnerable groups based on current scientific knowledge and experience over the years for addressing nutrition problems. The NNP contributes to a renewed commitment towards addressing critical issues basic to improving nutrition status of the population. Achieving the targets outlined in the NNP will make a significant contribution to achieving the broader development goals outlined in the PNG Vision 2050, PNG Development Strategic Plan (PNG DSP) 2010 – 2030, PNG National Health Plan 2011 – 2020, and other relevant policies, programmes and strategies.

The implementation of key nutrition strategies will make an important contribution to our PNG vision 2050 to improve the lives of all Papua New Guineans. I expect that this NNP is implemented in all levels of Government, and throughout the various agencies and development partners truly committed to health and development in PNG.

I urge all Papua New Guineans and our development partners to work towards achieving the targets put forward in this policy and helping our nation truly become smart, fair, wise, healthy and happy. Our children and future generations of Papuan New Guineans are depending on us to take decisive and definitive action.

Hon. PETER O'NEILL, CMG, MP
Prime Minister of Papua New Guinea

Declaration of Commitment

We the Government of Papua New Guinea, have reached national consensus on the content of the PNG National Nutrition Policy (2016-2026) and agree that improving the nutritional status of the people of PNG is a priority that is guided by an evidence based policy and realistic, achievable nutrition strategic action plans covering the periods 2016– 2021 and 2021– 2026.

We recognize that PNG faces significant nutrition challenges in regard to malnutrition, specifically in terms of stunting, wasting underweight and micronutrient deficiency, as well as the emerging problem of overweight and obesity and life style diseases. Commit to action in reducing the burden of any form of malnutrition, to improve the lives of all Papua New Guineans.

We recognize that improving the nutritional status of all citizens of PNG will enhance the ability of individuals to achieve their full health, learning, and economic productivity potential which will contribute to PNG's economic and social development into the future.

In implementing the policy, we recognize the importance of utilizing a multi-sectorial approach to achieve nutrition outcomes in seven priority areas. To do this we acknowledge the role of the Departments of Health, Agriculture & Livestock, Education, Community Development, National Planning and Monitoring and Provincial Affairs as well as the supporting Development Partners, non-Government organizations, community-based organizations, and Faith-Based Organizations. This policy should also serve as a guide for provincial and district administrations and local level governments (LLGs) to implement their sub national Medium Term Development Plans, and other program related planning documents.

We, the undersigned, commit ourselves to Vision 2050 to be a "Smart, Wise, Fair, Healthy and Happy Society" by supporting the implementation of the NNP (2016– 2026) and the first of two strategic action plans (SAPs) covering the period 2016– 2021. It is our role to provide the leadership, coordination, human, financial and technical resources required to realize the achievement of each of the objectives.

Signatures



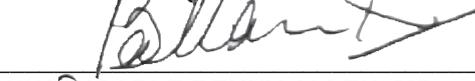
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Minister for National Planning and Monitoring



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HONOURABLE BENNY ALLEN, MP
Minister for Agriculture and Livestock



HONOURABLE NICK KUMAN, MP
Minister for Education

Acknowledgments

The development of the NNP was accomplished through the efforts of many individuals and institutions and we would like to express our sincere gratitude to them all.

We thank all members of the NNP Technical Advisory Group and the respective agencies who committed their time and technical expertise in the evolution of this policy. This group has been dependent on the inputs of members from the National Department of Health, Agriculture and Livestock, Education, Community Development, and Planning and Monitoring, as well as those from University of PNG, School of Medicine and Health Sciences (UPNG - SMHS), Susu Mamas, World Vision International, United Nations Children's Fund (UNICEF) and World Health Organization (WHO).

Of special mention we would like to acknowledge the input from the Policy Planning Division of the National Department of Health (NDOH) for the guidance throughout the development process.

Further, to UNICEF, we are grateful for the financial and technical support throughout the process, and the tireless work to spearhead and coordinate the task of developing the NNP document. The agency commissioned The Albion Centre and Menzies School of Health Research to conduct the initial desk based review, participated and document stakeholder consultations and prepares the initial and final draft documents.

We would also like to acknowledge the valuable contribution of local and international nutrition consultants, who have had significant involvement in the development of the drafts and supporting activities.

Special thanks to the nutrition stakeholders at national and provincial levels who were involved at every stage of the development of this policy. It is hoped that this policy provides the 'guiding light' in delivering real nutrition gains for all Papua New Guineans.



AMB. ISSAC B LUPARI, CBE
Chief Secretary to Government

Executive Summary

Context

The problem of malnutrition continues to be a significant impediment in the health, social and economic development of Papua New Guinea (PNG). The last National Nutrition Policy (NNP) was released in 1995 and despite engaging partners from various sectors, struggled to realize significant improvements in the health and nutrition of the PNG population.

The key challenges in making significant gains in nutrition is the lack of national and sub-national coordinating bodies to effectively plan, budget and manage the multi-sectoral response. One of the key contributors to this problem is a critically limited technical capacity in nutrition throughout health services, education institutions and the agriculture sector. This has also been limited by an inadequate system to build knowledge through peer-reviewed research, surveillance, monitoring and evaluation.

Nationwide, 44% of children under 5 years of age are classified as stunted, which limits not only the child's growth outcomes but also their future learning and income earning potential, and perpetuates the inter-generational cycle of malnutrition and poverty.

The problem of wasting, a potentially life-threatening condition caused by lack of adequate dietary intake, infection and a lack of access to clean water and sanitation, is not adequately identified and managed in clinical and community settings, endangering the survival of around 5% of children under 5 years of age in PNG.

More than a third of women between aged 15 – 49 years are classified as anemic. The figure is much higher in children under 5 years of age where nearly half of the children are classified as anemic.

The burden of overweight and obesity is as high as 25% among adults in some communities which is a significant risk for the increase in lifestyle related non-communicable diseases. Children who were stunted in the early years face an increased risk of becoming overweight later in life.

There are also groups in PNG population who are particularly vulnerable to malnutrition, including those living with diseases such as human immunodeficiency virus (HIV), tuberculosis (TB) and malaria, those living with mental illness or disability, and those living in institutional settings such as hospitals, prisons and boarding schools. While the nutritional impact of HIV and TB has been well recognized, the factors contributing to malnutrition among other vulnerable groups in PNG are not as well understood.

PNG is a nation that faces regular natural and human induced situations, including floods, landslides and tribal violence that threaten the food security and nutritional status of vulnerable communities.

Scope

This NNP draws together a multi-sectorial response to address malnutrition in PNG. It is based on the result of numerous national and provincial level consultations, drawing on peer reviewed research and discussions with front line clinicians, teachers, agriculture experts, community development advisers, program designers and policy development experts. The purpose of the NNP is to outline seven priority objectives aimed at promoting improved nutrition outcomes for all Papuan New Guineans.

Responsibilities

The implementation of the NNP requires the participation and involvement of stakeholders at all levels from the community to the national level, including the public sector (sectoral ministries and institutions, regional secretariats and local government authorities), higher learning and training institutions, professional bodies, private sector, development partners, civil society, media and the community. All concerned parties share responsibility for the successful implementation of the policy and should acknowledge and embrace its responsibilities.

CHAPTER ONE - BACKGROUND

1.1 Intent of Policy

This policy replaces the Papua New Guinea (PNG) National Nutrition Policy (NNP) (March 1995). It is intended to guide National Department of Health, Education, Agriculture & Livestock, and Community Development including development partners and all relevant stakeholders in PNG on evidence-based approaches to addressing under and over nutrition in PNG.

1.2 Historical Context

The first PNG National Food and Nutrition Policy was produced in 1978, and focused on strategies to improve systems of food production, availability and nutrition. The 1978 policy was replaced by the 1995 NNP, which was developed by an inter-sectoral committee. The 1995 policy document contained more than one hundred recommendations for action, assigned to relevant sectors including Department of Health, Education and Agriculture, Livestock & Fisheries and other government and non-government organisations. The 1995 policy was informed by the first PNG National Nutrition Survey (NNS), conducted in 1982–83. There is no documented evidence of the policy and recommendations for action being monitored or evaluated since the policy endorsement in 1995.

A second NNS was conducted in 2005. The results indicate that malnutrition (including under and over nutrition, and micronutrient deficiencies) continue to be significant public health issue affecting people across the lifecycle. The PNG Household Income and Expenditure Survey (HIES) conducted in 2009–10 validated many of the results of the NNS (2005), highlighting that little progress had been achieved in reducing the impact of malnutrition in PNG.

In 2009 Government of PNG outlined PNG's Vision 2050 to 'be a Smart, Wise, Fair, Healthy and Happy Society by 2050'. This was supported in 2010 by the PNG National Health Plan (NHP) (2011–2020), which focused on improved service delivery and primary health care to achieve eight key result areas (KRAs) to reach the goal of 'a healthy and prosperous nation for all, both now and for future generations'. A focus on reducing the immediate and long-term impact of malnutrition in PNG is essential to reach the goals of Vision 2050 and a number of the KRAs outlined in the NHP (2011–2020).

1.3 International Context

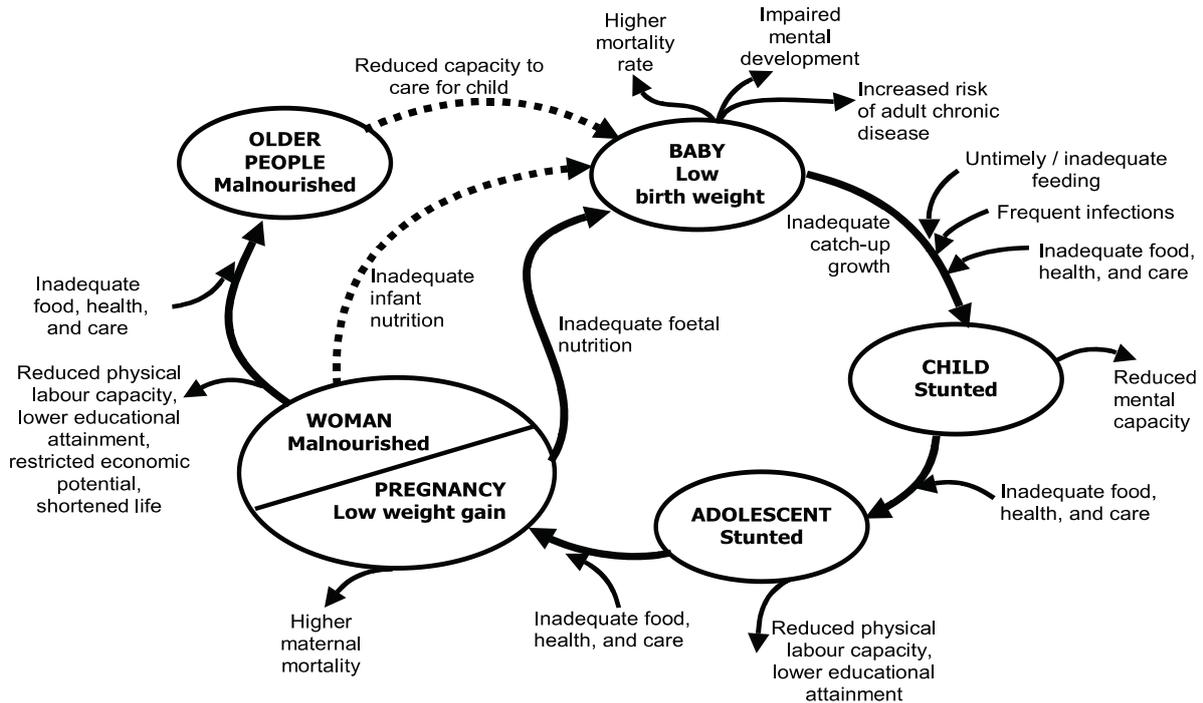
There is a growing body of evidence that highlights the importance of implementing both nutrition specific and nutrition sensitive interventions in terms of achieving sustainable reductions in malnutrition. Nutrition specific interventions address the immediate determinants affecting nutritional status and child growth and development such as adequate food and nutrient intake, appropriate infant feeding, care giving and parenting practices, and low burden of infectious disease (Ruel and Alderman 2013). These interventions are commonly implemented through the health sector. Nutrition sensitive interventions address the underlying determinants of nutritional status and child development which include a broad range of factors; some of which include interventions targeting food security (incorporating food quality, availability and access), access to nutrition, access to health services, reduction of adolescent pregnancy and increasing child spacing and a safe and hygienic environment, specially improved sanitation (Ruel and Alderman 2013). These interventions are nearly all implemented through other sectors such as education, agriculture and community development.

