

Nutrition and health: a looming crisis in the Pacific region

3.1 As discussed in Chapter one, malnutrition is a global problem of enormous scale. According to Care Australia around 795 million people in the world today are hungry.¹ Results International told the Sub-Committee that:

Malnutrition in all its forms is directly or indirectly responsible for approximately 3 million of the 6 million deaths of children under the age of 5 years each year, making it one of the largest causes of child mortality.²

3.2 The *Global Nutrition Report 2015* has noted that despite the incentives to overcome malnutrition, such as to support economic growth, it 'is a problem of staggering size – large enough to threaten the world's sustainable development ambitions.'³

3.3 Yet global malnutrition is not a consequence of a global food shortage. The World Food Programme (WFP) tells us that '[t]he world produces enough to feed the entire global population of 7 billion people'.⁴ At the same time, approximately one in nine people around the world do not have enough food to lead a healthy, active life while approximately 1.9 billion adults

1 Care Australia, *Submission 10*, p. 6, also see Department of Foreign Affairs and Trade (DFAT) *Submission 12*, p. 3. See also World Food Programme (WFP), 'What Causes Hunger?' 'What Causes Hunger' <www.wfp.org/hunger/causes> viewed 9 April 2016.

2 Results International (Australia), *Submission 5*, p. 5.

3 International Food Policy Research Institute (IFPRI), 'Executive Summary,' *Global Nutrition Report 2015 Actions and Accountability to Advance Nutrition and Sustainable Development*, 2015, p. xxi <www.fao.org/fileadmin/user_upload/raf/uploads/files/129654.pdf> viewed 11 April 2016.

4 WFP, 'What Causes Hunger', viewed 9 April 2016.

were estimated to be overweight and over 600 million were considered to be obese.⁵

- 3.4 The obesity epidemic afflicting industrialised societies has also become more prevalent in the developing world. A major study published in *The Lancet* reveals that: [t]he rise in global obesity rates over the last three decades has been substantial and widespread, presenting a major public health epidemic in both the developed and the developing world.⁶
- 3.5 Further, the World Health Organization (WHO) estimates that ‘contrary to conventional wisdom, the obesity epidemic is not restricted to industrial societies.’ Estimates by the WHO suggest over 115 million people in developing countries suffer from problems related to obesity.⁷
- 3.6 DFAT submitted that the ‘annual costs of undernutrition and micronutrient deficiencies are estimated at 2–3 per cent of global GDP, equivalent to USD 1.4 to 2.1 trillion per year.’⁸
- 3.7 The Indo–Pacific region is clearly faced with particularly serious and complex nutrition issues. To take one example, Sydney University’s submission noted that because of malnutrition:
- In Timor-Leste approximately 50 per cent of children suffer from stunting (growth and neurodevelopmental failure) due to malnutrition. More than 30 per cent of women suffer from chronic energy deficiency, and this is reflected in the high maternal mortality rate. The World Bank estimates that 11 per cent of gross national product in developing countries is lost annually due to malnutrition.⁹
- 3.8 The Sub-Committee acknowledges that Australia faces its own malnutrition and health challenges. Associate Professor Robyn Alders AO from the University of Sydney has highlighted Australian Health Survey (AHS) data which shows the prevalence of significant nutrition-related

5 The World Health Organization (WHO), ‘General Assembly proclaims the Decade of Action on Nutrition’ <www.who.int/nutrition/GA_decade_action/en/> viewed 10 April, 2016. See also WFP, ‘Hunger Statistics’ <www.wfp.org/hunger/stats> viewed 12 April 2016.

6 CJL Murray and M Ng, ‘Nearly One-Third of the World’s Population is Obese or Overweight, New Data Show’ <www.healthdata.org/news-release/nearly-one-third-world%E2%80%99s-population-obese-or-overweight-new-data-show> viewed 11 April 2016. For a detailed breakdown on obesity increases see M Ng, T Fleming, M Robinson *et al*, ‘Global, Regional, and National Prevalence of Overweight and Obesity in Children and Adults During 1980–2013: A Systematic Analysis for the Global Burden of Disease Study 2013’, *The Lancet*, Vol. 384, No. 9945, 30 August 2014, pp. 766–81.

7 WHO, ‘Nutrition: Controlling the Global Obesity Epidemic’ <www.who.int/nutrition/topics/obesity/en/> viewed 9 April 2016.

8 DFAT, *Submission 12*, p. 33.

9 The University of Sydney, *Submission 46*, p. 7.

problems across Australia's population. During 2011–12, 62.8 per cent of Australians aged 18 years and over were estimated to be overweight or obese, with 35.3 per cent being considered overweight while 27.5 per cent were considered obese.¹⁰ Assoc. Professor Alders also contrasts Australia with some of our neighbours:

Our modern food system is a double-edged sword: delivering chronic under-nutrition due to shortages of nutritious food, and chronic obesity due to overconsumption. In Australia, we're living among 60 per cent of adults and 25 per cent of children who are overweight or obese. But if you live next door in Timor-Leste, you face a childhood stunting rate of 60 percent, due to malnutrition.¹¹

- 3.9 This co-existence and contrast between people suffering undernutrition and others experiencing overconsumption is also apparent within many countries, communities and even families in our region.¹² DFAT's submission noted that:

Among several of our regional neighbours, including Timor-Leste, Papua New Guinea, Pakistan, Laos and Cambodia, stunting exceeds 40 per cent of children under the age of five. Moreover, a number of partner countries, particularly in the Pacific, face the so-called double burden of malnutrition – that is, hunger co-exists with obesity, and/or nutrition related non-communicable diseases (NCDs), such as type 2 diabetes and coronary heart disease. This problem has significant health, social and economic implications for families, local communities and the region more broadly.¹³

- 3.10 This 'double burden' of malnutrition in the Indo-Pacific and, in particular, in the Pacific Island countries is the main focus of this chapter. This emphasis reflects Australia's status as the leading provider of development assistance to Pacific Island countries, in seeking to support sustainable economic and social development through bilateral and regional programs. Australia's official development assistance (ODA) in 2015–16 now places the Pacific as the largest Australian aid recipient (AUD 1.1 billion).¹⁴

10 *Exhibit 13: R Alders, 'Peak Food and our Quest for an Ethical and Ecologically Sustainable Human Diet', Proceedings of the Australian Poultry Science Symposium, Vol. 27, pp. 9–13.*

11 *Exhibit 10: R Alders, 'Feeding the World: Addressing Gender Divides Could Help Reduce Malnutrition', The Conversation, September 25, 2013, p. 1.*

12 The Global Alliance for Improved Nutrition (GAIN), 'Why We Need to Care about the Double Burden of Malnutrition' <www.gainhealth.org/knowledge-centre/accountable-double-burden-malnutrition/> viewed 11 April 2016.

13 DFAT, *Submission 12*, p. 3.

14 DFAT, *2015–16 Development Assistance Budget Summary: Mid-Year Economic and Fiscal Outlook Update*, February 2016, p. 4. See also J Hayward-Jones, 'Australia's Pacific Aid Budget Spared

- 3.11 The significance of the double burden has been assessed by economist and expert on nutrition and food security issues, Professor Lawrence Haddad:

The saying goes ‘when tomorrow’s burden is added to the burden of today, the weight becomes more than anyone can bear’. This is precisely the situation the countries of South East Asia and the Pacific are facing today. They already have some of the highest undernutrition rates in the world and now they are having to deal with premature death, diabetes, hypertension and heart disease due to another variant of malnutrition caused by diets high in fat, sugar and salt – often associated with the consumption of highly processed foods.¹⁵

- 3.12 This chapter presents an overview of evidence received by the Sub-Committee on the issues relating to under and over nutrition within Pacific neighbour countries.