Developing a comprehensive approach highlights the importance of a multi-sectoral approach in terms of implementing nutrition interventions. In many instances, technical capacity in terms of nutrition is limited in delivering these nutrition specific and nutrition sensitive interventions (Gillespie, Haddad et al. 2013). Taking these different sector approaches to scale in a coordinated way will demand considerable energy and technical capacity at the local level (Nishida, Shrimpton et al. 2009). This framework for reducing malnutrition also emphasizes the importance of building systematic and organizational capacities to develop a sustainable approach to identify and respond to national priorities to reduce malnutrition. Globally, it has long been recognized that improving nutrition can have significant short and long term impacts on health, learning capacity, educational attainment, productivity and economic development now and for future generations.

The impact of malnutrition in the PNG population is experienced at every stage of the human lifecycle. The rapid period of growth and development that occurs during pregnancy and early infancy is critical not only to meet genetic potential of the individual but at a population level also makes a significant contribution to the health, development and prosperity of the nation. It is now well recognized that hunger and under nutrition interferes with the physical and mental development of a child. This has impacts that are not only observable through infancy and childhood, but also impact of the growth and development through adolescence and adulthood, echoing the consequences of under nutrition to future generations (Bhutta, Das et al. 2013; Black, Victora et al. 2013). Evidence suggests that infants whose growth faltered in early life, and who gained weight rapidly later in childhood, might be at particular risk of adult obesity and non-communicable diseases, highlighting the importance of good nutrition in the first 1000 days in the prevention of obesity, combined with strategies to address overweight later in childhood and among adolescents and adults (Lancet 2013).

The consequences of under nutrition during infancy are observed through higher rates of low birth weight, stunted physical stature and formation of bone structures (especially those of the pelvis important for child birth in later life), impaired cognitive development, mental capacity, delays in meeting cognitive developmental milestones and diminished learning ability. Throughout adolescence, malnutrition experienced during early life has a persistent impact on cognitive development and educational attainment, diminishing income earning potential and livelihood security. In adulthood, malnutrition in earlier life contributes to higher risks of delivering of low birth weight infants, complications during pregnancy, and higher risks of maternal morbidity and mortality. All of this highlights the association between health and nutrition status of mothers in relation to that of their child. The following figure highlights several contributing factors that have been identified by different stakeholders in PNG as contributors to malnutrition in different priority groups (Bhutta, Das et al. 2013; Black, Victora et al. 2013). Figure 1.0 outlines the impact on the inter-generational cycle of poverty, illness and malnutrition in PNG.

Figure 1.0 Impact of Malnutrition on Productivity during the Lifecycle and Across Generations



Adapted from the United Nations Administrative Committee on Coordination/Sub-Committee on Nutrition (ACC/SCN) (2000), 4th Report on the World Nutrition Situation, Geneva: ACC/SCN in collaboration with the International Food Policy Research Institute (IFPRI).

Globally, it is recognized that in order to achieve sustained outcomes in nutrition, a number of key elements are required. These include supporting national leadership and coordination, mobilizing take holders, developing a national framework for action, establishing monitoring and evaluation systems, strengthening organizational capacity development and resource mobilization.

This iteration of the PNG NNP (2016– 2026) is informed by the results of the NNS 2005 and components of the Household Income & Expenditures Survey (HIES) 2009– 2010. Building on the multi-sectoral coordination and integration outlined in the 1995 policy, this iteration of the policy promotes the scale up of evidence based nutrition sensitive and nutrition specific interventions relevant to the PNG situation.

1.4 Audience

The PNG NNP (2016– 2026) will be used to guide the nutrition actions of all stakeholders working to improve nutrition in PNG; including relevant Government departments at national, provincial, district and local government, development partners, private and non-government organisations, academic facilities, civil societies and faith based organisations.

1.5 Policy Development Process

The policy development process was initiated by the Government of PNG and supported by UNICEF PNG. This took place from June 2013 to March 2014, following an initial scoping mission and desk based literature review in December 2012. The five phases are outlined below. Refer to Annex 4 for the list of national and sub-national stakeholders consulted during phases one to four, and Annex 5 for the list of Technical Advisory Group members who guided this process.

Phase one (December 2012) - Desk based literature review and one-week scoping mission to consult with national stakeholders

- A review of the grey and published literature pertaining to nutrition in PNG informed the zero draft of the NNP. The scoping mission identified key stakeholders to be involved in the development of the NNP and provided direction on the processes required to undertake the development of the NNP. Following this phase, the first preliminary technical advisory group (TAG) meeting took place in early 2013.

Phase two (June–July 2013) - National stakeholder consultations and TAG meetings

- First TAG meeting held to present the zero draft NNP and to plan consultation process
- National stakeholder capacity assessment survey designed and conducted
- Second TAG meeting held
- Draft one NNP completed

Phase three (July –August 2013) – Sub-national stakeholder consultations and TAG meetings

- Third TAG meeting held to review activities
- National stakeholder consultations and capacity assessment conducted in three regions (Simbu, Western Highlands, Eastern Highlands, Milne Bay, and Madang Province)
- Fourth TAG meeting held for feedback on draft one NNP, collation of national and sub-national stakeholder consultations and presentation of preliminary results
- Draft two NNP completed

Phase four (August 2013 – March 2014) – Finalisation of NNP

- Finalize and distribute draft NNP
- Fifth TAG meeting to solicit feedback on draft NNP
- Stakeholder validation workshop
- Final Draft NNP ready for endorsement

Phase five (2014)

- Collation and reporting of the results from the nutrition capacity assessment surveys
- Peer review of final draft NNP
- Costing of the NNP presented for endorsement.

CHAPTER TWO - POLICY CONTEXT AND DIRECTIONS

2.1 Goal

To improve nutrition for all Papua New Guineans through evidence-based, coordinated nutrition approaches that optimises resources and aligns actions.

2.2 Vision and Mission

Vision

A smart, fair, wise, healthy and happy nation through improved nutrition and health outcomes for all citizens of PNG.

Mission

To use multi-sectoral mechanisms to deliver comprehensive, integrated, equitable and sustainable approaches based on best practices, to improve health and nutrition outcomes for all Papua New Guineans.

2.3 Principles

The implementation of the PNG NNP will be guided by the following principles at all levels:

- Government leadership, ownership, coordination and accountability through multi-sectoral collaboration
- Active community participation and ownership
- A focus on the 'first 1,000 days' from pre-pregnancy to two years of age (including adolescents) to improve nutrition and health throughout the lifecycle
- Gender equality and equity
- Nutrition is promoted as a core development issue
- Nutrition is integrated into existing government systems and structures
- Utilisation and support of existing delivery platforms to implement the policy
- Use evidence-based practice to deliver integrated nutrition programs
- Continuous quality improvement by regular monitoring and evaluation
- Where appropriate local foods and practices are promoted

2.4 Core Government Legislations and Policies

Nutrition is a cross cutting issue impacting a number of sectors. As a result, the NNP complement the following policies, legislations and regulations:

Laws, Acts and Legislations

- Constitution of PNG 1974
- PNG Lukautim Pikinini Act 2009
- PNG Food Sanitation Act 1991 & Regulation 2007
- PNG Institute of Medical Research (Amendment) Act 2007
- PNG Provincial Health Authority Act 2007
- PNG Independent Consumers and Competition Commission Act 2002
- PNG Medicines and Cosmetic Regulations 2001
- PNG Medicines and Cosmetic Act 1999
- National Agriculture Quarantine Act 1997

- PNG National Health Administration Act 1997
- PNG Organic Law on Provincial and Local Level Government 1995
- PNG Public Services Management Act 2014
- Public Financial Management Act 1995
- Public Service Management Act 1995
- PNG Public Hospital Act 1994
- PNG National Institute of Standards and Industrial Technology Act 1993
- PNG Labour Act 1978
- PNG Baby Feed Supplies and Control Act 1977 (Amended 1984)
- PNG Public Health Act 1973

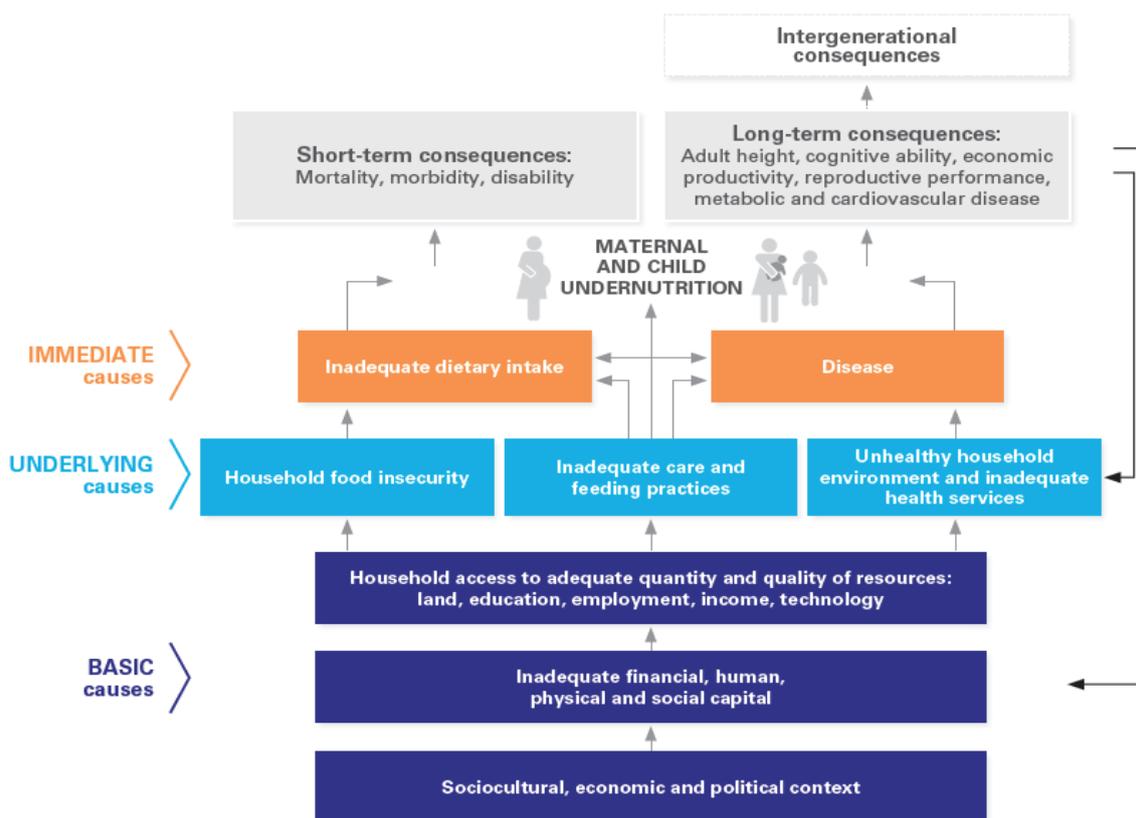
Policies and Standards

- PNG Infant and Young Child Feeding Policy 2014
- Guidelines for HIV care and Treatment in PNG 2014
- National Health Sector Partnership Policy 2014
- Free Primary Health Care and Subsidized Specialist Services Policy 2013
- National Education HIV and AIDS Strategy 2012 – 2016
- PNG Public Service General Orders 2012
- PNG Medium Term Development Plan 2011– 2020
- National Policy for Women and Gender Equality 2011 – 2015
- PNG National Health Plan 2011 – 2020 (2010)
- PNG National Health Service Standards 2011
- PNG Development Strategic Plan (PNG DSP) 2010 – 2030
- PNG Maternal Health Task Force Report 2010
- PNG National Mental Health Policy 2010
- National Population Policy 2015 – 2024
- PNG Vision 2050 2009
- PNG Child Health Policy 2010 – 2020
- National Disability Policy 2015 – 2025
- PNG National Policy on Integrated Management of Childhood Illness 2014
- PNG National Policy on Family Planning 2014
- National Youth Policy 2007 – 2017
- National Agricultural Development Plan 2007 – 2016
- PNG National Early Childhood Care and Development Policy 2007
- School Health Policy 2015
- National Education Policy 2005 – 2014
- PNG Health Workplace Policy on HIV&AIDS 2005
- PNG National Policy on Expanded Program on Immunization 2004
- PNG Food Security Policy 2000 – 2010
- PNG Minimum Standards for District Health Services in Papua New Guinea 2001
- National Medicine Policy 2014
- Sexual Reproductive Health Policy 2014

CHAPTER THREE - POLICIES AND STRATEGIES

3.1 Current Situation

Determinants of under nutrition in PNG: (Immediate, Underlying and Basic): The first section of this chapter outlines available information on the immediate, underlying and basic causes of malnutrition in PNG, as per the conceptual framework for malnutrition (UNICEF 2013).



Source: UNICEF, 2013

Figure 2.0: Underlying causes of malnutrition

Immediate causes

- Inadequate dietary intake:

Limited information on dietary intake is available. In 2006, 56% of infants 0-5 months were reported to be exclusively breastfed (DHS 2006). No data on complementary feeding or continued breastfeeding is available. It will be important to collect comprehensive data on IYCF practices at the next available opportunity, including on the core indicator measuring quality of complementary feeding: minimum acceptable diet. Information on the nutrient values of child and maternal diets is also not available.

- Disease

Recent information on the pattern of childhood disease is not available. In 2006, 3% of children less than 3 years were reported to have had ARI symptoms, 5% had diarrhea and 7% had fever (DHS 2006). A reported 63% of children with symptoms of ARI were taken to a health facility. However, in terms of diarrhea treatment, only 30% of children with diarrhea were taken to a health facility, 8% were given ORS and 7% were given recommended home fluids, while 86% were not given any appropriate fluids. This suggests a fairly low prevalence of common childhood illnesses, but poor diarrhea treatment.

Underlying Causes:

- **Household Food Insecurity**

According to the Food and Agriculture Organization (FAO) of the United Nations, PNG is listed as a Low income Food Deficit Country for 2013, and is not on track to meet its MDGs targets.

The National Food Security Policy (NFSP) 2000-2010 previously formulated by the Department of Agriculture and Livestock (PNG) has not been sufficiently implemented. Food and nutrition insecurity is still a major problem in the country. Whilst recent data is not available on the population at risk of food insecurity in PNG, the 1996 National Household and Food Security Survey indicated that more than 40% of the population have an intake of less than 2000 calories a day¹. According to consultations and observations from the communities visited in 2014 (in the context of formulating a new National Food Security Policy), the rural population do not seem to have access to sufficient, safe, nutritious food to meet their dietary needs. Their normal diet is basically starchy staples and greens, without protein, especially animal protein. The lack of animal protein leads to poor growth and development of a child, due to low protein, micronutrients and fat intake. Poor intake of fat deters absorption of micronutrients such as vitamin A and E, which are very important for boosting the immune system. Access to sufficient quality and quantity of food is lacking in most households, even in towns and cities in PNG. Prices for basic commodities such as bananas, sweet potatoes, rice, meat and fish have increased in the past decade. The resources boom in PNG may have inflated prices for basic commodities across the board. Most people, especially the rural majority, lack the purchasing power, since their cash earning opportunities are limited.

In terms of food production, there is lack of diversity of food crops and small livestock, including aquaculture, tree crops such as fruit and nut trees. Agricultural interventions targeting smallholder farmers involved in diverse food production can improve diet and reduce malnutrition. An example of the food diversification program implemented in the Markham District of Morobe Province reduced the underweight population from 21.9% in 2000 to 9.6% in 2013, approximately a 56% reduction (NHIS 2000 & 2013).

- **Inadequate Feeding and Care Practices:**

Poor infant and young child feeding practices are a major contributor to under nutrition and increased risk of illness and death. For example, a non-breastfed child is 14 times more likely to die in the first six months compared to an exclusively breastfed child (Lancet 2008). Sub-optimum breastfeeding practices in the first two years cause 12% of all child deaths (Lancet 2013). Poor complementary feeding practices are strongly associated with under nutrition- and their improvement is the most important direct nutrition intervention for stunting prevention.

¹ Gibson, 2001

The exclusive breastfeeding rate was 56% in 2006 (DHS 2006). Updated data is needed on breastfeeding practices, as well as complementary feeding (minimum acceptable diet).

- **Unhealthy Environments:**

The poor water supply, hygiene and sanitation conditions are important contributing factors to malnutrition and poor health in PNG population. Recent evidence highlights how open defecation is a major driver of stunting, not just through causing high rates of diarrhea but through sub-clinical environmental enteropathy which inhibits absorption of nutrients and stunts growth (Humphrey 2009). In fact enteropathy contributes a larger portion of the under nutrition than diarrhea.

About 41.0% of the population rely on a river, stream, lake or pond for their water (48.5% in rural areas), with a further 11.8% relying on rain water. Only 12.1% of the population have tap water piped into their homes (although this is as high as 59.6% in the urban areas) and 13.7% have water piped into their village or community. The average time taken to reach the water source is 13 minutes (7 minutes in urban areas).

The WHO/UNICEF 2013 Joint Monitoring Programme (JMP, based on national Government data) for PNG reports a figure of only 19% having improved sanitation facilities, 66% having unimproved facilities and 12% practising open defecation.

- **Inadequate Access to Health Services:**

The access to health services remains low in the country hampered by difficult geographical access and weak outreach frequency. According to NDOH administrative report presented at the National Health Conference, ANC 1 coverage is 64%, ANC 3 is 28% and institutional delivery is 43%. The immunization coverage has not improved during the last 10 years, with 88% for BCG, 42.96% for measles at 9 months of age, 52% for DPT3 and 70% for Tetanus Toxoid second dose (TT2) to pregnant women. About 92,000 children under-one remain unvaccinated (Penta 3). PNG is the only country which has not yet eliminated the maternal and neonatal tetanus in the pacific region.

Basic causes:

Education rates may be increasing in PNG (Education for All 2015 National Review), however literacy rates among women remain low, and worse in the rural areas (DHS, 2006). It has been demonstrated that higher education and literacy rates have positive effects on the health and nutrition status of families – better educated people tend to be more aware of nutrition needs of children than non-educated people.

Currently in PNG there are no systems in place to support the social protection of communities vulnerable to food insecurity and malnutrition. Despite vast natural and mineral wealth, it is estimated that 36 % of Papuan New Guineans live on less than US\$1.25 per day. Between 1980 and 2012 the PNG Human Development Index (a composite measure of human development including health, education and income) rose annually by 1.3 % from 0.324 in 1980 to 0.466 in 2012, placing PNG below the regional average of 0.683 and at a rank of 156 out of 187 countries today with comparable data(UNDP 2013).

There is a significant nutritional problem in PNG with a number of key nutritional indicators affecting the health of the population, these include stunting, wasting, underweight, micronutrient deficiency

and overweight and obesity. The actions needed range from governance and coordination of nutrition responses, reducing the impact of under and over nutrition, particularly among vulnerable groups and establishing nutrition responses to emergency situations.

This next section outlines the current situation in each of the priority areas outlined in this policy, focusing on the status of available outcome indicators and summary information on the current programmes and interventions in each area.

Objective 1: Governance, Coordination, Communiation, Partnerships, M&E, Research

National Level Leadership and Coordination

PNG has struggled to make significant achievements in reducing the impact of malnutrition for more than two decades. At the core of this has been a lack of leadership and coordination to administer the advocacy, research, planning, implementation and monitoring of a multi-sectoral nutrition response. This has led to a significant impediment in administering nutrition activities at all levels, in PNG to achieve real reduction in malnutrition. This lack of national level coordination has not only contributed to a declining awareness of malnutrition as a national health issue but also reprioritized the responses required to address issues such as stunting, wasting, micronutrient deficiency and the emerging problem of overweight and obesity. In addition, collaboration through a multi-sectoral response between partners and programs has not fully exploited to mobilize funds.

In terms of governance, currently there is no national level organization providing leadership or coordination for addressing nutrition issues in PNG. The implementation of the nutrition specific and nutrition sensitive interventions are administered by individual government departments or through the activities of development partners. There are limited nutrition components in the sectorial plans in Department of Health, Agriculture & Livestock, Education and Community Development. There are few examples of inter-sectorial collaboration between departments on delivering nutrition outcomes. A review of national level plans from different sectors shows that specific budget line items focusing on nutrition activities are missing from national strategies. PNG is also lacking capacity in terms of responses in nutrition at all levels of government and the mode of intervention. This is compounded by a lack of data on key nutrition indicators important for advocacy and building evidence informed approach to program design.

Provincial and District Coordination

At the provincial and district levels, nutrition specific and nutrition sensitive interventions are not included as part of Medium Term District Plans and only 8 out of 22 provinces have a designated nutrition officer. Despite this and recognizing the significant nutritional problems affecting many communities, a few provinces have taken steps to establish multi-sectoral nutrition committees to identify and respond to nutritional issues such as stunting, underweight and micronutrient deficiency. Even in provinces where these teams have been established, budgeted work plans have not been developed and there is little coordination between national, provincial and district teams.

Research, Surveillance, Monitoring and Evaluation

There are currently limited systems of research, surveillance, monitoring and evaluation to support the development of evidence base interventions for identifying, advocating and responding to nutrition issues in PNG. Research into nutrition is limited to nutrition surveys last implemented in 2005, an HIES in 2010, and small-scale micronutrient studies coordinated through academic and some health facilities. Monitoring data in terms of key nutrition indicators for surveillance and outcomes in stunting, wasting, underweight, overweight and obesity are not included as part of routine monitoring within the Department of Health information systems.

There is very limited data on nutrition programme implementation, for example from monitoring systems or periodic supervision, which can inform managers' decisions on programme improvement.

Objective 2: Nutrition Capacity:

Nutrition human resource capacity is very limited in PNG at all levels to provide technical manpower and support to implement nutrition intervention. There has not been any form of pre-service and in-service training in nutrition for more than 20 years. An assessment of nutrition capacity at the national, provincial and district levels was conducted in 2013. This assessment, which focused on the health sector provided evidence that nutrition capacity in PNG is limited at all levels of intervention from the district to national levels. None of the academic facilities in PNG provide specific nutrition pre-service training, and the nutrition elements of other health training such as medical and nursing courses is limited. The impact of the lack of capacity in nutrition is not only in terms of developing a multi-sectoral strategic plan but it also inhibits the ability to identify, advocate, budget and implement a coordinated response to nutritional problems in the communities

Adding to this dearth of trained resources, there are few employment or career progression opportunities for nutrition workers within the health sector. National and provincial level consultations with leaders from the Department of Agriculture & Livestock, Education and Community Development sectors also indicate a lack of trained human resources in terms of nutrition. This has also led to a deficit in tools and resources, in health, education and agriculture sectors important for the delivery of nutrition interventions.

Objective 3: Prevent and Treat under Nutrition:

While the infant and under-fives mortality rates have fallen in recent years (from 64 to 45, and 60 to 58 respectively), an opportunity exists to further reduce these rates by reducing under nutrition (UNICEF 2012), given that it contributes to 45% of child deaths (Lancet 2013).