Malnutrition: global problem, Indo–Pacific dimensions

- 3.13 Malnutrition is a term used to describe inadequate or poor nourishment. It is a term that is generally applied to both undernutrition and its associated conditions such as stunting, as well as overnutrition where dietary intake is in excess of requirements. Conditions that are associated with over nutrition include being overweight and obese and related health problems including diabetes and heart disease.¹⁶
- 3.14 The problem of high rates of global malnutrition is not new. The world has been trying to solve the problem of undernutrition for decades. In 1974, the United States Secretary of State Henry Kissinger told the first world food conference in Rome that ‘no child would go to bed hungry in ten years.’¹⁷
- 3.15 Four decades later there has been considerable progress in reducing malnutrition in the form of undernourishment. However, for the poor and

from Serious Cuts’, *The Interpreter* <lowyinterpreter.org/post/2015/05/13/Australia-aid-budget-Pacific-spared-serious-cuts.aspx> viewed 11 April 2016.

- 15 Professor Lawrence Haddad is Director of the Institute of Development Studies in Sussex, United Kingdom (UK). For reference see L Haddad, ‘The Double Malnutrition Burden: Time for Australia to Lead’, *Development Policy Centre Blog*, 7 March 2014 <www.devpolicy.org/the-double-malnutrition-burden-time-for-australia-to-lead-20140307/> viewed 7 April 2016.
- 16 World Hunger Education Service, ‘2015 World Hunger and Poverty Facts and Statistics’, viewed 13 April 2016.
- 17 *The Economist*, ‘How to Feed the World’, 19 November 2009 <www.economist.com/node/14915144> viewed 2 April 2015.

for developing nations the costs of hunger and malnutrition remain particularly high.¹⁸

- 3.16 DFAT's Office of Development Effectiveness (ODE), for example, produced a major report on the aid implications of child undernutrition in 2015. This report, entitled *A Window of Opportunity: Australian Aid and Child Undernutrition*, supported international findings that without access to proper nutrition to support a child's growth over the first 1 000 days of life, the long term health and developmental impediments are likely to be irreversible.¹⁹ The report further noted that:

In 2013, about half of all stunted children lived in Asia and over one third in sub-Saharan Africa. In Asia, most of the children affected by stunting (62.5 million) are in South Asia – Bangladesh, India, Nepal and Pakistan in particular. Lower but still large numbers of stunted children live in Southeast Asia (16 million), particularly Indonesia where it has proved difficult to achieve improvement.²⁰

- 3.17 Of particular relevance to Australia, the ODE report noted the prevalence of stunting in Oceania, where overall stunting rates in 2013 were the highest in the world, at 39 per cent.²¹ More recently, slow progress against Millennium Development Goal (MDG) 1, to eradicate extreme poverty and hunger, saw the proportion of undernourished people in Oceania fall only 1.5 per cent – from 15.7 to 14.2 per cent of the total population – between 1992 and 2016.²²
- 3.18 Results International (Australia) drew attention to the persistence of high rates of stunting in Papua New Guinea, which the organisation puts at 49 per cent and in Timor-Leste at 58 per cent. Results International observed that '[t]his means more than half of an entire generation of

18 World Hunger Education Service, '2015 World Hunger and Poverty Facts and Statistics, '<www.worldhunger.org/articles/Learn/world%20hunger%20facts%202002.htm> viewed 5 April 2016.

19 DFAT, Office of Development Effectiveness (ODE), *A Window of Opportunity: Australian Aid and Child Undernutrition*, April 2015, p. 11 <dfat.gov.au/aid/how-we-measure-performance/ode/Documents/a-window-of-opportunity-australian-aid-and-child-undernutrition-2015.pdf> viewed 26 April 2016.

20 DFAT, ODE, *A Window of Opportunity: Australian Aid and Child Undernutrition*, April 2015, p. 11, viewed 26 April 2016.

21 DFAT, ODE, *A Window of Opportunity: Australian Aid and Child Undernutrition*, April 2015, p. 11, viewed 26 April 2016.

22 From 15.7 per cent in 1990–1992 to 14.2 per cent in 2014–2016 'Oceania', *Millennium Goals Report 2015: Fact Sheet*, <www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20PR%20Key%20Facts%20Regional.pdf> viewed 26 April 2016.

children in these countries will fail to reach their full physical or mental potential.’²³

3.19 The prevalence of stunting in our region, with its accompanying long term health and developmental implications would seem to present a significant burden to future growth in itself; however, at the same time, economic development in the Pacific region has been accompanied by sharp rises in the incidence of overnutrition and its associated health problems.

3.20 In its submission to the inquiry, DFAT, for example, highlighted the incidence of the double burden in Australia’s immediate region, noting, ...in the Solomon Islands, 33 per cent of children are stunted and 39 per cent of women are obese, while in Indonesia, 39 per cent of children (under five) are stunted and 12 per cent of children (under five) are overweight.²⁴

3.21 The submission further explained the phenomenon of the double burden in our region:

In many of our partner countries, the double burden of malnutrition is experienced as societies undergo a nutrition transition, with rising incomes associated with changes in diet and physical activity. This in turn results in increased prevalence of obesity. In rural areas, increased mechanisation of farm activity leads to reduced physical activity at the same time that more - but not necessarily better quality – food becomes available. Traditional diets featuring grains and vegetables are giving way to calorie-dense and processed foods that are high in fat and sugar.²⁵

Causes of malnutrition—a brief overview

3.22 In discussion of the complexity around the causes of malnutrition, in particular undernourishment, Assoc. Professor Alders noted:

For the greater part of the 20th century, undernourishment was misdiagnosed as a lack of food, and agricultural activity worked to rectify it by increasing food production and agricultural productivity. The yields of maize, wheat and rice all increased. But with increasing yields came decreased nutritional diversity.²⁶

23 Results International (Australia), *Submission 5*, pp. 5–6.

24 DFAT, *Submission 12*, p. 33.

25 DFAT, *Submission 12*, p. 34.

26 *Exhibit 10: R Alders, ‘Feeding the World: Addressing Gender Divides could Help Reduce Malnutrition’, The Conversation*, September 25, 2013, p. 2. For background information on the

- 3.23 Professor Alders argues that mixed farming is crucial; just producing more food does not necessarily address the issues of malnutrition.²⁷ Essential micronutrients, such as zinc, vitamin A and iron are required in diets and can be sourced from the production of eggs and poultry in combination with sufficient calories for optimal growth and health.²⁸
- 3.24 There are many causes and factors that contribute to why people are undernourished. It is clear that just as the term malnutrition encompasses a diverse range of conditions its causes and causal links are equally diverse.
- 3.25 Like the condition of malnutrition itself, many of these causes are not new. As the FAO points out, the main causes of most nutrition problems have remained the same for over the past 50 years:
- Poverty, ignorance and disease, coupled with inadequate food supplies, unhealthy environments, social stress and discrimination, still persist unchanged as a web of interacting factors which combine to create conditions in which malnutrition flourishes.²⁹
- 3.26 Adverse health outcomes for mothers and babies, such as low birth weights and maternal mortality, are linked to a maternal history of stunting and micronutrient malnutrition.³⁰ The WHO links malnutrition to approximately 45 per cent of child deaths under five.³¹ Overweight or obese woman are also at greater risk of medical complications during pregnancy including pre-eclampsia and gestational diabetes. For children born to obese women research suggests they are at greater risk of a higher birth weight and of being insulin resistant, which may cause diabetes and obesity to develop later in life.³²

history of nutritional strategies see FAO, 'Human Nutrition in the Developing World' <www.fao.org/docrep/w0073e/w0073e03.htm> viewed 12 March 2016.