Stunting

Stunting is the biggest nutrition challenge facing PNG and threatens the future development of PNG. The greatest impact is in terms of child growth and cognitive development, leading to poor socio economic development of community and the nation. The period of '1,000 days' from pre-conception until a child's second birthday is a 'window of opportunity' during which good nutrition can be promoted for optimal growth and development to have lifelong impacts on health, educational attainment, labour capacity, reproductive health and earning potential. It is a global priority to prevent stunting to break the intergenerational cycle of malnutrition. Stunting extending beyond 2 years of age is irreversible and persists through childhood, adolescence and adulthood. Stunting in the first 1000 days of life constitutes a risk factor for later overweight and obesity, due in part to "pre-programming" that happens during that period, predisposing people to later gain in weight when exposed to obesity-prone environments in later childhood and adulthood.

Women of short stature are at greater risk of experiencing complications during pregnancies and births, and are at an increased risk of maternal morbidity and mortality. These women also have a higher risk of having small, low birth weight babies, who are at an increased risk of illness and death in infancy, and persistent ill health as a child and throughout adulthood.

The national prevalence of stunting (low height/length for age, an indicator of chronic under nutrition), among children aged 6 – 59 months is “very high”. At the national level, 44% of children under 5 years of age are classified as being stunted, ranking PNG among the top 20 countries worldwide in terms of prevalence of stunting. It is estimated that over 430,000 PNG children are stunted. The figure is as high as 52% in Mamose Region, followed by 46% in the Highlands Region. A comparison between urban and rural populations showed that stunting tends to be higher in rural areas rather than in urban areas (48% and 28% respectively)(National Department of Health 2005).

The main reasons PNG still has such a high stunting rate are linked to the poor status of implementation of key specific-nutrition interventions to address the situation. IYCF interventions are still emerging with high number of service providers not yet trained on key IYCF practices, including exclusive breast feeding and optimal feeding. The treatment of severe acute malnutrition, one of the key interventions to save children life has just begun in the country and many children under 24 months of age continue to be threatened by severe malnutrition in the country. Baby-friendly conditions in health facilities to encourage systematically the exclusive breast feeding and the optimal feeding are yet to be part of health facilities and hospitals quality standards. Interventions aiming to improve children access to the family food basket are not widely implemented. Nutrition-sensitive interventions, agriculture/food security, prevention and treatment of childhood illnesses, WASH, especially sanitation and hygiene, early childhood care, maternal health and nutrition interventions, nutrition-sensitive social safety nets are still emerging in the country.

In terms of IYCF interventions, there has been some training and efforts on growth monitoring and IYCF counselling supported by the NDOH in 4 provinces. NGOs are implementing programmes to promote good IYCF practices in their respective areas of action.

Wasting

Nationally the prevalence of wasting (low weight for height/length, a sign of acute under nutrition), among children aged 6 – 59 months is 4.5%. However, there is considerable variation across regions with some regions (e.g. Mamose) recording up to 8.0%, which is classified as ‘poor’. The recent national figures on wasting have been contested with estimates as high as 18% reported in some provinces(National Statistical Office 2009a).It is estimated that the annual caseload of children suffering from SAM is 4,500 (Paediatrician Society Reporting, 2013).

Currently treatment of wasting in PNG is under resourced at all stages of the continuum of care. There is also a lack of clarity about the extent and distribution of the problem in many parts of the country. Many clinic facilities report that the problem is extensive and frequently under-reported through hospital data collection systems and the responses to treat the condition are inadequate. This is evident through hospital lengths of stay, and Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM) recovery rates and death rates, especially among children under 5 years.

Management of SAM using UNICEF and WHO-recommended therapeutic milks and ready to use therapeutic food was only initiated in one hospital in 2014. Outpatient management of SAM according to the most recent WHO protocols (2013), including the use of MUAC screening and

ready to use therapeutic food, has been proven to significantly increase the early detection of cases, improve coverage of patients treated and reduce rates of death.

Underweight

The national prevalence of underweight (low weight for age, a sign of stunting, wasting or both stunting and wasting) in children aged 6 – 59 months is 18.1%. Almost one third (31.9%) of children aged 6 – 59 months are underweight in Mamose region.

Low BMI among Women of Childbearing Age

The national prevalence of underweight among non-pregnant women of reproductive age (15 – 49 years) is 5.3% (BMI<18.5). However, the prevalence is substantially higher in the Southern Region (11.2%). The prevalence of malnutrition is an important factor in the maternal mortality rate of 250 maternal deaths per 100,000 live births and the low birth weight rate (less than 2,500 grams) of 8% (National Department of Health 2005). Specific actions such as iron folic acid supplementation during pregnancy to reduce anaemia in pregnant women, weighing and counselling during ANC sessions are the only maternal nutrition interventions actually implemented within the health system. Other specific interventions may be occurring at smaller scale through the networks of NGOs in the country.

Teenage Pregnancy

Teenage pregnancy contributes to low birth weight and under nutrition. The average age of first pregnancy of 20.5 years (DHS, 2006) is just at about WHO's recommended age, of 20 years (UNFPA 2011). In 2006, 12.9% of girls aged 15-19 years had begun child bearing (National Statistical Office 2009b). Five percent of females who stopped attending school reported that this was due to marriage or pregnancy (National Statistical Office 2009a). Interventions targeting adolescent girls are yet to be largely and strongly developed in the country.

Low Birth Weight

The rate of Low Birth Weight (LBW) in PNG is 8% (National Health conference, 2014). However there are huge differences between regions with Milne Bay Province and Mamose reporting high incidence (National Department of Health 2005). These statistics account for only children born at the institutional level (43%) and therefore should be taken with cautious as no records exist about children born out-of health facilities. The LBW rate may be higher than recorded.

There are other groups in the community, at certain stages in lifecycle that are also vulnerable to malnutrition including older populations.

Objective 4: Micronutrient Deficiencies:

Anaemia

Iron deficiency anaemia among children and pregnant women is a serious public health problem. The current situation among other groups is unknown, but given that anaemia is moderate public health problem among women of reproductive age and also in men, investigation to identify anaemia among school aged children is warranted. Previous site specific studies identified iron deficiency, malaria and thalassemia as the main causes of anaemia among pregnant women.

Nationally, the prevalence of anemia (Hb<11.0g/l) among children aged 6– 59 months is 48.1%, and highest in the Mamose region at 67.5% which is classified as severe public health problem. The national prevalence of anemia is highest among children aged 6– 11 months (69.2%)(National

Department of Health 2005). Iron deficiency anemia in children aged 6– 59 months is 22.8%, accordingly almost 50% of anemia was found in children aged 6–59 months.

The prevalence of anemia (Hb<12.0g/l) among girls aged 15 – 19 years is 34.5%, classifying it as a moderate public health problem. The prevalence of anemia (Hb<12.0g/l) in non-pregnant women aged 15 – 49 years is 35.7% (National Department of Health 2005), and considered a moderate public health problem. The prevalence of iron deficiency anemia is 15.0%; accordingly almost 50% of the anemia was among women aged 15– 19 years.

National prevalence of anemia in pregnant women was 55% in 2005. A study at Port Moresby General Hospital found that 81% of the participating pregnant women had a hemoglobin level below 11.0g/l (Sill, White et al. 1986). Prevalence of anemia (Hb<13.0g/l) in males aged 18 years and older is 26.3% (National Department of Health 2005), which is considered moderate public health problem (WHO 2005).

Although iron folic acid supplementation to pregnant women, deworming and intermittent treatment of malaria (IPT) are part of the interventions delivered during antenatal care sessions, data are not recorded nor reported consistently, thus, there are no reliable statistics showing the status of these interventions. The insecticide-treated nets are widely distributed in the country with the support by the Global Funds (Households covered in 99% of villages of the country), but the effective use rate are yet to be determined. Before then, we consider vulnerable population still at risk of malaria.

Interventions to address the problem of iron deficiency among children were limited because many regions of PNG are classified as malaria endemic areas. In the past, iron supplementation among children with normal iron status was not recommended in malaria endemic areas, limiting the potential to use blanket supplementation interventions. However, more recent evidence shows that iron-containing products for home fortification such as multiple micronutrient supplements (MNPs) can be safely given in malaria hit areas when implemented in conjunction with measures to prevent, diagnose and treat malaria (WHO 2011).

Vitamin A Deficiency

VAD is severe problem among children 6 – 59 months. The prevalence of Vitamin A deficiency (VAD) in children aged 6 – 59 months is 25.6%, which is considered severe public health problem. It was measured as serum retinol <0.7µmol/L and did not exclude those with inflammation. The only other data available for VAD is among non-pregnant women aged 15 – 49 years where the prevalence of VAD is 0.7% (National Department of Health 2005).

Current global guidance recommends that children up to the age of 11 months are given 100,000 IU vitamin A, while children 12 months and over receive 200,000 IU every six months. In PNG vitamin A is given through immunisation clinics. However, once the immunisation schedule has completed, many children tend not to attend well baby clinics, which reduces the uptake of vitamin A supplementation. VAD is associated with impaired vision, permanent loss of sight, and an increased risk of infection and death from infectious diseases, including measles that can persist throughout the lifecycle.

Iodine Deficiency Disorders and Iodised Salt Consumption

In terms of iodine deficiency, the overall coverage of iodised salt throughout the PNG population is beyond 62% (National Department of Health 2005). There are some remote communities where iodine deficiency disorders (IDD) are still a problem. These communities are very often remote and hard to reach. The effects of IDD include goitre, brain damage, still birth, spontaneous abortion

during pregnancy and cretinism. Children have impaired cognitive development, experience delayed growth and physical development.

An assessment conducted as part of the 2005 National Nutrition Survey found that iodised salt was present in 61.9% of all participating households and 92.5% of the salt samples tested contained more than 15ppm of iodine (the current international recommendation for salt iodization at household level)(National Department of Health 2005). The median urinary iodine concentration in non-pregnant women of reproductive age in PNG is 170.0µg/L(National Department of Health 2005), which is well above the cut-off level of 100µg/L. A number of small scale studies in PNG have indicated that iodine deficiency still exists in some communities.

In 1995 the Government of PNG amended the Pure Food Standards making it mandatory for all salt to be iodized with potassium iodate to an iodine content of 30 parts per million (PPM).

Other Micronutrient Deficiencies

There is need to develop and identify other emerging micronutrient deficiencies in PNG. With an increasing consumption of locally produced rice, the risk of thiamine deficiency may increase as the locally produced rice is usually not fortified, and food legislation is less monitored and enforced. Deficiencies in other micronutrients such as zinc, calcium, selenium and vitamin D are reported in many countries, however only few studies have been completed in PNG.

There is limited research on the prevalence of other micronutrient deficiencies in PNG; however some small studies indicate that micronutrient deficiencies may exist for thiamine and zinc. One study on the thiamine status of boarding school students revealed that thiamine deficiency exists among students in boarding schools. In this study female students were at greater risk of deficiency compared with their male counterparts. The PNG Food Sanitation Regulations (2007) outlines that all rice in PNG be enriched with thiamine, feedback from many agricultural experts is that a lot of locally produced rice is not enriched.

Objective 5: Overweight and Obesity:

Overweight and obesity is a problem particularly in urban areas. Previous studies have shown that as economic development increases the rate of overweight and obesity tends to increase in a population. This increases the risk of life style related disease in those countries. In PNG, the prevalence of overweight (BMI for age (BAZ)) in children aged 6– 59 months was 4.8%. The prevalence was highest in the Highlands Region at 9.9%. Among adolescent girls (aged 15– 19 years) 16.3% are classified overweight and 0.7% are obese². Among non-pregnant women aged 15– 49 years the 2005 NNS found that 17.4% are overweight and an additional 5.1% obese. In urban areas, 23.2% of women of reproductive age (15– 49 years) are overweight and 13.6% are obese. In terms of men over the age of 18, at the national level 16.1% are classified as overweight and 4% are obese. Additionally approximately one in five men living in urban areas are overweight (20.7%) and 11.4% are classified as obese(National Department of Health 2005).Obesity (BMI >30) increases the risk of premature death, disability and diminished quality of life. The effects include: increased the risk of psycho-social disorders, high blood pressure, impaired skeletal development, adult morbidity and mortality, pregnancy complications including preeclampsia and gestational diabetes.