27 *Exhibit 17*: R Alders, 'Why Mixed Family Farming is Crucial', pp. 1-2.

28 *Exhibit 15*: R Alders, A Aongolo, B Bagnol *et al*, 'Using a One Health Approach to Promote Food and Nutrition Security in Tanzania and Zambia', *GRF Davros Planet@Risk, Vol. 2, No.3, Special Issue on One Health (Part I/II)*, April, 2014, p. 188.

29 FAO, 'Human Nutrition in the Developing World', <www.fao.org/docrep/w0073e/w0073e03.htm> viewed 12 March 2016.

30 1 000 Days, 'Stunting' <[//thousanddays.org/the-issue/stunting/](http://thousanddays.org/the-issue/stunting/)> viewed 11 April 2016.

31 WHO, 'Children: Reducing Mortality', updated January 2016 <www.who.int/mediacentre/factsheets/fs178/en/> viewed 11 April 2016.

32 H Grieve, J Busch-Halen, K Mellor, 'Undernutrition in Pacific Island Countries: An Issue Requiring Further Attention', Women's and Children's Health Knowledge Hub, *Compass*, May 2013 <www.wchknowledgehub.com.au/sites/default/files/PB_Grieve_May2013.pdf> viewed 11 May 2016.

- 3.27 The causes of malnutrition can also be linked to factors that go beyond poverty and food availability. As the FAO points out, poor nutrition can be related to a lack of status and to cultural norms.³³
- 3.28 For example, women in some cultures eat last,³⁴ have little control over house hold expenditure³⁵ and through lack of education may well lack knowledge about what constitutes good nutrition and what foods are best to feed their families.³⁶ The FAO further notes that '[s]ocial and economic inequalities between men and women often stand in the way of good nutrition.'³⁷
- 3.29 Poverty is, nevertheless, clearly associated with undernutrition. Action Against Hunger noted that '[o]ver 90 per cent of malnourished people live in developing countries.' Food and nutritional crises often arise when the poor people are unable to access or obtain food.³⁸
- 3.30 The WFP notes that if poor people cannot afford nutritious food or the seeds or tools to grow it, they can become weak and less able to work affecting their ability to escape from poverty.³⁹
- 3.31 Poverty can hinder the ability to build food security in communities. Just as it is important to note evidence that suggests a link between malnutrition and poverty, there is also a link between good nutrition and economic growth. The *Global Nutrition Report 2015* makes the point that:
- When peoples' nutritional status improves, it helps break the intergenerational cycle of poverty, generates broad-based

33 FAO, 'Gender and Nutrition', <www.fao.org/docrep/012/al184e/al184e00.pdf> viewed 26 April 2016. See also ChildFund Australia, *Submission 1*, p. 3.

34 Unicef, 'Matter of Magnitude', The Impact of the Economic Crisis on Women and Children in South Asia, June 2009, <www.unicef.org/rosa/Latest_Matter_of_magnitude.pdf> p. 7.

35 ChildFund Australia, *Submission 1*, p. 3

36 Dr Kuntala Lahiri-Dutt, *Submission 35*, p. 2. The need to educate parents on nutrition was noted by Mr Marcus Howard, Acting Assistant Secretary, Health and Water Branch, Development Policy Division, DFAT, *Proof Committee Hansard*, Canberra, 22 February, 2016, p. 8. For the importance of the education of women and nutrition see WHO, Western Pacific Region, *Integrating Poverty and Gender into Health Programmes, A Sourcebook for Health Professionals, Module on Nutrition*, 2007, p. 15 <www.wpro.who.int/publications/docs/Nutritionmodule2.pdf> viewed 12 April 2016.

37 FAO, 'Gender and Nutrition' <www.fao.org/docrep/012/al184e/al184e00.pdf> viewed 26 April 2016. See also ChildFund Australia, *Submission 1*, p. 3.

38 Action Against Hunger, ACF International, 'Underlying Causes of Malnutrition', <www.actioncontrelafaim.ca/what-is-acute-malnutrition/underlying-causes-of-malnutrition/> viewed 12 March 2016.

39 WFP, 'What Causes Hunger?', viewed 7 April 2016.

economic growth, and leads to a host of benefits for individuals, families, communities, and countries.⁴⁰

- 3.32 DFAT noted that ‘poverty is inextricably tied to food security, with the poor spending more than half of their income on food. This makes them particularly vulnerable to sudden food price increases.’⁴¹
- 3.33 Food security is a term used to describe the availability of safe and nutritious food to all persons at all times.⁴² It links together physical, social and economic access to sufficient, safe and nutritious foods to meet their dietary needs and food preferences for an active and healthy life.⁴³
- 3.34 As the submission from the Pacific Island Forum’s Office of the Chief Trade Adviser (OCTA)⁴⁴ points out:
- Food security at the household level can be realised either by production or purchase of food, with agriculture contributing to both. However, production is often hampered by challenges leading to low productivity, including land access, soil quality, water, pest and diseases, inputs, natural disasters and climate change. On the other hand, the capacity to purchase food may be limited by income due to challenges arising from lack of market access and competitiveness as a result of low productivity, quality and consistency of supply, quarantine issues, infrastructure and equipment, information and communications, business skills, finance and credits.⁴⁵
- 3.35 Given the inquiry terms of reference, agriculture was a major focus in many submissions. Evidence focused on agriculture as a means to address poverty, malnutrition and to improve economic wellbeing in our region. DFAT pointed out that agricultural development is ‘the most direct route to improving diets (quantity and quality), ensuring year-round access to adequate, safe, nutrient-rich food.’⁴⁶

40 FAO, *Global Nutrition Report 2015. Actions and Accountability to Advance Nutrition and Sustainable Development* <www.fao.org/family-farming/detail/en/c/357395/> viewed 11 April 2016.

41 DFAT, *Submission 12*, p. 3.

42 Office of the Chief Trade Adviser (OCTA-PIF), *Submission 7*, p. 4.

43 WHO, ‘Trade, Foreign Policy, Diplomacy and Health’ <www.who.int/trade/glossary/story028/en/> viewed 8 April 2016.

44 OCTA-PIF (*Submission 7*) is based in Port Vila, Vanuatu. It provides independent advice and support to the Pacific Island Countries (PICs) in negotiations of PACER Plus with Australia and New Zealand. OCTA is fully owned and under exclusive control of the Pacific Island Countries. <www.octapic.org/about/general-information/> viewed 7 April 2016.

45 OCTA-PIF, *Submission 7*, p. 4.

46 DFAT, *Submission 12*, p. 34.

- 3.36 Agriculture production not only produces food, but can also be a source of income. Greater agricultural productivity can help to lower food prices. Agricultural productivity contributes to a country's macro-economic growth and food security.⁴⁷ With men migrating for paid work, empowering rural women in agriculture is now seen as vital to achieve nutrition goals. The relationship between agriculture, nutrition and women in reducing malnutrition are examined in Chapter four of this report.
- 3.37 The FAO notes that 'many conflict situations are characterised by widespread malnutrition and death among vulnerable groups (children, women, and the elderly).'⁴⁸ Military conflicts, civil disturbances, and environmental disasters can also affect food security, when people are displaced from their land and sources of income.⁴⁹
- 3.38 Climate change has also been linked with malnutrition.⁵⁰ Care Australia, for example, advised:
- According to the IPCC, climate change will have a substantial impact on per capita calorie availability, malnutrition, and related child deaths in developing countries.⁵¹
- 3.39 DFAT's submission considered that:
- At least in the medium term, ongoing food and water security concerns in our region are also expected to be compounded by the return of the El Nino weather event. Previous El Nino episodes have caused climatic variations with significant impacts on agriculture and consequent implications for food security.
- The last two severe episodes – in 1997–98 and 1982–83 – resulted in significant crop damage and a surge in food prices. A number of meteorological authorities worldwide have predicted that the current event will be the strongest on record.⁵²

47 DFAT, *Submission 12*, p. 34.

48 FAO, 'Impact of Armed Conflict on the Nutritional Situation of Children' <www.fao.org/docrep/005/w2357e/W2357E02.htm> viewed 4 April 2016.

49 Action Against Hunger, ACF International, <www.actioncontrelafaim.ca/what-is-acute-malnutrition/underlying-causes-of-malnutrition/> viewed 12 April 2016.

50 Action Against Hunger, ACF International 'Underlying Causes of Malnutrition', <www.actioncontrelafaim.ca/what-is-acute-malnutrition/underlying-causes-of-malnutrition/> and see Care Australia, *Submission 10*, p. 6, which notes: 'changes in climate in the last 30 years have already reduced global agricultural production one to five per cent per decade and could reduce it by two per cent per decade for the rest of the century. Up to 600 million more people could be at risk of hunger by 2080 as a result.'

51 Care Australia, *Submission 10*, p. 6.

52 DFAT *Submission 12*, p. 4.

- 3.40 Weather induced disasters and changing weather patterns can affect infrastructure, water supplies and other basic amenities. Not having access to safe drinking water, poor sanitation and hygiene practices are also linked to the spread of diseases which in turn can result in malnutrition.⁵³

The high costs of malnutrition

- 3.41 The social, health and economic costs of the double burden in the region are considerable. A report by the United Nations Secretary-General commented that non-communicable diseases 'represent a new frontier in the fight to improve global health. Worldwide, the increase in such diseases means that they are now responsible for more deaths than all other causes combined.'⁵⁴
- 3.42 Results International (Australia) cited World Bank estimates that undernutrition imposes significant economic costs:
- ...countries affected by undernutrition lose at least 2–3 per cent of their Gross Domestic Product, and incur billions of dollars in avoidable health care spending. Globally, the direct costs of undernutrition in children have been estimated at \$20–\$30 billion per year.⁵⁵
- 3.43 Professor Haddad further highlighted the long term economic and social significance of the prevalence of malnutrition across the Indo-Pacific region:
- Unchecked, malnutrition will likely thwart economic ambitions. The countries of South East Asia and the Pacific are the first to have to deal with this problem in its most virulent form. Most other countries have had the time to deal with undernutrition before its twin, over nutrition, emerges. Not in this region. Indonesia, the regional power, is particularly worrying: good economic growth, some successes in poverty reduction, yet stunting rates that are flat lining at very high levels, with high and

53 Action Against Hunger, ACF International 'Underlying Causes of Malnutrition' and see Results International (Australia), *Submission 5*, which notes that water, sanitation and hygiene are critical determinants for nutrition, p. 3.

54 United Nations, Report of the Secretary General, *Prevention and Control of Non-Communicable Diseases*, Sixty-sixth session, Summary, A/66/83, In 2008, 36 million people died from non-communicable diseases, representing 63 per cent of the 57 million global deaths that year. In 2030, such diseases are projected to claim the lives of 52 million people.

55 Results International (Australia), *Submission 5* p. 5.

increasing rates of overweight at the adult, and most worryingly, childhood levels.⁵⁶

- 3.44 Rising health costs, losses in productivity and the tragic loss of human potential are all factors in what can be seen in the rising tide of Pacific malnutrition. Professor Haddad asks: '[h]ow on earth will Indonesia and the other countries in the region fulfil their economic aspirations?', and warns:

High quality longitudinal evidence confirms that the adult wage rates of young infants who were not stunted at 3 years of age was nearly 50 per cent higher than those who were stunted. And these individuals were 33 per cent less likely to live in poverty. That is just for undernutrition. Over nutrition costs are a time bomb waiting to happen. In the USA 1 in 5 health dollars is spent in treating diabetes. The USA has 22 million people suffering from diabetes; Indonesia has 7 million – imagine what the treatment costs will do to the Indonesian public health budget and the livelihoods of low income Indonesians. They are already crippling Pacific Island health budgets.⁵⁷

Malnutrition in the Pacific

- 3.45 A number of Australia's regional neighbours have both the highest levels of obesity among adults in the world and high rates of child undernutrition.⁵⁸ This double burden causes significant adverse health outcomes, as well as impacting on the ability of these countries' economic development.

- 3.46 Robert Oliver, chef, author and television presenter, drew attention succinctly to the severity of the problem for our Pacific Island neighbours:

...[t]he South Pacific is in crises. Every day, 2 Fijians have a limb removed due to diabetes, American Samoa, Nauru and the Cook Islands are the world's most obese nations – with Tonga and Samoa not far behind.⁵⁹

56 L Haddad, 'The Double Malnutrition Burden: Time for Australia to Lead,' *Development Policy Centre Blog*, viewed 11 March 2016.

57 L Haddad, 'The Double Malnutrition Burden: Time for Australia to Lead,' *Development Policy Centre Blog*, viewed 12 April 2016.

58 Professor M Toole, 'Stunted Growth and Obesity: the Double Burden of Poor Nutrition on our Doorstep,' *The Conversation* <www.theconversation.com/stunted-growth-and-obesity-the-double-burden-of-poor-nutrition-on-our-doorstep-50385> viewed 7 March 2016.

59 Robert Oliver Enterprises, *Submission 47*, p. 6.

- 3.47 In general economic terms, the Asia–Pacific region has undergone rapid economic growth over the last two decades. As noted by the *Economic and Social Survey Report of Asia and the Pacific 2015*, this growth (although somewhat uneven) has improved the lives of millions of people.⁶⁰ However, as Professor of Economics Raghendra Jha observed to the Committee, an: ‘Increase in income does not necessarily mean improvement in nutritional status’.⁶¹
- 3.48 Professor Mu Li, Professor in International Public Health at the University of Sydney, told the Sub-Committee that she had reviewed the statistics for the top 10 countries receiving international development assistance from Australia, and concluded that:
- Twenty per cent of children under five in Vietnam had stunted growth, and the rate was above 30 per cent in the remaining nine countries. The clear standout was Papua New Guinea, which had a rate of 49.5 per cent. On the other hand the percentage of children under five who were overweight or obese in PNG is 13.8 per cent. This is the double burden we have been talking about. So we have to not only feed the people but feed them quality food that helps young bodies to grow. It needs strong multi-sectoral and government intervention on many fronts. Future programs need to consider how to combat the persistence of undernutrition and, on the other hand, the rise in the over nutrition problem.⁶²
- 3.49 According to the WHO, non-communicable diseases or chronic diseases are now the leading cause of death around the world, killing more than 36 million people each year.⁶³ An ‘Outcomes Statement from the Joint Forum Economic and Pacific Health Ministers Making Growth More Inclusive for Sustainable Development Meeting’, held on 11 July 2014, announced ‘Pacific Island countries are in the midst of a Non-Communicable Disease (NCD) crisis’, and noted that ‘NCDs account for around 75 per cent of all deaths in the Pacific.’⁶⁴ The *Solomon Times Online*, in an article authored by the Pacific Islands Forum Secretariate, reported that common NCDs are cardiovascular disease and diabetes. Key

60 United Nations ESCAP, ‘Making Growth more Inclusive for Sustainable Development’, <www.unescap.org/sites/default/files/Economic%20and%20Social%20Survey%20of%20Asia%20and%20the%20Pacific%202015.pdf> viewed 12 May 2016.