²Note that adult growth reference standards are used to measure BMI among adolescent girls, which produces and underestimate of overweight among adolescents

PNG Household Income and Expenditure Survey 1996 has shown that people in urban areas rely mostly on rice and bread as their main staple foods, while the majority of rural population consume traditional root crops of which sweet potato is the main one (Gibson and Rozelle 1998). Meat is infrequently consumed and fatty meats like lamb flaps are popular (Muntwile and Shelton 2000). In urban areas over 90% of the food consumed is purchased from stores and markets. It is the result of transition towards diets with more energy dense foods and sedentary lifestyle. There is growing rate of lifestyle diseases such as high blood pressure, heart disease, diabetes, diet related cancers and other non-communicable diseases which has the potential to add a significant economic burden to the health system and may impede the progress of health, social and economic development in PNG.

Objective 6: Nutrition among Vulnerable Groups - HIV, TB, Malaria, Mental Illness and Disabilities

A direct link between nutrition, HIV and TB has been long recognised. Nutritional status may affect the progression of HIV and TB and is an important determinant of survival of people living with diseases such as HIV or TB. Underlying or worsening malnutrition affects immune function and the cycle continues with disease progression and further worsening of nutrition status. Strengthening interventions to promote nutrition assessment, counselling and support have an important role in contributing to the long-term health and well-being of those affected.

The estimated prevalence of HIV in PNG is 0.6% (UNAIDS 2013) however, this varies across the provinces to range from 0.2% in Morobe Province to 0.9% in Western Highlands Province. Globally, the links between malnutrition, food insecurity and HIV are well recognised, despite this few studies have been implemented in PNG to determine the factors contributing to malnutrition. Systematic data collection on the prevalence of HIV among SAM patients in SAM treatment facilities or the prevalence of SAM among HIV patients in ART clinics is not undertaken. The bi-directional integration of actions to screen, treat and counsel patients with malnutrition and patients with HIV is important.

PNG has the highest burden of TB in the Pacific region with over 14,749 new cases diagnosed a year and a total prevalence rate of 534 per 100,000 people (WHO 2011). In other regions with similar incidence rates, malnutrition has been identified as a common determinant in terms of the development of active disease and disease outcome (Lonroth, Williams et al. 2010). Information about the prevalence of malnutrition among groups with either HIV or TB in PNG is not known. However, information from selected hospitals showed that around half of the patients with SAM also had TB.

Malaria is another disease that frequently linked with malnutrition globally. The incidence of malaria in PNG is 17.0% nationally (WHO 2011). Despite the high incidence of malaria in many regions of PNG, little is known about the nutrition implications of the disease.

Institutionalized Populations

There have been very limited studies done in PNG to assess the nutritional status of institutionalised population. These unpublished studies suggested nutrition problems in institutions such as boarding schools, tertiary institutions, hospital, prisons, etc. There is need for better understanding of the nutritional status of this population group.

Mental Illness and Disabilities

Globally it is known that although malnutrition can be a cause of disabilities, it can also be a consequence. Children with disabilities are at higher risk of malnutrition. For example, a child with cleft palate may not be able to breastfeed or consumed food effectively or a child with cerebral palsy may have difficulty chewing and swallowing food. Some people with disabilities may need a specific diet or increase their calories intake in order to maintain a healthy weight. They may be kept away from the community due to stigma and discrimination therefore fed less. They may not be taken to health facilities for routine services and treatment. People with physical or mental disabilities may have difficulty in feeding themselves and need assistance to eat which may lead to inadequate intake resulting in malnutrition.

There is limited data available about the association and determining factors between those in the community with mental illness or disability and nutritional status in PNG. Greater understanding is needed regarding factors contributing to poor nutrition among those with mental illness and disabilities in PNG.

Objective 7: Nutrition in Emergencies

Another challenge with a potential impact on the nutritional wellbeing of the PNG population is the impact of climate change and the response to emergency situations. PNG experiences frequent episodes of natural and human induced natural disasters ranging from weather events such as floods and landslides, to tribal disputes resulting in violence and displacement. The impact of changing climate, influencing phenomena such as weather patterns, rainfall and sea level rise is also being increasingly reported among many communities and agriculture experts. Discussions with the agricultural sector indicate that the impact of this is potentially significant in terms of agricultural production, availability and access to foods, and consequently on the health and nutrition of many communities.

In terms of nutrition, PNG is currently inadequately prepared to respond to nutritional crises caused by natural or human induced emergency situations. The threats to nutrition status and child survival experienced during periods of disaster and other emergency situations represent a significant challenge for stakeholders working in food and nutrition. This coupled with the geographical isolation of many districts and communities poses significant challenges for households to be able to access government services and highlights the importance of utilizing a multi-sectoral approach in the delivery of nutrition specific and nutrition sensitive interventions focused on populations most at risk of emergencies before disasters strike (to build resilience). Of key importance is the planning of a comprehensive response that includes a preparedness, response and recovery phase of implementation.

3.2 Policy Responses and Key Strategies

Objective One

Strengthen nutrition governance, coordination, communication, partnerships and research to effectively plan, implement, monitor and evaluate nutrition activities across sectors

Policy Statement One

Establish national and provincial multi-sectoral coordinating mechanisms to provide leadership and advocacy to ensure that the NNP is sufficiently resourced, implemented and evaluated effectively and relevant research is undertaken to inform practice

Strategies:

1. Promote and encourage multi-sectoral national and regional planning and implementation of policies and plans to ensure alignment and collective action
2. Build a strong governance and coordination structure essential for effective multi-sectoral nutrition response at all levels.
3. Nutrition issues and responses are planned and cost through the development of strategic plans with separate budget allocation at the provincial and district levels in each applicable sector
4. Build a rigorous research agenda in nutrition
5. Strengthen national information systems to ensure that nutrition and nutrition related indicators, including programme outputs/coverage, are reported in order to identify emerging challenges and adjust priorities
6. Promote the importance of nutrition as a core health and development issue through effective advocacy and communication at all levels including social and behavior change communication
7. Develop mechanisms to effectively monitor and evaluate policy implementation at all levels

Objective Two

Improve nutrition capacity including pre-service training, cross sector in-service training, supportive supervision, work force development, career structures and operational resources

Policy Statement Two

Develop comprehensive strategies to build nutrition capacity of the workforce to ensure all relevant sectors have the skills and resources to address malnutrition

Strategies

1. Develop national pre-service (including undergraduate and postgraduate) training in nutrition and dietetics, including management of nutrition programmes
2. Develop criteria for national registration of nutritionists and dietitians
3. Ensure that nutrition is adequately covered in existing health and other courses delivered by all training institutions
4. Develop national nutrition in-service training for all relevant sectors/institutions, with mentoring and supervision mechanism
5. Advocate and create designated positions and establish career pathways for nutritionists and dietitians at all levels across relevant sectors
6. Ensure designated nutrition positions are adequately resourced

Objective Three

Implement and strengthen interventions to prevent, control and treat under nutrition, including low birth weight, stunting, wasting and underweight across the lifecycle (focusing on adolescents and women of childbearing age, pregnant and lactating women, children under 5, pre-school and primary school children)

Policy Statement Three

Health, Education, Agriculture & Livestock, Community Development sectors shall develop and implement comprehensive strategies to prevent and manage under nutrition, specifically stunting, wasting, low birth weight, and low BMI among women

Strategies:

1. Scale up effective interventions to improve infant and young child feeding practices:
 - Lactation management in maternity and newborn care
 - Individual IYCF counseling (breastfeeding and complementary feeding) by skilled providers for pregnant women and mothers/caregivers of children under 2
 - Evidence-based communication for social and behavior change on IYCF using multiple channels to address social norms, barriers, beliefs and taboos
 - Provision of complementary feeding supplements as required, including multiple micronutrient powders for children and nutritious fortified foods or lipid nutrient supplements for children with growth faltering and/or moderate malnutrition or areas with high prevalence of stunting and/or moderate acute malnutrition
 - Adoption, monitoring and enforcement of legislation on the marketing of breast milk substitutes
 - Adoption and application of maternity protection legislation and workplace breastfeeding policies

2. Scale up other nutrition specific and sensitive interventions and approaches to address and prevent under nutrition
 - Community led total sanitation,
 - Promotion of hand washing with soap
 - Interventions to increase access to clean drinking water
 - Diversify diet through adequate production of diverse food production at the community and household levels
 - Promote farming of small livestock and aquaculture
 - Identify and promote cash earning opportunities, including market access for especially the disadvantaged communities
 - Increase farmer's awareness on issues related to diet, food safety, food taboos, food preparation and food distribution at the household level

3. Improve early detection and management of severe acute malnutrition in children at health facilities and in the community
 - Active case finding with MUAC and follow up through outreach and community based approaches
 - Outpatient management of SAM case with no complications using ready to use therapeutic food
 - Inpatient stabilization of SAM cases with complications

4. Scale up nutrition specific and sensitive interventions and approaches for women to reduce under nutrition among adolescent girls, women of childbearing age and pregnant and lactating women and to improve birth outcomes
 - Regular weighing of pregnant women, including monitoring of weight gain and screening for acute malnutrition, with provision of food supplements as applicable
 - Nutrition counseling, especially of pregnant and lactating women
 - Family planning to increase child spacing/reduce parity

- School-based nutrition education Social safety nets/cash transfers for the most vulnerable/impoverished pregnant and lactating women
 - School-based micronutrients supplementation as well as targeted supplementation (poorest families).
5. Strengthen and implement appropriate interventions and approaches in schools and communities to prevent early marriage and teenage pregnancy
 - Social and behavior change interventions to reduce child marriage and teenage pregnancy.
 6. Strengthen and support nutrition sensitive interventions to ensure PNG has a sustainable healthy food system that ensures an adequate supply of nutritious and safe food and income generation at the household level
 - Increase knowledge and skills, including technology transfer for food producers on the value chain approach (Farm to Fork)
 - Support food testing and monitoring services to monitor and protect food safety
 - Promote and support the use of codex food standards
 - Implement activities to collect data on food security in PNG
 7. Strengthen and support social safety nets for vulnerable households to improve the health and nutrition situation
 - Cash transfers or vouchers system to improve the family basket foods content.

Objective Four

Strengthen interventions to prevent and control micronutrient deficiencies including iron, vitamin A, iodine, zinc and other micronutrient

Policy Statement Four

Develop and implement comprehensive strategies to prevent and treat micronutrient deficiencies, including iron, vitamin A, iodine and other micronutrients

Strategies:

1. Strengthen and support interventions to reduce iron-deficiency anemia at all stages of the lifecycle, especially children aged 6– 59 months and women of reproductive age
 - Home fortification with multiple micronutrient powders for young children (6-23m, or 6-59m)
 - Iron-folate supplementation and deworming during pregnancy and lactation
 - Weekly/intermittent iron-folate for women of childbearing age
 - Screening for low hemoglobin (hemocue) and treatment of anemia
 - Deworming in schools.
2. Support and implement interventions to treat and prevent VAD among infants, young children pregnant and lactating women and other vulnerable groups
 - Vitamin A supplementation for all children every six months from 6-59 months
 - Post-partum Vitamin A supplementation (up to 6 weeks)
 - Provision of Vitamin A during measles episodes.