61 Professor Raghendra Jha, *Submission* 48, p. 1.

62 Professor Mu Li, Professor in International Public Health, University of Sydney, *Proof Committee Hansard*, Sydney, 11 March 2016, p. 26.

63 WHO, ‘10 Facts on Non-Communicable Diseases’ updated March 2013, <www.who.int/features/factfiles/noncommunicable_diseases/en/> viewed 11 April 2016.

64 ‘Joint Forum Economic and Pacific Health Ministers Meeting Outcomes Statement’, Honiara, Solomon Islands, 11 July 2014, p. 1.

risk factors include: tobacco use, harmful use of alcohol and an unhealthy diet.⁶⁵

- 3.50 A 2010 WHO Bulletin entitled 'Pacific Islanders Pay Heavy Price for Abandoning Traditional Diet' stated that:

About 40 per cent of the Pacific island region's population of 9.7 million has been diagnosed with a non-communicable disease, notably cardiovascular disease, diabetes and hypertension. These diseases account for three quarters of all deaths across the Pacific archipelago and 40–60 per cent of total health-care expenditure, according to a meeting on obesity prevention and control strategies in the Pacific held in Samoa in September 2000.⁶⁶

- 3.51 Ian Anderson's discussion paper on non-communicable disease in the Pacific region, notes that Pacific Island countries also have high risk factors for acquiring NCDs:

Each of the ten countries in the Pacific for which data is available have 60 percent or more of the adult population that is overweight, and in six countries more than 75 per cent are overweight. In four countries of the Pacific at least half the adult population is obese. Obesity and being overweight often occur at young ages: nearly one in four boys and one in five girls in Tonga are obese. Other risk factors apart from weight are also significant in the Pacific. Over two-thirds of people in Kiribati smoke tobacco daily. Over 70 per cent of people in Cook Islands are physically inactive. Only 5 per cent of adult females and 10 per cent of adult males were free of any of the preventable risk factors for acquiring NCDs in Vanuatu.⁶⁷

- 3.52 These risk factors feed a pipeline of future NCDs. Yet, at the same time, Pacific Island countries must still contend with providing treatment programs for 'communicable, maternal, neonatal and nutritional

65 *Solomon Times Online*, authored by Pacific Islands Forum Secretariat 'Pacific Ministers Commit to Fight against Non-Communicable Diseases (NCDs)', 11 July 2014 <www.solomontimes.com/news/pacific-ministers-commit-to-fight-against-noncommunicable-diseases-ncds/8207> viewed 11 April 2016.

66 WHO, Bulletin of the WHO, 'Pacific Islanders Pay Heavy Price for Abandoning Traditional Diet', 2010 <www.who.int/bulletin/volumes/88/7/10-010710/en/> viewed 26 April 2016.

67 I Anderson, *The Economic Cost of Non-Communicable Diseases in the Pacific Islands: A Rapid Stocktake of the Situation in Samoa, Tonga, and Vanuatu*, Health Nutrition and Population (HNP) Discussion Paper, September 2013, p. 72 <openknowledge.worldbank.org/bitstream/handle/10986/17851/865220WP0Econo0Box385176B000PUBLIC0.pdf?sequence=1&isAllowed=y> viewed 26 April 2016.

conditions ...[which] typically still account for between 20 per cent and 25 per cent of all deaths.’⁶⁸

- 3.53 One theory as to why obesity is such an issue in Pacific Island countries is that the Pacific Islanders are genetically pre-disposed to become obese. However, the WHO points to a link between the loss of traditional foods and the high prevalence of obesity and related health problems in the Pacific region. Chef Robert Oliver, in his submission, made reference to the observations of visiting American nutritionist Weston Price, to note the change since the 1940s, when Samoans had “near perfect physiques” ‘.⁶⁹

Dietary and lifestyle changes

- 3.54 Pacific Island diets have been transformed over the last few decades. The Secretariat of the Pacific Community in conjunction with CSIRO have observed that traditional diets in Pacific Island countries were:

...based on starchy root crops supplemented by coconuts, fish and sometimes livestock products. But these traditional foods are being replaced by imported foods (most notably in urban areas). In particular, white rice and refined flour, along with processed, usually tinned, meats and fish, which have become popular due to changed dietary preferences and ease of storage and preparation, even though imported foods are sometimes more expensive.⁷⁰

- 3.55 This significant dietary change has included the introduction of popular, imported but high fat foods such as turkey tails and mutton flaps. Turkey tail is a term used to describe fatty meat that is not actually the tail of the turkey but the meat around the tail and includes the gland that provides oil that the birds use to preen their feathers. Turkey tails are marketed to Pacific Island countries by United States suppliers.⁷¹

68 I Anderson, *The Economic Cost of Non-Communicable Diseases in the Pacific Islands. A Rapid Stocktake of the Situation in Samoa, Tonga and Vanuatu*, HNP Discussion Paper, September 2013, p. 3, viewed 26 April 2016.

69 WHO, *Bulletin of the WHO*, ‘Pacific Islanders Pay Heavy Price for Abandoning Traditional Diet’, 2010, viewed 12 April 2016; also see Robert Oliver Enterprises, *Submission 47*, p. 7.

70 ‘Food Security in the Pacific and East Timor and its Vulnerability to Climate Change’, prepared by the Australian Government Department of Climate Change and Energy Efficiency and by the Secretariat of the Pacific Community in Conjunction with the CSIRO, 2011, p. 2 <www.environment.gov.au/system/files/pages/275228c5-24db-47f2-bf41-82ef42cda73d/files/food-security-report.pdf> viewed 12 April 2016.

71 A Arbor, ‘A Tale of Turkey Tail: the Part of the Bird Best Left Uneaten’, Michigan University, Institute of Social Research, 13 November 2012, <www.ns.umich.edu/new/multimedia/videos/20978-a-tale-of-turkey-tail-the-part-of-the-bird-best-left-uneaten> viewed 2 April 2016.