3. Support interventions that prevent and treat malaria to reduce anemia among infants, young children, pregnant and lactating women and other vulnerable groups
 - Iron folic acid supplementation to pregnant women
 - IPT during pregnancy
 - ITN distribution and awareness to increase the effective use of ITN by pregnant women and children
 - Community-based testing (using rapid malaria test kits) and treatment of non-complicated malaria cases
 - Weekly supplementation of adolescent girls with iron tablets.
4. Strengthen and support interventions that identify, prevent and treat IDD in vulnerable communities
 - Monitoring and Enforcement of the national legislation and standards on iodized salt
 - IDD Surveillance system
 - Mass campaign awareness to increase the demand of iodized salt.
5. Strengthen interventions that prevent, identify and treat emerging micronutrient deficiencies
6. Strengthen interventions including legislation and its implementation that supports the enrichment and fortification of Rice and Wheat flour with key nutrients known to be at risk.
7. Strengthen interventions that support the consumption of a diversified diet with an emphasis on promoting local foods rich in micronutrients
 - Implementation of individual counseling for pregnant women and caregivers of children under two
 - Communication and nutrition education through various channels (schools, early childhood centers, health system, community, agriculture, the media, traditional channels and others)

Overweight, Obesity and Diet Related Lifestyle Diseases

Objective Five

Implement interventions to prevent and control overweight and obesity to reduce the risk of diet related lifestyle diseases

Policy Statement Five

Develop and implement comprehensive strategies to prevent and control overweight and obesity among the PNG population to reduce diet related lifestyle diseases

Strategies:

1. Promote and support preventative interventions to address overweight, obesity and diet related lifestyle diseases
 - Implement interventions to reduce stunting during the 1000-day window (see above)
 - Promote healthy diets and physical activity in early childhood development and education programmes
 - Promote healthy diets and physical activity in primary and secondary schools

- Communication for social and behavior change on healthy diets and physical activity
 - Develop and implement policies on healthy school meals.
2. Promote and support interventions that manage and treat overweight, obesity and diet related lifestyle diseases
 - Individual counseling for overweight children and their caregivers and adolescents in schools
 - Counseling and health care for overweight children and their caregivers, adolescents and adults in health facilities.
 3. Review, develop and enforce legislation (e.g. food acts) to control local production, marketing, labeling and the importation of foods high in fat, sugar and salt and sugary beverages

Objective Six

Strengthen interventions to prevent and control malnutrition among vulnerable groups, in particular, people living with HIV (PLHIV), TB, mental illness and disabilities, and people living in institutions

Policy Statement Six:

Comprehensive strategies shall be developed and implemented to prevent, control and treat malnutrition among vulnerable populations

Strategies:

1. Promote and implement interventions that research the factors contributing to malnutrition among vulnerable groups, including PLHIV, TB, mental illness, those with disabilities and institutionalized populations
2. Strengthen and support interventions to prevent and treat malnutrition among people with HIV, TB, malaria, mental illness or disabilities
3. Strengthen and support interventions that promote food and nutrition security for institutionalized populations
4. Promote, develop and conduct research on malnutrition among vulnerable groups and institutionalized populations.

Objective Seven

Strengthen interventions that protect resilience and support recovery of households from the impact of nutrition emergencies and other vulnerabilities

Policy Statement Seven:

Develop comprehensive plans and systems to ensure and support optimal nutrition during disasters, emergencies and food crisis at the national and provincial level

Strategies:

1. Strengthen interventions that support the preparedness for disasters and emergency situations related to nutrition:
 - Capacity building on nutrition in emergencies
 - Development of preparedness and response contingency plans

- Ensure all applicable staff have checklists, tools and handbooks for emergency response
2. Strengthen interventions to enable rapid nutrition response to disasters and emergency situations links with social protection policy,
 - Rapid assessment of situation and planning
 - Establishment of functioning nutrition coordination mechanism/cluster at various levels
 3. Strengthen interventions to support the food and nutrition rehabilitation of communities affected by disaster and emergency situations
 - Dissemination of policy statement on preventing donations of breast milk substitutes and preventions/control of donations coming in
 - IYCF interventions – communication and counseling on breastfeeding and complementary feeding
 - Distribution of multiple micronutrients, vitamin A and deworming tablets
 - Blanket supplementary feeding
 - Management of moderate acute malnutrition
 - Management of severe acute malnutrition
 - Provision of vouchers or cash
 4. Monitoring of interventions
 5. Strengthen interventions to ensure optimal food and nutrition security for displaced people and refugees
 6. Identify and target disaster prone populations for implementation of package of nutrition services to strengthen resilience through ensuring strong capacities are in place and nutrition status improved before disasters occur.

3.3 Resource, Staffing and Service Implications

Establishment of the National Food and Nutrition Council (FNC) and nutrition advisor groups at national, provincial and district levels is a key to effective implementation of the objectives of the NNP. These groups will have the responsibility of providing leadership in the area of nutrition, strengthening multi-sectoral coordination in the implementation of the NNP and subsequent plans. Further, establishing of surveillance, monitoring & evaluation systems, as well as peer reviewed research agenda for nutrition related indicators and advocating for the ongoing support of nutrition interventions.

Another core element of this NNP is to support the establishment of skilled labour force in nutrition extending beyond the health sectors to also include education, agriculture and community development. This will require the FNC to coordinate the development of a comprehensive plan for human resource development in nutrition. This plan will need to have components focusing on pre-service training of nutritionists in academic facilities, strengthening nutrition components of medical and nursing curriculums, supporting improved pre-service training of teachers and agriculture worker. Establish modules for in-service training within health, education and agriculture sectors. Support the mentoring and supervision of trained clinical and public health nutritionists, and particularly focusing on the restructure of nutrition within the health system. Currently, nutrition is included under the family health branch in DOH. It is proposed that nutrition be restructured and revived as a separate branch of the health system from district to national levels. This is important

to not only raise the profile of nutrition, but also promote employment into nutrition positions, and establish career development pathways in both public health and clinical nutrition. The final aspect of human resource management includes supporting the capacity development and retention of skilled cadre of human resources who are essential in delivery of the services on the ground. Effective, quality delivery of nutrition services by the trained and skilled workers includes the establishment of work structures, job descriptions, and monitoring/reporting mechanisms and tools for all the nutrition interventions in each sector, as well as mentoring, supervision and feedback systems.

Tools and resources are also an important component of the NNP and are included under Objective Two to support the capacity development of nutrition at all levels. From the perspective of health, these include tools and resources such as equipment to measure nutritional status, registers, assessment forms, culturally appropriate client education material. For the education sector this includes developing and updating teaching resources and nutrition as part of the teaching curriculum. This also includes tools for the integration of nutrition as part of school based health programs. In terms of agriculture, tools and resources are needed for training extension officers, tools for food and nutrition education especially in communities with low literacy.

It is important to ensure that the procurement, distribution and monitoring of nutrition supplies is adequately addressed. The full set of nutrition supplies needs to be incorporated into essential supply lists of the NDOH, appropriate forecasting of needs at all levels needs to be undertaken, adequate budgets allocated, and then the supplies procured, distributed and monitored in a timely manner. All applicable staffs need to be adequately trained on the use of these supplies. Essential nutrition supplies identified in the policy include (but are not limited to) F-75 and F-100 therapeutic milks, ready to use therapeutic food, multiple micronutrient powders, vitamin A, iron-folate, deworming tablets, fortified complementary foods or lipid nutrient supplements.

The NNP requires an enabling environment to support nutrition interventions across the continuum of care through both clinic and community-based facilities. At the implementation level, this enabling environment includes the systems, physical conditions and human resources required to ensure the approach is implemented based on best available evidence and in a sustainable manner. The systems component incorporates the guiding policies, funding allocations, mechanisms for service implementation, employment structures, organisational networks and referral pathways. The physical conditions include the standards of practice, and commodities required to implement the approach.

CHAPTER FOUR - COORDINATION AND IMPLEMENTATION PLAN

Coordination at National, Provincial, District and Local Level Government Levels of Government

The Government of PNG commits itself to achieving the nutrition objectives outlined in the NNP. In view that nutrition is a cross-cutting, yet, development matter, there is need to get all relevant sectors at national and local government levels to address nutrition in their development plans. Doing so requires effective coordination. Thus, a National Nutrition Committee, under the National Health Board, whose terms of references (ToRs) clearly guide an interim coordination for two years is proposed (Appendix 3). After which, a Food and Nutrition Council shall be responsible for the overall coordination of the nation's nutrition agenda, that is spelled out in this policy. During the coordination period by the National Nutrition Committee, the Government will support the establishment of a FNC that includes representatives from senior levels of government, development partners, non-government organisations (NGOs) and civil society. To establish the FNC will require legislation to support its establishment. While the FNC is in the process of being established, the National Nutrition Committee will work with each sector and provincial partners to develop provincial level costed, strategic action plans in nutrition.

The objective of the National Nutrition Committee, and later (after two years), the FNC is to ensure a comprehensive and coordinated approach to addressing the nutrition challenges in PNG. Similar multi-sectoral nutrition committees at provincial, district and LLG levels of Government will also be established.

The principal functions of the National Nutrition Committee, and ultimately, the FNC, will be to:

- Advise the government on appropriate responses and actions required to improve the nutrition situation in PNG
- Develop consensus with government departments and other stakeholders on a implementation plan and the proposed way forward, including a set of key time-bound milestones for the strategic action plan
- Coordinate the implementation of the NNP across all relevant line departments and external partners

Implementation and Monitoring of the Implementation of the NNP

Respective national level sectoral departments and institutions will be responsible for ensuring that nutrition is adequately reflected in sector policies, strategic plans, annual work plans, monitoring and reporting systems, legislation, regulations and guidelines that lie within their mandate. They will also be responsible for identifying and allocating adequate human, financial and organisational resources for the implementation of the NNP, donor coordination, and quality assurance for nutrition at all levels. Each sector is accountable for reporting on the progress of implementation of their respective plans.

Provincial

Provincial level nutrition teams will include nutrition as part of Provincial development plan, and Provincial Strategic Implementation Plans.

District and LLG

The NNP will form the basis for the districts and LLGs to develop the nutrition components of their District Services Improvement Program (DSIP), Local Level Government Services Improvement Program (LLGSIP), Annual Implementation Plans and other relevant strategies.

Development Partners

The implementation of the NNP requires the commitment and support of development partners including the United Nations (UN) agencies, multilateral and bilateral organisations. The development partners will provide technical and operational assistance; and for mobilising human, financial and institutional resources to support the implementation of the NNP.

Private Sector

The Government of PNG recognises the contribution of the private sector in the provision of social services, potentially in nutrition. The private sector will be a key partner for supporting government and community actions under the NNP. Resources provided by the private sector for the implementation of the NNP will be in line with national laws, regulations and guidelines. These will be implemented through Public Private Partnerships. Careful application of conflict of interest principles shall guide these partnerships, and the Code of marketing of breast milk substitutes shall be adhered to.

NGOs, Faith Based Organizations (FBOs), Community Based Organizations (CBOs) and Civil Society

The NGOs, FBOs, CBOs and civil society will advocate for nutrition as a human development issue, and support LLGs in capacity development and management of nutrition activities. They will incorporate nutrition interventions in community-based programs and ensure effective linkages to the health care system and other relevant sectors. All activities will be coordinated with central coordinating agencies.

Academic Facilities

Higher learning institutions, including public and private institutions for training all levels of health, agriculture, education and community development workers, will be responsible for reviewing and developing and updating their curricula for pre-service, in-service and continuing education to ensure nutrition is adequately integrated. They will increase opportunities for training in nutrition, undertake research in nutrition, and provide technical advice and updates on nutrition developments.

Professional Bodies

Professional bodies will provide guidance in nutrition, conduct research, set professional standards, and participate in the developing of curricula for pre-service, in-service and continuing education.

Media

The media, including the print, radio and television media will highlight the problem of malnutrition in PNG, advocate for action, and report on progress, failures and successes in the alleviation of malnutrition.

Community

The participation of the community is crucial to the successful implementation of the NNP. Individuals and families hold the key to maintaining and improving their own health and nutritional status, as well as food security. They are actors in their own development. The community will be responsible for mobilising resources, initiating, implementing and monitoring nutrition activities in line with NNP.

CHAPTER FIVE - MONITORING AND EVALUATION

Monitoring and Evaluation Framework

The current M&E system for nutrition indicators is weak, with minimal and fragmented systems among sectors and development partners. To effectively track progress of NNP implementation and performance, a comprehensive and integrated multi-sectoral monitoring system for nutrition will be developed. As this is a multi-sectoral plan it is dependent on the implementation of a number of related plans and systems for data collection for measuring the progress of a number of plans from health and other sectors including agriculture and education.

The Monitoring and Evaluation Plan (M&E Plan) aims at providing consistent and reliable information on the progress of the implementation of the NNP for achieving outcomes in each of the seven priority areas.

Specific Objectives of the M&E plan for the NNP are to:

1. Guide data collection, processing and analysis of selected indicators. Indicators to be defined based on relevant coverage and quality data to be collected from each nutrition intervention, including those not currently monitored.
2. Monitor implementation of activities in accordance with respective operational plans
3. Provide feedback to those who implement and manage the plan to ensure they have timely information for decision making
4. Provide regular documentation of results achieved against the targets
5. Guide national authorities and partners on the response of programs and services under implementation aimed at accelerating the reduction of malnutrition in PNG
6. Promote evaluation and research activities aimed at improving performance of the NNP for the reduction of malnutrition in PNG

To deliver these objectives, an annual multi-sectoral monitoring and reporting system will be established through FNC. All implementing agencies will submit annual reports on the status of implementation and performance of the target indicators to FNC. The FNC will then compile the reports to produce an annual report. An annual review meeting for the implementing agencies and other nutrition stakeholders will be held.

The monitoring process will follow up strategies and activities to identify progress based on the targets, and provide managers with the opportunity to identify clarify and respond to needs emerging during the implementation process. The evaluation process should help determine the importance, efficiency, effectiveness and sustainability of the NNP interventions, as well as to assist in identifying future policies, strategies and interventions.

Implementation of the M&E and Information Sources

Given the lack of reliable systems and mechanisms for measuring nutrition indicator performance, it is important that new mechanisms are created for implementing the M&E plan and that nutrition indicators are integrated into existing systems of M&E. Where possible the plan should be based on existing systems such as monthly analysis of information collected through national health information system (NHIS), however given the lack of a coordinated M&E system many of these tools need to be developed.

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ANNEX ONE

Acronyms

AIDS	Acquired immune deficiency syndrome
ANC	Ante natal care
ARI	Acute Respiratory infection
BAZ	Body mass index for age Z score
BMI	Body mass index
CBO	Community based organizations
DPT	Diphtheria, pertussis (whooping cough), and tetanus
DSIP	District Services Improvement Program
DSP	Papua New Guinea Development Strategic Plan (2010-2030)
FBO	Faith based organizations
FNC	Food and Nutrition Council (National)
HAZ	Height-for-age Z score
Hb	Hemoglobin
HIES	Household Income and Expenditure Survey
HIV	Human Immunodeficiency Virus
IDD	Iodine Deficiency Disorders
IU	International units
KRA	Key Result Area
LBW	Low birth weight
LLG	Local level government
LLGSIP	Local Level Government Services Improvement Program
M&E	Monitoring and evaluation
MAM	Moderate Acute Malnutrition
NCD	Non-communicable diseases
NDOE	National Department of Education
NDOH	National Department of Health
NGO	Non-Government Organization
NHIS	National Health Information System
NHP	National Health Plan (2011-2020)
NNP	National Nutrition Policy
NNS	National Nutrition Survey
ORS	Oral rehydration solution
PLHIV	People Living with HIV
PNG	Papua New Guinea
PPM	Parts per million
SAM	Severe Acute Malnutrition
SAP	Strategic Action Plan
SMHS	School of Medicine and Health Sciences
TAG	Technical advisory group
TB	Tuberculosis
UN	United Nations
UNICEF	United Nations Children's Fund
UPNG	University of Papua New Guinea
USAID	United States Agency for International Development
VAD	Vitamin A deficiency
WAZ	Weight-for-age Z score
WHO	World Health Organization
WHZ	Weight-for-Height Z score

ANNEX TWO: DEFINITIONS

TERM (S)	DEFINITION (S)
Complementary Feeding	The process starting when breast milk alone is no longer sufficient to meet the nutritional requirements of infants and therefore other foods and liquids are needed, along with breast milk. It should be <i>timely</i> , meaning that all infants should start receiving foods in addition to breast milk from 6 months onwards. It should be <i>adequate</i> , meaning that the complementary foods should be given in amounts, frequency, and consistency and using a variety of foods to cover the nutritional needs of the growing child while maintaining breastfeeding.
Exclusive breastfeeding	The infant receives no other liquids or solids, not even water other than breast milk in the first six months of life.
Enteropathy	Enteropathy refers to any disease of the intestine
Food Fortification	The addition of one or more essential nutrients to a food, whether or not it is normally contained in the food, for the purpose of preventing or correcting a demonstrated deficiency of one or more nutrients in the population or specific population groups (FAO/WHO 1994)
Food Security	When all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life.
Household food security	A household is food secure when it has access to the <i>food</i> needed for a healthy life for all its members (adequate in terms of quality, quantity, safety and culturally acceptable), and when it is not at undue risk of losing such access.
Inter-Sectoral action	Inter-Sectoral action refers to actions affecting health outcomes undertaken by sectors outside the health sector, possibly, but not necessarily, in collaboration with the health sector.
Low Birth Weight (LBW)	A birth weight of a live born infant of less than 2,500 g regardless of gestational age
Micronutrient Deficiencies	A lack of essential vitamins and minerals required in small amounts by the body for proper growth and development. Micronutrients include, but are not limited to vitamins A, B, C and D but also minerals like iodine, iron, and zinc, among others.
Micronutrient Powders	Are single-dose packets of vitamins and minerals in powder form that can be sprinkled onto any ready to eat semi-solid food consumed at home, school or any other point of use
Nutrition Sensitive Intervention	Interventions or programmes that address the underlying determinants of fetal and child nutrition and development— food security; adequate care giving resources at the maternal, household and community levels; and access to health services and a safe and hygienic environment—and incorporate specific nutrition goals and actions
Nutrition Specific Interventions	Interventions or programmes that address the immediate determinants of fetal and child nutrition and development—adequate food and nutrient intake, feeding, care giving and parenting practices, and low burden of infectious diseases
Nutritional Indicators	Choosing and prioritizing actions to combat under nutrition will depend primarily on the information regarding the nutritional status of the population. Such information will be provided by indicators of status, allowing to characterize the nature of the under nutrition problem. They will then be linked to the characteristics of persons, times and places, in order to obtain an indication of the distribution of the problem in the population, and thus reach an overall picture of the situation.

Over Nutrition	Overconsumption of nutrients and food to the point at which health is adversely affected. Over nutrition can develop into obesity, which increases the risk of serious health conditions, including cardiovascular disease, hypertension, cancer, and type-2 diabetes.
Therapeutic Food	Designed for specific, usually nutritional, therapeutic purposes as a form of dietary supplement, as such, considered diets of persons with special nutrition requirements
Under nutrition	The outcome of insufficient food intake and repeated infectious diseases. It includes being underweight for one's age, too short for one's age (stunted), thin for one's height (wasted) and deficient in vitamins and minerals (hidden hunger/ micronutrient malnutrition). All forms of malnutrition can be mild (at the on-set), moderate (threat) or severe (fatal).

ANNEX THREE

National Nutrition Committee Terms of References (ToRs)

1. Rationale

Despite the existence of elaborate planning frameworks in Papua New Guinea, all forms of malnutrition persist; moreover, over decades (refer to NNP 2016-2026). Nutrition has for many years been addressed in a few sector-level development plans, but consistently, either working in isolation or partially implementing the strategy. The result has been no tangible results, no progress, in the country's nutrition situation. On one hand, nutrition has often been narrowly perceived to be a health matter. Yet, health practitioners have also not been able to address all the multi-dimensional aspects of tackling malnutrition—due to multiplicity in causal factors. Implying; that no single sector can effectively address nutrition issues, but, well guided and collaborative efforts. It is possible to improve PNG's nutritional status, if policies or re-arrangements in key sectors such as education, community development and religion, agriculture and livestock, planning and monitoring and not just the health sector alone are made. There is evidence that unless nutrition interventions are implemented at a large scale, with the necessary resources and institutional structures for sustainability, they will not be able to significantly affect national rates of malnutrition.

In view that nutrition is a cross-cutting, yet, development matter, there was need to get all relevant sectors at national and local government levels to address nutrition in their development plans. Doing so started with a comprehensive process and development of a multi-sectoral National Nutrition Policy (2016 – 2026). The process equally brought together, five Secretaries from National Departments for Education, Community Development and Religion, Agriculture and Livestock, Health, as well as National Planning and Monitoring. The high level advocacy event, held on Wednesday 8 April 2015 at Grand Papua Hotel, is part of the efforts to maintain nutrition on the national agenda. At that meeting, the Secretaries agreed to move forward to a legal process; to a cabinet submission (agreed together), but originating from Minister for Health, a sector that has the National Health Board, of which nutrition is. The submission would seek approval for endorsement of the NNP 2016 – 2026 and establishment of a high level National Nutrition Committee, under the National Health Board. There is established a National Health Board (PNG's National Health Administration Act, 1997), with power to establish committees on matters considered necessary, as is the current case with PNG's nutrition issues. **Interpretation:** Aware of other committees established by the National Health Administration, the National Nutrition Committee will be a high level Executive committee, at national level for harmonized delivery, liaison and coordinated nutrition specific and sensitive activities, given the country's common goal. There is an implementation plan, guided by the high level National Nutrition Committee in the NNP 2016 - 2026 and that the committee would have very clear ToRs.

These ToRs therefore seek to operationalize the provisions of the NNP 2016 - 2026, that seeks to ensure improved nutrition, for a **“Smart, Wise, Fair, Healthy and Happy Society** —a happy Papua New Guinea. PNG's comprehensive National Development Planning Framework, the global obligations in the Sustainable Development Goals (SDGs), the National Nutrition Policy (NNP 2016-2026) and other planning frameworks, by providing practical guidance on the leadership to integrate nutrition into the development plans of all relevant sectors, at both national and sub-national levels. It is expected that the high level National Nutrition Committee ToRs will promote 'nutrition-sensitive thinking' during development planning processes; consequently, implementation, moreover, in a coordinated manner, for a common goal.

2. Objectives of the National Nutrition Committee

Delegated by the National Health Board, fully function, “To provide advisory support and guidance on the implementation of the NNP 2016 - 2026; to key sectors and to monitor performance against the goals, objectives, activities/ interventions and targets in sector strategies and policies”.