- 3.56 Mutton flaps are meat from the ‘low-quality end of a sheep’s rib.’⁷² It is estimated that every 100 grams of mutton flap includes approximately 40 grams of fat and contains around 420 calories. In Pacific Island countries these fatty cuts of meat are sometimes the only cut of the animal on sale.⁷³
- 3.57 Robert Oliver suggests this diet is part of the ‘food colonisation’ of the Pacific, and was ‘formed after colonials arrived and decided that it would be a clever idea to foist unwanted leftover fatty meats onto island nations because they would be cheap and a great way to get rid of food that first nation’s people no longer wanted...’⁷⁴
- 3.58 Fatty, salty or sugary foods are, however, also prized as tasty and high status foods.⁷⁵ Mr Oliver noted that imported, high fat meat products are highly popular in part because of community attitudes that ‘overseas is better’,⁷⁶ while fish and traditional staple foods have also increased in price.⁷⁷
- 3.59 Robert Oliver highlighted the impact of dietary change in the South Pacific in his evidence to the Sub-Committee:
- Spam is not food. Neither are mutton flaps, turkey necks or instant noodles. But these are the foods the Pacific islands have embraced – and the results have undermined the health of their people, their economies and their environment.⁷⁸
- 3.60 Mr Oliver further observed that two generations in the Pacific region have now been:
- ...raised under the umbrella of fast, processed and convenience foods. Small Pacific nations are vulnerable to the massive marketing campaigns of fast foods: marketing that is often passed

72 K Watson and S Treanor, ‘How Mutton Flaps are Killing Tonga’, *BBC News*, Tonga, 18 January 2016; see also D Gewerz and F Errington, ‘Cheap Meat: Flap Food Nations in the Pacific Islands’, 2010, University of California Press, and Australia and New Zealand sell ‘lamb or mutton flaps-sheep and sheep bellies to the Pacific Islands’, <www.jstor.org/stable/10.1525/j.ctt1pnjgn> viewed 12 April 2016.

73 K Watson and S Treanor, ‘How Mutton Flaps are Killing Tonga’, *BBC News*, Tonga, 18 January 2016, <www.bbc.com/news/magazine-35346493> viewed 12 April 2016.

74 Robert Oliver Enterprises, *Submission 47*, p. 8.

75 Ms Chakriya Bowman, Director, Pacific Economic Growth Section, Pacific Regional Branch, Pacific Division, DFAT, *Proof Committee Hansard*, 22 February, 2016, p. 2.

76 Robert Oliver Enterprises, *Submission 47*, p. 8.

77 Eliza Barclay, Radio Program, NPR, The Salt, ‘Samoans Await the Return of the Tasty Turkey Tail’, 9 May 2013 <www.npr.org/sections/thesalt/2013/05/14/182568333/samoans-await-the-return-of-the-tasty-turkey-tail> viewed 4 April 2016.

78 Robert Oliver Enterprises, *Submission 47*, p. 2.

off as truth. NGO Health initiatives tend to have been packaged into reduced components – less sugar, less fat, less fried food.⁷⁹

Dietary preferences, economic change, trade and urbanisation

- 3.61 A recent BBC investigation entitled ‘How Mutton Flaps are Killing Tonga’ focused on what the program considered to be one of the main causes of obesity in that country: a ‘cheap, fatty kind of meat – mutton flaps – imported from New Zealand.’ Papiloa Foliaki from Tonga suggested some Tongan’s think something imported is superior, and goes on to say:

And you have a situation where fishermen spear their fish – sell it – and go and buy mutton flaps. People don’t have the education to know what is bad for their health.⁸⁰

- 3.62 The BBC report highlighted the interaction of economic change, access to products from global suppliers, traditional social norms and a lack of adequate dietary education:

‘The bigger you are, that’s beauty,’ says Drew Havea, chair of the civil Society Forum of Tonga.⁸¹

- 3.63 Reverend Dr Ma’afu Palu ‘a minister who is making it his mission to preach healthier eating’, stated that:

The obesity epidemic is not solely down to mutton flaps and turkey tails. Lots of fatty canned meat is consumed – sometimes from giant 2.7 kg (96oz) tins. And then there are fizzy drinks.⁸²

- 3.64 Deputy Chief Executive at the Ministry of Revenue and Customs, Lepaola Vaea, stated that:

‘You have to understand that in Tonga we are catching up’.

‘We used to watch American movies and TV shows and everyone was drinking soda. We sat there and thought, ‘Wow, I would love to drink soda and we’re poor because we’re drinking water.’ But now everyone’s drinking water and we are drinking soda!’

In 2008, Vaea tried to raise duty on mutton flaps, as Fiji has successfully done.

79 Robert Oliver Enterprises, *Submission 47*, p. 7.

80 Papiloa Foliaki is one of the few Tongans over eighty, and is described as a former nurse, activist and politician, now working in the hotel business; see K Watson and S Treanor, ‘How Mutton Flaps are Killing Tonga’, *BBC News*, Tonga, 18 January 2016 <www.bbc.com/news/magazine-35346493> viewed 4 April 2016.

81 K Watson and S Treanor, ‘How Mutton Flaps are Killing Tonga’, *BBC News*, Tonga, 18 January 2016, viewed 12 April 2016.

82 K Watson and S Treanor, ‘How Mutton Flaps are Killing Tonga’, *BBC News*, Tonga, 18 January 2016, viewed 12 April 2016.

The result: ‘There was a large public outcry,’ she says.

‘People are addicted.’

It says a lot about Tongan eating habits that a health food restaurant here serves fish and chips. But this really is healthier than a lot of Tongan dinners.⁸³

- 3.65 In discussion with the Sub-Committee, Professor Guest also highlighted the complex factors underlying dietary change and adverse health trends in Pacific Island countries:

One of the things you see in the Pacific and Asia is a drift of young people, usually young men, away from the farms to the cities. That decreases the availability of labour – in particular, productive labour. That means farmers are getting older, as they are in Australia, so they are more prone to disease and illness and they are less productive. The young people leave, and that takes away the capacity to produce traditional food. They go to the cities. Of course, one of the greatest exports of the Pacific Islands is people. They come to Australia and New Zealand. They repatriate money to their home country. That money is used to buy fast food – turkey tails, lamb flaps and things like that – which is seen as prestigious. If you have to eat traditional foods you are clearly poor but if you can eat unhealthy foods you are wealthy! So we have this really unfortunate spiral where many of the countries are losing their capacity to produce healthy foods and that is being replaced by money coming in which allows people to buy imported products – essentially waste products – from Australia, New Zealand, the US and wherever. To me, that is one of the major contributors. It is not just advertising; it is the fact that there is this cultural shift – that eating these unhealthy imported foods is seen as prestigious.⁸⁴

- 3.66 Countries in the Pacific region are trying to improve their diet. For instance, Fiji banned the sale of mutton flaps in 2000⁸⁵ but the product is reported to still be widely available under the alias of ‘mutton carcass’. The Fiji Ministry of Health has pursued a community education program aimed at encouraging more nutritious eating by providing information

83 K Watson and S Treanor, ‘How Mutton Flaps are Killing Tonga’, *BBC News*, Tonga, 18 January 2016, viewed 12 April 2016.

84 Professor David Guest, Professor of Plant Pathology, University of Sydney, *Proof Committee Hansard*, Sydney, 11 March 2016, p. 26.