3. Roles and Functions of the National Nutrition Committee

- i. Through the National Health Board, advise the National Executive Council on the NNP 2016 - 2026
- ii. Provide technical and public health managerial advice and support to key sectors on the design of national and sectoral policies, strategies, plans and activities to ensure that nutrition concerns are adequately addressed. Primarily, contributing proactively towards multi-stakeholder platforms and nutrition related processes in support of the NNP 2016 - 2026 activities at the national, sub-national and global level
- iii. With a clear system that tracks deliverables and shortcomings in the national implementation of the NNP 2016 – 2026, supervise the implementation and regularly report to the National Health Board, thus, contribute to the latter's efforts and activities, for an improved nutritional situation in Papua New Guinea
- iv. Lobby meetings with Government and representatives of donors, government sectors and treasury, on gradual increased resource allocation for the implementation of the NNP 2016 - 2026
- v. Lobby, to build capacity for responding to PNG's nutrition situation, create and fill up positions for which such capacity has been developed
- vi. Advocate for the finalization and enforcement of key nutrition-sensitive legislation (Baby Feeds Supply Control Act; Food and Sanitation Act; Food Security Policy;) and support monitoring the adherence of such
- vii. Support formulation and 'cause', of, sub-national Nutrition Committees. Supervise and coordinate their contribution to the NNP 2016 -2026
- viii. Support formulation and 'cause', of, Nutrition Alliances for advocacy purpose, e.g. Civil Society Organizations (CSOs), UN-REACH, Technical Working Groups (TWGs), Clusters, Nutrition researchers to unearth practice gaps that would in turn be a basis for improved interventions, etc.
- ix. Establish country and sub-country level platforms for the annual disseminations aimed at sharing information and experiences of progress made on NNP 2016 – 2026. Through a best practices approach, identify implementation bottlenecks in need of redress and determine appropriate solutions; moreover, act appropriately
- x. Facilitate the strengthening of monitoring on nutrition to ensure that nutrition indicators are integrated into national and sectoral monitoring, evaluation, and reporting frameworks and systems
- xi. Advance the country's nutritional status globally, including, joining the scaling up nutrition (SUN), a global movement which unites governments, civil society, businesses and citizens in a worldwide effort to end under-nutrition.
- xii. Each Committee member (refer to composition and committee structure below), ensure inclusion, budgeting and implementation of the interventions relevant to their Sector, agency or body as stipulated in the NNP 2016 – 2026; consequently be accountable to the entire Committee on their Sector outputs
- xiii. Formulation of the National Food and Nutrition Council; proposed under the Office of the Prime Minister

4. Composition and Committee Structure

- a. The executive Chair - Secretary Department of Health
- b. Co-Chair – Secretary National Department for Planning and Monitoring
 - o Executive Secretary – Nominated Member Deputy Secretary other than Department of Health or National Department for Planning and Monitoring. These two already form the executive
- c. Members (also equal to Government), through relevant National Departmental Secretary
 - o Deputy Secretary Policy & Cooperate Services, Department of Education
 - o Deputy Secretary Policy, Department for Community Development and Religion
 - o Deputy Secretary Policy, Department of Agriculture and Livestock
 - o Deputy Secretary National Health Service Standards, National Department of Health
 - o Deputy Secretary Operations, Treasury and Finance

- d. Invitee members. Proposed by the National Nutrition Committee, but nominated by the responsible body
 - Academia
 - Professional bodies/ societies
- e. Development partners. Proposed by the National Nutrition Committee, but nominated by the responsible body
 - UN agencies, other than UNICEF. Latter is the Secretariat
 - INGOs
 - NGOs
 - Churches umbrella
 - Private sector
- f. Interim Secretariat –UNICEF; initially; for a two-year tenure during the short-term for the proposed committee.

5. Operation Modality, Schedule of Meetings and Meeting Venues

- These two-year interim ToRs, come into action when the National Executive Council approves the NNP 2016-2026
- The meeting of the Executive National Nutrition Committee will be held a minimum of three times a year or as and when necessary or decided by the Chair and Co-Chair. The National Health Board or directly, the National Executive Council, can cause a meeting by the National Nutrition Committee as when deemed necessary. Commitment must be made within 14 days.
- Hosting of meetings will rotate among key Sectors for the purpose of implementing the NNP 2016 – 2026. The cost associated to meetings shall be borne by the host.
- The performance of a function of the Executive National Nutrition Committee is not invalidated by reason only of a vacuum in any of the membership
- Executive Secretary – Nominated Member Deputy Secretary other than Department of Health or National Department for Planning and Monitoring shall be at an annual rotational basis between the key Sectors, responsible for the implementation of the NNP 2016 – 2026
- The Chair and Co-Chair will represent the National Nutrition Committee at National, Regional and Global meetings for scaling up nutrition, unless technical expertise is required, in which case, the Chair and Co-Chair shall approve any other preferred person
- The committee members (a, b and C, above) will have a right to vote
- The co-opted (d) and other members (e to i) shall not bear voting rights
- Two-year tenure, then reviewed.

6. Planning, Reporting and Information Sharing

- The Chair and Co-Chair, in one accord, witnessed by the Executive Secretary will report to the National Health Board, which in turn reports to the National Executive Council. Mandatorily, annual reports shall be provided by end of February for NNP 2016 – 2026 activities covering the previous year ending on 31 December
- Regular reporting shall be made, quarterly, or otherwise, as meetings and events happen.
- Regular reports shall be a standing agenda for the National Health Board.
- All reports shall be brought to the attention of key Sector Secretaries and Chief Secretary, aimed at keeping progress, bottlenecks, matters arising and other nutrition specific and sensitive priorities on the national agenda.

7. Roles of the Interim Secretariat

- Support and guide the establishment of the Executive National Nutrition Committee
- Communicate and promote Nutrition alliances inside the country and internationally/ globally
- Have oversight of the National Nutrition Committee functions at national level
- Provide technical support, thus, oversee the implementation of the NNP 2016 – 2026
- Be at the fore front, to coordinate, plan and strategize National Nutrition Committee activities and advocate by fostering an inclusion, open and transparent process involving all committee members

- Liaise with Government, development partners and other stakeholders to contribute proactively towards multi-sectoral platforms aimed at nutrition specific and sensitive processes, all in support of the National Nutrition Committee functions
- Foster learning and sharing to improve general understanding of the country's nutrition agenda
- Liaise with the global scaling up nutrition (SUN) movement, as deemed necessary, for the benefit of PNG's vision for improved nutrition for all
- Capture and disseminate lessons learnt in implementing the NNP 2016 – 2026, multi-sectorally
- Shall create ambience for decision making without necessarily influencing such decisions
- Shall provide technical support; whenever necessary
- Advocate for Sectoral financial resourcing towards the implementation of Sector specific strategic actions, meetings and other key events.

8. Resources

- Delivering the seven policy objectives: Is a responsibility of each Sector
- Other resources (Coordination): Event host.

Table 1. Summary of key National Nutrition Indicators

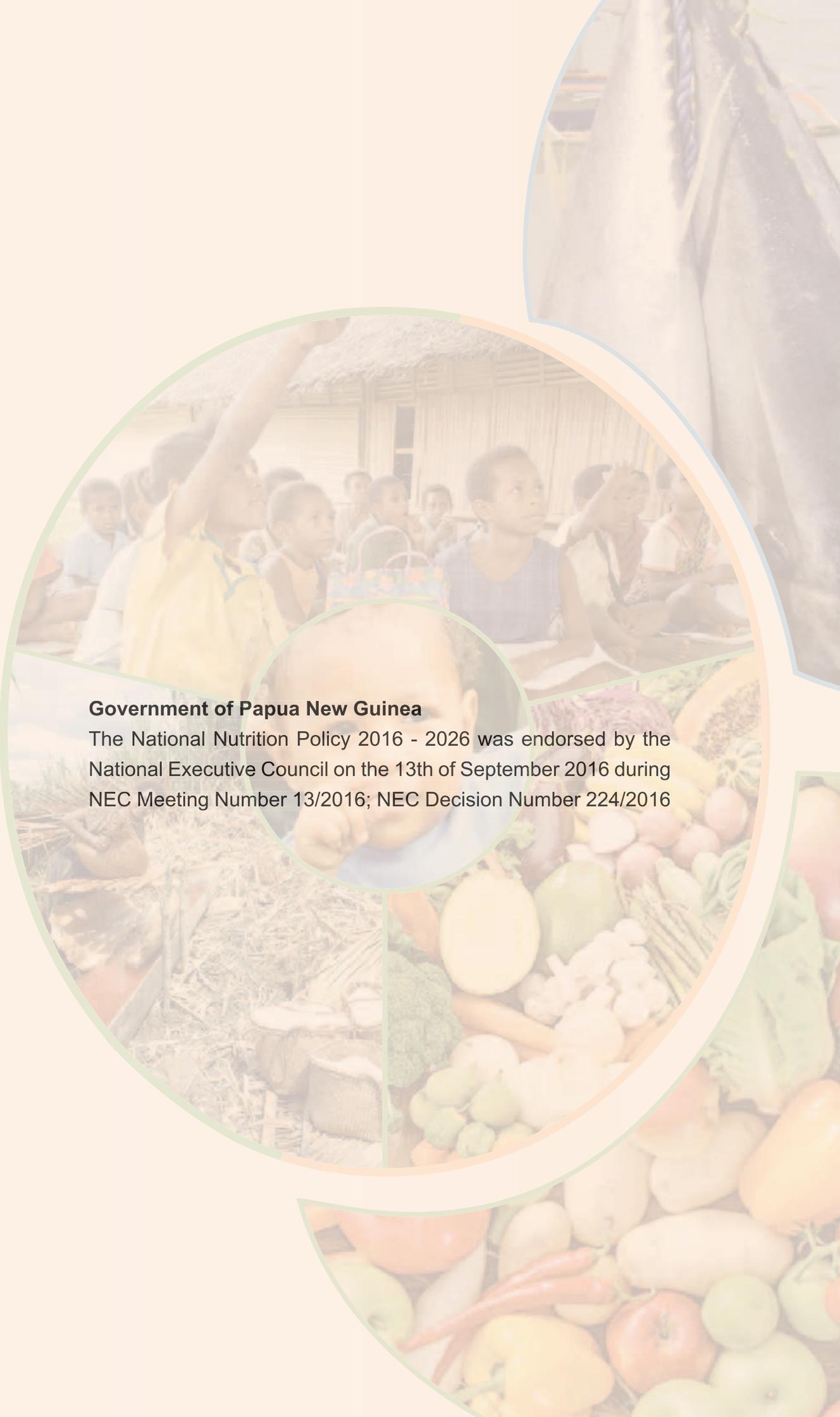
Indicator	Prevalence/ Rate
Low birth weight	7.9%
Neonatal mortality rate(deaths per 1,000 live births)	23
Infant (under 12 months) mortality rate (deaths per 1,000 live births) [†]	45
Under-5 mortality rate (deaths per 1,000 live births) [†]	58
Maternal mortality ratio (deaths per 100,000 live births) [†]	230
Prevalence of moderate underweight (WAZ<-2 and >-3) in children aged 6 – 59 months [†]	18.1%
Prevalence of severe underweight (WAZ<-3) in children aged 6 – 59 months	5.2%
Prevalence of moderate wasting (WHZ<-2and>-3) in children aged 6 – 59 months	4.5%
Prevalence of severe wasting (WHZ<-3) in children aged 6 – 59 months	0.9%
Prevalence of moderate stunting (HAZ<-2 and >-3) in children aged 6 – 59 months	43.7%
Prevalence of severe stunting (HAZ<-3) in children aged 6 – 59 months	17.6%
Prevalence of underweight (BMI < 18.5) in non-pregnant women aged 15 – 49 years	5.3%
Prevalence of overweight in children aged 6 - 59 months (BAZ > 2)	4.8%
Prevalence of overweight (BMI 25 – 29.9) in non-pregnant women aged 15 – 49 years	17.4%
Prevalence of obesity (BMI ≥30) in non-pregnant women aged 15 – 49 years	5.1%
Prevalence of overweight (BMI 25 – 29.9) in men aged > 18 years	16.1%
Prevalence of obesity (BMI ≥30) in men aged > 18 years	4.0%
Prevalence of anaemia (Hb<110g/l) in children aged 6-59 month	48.1%
Prevalence of anaemia (Hb<120g/l) in girls aged 15 – 19 years	34.5%
Prevalence of anaemia in pregnant women	NA
Prevalence of anaemia (Hb<120g/l) in non-pregnant women aged 15 – 49 years	35.7%
Prevalence of anaemia (Hb<130g/l) in males aged >18 years	26.3%
Prevalence of VAD in children aged 6 – 59 months (retinol binding protein <0.7umol/L)	25.6%
Prevalence of VAD in non-pregnant women aged 15 – 49 years (retinol binding protein <0.7umol/L) ^{††}	0.7%
Prevalence of VAD in pregnant women	NA
Percentage of children aged 6-59 months who received VAS in the previous 6 months ^{†††}	12%
Percentage of households with access to iodised salt	92%

[†]Unless otherwise stated, the prevalence/rate in the Table 1 has been taken from PNG National Nutrition Survey 2005

^{††}UNICEF, *State of the World's Children*, 2012

^{†††}Interpret data with caution.

^{††††}Full coverage with vitamin A supplements is reported as the lower percentage of 2 annual coverage points (i.e., lower point between round 1 (January–June) and round 2 (July–December) of 2011.



Government of Papua New Guinea

The National Nutrition Policy 2016 - 2026 was endorsed by the National Executive Council on the 13th of September 2016 during NEC Meeting Number 13/2016; NEC Decision Number 224/2016