85 J Gale, ‘Pacific Nations Try to Restrict Imports of Fatty Foods’, *Bloomberg Businessweek*, 23 November, 2011, p. 1.

about 'the negative aspects of animal fat and to [encourage a] switch to vegetable fat instead.'⁸⁶

- 3.67 The World Bank has noted that diet-related non-communicable diseases are a very large health challenge in Samoa:

Around 85 per cent of the population is overweight, and 54 per cent is obese; and the incidence of diabetes and high blood pressure is high. These NCDs impose large – but often preventable – costs on the already overstretched Government health budget, and the economy more broadly.⁸⁷

Real per capita expenditure on health care in Samoa is rising faster than real GDP per capita. Per capita consumption of fruits and vegetables in Samoa is very low by regional and global standards. There is a need for increased awareness of the dietary benefits of fruit and vegetable consumption. Furthermore, despite having a large subsistence agriculture sector, households remain very vulnerable to increases in food and fuel prices. A large share of the existing demand for fruits and vegetables is being met by imports.⁸⁸

- 3.68 Against this background, Samoa banned the importation of turkey tails in 2007 as part of an effort to reduce consumption of imported high fat foods. Samoan Prime Minister Tuilaepa Sailele Malielegaoi observed in 2011 that: 'The turkey should bring its own tail to Samoa. It's no good somebody else chowing the turkey and then sending the tail to Samoa.'⁸⁹

- 3.69 However, in 2013 Samoa was required to lift the prohibition. As part of an agreement to join the World Trade Organisation, Samoa 'was given one year to remove the ban, which violated WTO rules on targeting individual products.'⁹⁰ As a transitional measure Samoa was allowed to retain a two year a domestic ban on the sale of turkey tails and turkey tail products together with an import duty of 300 per cent. This was to allow time to develop and implement a programme promoting healthier diet and life style choices.⁹¹ The domestic sale ban was to be lifted after two years 'and

86 'Killer Flaps' *Fiji Times Online*, 11 May 2015 <www.fijitimes.com/story.aspx?id=305312> viewed 15 April 2016.

87 The World Bank Group, *Submission 20*, pp. iii-5.

88 The World Bank Group, *Submission 20*, p. 5.

89 ABC News, 'Samoa Lifts Ban on High-fat Turkey Tails,' 20 May 2013 <www.abc.net.au/news/2013-05-20/an-samoa-lifts-ban-on-high-fat-turkey-tails/4699506> viewed on 4 April 2016.

90 ABC News, 'Samoa Lifts Ban on High-fat Turkey Tails,' 20 May 2013, viewed on 4 April 2016.

91 WTO, Briefing Note, Samoa's Accession to the WTO, <www.wto.org/english/thewto_e/minist_e/min11_e/brief_samoa_e.htm> viewed 11 April 2016.

the import duty reduced to 100 per cent or replaced by another tax regulation or by recommendations from the national health programme.’⁹²

- 3.70 By the end of 2016, Samoa hopes to have reduced local consumption of turkey tails through public health education.⁹³ It is clear, however, that the causes and persistence of malnutrition are exacerbated by the lack of available nutrition trained experts in Pacific Island countries. Heather Grieve, Jennifer Busch-Hallen, and Kate Mellor from the Menzies School of Health Research observed:

Compounding and perpetuating the lack of capacity in nutrition is an absence of nutrition training, with Fiji the only PIC offering specialised nutrition training at the tertiary level. For most PICs, tertiary nutrition training is therefore expensive and time-consuming often requiring travel to Fiji, Australia or New Zealand and leaving the few nutrition positions vacant for considerable lengths of time. For example, the three nutrition positions in the Solomon Islands were all vacant for approximately 18 months when the three qualified nutritionists undertook further nutrition training abroad. Anecdotal evidence also suggests that workforce attrition rates of internationally-trained national nutritionists are high.⁹⁴

Educating for nutrition

- 3.71 For developing countries, the evidence seems to suggest, the influx of western foods is coming at a heavy cost to nutritional. Dr Nyo Htwe, a post-doctoral fellow from Myanmar on Scholarship with the John Dillon Fellowship, ACIAR, noted:

...now the country is opening up, a lot of companies are coming in. Even for KFC, it was opened recently – Kentucky Fried Chicken. It just opened last year, and it is a special food for us, not an instant food for us. Once people get money, they will go more for unhealthy food rather than healthy food.⁹⁵

- 3.72 The connection between mass marketing of western processed foods adverse but pervasive influence on developing countries was highlighted

92 WTO, Briefing Note, Samoa’s Accession to the WTO, viewed 11 April 2016.

93 Eliza Barclay, Radio Program, NPR, The Salt, ‘Samoans Await the Return of the Tasty Turkey Tail’, 9 May 2013 <www.npr.org/sections/thesalt/2013/05/14/182568333/samoans-await-the-return-of-the-tasty-turkey-tail> viewed 4 April 2016.

94 H Grieve, J Busch-Halen, K Mellor, ‘Undernutrition in Pacific Island Countries: An Issue requiring Further Attention’, Women’s and Children’s Health Knowledge Hub, *Compass*, May 2013, viewed 12 April 2016.

95 Dr Htwe, IRRI, *Proof Committee Hansard*, Canberra, 15 March 2016, p. 10.

by other contributors to the inquiry. For example, Professor Mu Li noted that while travelling in Sabah, Malaysia, she saw ‘a huge billboard advertisement with a happy family – three generations – sitting around sharing KFC. Increasingly, you see this, sadly, in developing countries... Advertising is definitely an influencing factor.’⁹⁶

- 3.73 Dr Martin Golman, Acting Director with Papua New Guinea Forest Research, observed that another factor is price; good food is often too expensive for people:

Good food is sometimes highly priced. The food that is taken to the main market and then, if people who are able to then get a little money to buy from the market and resell it, that increases the price. So it does have an impact on people who are really at the bottom level. In that kind of situation people have no other option but to pay for the cheap meat they can afford. That is mainly the lamb flaps and the sausages and –⁹⁷

- 3.74 In addition, he noted:

...And of course Coca-Cola, which is now selling only for two kina, which is very good and very cheap. Sorry, not very good to have, but very cheap. The development pressures that we have in the country – I do not know about the others, but in PNG especially it does have that kind of impact on the livelihoods of the people.⁹⁸

- 3.75 In these circumstances, Professor Rina Oktaviani, the Director of International Trade Analysis and Policy Studies, Bogor Agricultural University in Indonesia, highlighted the importance of the government promoting more healthy dietary choices:

I think it is important for the government to defend healthy food and make it the focus of the people.⁹⁹

- 3.76 DFAT’s Mr Marcus Howard, Acting Assistant Secretary, Health and Water Branch, Development Policy Division, advised that a focus on nutrition education is part of the Government’s health response in the region:

96 Professor Mu Li, International Public Health, University of Sydney, *Proof Hansard*, 11 March 2016, p. 26.

97 Dr Martin Golman, Acting Director, Papua New Guinea Forest Research Institute *Proof Committee Hansard*, Canberra, 15 March 2016, p. 9.

98 Dr Golman, Papua New Guinea Forest Research Institute, *Proof Committee Hansard*, Canberra, 15 March 2016, p. 9.

99 Professor Rina Oktaviani, Director, International Trade Analysis and Policy Studies, Bogor Agricultural University, *Proof Hansard*, Canberra 4 February 2016, p. 2.

Part of our health development strategy stresses that nutrition, water and sanitation, which are linked, are clearly factors in the causes of undernutrition. Equally, we are recognising that in many developed countries, that is Indonesia and the Pacific, we also have to address education of parents and children and issues of breastfeeding. Another thing is staying with some of those practices. It is a long-term behaviour change to be able to make good choices which essentially we see as a health issue.¹⁰⁰

- 3.77 DFAT's Dr Julie Delforce, Office of Trade Negotiations, spoke of success in Timor-Leste under the Australian supported annual President's Nutrition Prize, which had promoted an awareness of child nutrition needs to mothers. Dr Delforce reflected on the influence of the award on the previous year's winner, who was now running a women's group:

[S]he used to have very little understanding of nutrition – in common with a lot of other mothers in the community she had understood that the correct food for infants is basically something that will fill up their tummies. It might be cassava or rice or something along those lines – white food is considered to be appropriate for infants. But during the course of this prize and the education that went with it, she and her group have come to growing a much wider range of vegetables, and she and her group are even talking about maybe setting up a mini-restaurant in her area so that other people can come and sample the interesting foods that they are growing.¹⁰¹

- 3.78 Robert Oliver's submission reported on related approaches he is deploying across the Pacific region to raise awareness and appreciation of traditional foods with benefits to health, incomes and cultural pride.¹⁰²
- 3.79 By promoting traditional cuisine to create linkages between tourism and agricultural production, Mr Oliver sees an opportunity for Pacific nations to both improve their diets and their incomes.¹⁰³ His submission referred to his award winning cookbooks on South Pacific cuisine,¹⁰⁴ which have

100 Mr Marcus Howard, Acting Assistant Secretary, Health and Water Branch, Development Policy Division., DFAT, *Proof Committee Hansard*, Canberra, 22 February, 2016, p. 8.

101 Dr Julie Delforce, Senior Sector Specialist, Agricultural Development and Food Security, Agricultural Productivity and Food Security Section, Agriculture and Food Branch, Office of Trade Negotiations, DFAT, *Proof Committee Hansard*, Canberra, 22 February, 2016, pp. 7-8.

102 Robert Oliver Enterprises, *Submission 47*, p. 2.

103 Robert Oliver Enterprises, *Submission 47*, pp. 1-2.

104 Robert Oliver won the Gourmand World Cookbook 'Best Cookbook in the World 2010' for his book *Me'a Kai: The Food and Flavours of the South Pacific*, and a second focused on Samoa won another Gourmand World Cookbook Award for the Best TV Chef Cookbook in 2013. See Robert Oliver Enterprises, *Submission 47*, p. 12.

captured the attention of the international food and tourism markets. Meanwhile, his television series 'REAL PASIFIK', his submission reported, has 'travelled across the Pacific creating local food chef ambassadors [and] has had terrific traction in the region, with many networks screening the whole series up 30 times'.¹⁰⁵

3.80 In evidence to the Sub-Committee, DFAT advised that it is:

...exploring work with Robert Oliver, who is a well-known chef from New Zealand. He has worked extensively through the Pacific. He has a beautiful cookbook called *Me'a Kai: the Food and Flavours of the South Pacific*. We are looking at partnering with him to help increase awareness about beautiful traditional Pacific foods and to bring some status back to them so that people want to cook and enjoy cooking those types of foods.¹⁰⁶

Committee comment

3.81 In her evidence, Dr Delforce from DFAT rightly stated that:

...nutrition really is a multi-sectoral issue. Agriculture is one part of the picture and health interventions are clearly another part. And education is another part – certainly, in a case such as East Timor, part of the issue is people's understanding of nutrition...¹⁰⁷

3.82 The Committee acknowledges that the causes and consequences of the double burden of malnutrition are extremely complex and vary significantly between countries and communities. Malnutrition in our region and particularly in the Pacific requires a deeper investigation than has been able to be conducted for this first report.

3.83 Although there is a need for further research, the overall picture is very clear. As Professor Boyd Swinburn of Deakin University has suggested: '[o]besity in East Asia is like a train crash waiting to happen.'¹⁰⁸

3.84 It can be argued that in the South Pacific, that train crash has already taken place. As Professor Haddad and other expert observers have noted:

105 Robert Oliver Enterprises, *Submission 47*, p. 17.

106 Ms Chakriya Bowman, Director Pacific Economic Growth Section, Pacific Regional Branch, Pacific Division, DFAT, *Proof Committee Hansard*, 22 February, 2016, p. 3.

107 Dr Delforce, DFAT, *Proof Committee Hansard* Canberra, 22 February 2016, p. 7.

108 Professor Boyd Swinburn, quoted in 'The Double Burden of Malnutrition in East Asia and the Pacific' World Bank, 17 August, 2010, <www.worldbank.org/en/news/feature/2010/08/17/double-burden-malnutrition-east-asia-pacific> viewed 12 May 2016.

We have known about the problem of the double burden of malnutrition in this region for some time. But...the situation is getting more serious because the increases in overweight rates over the past 30 years have been most rapid in this region of the world.¹⁰⁹

3.85 Most Pacific countries have relatively young populations, the median in Samoa, Tonga and Vanuatu is 21 years of age.¹¹⁰ But as these populations age, the impact of non-communicable diseases may be expected to increase.¹¹¹ These adverse health trends will impose increased financial strain on governments, communities and households.¹¹²

3.86 In this context, as suggested in evidence, investment in ‘nutrition sensitive interventions’ would be one of the most cost effective forms of foreign aid and an essential foundation for long-term, sustainable development. This was strongly emphasised to the Sub-Committee by DFAT which observed that:

As a value-for-money investment, nutrition is assessed, globally, to return \$16 for every dollar invested. In the Indo-Pacific, the ratios are even higher: 44:1 in the Philippines, 29:1 in Pakistan, and 48:1 in Indonesia.¹¹³

3.87 It is also clear that urgent action is required to slow the pace of the obesity epidemic that is already afflicting Pacific Island countries. It is the Sub-committee’s view that the window of opportunity for effective action is closing, and if this opportunity is missed, the double burden could be a burden to great too bear for Pacific communities and perhaps also for aid donors such as Australia.

3.88 The consumption of cheap, high calorie imported foods is a major contributor to the obesity problem in the Pacific region. Long term action through multi sectoral partnerships – in agriculture, education, and

109 L Haddad, L Cameron and I Barnett, ‘The Double Burden of Malnutrition in SE Asia and the Pacific: Priorities, Policies and Politics’, *Health Policy and Planning*, <www.heapol.oxfordjournals.org/content/early/2014/10/15/heapol.czu110.full> 15 October 2014, p. 1.

110 I Anderson, *The Economic Cost of Non-Communicable Disease in the Pacific Islands: A Rapid Stocktake of the Situation in Samoa, Tonga and Vanuatu*, HNP Discussion Paper, September 2013, viewed 2 April 2016.

111 I Anderson, *The Economic Consequences of Non-Communicable Diseases in the Pacific Islands, A Rapid Stocktake of the Situation in Samoa, Tonga and Vanuatu, Final Report*, November 2012, pp. vi-viii, viewed 2 April 2016.

112 I Anderson, *The Economic Cost of Non-Communicable Disease in the Pacific Islands: A Rapid Stocktake of the Situation in Samoa, Tonga and Vanuatu, Final Report*, November 2012, p.vi, viewed 2 April 2016.

113 DFAT, *Submission 12*, p. 33.

health – will be needed to address the impacts of over and undernutrition. Pacific Island peoples must have the option of a tasty, affordable and healthy diet and an appreciation of nutritious locally produced foods. The innovative efforts of Robert Oliver and his team in advocating for traditional Pacific cuisine, regionally and internationally, should be promoted.

- 3.89 As discussed in the following chapter, nutrition sensitive approaches to agricultural development, that is ‘agricultural development with explicit nutrition objectives’,¹¹⁴ will be vital to increase the supply and affordability of these foods.
- 3.90 Women can and do play an important role in supporting good nutrition, both as producers of food and in its preparation for their families. Good nutrition in early in life, in particular in the first 1 000 days, is regarded as the foundation of good health. The importance of this to Australia’s future aid development policy for the region will be discussed in Chapter five.

114 DFAT, *Submission 12*, p. 36.

